

Sandra Gilgen

# Disentangling Justice

Needs, Equality or Merit?  
On the Situation-Dependency  
of Distributive Justice



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Sandra Gilgen

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*to Kaya and Juri*



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## Chapter 1: Distributive Justice Matters – Introduction

Distributive justice lies more at the core of our everyday dealings than we are probably aware of. In face of the worldwide raging Covid-19 pandemic, uncomfortable questions are being asked: Who is most at risk and are the measures in place effective in protecting those most vulnerable? Are governments taking action to attenuate the blow of the pandemic-related financial problems of their citizens? How do the protective measures affect our daily lives and economic realities differently depending on our personal situation and position in society? Which countries are provided with the vaccines first? And even more grimly: who gets prioritised when there are not enough hospital beds for every patient in need? The differences in the ways people are affected and in the resources and possibilities they have and can resort to when dealing with trying times and situations, as well as the way these distributional problems are solved say a lot about the way our societies are organised. Locally as well as globally, the pandemic has strengthened existing inequalities, shining light on power structures that privilege some, at the expense of others. However, even on a much smaller day-to-day scale, allocation problems are omnipresent. When we buy clothes, do we care how much of the money is going to the people who manufactured them and where the rest of the money is going to? When we receive our tax bill, do we feel like we are being robbed or like we are paying our due to society? The way we experience and evaluate these inequalities and questions of (re)distribution of resources in terms of fairness is far from accidental.

Perhaps more than we would ever like to admit, our views on issues of distributive justice have been shaped by our upbringing and socialisation, as manifestations of the contexts we find ourselves embedded within. Of course, what we perceive as fair also depends on our individual predispositions and experiences, however, from a sociological point of view, these are never independent of contextual influences, and are developed in interaction with our environment or *context*. Throughout this book, it will thus be assumed that our interpretations of the world around us are a result of an interaction of individual predispositions and the contexts we find ourselves in. Context itself is treated as inherently social in the sense that human behaviour is seen as a result of not only individual preferences, opportunities and restrictions,

but also of our inherent sociability and mutual interdependence (Zangger 2017; Granovetter 1985; Esser 2002). Depending on the context, situations and actions can carry different meaning and have different implications. Regional, temporal or (sub)-culture-specific social norms are an example of how context can shape collective belief formation, preferences as well as perceptions of the appropriateness of an action or situation. These social norms, or context-specific expectations, guide subsequent conforming or non-conforming behaviour, which in turn elicits social responses such as approval or disdain and punishment, for example, in the form of ostracism (Elster 2007).

Consequently, distributional preferences and the allocations we make also depend on our values and beliefs we have developed, while embedded in a specific context or contexts. These convictions manifest in the form of our beliefs, values and ideologies, whether they are religious, philosophical or political in nature, and guide us in our everyday decisions (Elster 1989; Binmore 2009). However, next to the implications for our daily lives, our beliefs about the state of the world and our preferred allocation systems of resources and rewards to members of society will have an effect on our political choices. For example, people who believe that poverty is primarily caused by laziness, are against policies for redistribution, while people who believe poverty is primarily a result of bad luck, that could hit anybody, are much more in favour of insuring themselves and others through such policies (Fong, Bowles, and Gintis 2006). At its core, much of the polarity between the political left and right has to do with issues of distributive justice.

Philosophers since Aristotle (2000) have contributed to normative frameworks of social justice more broadly or distributive justice more specifically, out of which different traditions of thought have arisen. Ranging from the classic liberal thought of Locke (1976) and Smith (1976; 2002), the liberalism and egalitarianism of Rousseau (2002) and Kant (1991) to Marxism (2009; 1976) and utilitarianism (Mill et al. 2003). More recently Nozicks' libertarian (2013) entitlement principle, Rawls' (2005) theory of justice, Dworkin's (2002) resource egalitarianism and Sen's (1999; 2009) capability approach to social justice have been influential, to name a few. These theories rely on different perceptions of human nature and thus also bring forth and legitimate different value systems. In turn, these values, among other factors, inform our choice of allocation norms we apply to problems of distributive justice (Frohlich, Oppenheimer, and Eavey 1987a; Frohlich 2007; Fleischacker 2004).

*A. Justice, Individual Well-Being and Group Functioning*

Allocation decisions have profound effects on individual and group welfare and thus determine the fate of groups and organisations (Leventhal 1976, p. 131). As Robinson and Bell (1978) note, differences in the perceptions of the fairness of inequalities in terms of various goods such as education, housing, job opportunities and health care are at the heart of many political struggles. It is thus of practical relevance to empirically evaluate how much inequality is too much for whom, under which conditions, and why (Robinson and W. Bell 1978, p. 126). People have a strong intuitive sense of justice and have strong reactions to it. On a personal level, feeling unfairly treated can lead to negative emotions such as anger, sadness or even depression; and can lead to conflicts at an interpersonal level (Adams 1965; Homans 1961).

Individual well-being and group functioning are thus intertwined and codependent. As Deutsch puts it: “[T]here is usually a positive, circular relation between the well-being of the individuals in a group (or society) and the well-functioning of that group: The more satisfied the individuals are, the better their group functions and vice-versa.” (Deutsch 1975, p. 140). Individuals have a threshold of tolerance when it comes to being treated unfairly by their group, so that beyond a certain level of misfit between what one considers just treatment and the treatment one receives, the will or capacity to cooperate dies (Deutsch 1975, p. 141). Justice thus functions as one of the most central motivations of human behaviour and interaction (Lerner 1977, p. 49). Consequently, the distribution of goods in societies will be questioned and compared to normative ideas of justice:

Why rewards and deprivations should be so unevenly distributed among men, and what the relation of this distribution to their ‘deserts’ may be, are not questions satisfactorily answerable in scientific terms.[...] Hence, because of their great importance in reconciling normative expectations and actual responses (rewards and allocations) common orientation through nonempirical ideas has great significance for the social system. (Parsons and Shils 2017, pp. 167–168)

Thus, the choice of allocation strategy in societies has consequences on many levels. Next to the consequences felt by each individual, distributions and the way they are perceived in terms of justice have instrumental effects. Moreover, a large discrepancy between the allocation of rewards and burdens can negatively affect motivation: “the distribution of rewards plays a large independent part in the motivation of action and particularly in the motivation of conformity and alienation vis-à-vis general value-orientations and specific role-expectations” (Parsons and Shils 2017, p. 201). This potential

disequilibrium can be reduced by the enforcement mechanisms of tradition and authority. However, a large imbalance between these control mechanisms and an individual's sense of justice creates cognitive strains "since in a system of cognitive values it is inherent that the ultimate criteria of truth should be cognitive, not traditional or authoritarian" (Parsons and Shils 2017, p. 168).

This of course brings to mind Weber's work on power and authority in modern societies that attain their legitimacy through the beliefs of citizens (Weber 1978).

## I. Legitimizing the Social Order or Striving to Change it

Justice is one of the most highly respected notions in our spiritual universe. All men — religious believers and non-believers, traditionalists and revolutionaries — invoke justice, and none dare disavow it. [...] It is invoked to protect the established order as well as to justify its overthrow. And so, justice is a universal value. (Perelman 1980, p. 24)

When it comes to legitimising action or the absence of action, there are few reasons that are so powerfully felt as those justified by appeals to justice<sup>1</sup> (Lerner 1975, p. 19). Whether people are engaged in political debates for or against affirmative action, for or against more public spending, and even in the call for war or peace, the arguments are almost always based on some notion of justice (Konow 2003; Lerner 1977). "Certainly there is strong, clear evidence that at least at the level of verbalization and cultural symbols, the related themes of justice and deserving are uniquely central, powerful, and universal in Western civilization" (Lerner 1977, p. 4).

However, this brings us to the question of how this can be: How can people from opposing political spectrums all be advocating their own agendas but both in the name of justice? This begs the question: what is justice?

## B. *What is Justice?*

Justice is a curious mixture of equality within inequality. (Homans 1961, p. 244)

Although there are many ways of looking at justice, Homan's suggestion refers to the fact that in most conceptions of justice we are striving to achieve

---

1 The verb "to justify" originates from the latin "iustificare" which literally means to "make just".

an outcome that reflects equality on some level. More shall be said about this in chapter 2, however as Amartya Sen (2009) has pointed out: fundamentally, every theory of justice that has found support, perhaps in the last two to three centuries, has been concerned with equality in one way or another. However, different traditions of thought with their different perceptions of human nature and the functioning of society have come to diverging conclusions as to what exactly should be equalised — be it outcomes, opportunities or more generally the right and capability of everyone to live a decent life in dignity (Sen 2009; Sen 2001). Freedom and equality are perhaps two of the most important words used in any theory of distributive justice. While according to some theorists, freedom and equality are both deemed quintessential and inherent parts of justice (Sen 2009; Rawls 2005), in capitalist societies adhering to the liberal tradition, it is frequently argued that, to the contrary, equality is an enemy of freedom (M. Friedman and R. D. Friedman 2002; Nozick 2013).

Another more general rule of justice concerns the “elimination of arbitrary distinctions” as well as the establishment “of a proper balance between competing claims” (Rawls 1964, p. 133). These *competing claims* refer to the different justice principles or allocation norms people typically use as guidance in their allocations. Theorists and empiricists alike have suggested a whole array of justice principles, the most popular of which are presumably: *equity, proportionality, desert, merit, equality, reciprocity, needs, efficiency* and *accountability* (e.g. Deutsch 1985; D. Miller 2003; Leventhal 1976; Konow 2003). And while each of these will be discussed and put into context in chapter 2, the focus will lie on the principles of *merit, equality* and *need*, as three distinct allocation norms that together cover much of the variation in distributional preferences (Deutsch 1975).

While the normative question of what is just has traditionally been considered the domain of philosophy (e.g. Rawls 2005; D. Miller 2003; Sen 2009; Dworkin 2002; G. A. Cohen 1995; Nozick 2013), “what the people think” to say it in Miller’s words (1992) is an empirical endeavour, very much in the realm of the social sciences. Therefore, while normative theories of justice will be discussed in chapter 2, this book is concerned with identifying *who* thinks *what* of justice *when* and, if we’re being brave, *why*. Throughout the book, when talking about justice, unless stated otherwise, I am referring to distributive justice. When it comes to what exactly is being distributed, if not stated otherwise, the statement can be generalised to any kind of good, resource, reward that people might reasonably have an “interest in having or using (e.g. health, wealth, deference, skill)” (Schwartz 1975, p. 112).

## I. What is Fair to Whom, When and Why?

While people are guided by the different allocation norms of merit, equality and need, previous research has not yet been able to offer a comprehensive theory of how people arrive at their understanding of what is just. For example: Why do they choose one principle over another in a given situation? Why do people in different countries have such different views on justice and redistribution? What happens when people feel that a just distribution requires both that needs be met and people be rewarded for their merit? Is there a hierarchy of principles? How do people weigh up the different principles of justice? While research on issues concerning distributive justice is anything but lacking, generalisable statements are still hard to find. This is partly due to the complexity of the issue at hand, but also because the subject has been handled very differently across disciplines. While, for example, economists have been concerned with finding explanations for deviations from strictly self-interested behaviour in game theoretic experiments (e.g. Ostrom and Walker 2003; Bowles and Gintis 1998b; Bowles and Gintis 2011; Kolm and Mercier Ythier 2006), social psychologists have been more concerned with the effects of different allocation norms on group behaviour (e.g. Deutsch 1975; Lerner 1977; Leventhal 1976). Those identifying more with the behavioural sciences have focused on the evolutionary perspective on human sociality (e.g. Bowles and Gintis 2011; R. M. Axelrod 2006; Ostrom and Walker 2003) and those working more in the tradition of the social sciences have instead striven to find out why some people endorse redistribution policies more than others or what people perceive as fair wages (e.g. Jasso and Rossi 1977; Fong 2001; Alesina and Giuliano 2011). While there is plenty of theoretical overlap across disciplines, there seems to be an unfortunate mutual lack of interest or at least not much interdisciplinary work to show for it. This has led to an overwhelming degree of fragmentation of knowledge.

Furthermore, the question of what people think of as a just distribution is complex, because there are three levels of factors influencing justice perceptions. For one thing, people differ in their justice perceptions on the individual level, so that, for example, women and people from lower socio-economic backgrounds are more egalitarian than men and those who are better off (e.g. d'Anjou, Steijn, and Van Aarsen 1995; Robinson and W. Bell 1978; Andreoni and Vesterlund 2001; Lewin-Epstein, Kaplan, and Levanon 2003; Shepelak 1989; Alves and Rossi 1978; Boeri et al. 2001; Frohlich, Oppenheimer, and Eavey 1987b; Leventhal and Lane 1970). Second, and this has predominantly

been noticed by social psychologists and social anthropologists (e.g. Deutsch 1975; Fiske 1992; Lerner 1977; Leventhal 1976), people use different allocation norms depending on the situation. Since a majority of work on distributive justice in the economic or sociological tradition has been set in the economic sphere, this has largely gone unnoticed.

Additionally, since the majority of empirical work in the social sciences has used data from subjects living in Western democratic countries, the variability of human attitudes towards distributive justice has been widely underrated (Henrich, Fehr, and Gintis 2004). This problem has been further exacerbated by the fact that a sizeable share of these subjects were students, making any generalisations to concepts such as human nature deeply problematic (e.g., Kunovich and Slomczynski 2007; Henrich, Fehr, and Gintis 2004; Alesina, Di Tella, and MacCulloch 2004; Alesina and Giuliano 2009; Phillips 1983). This leads us to the third level: people's views on justice are also shaped by the contexts they live in.

### C. Goal and Organisation of the Book

The goal of this book is to make a contribution to the disentangling of all these different aspects of distributive justice. For this purpose, a new modified survey experiment, which I have named *distributional survey experiment* (DSE), was developed and applied for the first time for the analyses presented in chapter 4 of this book. Using the DSE, it was possible to collect data efficiently on the level of the individual, the situation and context. First, since the DSEs were integrated in an online or paper and pencil survey, this allowed for an easy collection of respondent characteristics. Second, to capture the effect of *the situation*, the questionnaire included four different DSEs operationalising different social settings. Third, by administering the survey to three different populations, we are provided with some insight into the workings of context. The main achievement of the DSE, however, is that it measures people's attitudes towards distributive justice in as direct a manner as possible and by doing justice to the nature of the problem at hand, wherein — given limited resources — one person's gain is another's loss. The DSE is unique in that, by letting respondents distribute a prespecified amount of money among people described in vignettes, it combines the possibilities of distributional games in laboratory settings with the efficiency and scope of a survey experiment.

The DSEs were set in four very different situations: resources, in the form of money, were actively distributed to hypothetical friends, employees, family members and among prospective students applying for a scholarship. This last mentioned DSE was constructed as an example of a situation involving public goods. By way of bringing in context, the experiments were administered to three different populations: a general population survey in Switzerland as well as two student surveys were conducted. The students were sampled from the University of Bern in Switzerland and Princeton University in the United States. However, more shall be said on the data and methods in chapter 3.

In the following chapter, the principles of justice will be introduced and discussed in the context of some of the most relevant theories of justice and empirical findings. This is followed by the methods chapter which introduces the distributional survey experiment as a new tool. In a next step, the results are presented. Finally, the findings are discussed in regard to their broader generalisability and some concluding remarks on the implications are made. This book is guided by the hope of helping lay out some groundwork for the identification of the mechanisms leading to differing views on distributive justice.



## Chapter 2: Principles of Justice in Different Situations and Contexts – Background

Discoveries from a variety of fields ranging from evolutionary biology, psychology, political science and economics or sociology have all contributed to the understanding of our complex relationship towards distributive justice and the principles we refer to, when solving allocation problems and legitimising our choices. These principles include concerns for equality, need and merit, on deservingness, proportionality or efficiency (alternatively: overall utility / prosperity) to name a few. However, in agreement with Deutsch (1975) and Miller (1992) among others, I would argue that the differentiation into the three principles of *merit*, *equality* and *need*, is perhaps the most useful, because together they cover most ground and are maximally independent principles<sup>1</sup>. I will call these the three basic principles of justice or allocation norms. Other considerations, such as those pertaining to reciprocity and efficiency are naturally also useful for our understanding of people's evaluative judgements and choices on questions of distributive justice. However, I argue here, that reciprocity and efficiency are best understood as overarching general rules of conduct that can also be applied to allocation problems. Depending on the situation, they can then lead to equitable, equal or needs-based distributions. As an example, depending on which goal I am pursuing, I will be maximising other goods, so that if the goal is to maximise the overall productivity of a company, then distributing resources such as in the form of end of year bonuses according to merit can be understood as efficient and reciprocal at the same time. However, this scenario only works out if competitive mechanisms are at work. Where people are required to display high degrees of cooperation, such as when working on a problem together, distributing according to the equality norm could be the most efficient because using this allocation norm encourages mutual respect and solidarity; thus creating an ideal cooperative working environment. If we allow for a more long-term perspective, we see that this could actually be in line with a reciprocity norm as well: If we assume that the same factors that contribute to higher levels of respect and solidarity in the

---

1 By contrast, as we shall see, the accountability principle and equity rule are conceptually very similar, and are best treated as one and the same allocation norm.

work environment also contribute to employee satisfaction, then the happy employee might reciprocate by staying in the company and exerting higher effort levels (loosely based on arguments and theory found in Deutsch 1975; Leventhal 1976; Fiske 1992). This functional perspective on justice will be discussed in much more detail in the subchapter *Situations*, describing how the situation affects our choice of allocation norm.

One of the most important differences between these allocation norms is the underlying motivation behind their application. Distributing according to *merit*, or an *equity* norm, which will be used interchangeably throughout this book, is motivated by notions of *deservingness*: Because someone did something, made or failed to make a contribution, they deserve to be rewarded or punished more or less proportionately to their input. In everyday language, when we say that “someone deserves what they get”, we are referring to an equity norm. The principle of *equality* is founded in egalitarianism. It builds on the assumption of what Scanlon calls *basic moral equality* or “the idea that everyone counts morally, regardless of differences such as their race, their gender, and where they live” (Scanlon 2018, p. 4). When we apply the equality norm, such as when we give everyone an equally sized piece of a birthday cake, we are normally contributing to a harmonious, tensionless situation. The needs-based approach is motivated by a desire to help someone (Leeds 1963). When we unselfishly give someone who does not have (enough of) something and we think they would benefit from having (more of) that particular resource, we are distributing according to need. We apply the needs-based approach when we are motivated by a desire to make their situation better than it would otherwise be, such as when we make a donation after a natural disaster. Typically we expect nothing in return, except maybe to feel a *warm glow* or other social or psychological benefit (Olson 2003; Andreoni 1990), but what motivates us are the consequences of our altruistic act for others.

However, it is not uncommon for us to acknowledge the legitimacy and usefulness of multiple principles of justice not only in general, but also in a particular instance (Leventhal 1976). When more than one principle of justice is salient at the same time, this can make the ensuing allocation decision complex. In some cases, several allocation norms will point in the same direction, that is, favour the same outcome. This is the case when, for example, a potential recipient is both needy and deserving. Then it will be an easy decision to allocate resources to this person’s benefit. However, cases like this, in which several principles of justice favour the same outcome, are more of an exception than a rule. In most cases, simultaneous adherence to

different principles comes with the problem that single principles demand outcomes that conflict with one another. Person A might be needy but may not be making (or be able to make) much of a contribution to a certain goal, while person B might be rich in both resources as well as output or contributions. Wanting to accommodate the needs of person A and at the same time punish them for not having exerted enough effort leads to a dilemma. And it becomes more complicated when we also take person B into the equation who has no need but who, from a meritocratic perspective, deserves to be rewarded. We are then forced to apply the competing principles of justice according to a rank order in terms of their legitimacy or functionality in a given situation. Focusing on one principle is a possible solution. However, if we acknowledge the legitimacy of more than one principle, then concentrating on just one will lead to an unsatisfactory outcome. We are left with the option of assigning figurative weights to the opposing justice principles and allocating resources according to this weighted combination (Leventhal 1976; Boulding 1988). The mechanisms guiding our choice of justice principles and the weights we assign to them in different situations will be discussed in further detail in the second part of this chapter. Before that, we will take a closer look at each of the three principles of justice we will be focusing on throughout the book: *merit, equality and need*.

#### A. Principles of Justice

Throughout the book, it will be assumed that when making a justice evaluation or, more actively, allocating goods, people primarily rely on a combination of *merit, equality and need* considerations (Deutsch 1975; Deutsch 1985). Given the wide interest in the subject and the different points of view depending on the field, it is not surprising that arguments have been put forward for alternative principles of distributive justice (Konow 1996; Konow 2000; Konow 2001; Frohlich 2007). While these other allocation norms will not be ignored, we will focus on the three aforementioned principles. For a better understanding, in the following, each of these — *merit, equality and need* — will be summarised briefly and put into relation with the other allocation norms.

## I. Merit

*Homo economicus*, a term which was coined in reaction to the influential works by John Stuart Mill (Persky 1995), portrays humans as rational, meaning: goal-oriented, selfish free agents. With the gradual rise, starting in the nineteenth century, of economic man, primarily referred to as *homo economicus*, it became increasingly normal (granted: primarily among researchers of specific fields) to regard human behaviour through the lens of this theoretical construct. From this point of view on human nature, it comes as no surprise that it became natural to think of justice in terms of inputs and outputs:

The rule of justice says that a man's rewards in exchange with others should be proportional to his investments. (Homans 1961, p. 235)

Building on Homan's (1961) theory of social exchange, Adams (1963; 1965) formulated a theory of justice, which she called *equity theory*. The idea is that people are constantly in situations in which they exchange one thing or service for another and this exchange is often evaluated in terms of fairness. There is always the danger that one or all people involved in the exchange will perceive the transaction as inequitable, especially when exchanging services for pay (Adams 1965, p. 276). In brief, the theory postulates that in situations in which social exchanges happen, such as between employer and employee, people are constantly keeping balance of the inputs, such as effort, and outputs or rewards, in this case their wage. Both inputs and outputs are evaluated subjectively. What counts as an input is what the person contributing considers an input (Adams 1963). Also, the respective magnitudes of the inputs and outputs are not measured in absolute terms but relative to a reference person or group. When outputs are perceived as proportional to inputs, then the evaluator perceives the social exchange as equitable. In Adam's words: "Inequity exists for Person whenever he perceives that the ratio of his outcomes to inputs and the ratio of Other's outcomes to Other's inputs are unequal." (Adams 1965, p. 280). If outputs or rewards are perceived as too high or more so, when they are perceived as too low, this inequity is felt as an injustice, such as in the form of relative deprivation (Adams 1965; Merton and Lazarsfeld 1974). This perceived injustice causes (di)stress in the form of cognitive dissonance (Festinger 1957; Adams 1963). To reduce these negative emotions, people can resort to a multitude of strategies such as by either changing their inputs or outputs till they feel they have achieved equity, or through cognitive distortions. However, usually people face various constraints in their quest to restore equity, because it is rarely possible to

raise outputs (we can again think of wage), and many forms of inputs are relatively stable (such as education and ability), so that effort is one of the rare and perhaps most obvious input factors we can adjust.<sup>2</sup>

Through cognitive distortion of either their own or other's inputs and outputs, people can make themselves believe that a given exchange is equitable or proportional. If they do not succeed in reducing the inequity or adjusting their beliefs, then people continue to feel uneasy about the perceived inequity and might choose to remove themselves from the exchange situation (such as quitting a job) (Adams 1963). Not long after Adams first formalised equity theory (Adams 1963), Walster, Berscheid and Walster (1973) developed the theory further. They make the distinction between assets as inputs, entitling a person to rewards, and liabilities, "entitling" a person to costs. They furthermore stress that depending on the settings or situations other things will count as assets or liabilities.

In industrial settings, assets such as 'capital' or 'manual labor' are seen as relevant inputs — inputs that legitimately entitle the contributor to reward. In social settings, assets such as physical beauty or kindness are generally seen as assets entitling the possessor to social reward. Social liabilities such as boorishness or cruelty are seen as liabilities entitling one to costs. (E. Walster, Berscheid, and G. W. Walster 1973, p. 152)

Additionally, there seems to be widespread agreement that people indeed often at least implicitly refer to proportionality, or an equal balance of give and take in their conceptions of fairness. Although equity theory, as Lerner points out, seems "extremely explicit about the way people decide what is equitable or just", in fact, since justice comes in different forms within even a single society, it is much more "nebulous and vague" than it appears at first (Lerner 1977, pp. 23–24). This leads him to question the utility of the theory, which he argues is "more illusory than real" (Lerner 1977, p. 24). In this same vein, Schwartz (1975, p. 132) questions whether the theory is meaningful and falsifiable if basically anything can be made out to be an

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2 It is worth noting here that both Homans (1961, p. 236) as well as Adams (1963, p. 423) count gender as well as ethnicity or race as an input factor or an investment. "On the man's side of the exchange are his education, intelligence, experience, training, skill, seniority, age, sex, ethnic background, social status, and, of course, the effort he expends on the job. Under special circumstances other attributes will be relevant. These may be personal appearance or attractiveness, health, possession of certain tools, the characteristics of one's spouse, and so on." (Adams 1965, pp. 276–277). If people unconsciously agree with this view, this is a potential mechanism for the explanation of discrimination such as due to skin colour and gender.

input; even needs (Marshall et al. 1999; Schwartz 1975). Anyhow, it seems straightforward to say that equity theory and the merit-based approach in general are only different in so far as the equity principle includes the concept of proportionality more explicitly. There is no fundamental substantive difference between the concepts. Additionally, equity theory is also very closely related to some other conceptions of justice principles such as to what Konow (1996; 2000) calls the *accountability principle*, which he at one point claims is *the* principle of justice. The accountability principle is basically equivalent to the merit principle, but applied only to factors over which someone has control and can thus be made accountable for (Konow 2000). This brings to mind Miller's (1992; 2003) *desert principle* which conflates merit and proportionality as Marshall (1999) points out. However, in defence of this approach, the latter author also points out that, according to Miller's (1992) own empirical research, this roughly corresponds to what most "ordinary people" think of as just. According to his findings, people apparently believe that those who have contributed something *deserve* a reward of equivalent value (D. Miller 1992; Marshall et al. 1999). Throughout this book, when referring to equity theory (or the theory of proportionality) (E. Walster, Berscheid, and G. W. Walster 1973), the terms will be used broadly and include other related concepts such as *merit* and *desert*, since there is considerable overlap in the literature. The reason for this is that they share a characteristic that is important for the research at hand. Equity, desert and merit all rely on the belief that there should exist a positive relationship between inputs and outputs. Additionally, it will be implied here, that this positive relationship should also satisfy proportionality demands. This means that when we are referring to merit, equity or desert, we are fundamentally referring to the belief or postulate that individuals should receive outputs that are in proportion to the inputs they provided.

## II. Equality

As much as the merit-based approach and its various conceptualizations have been treated as natural and rational, and sometimes even as the only relevant allocation norm (e.g. E. Walster, Berscheid, and G. W. Walster 1973; Konow 1996), the other two basic principles seem to be considered less convincing. One reason is historical:

Radical egalitarianism is now the orphan of a defunct socialism. The unruly and abandoned child of the liberal enlightenment had been taken in by socialism in the

mid-nineteenth century. Protected and overshadowed by its new foster parent, radical egalitarianism was relieved of the burden of arguing its own case: as socialism's foster child, equality would be the byproduct of an unprecedented post-capitalist order, not something to be defended morally and promoted politically on its own terms in the world as it is. (Bowles and Gintis 2002, p. 1)

Another reason for favouring the merit-based approach can be seen as a direct product of our collective socialisation in a market economy. Because economic values tend to spill over to other spheres of life, this has led to a pervasiveness of economic rationality, apparent in the commodification of virtually every sphere of life (Diesing 1973; Deutsch 1975). The findings of Henrich et al. (2004) who performed game experiments<sup>3</sup> in 15 small-scale societies support this view. While the researchers witnessed a wide variability in the participants' behaviour, they found that the best predictor of their game behaviours was the organisation of economic interactions in their respective societies (Henrich, Fehr, and Gintis 2004).

The degree to which post-industrialised Western societies have embraced the equity principle as a powerful norm manifests itself in concepts such as meritocracy, to which these societies pride themselves in subscribing to (Hadjar 2008). The scepticism with which the equality norm has been met, is evident in declarations such as this:

(...) equality is not a principle of fairness; at best it is a special case of the principles when members are equally accountable, efficient or needy. (...) however, when information about relevant differences, e.g. discretionary variables, is unavailable or insufficient, such differences are assumed away, and equal splits represent the observer's best estimate of fair allocations. The *ceteris paribus* assumption probably also underlies equality when available information is subject to differing interpretations and equality is viewed as a simple means of avoiding costly information search and/or costly disputes. (Konow 2001, p. 159)

However, in his later work, Konow acknowledges the equality norm as well as the needs-based approach, attributing them to the egalitarian and social-contract traditions that "incorporate a concern for the wellbeing of the least well-off members of society" (Konow 2003, p. 1189). More specifically, Konow refers to Marxism and Rawls' theory of justice, which he associates with the needs principle, understood as a call for the "equal satisfaction of basic needs" (Konow 2003, p. 1189). While the two principles of justice do

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3 The games played were: the dictator game, the ultimatum game and the public goods game. Since they have more extensive cross-cultural data from the ultimatum games, the results build primarily on data from this game (Henrich, Fehr, and Gintis 2004, p. 50).

share more in common with each other than the merit principle, this conflation of the principles is nonetheless not quite accurate. It shows however, that when talking about equality or egalitarianism, we must first clarify what we mean. Depending on how we stretch the term, we are talking less about whether equality is desirable or rational and more about what exactly we want to equalise or for whom (Sen 2009). In this book, egalitarianism and the principle of equality refer to the “long tradition in political theory which holds that in some sense, however hard to define, all men are equal as human beings and require to be treated as such” (Runciman 1967, p. 274). Or as Deutsch put it: “Equality frequently is based on a sense of the equal, divine value of every person” (Deutsch 1985, p. 42). This basic notion of the equality of (*wo*)*man* in the moral sphere, one of the key postulations of the enlightenment, is often credited (e.g. Frohlich 2007, p. 255) to Kant (2003; 1991) and the therefrom deducible moral obligation to treat human beings as ends in themselves. The acceptance of this basic notion of the moral equality of people and “the expansion of the range of people it is acknowledged to cover, has been perhaps the most important form of moral progress over the centuries” (Scanlon 2018, p. 4).

One of the most prominent manifestations of this basic assumption of equality in recent theoretical work is perhaps John Rawls’ *Justice as fairness*. In it, Rawls claims to present what rational people in the so called *original position*, operating behind a *veil of ignorance* would agree upon as a just system of distribution. The agreement is *fair* in that everyone is considered equal in this hypothetical state of nature and no one knows what position they would end up occupying in society and what their natural endowments would be. Hence, no one has an incentive to advocate for principles of justice that would primarily benefit a particular group of people over others. It is thus reasonable to assume that one’s positions would be impartial (Rawls 2005). From this standpoint, Rawls argues, people would opt for a society that guarantees equal distributions of “all social values — liberty and opportunity, income and wealth, and the social bases of self-respect” unless if departing from this initial equality would benefit everyone and particularly the least well off<sup>4</sup> (Rawls 2005, p. 54). Furthermore, Rawls argues that the positions in society would need to be open to all and that people would be able to achieve them “under conditions of fair equality of opportunity” (Rawls 2005, p. 302). While Rawls’ theory, with this particular application of the equality

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4 Rawls later specifies that it is the least well off who should benefit from any inequalities (not necessarily everyone) (Rawls 2005, p. 302).



norm, has received much attention and earned both praise and criticism, the underlying assumption of equality has been hard to shatter.

As Sen argues, basically “every normative theory of social justice that has received support and advocacy in recent times seems to demand equality of *something* — something that is regarded as particularly important in that theory” (Sen 2001, p. xi). Next to those philosophers typically labeled egalitarians or liberals such as Rawls, Meade, Dworkin, Nagel or Scanlon, he argues that even libertarians such as Nozick demand equal rights to liberty for everyone. And ultimately, utilitarianism (Mill et al. 2003; Harsanyi 2020) is egalitarian in that everyone’s utility has the same worth (Sen 2009, pp. 291–292). Sen argues that in the end, it is not a question of equality yes or no, but “equality of what?” (Sen 2009, p. 292). For Sen, demanding equal treatment of people on the basis of their equality as human beings amounts to being *impartial* or *objective* (Sen 2009, pp. 293–294). Quintessentially, he argues that even theories and schools of thought that seem anti-egalitarian at first, are all alike in that they claim “equality in *some* space”. Egalitarians would typically claim equality pertaining to wealth, income or utilities, while their libertarian or other anti-egalitarian opponents would advocate for equal rights and liberties or just deserts (Sen 2009, p. 295). Ronald Dworkin, a resource egalitarian, also makes this point in *Sovereign Virtue* (Dworkin 2002, pp. 131–133). Sen’s own capability approach — in which he argues from a human development perspective and vehemently rejects the subjective utility approach typically adopted in the context of welfare economics — also builds on an egalitarian foundation, and especially, by his own account, the works of Aristotle, Smith and Marx (Sen 2006, p. 43). Sen illustrates how the utilitarian approach fails to adequately take objective deprivation into account, by concentrating on different forms of mental metrics, such as happiness or pleasure. Sen builds his arguments around the basic egalitarian assumption that to be convincing, we need to demonstrate equal concern for all humans at least on some level (Sen 2001, p. ix). He makes the case for the capability approach on the grounds that the capabilities of people to live full lives should be our measure of whether or not we are succeeding in treating people as moral equals (Sen 2006). As an example, the essential failing of a primary goods approach — that can be understood as listing a partly commodity-based set of basic human needs “in their status as free and equal citizens, and as normal and fully cooperating members of society

over a complete life” (Rawls 1999, p. xiii)<sup>5</sup> — is that people differ in their capabilities to make use of the apportioned goods. Although the concepts both have similar intentions, the crucial difference is that “primary goods are means to freedoms, whereas capabilities are expressions of freedoms themselves”<sup>6</sup> (Sen 2006). Aristotle famously said that “wealth is not the good we are seeking; for it is merely useful and for the sake of something else” (Aristotle 2000). It is this that Sen is referring to when he advocates for the capabilities approach over Rawls’ (2005) or Dworkin’s (2002) egalitarianism. Demanding equality of resources can be seen as a means to achieving equality of capability, which is in the end what can be valued as an ends in itself, as it allows people the freedom to live their lives to their full potential (Sen 2009). And although Marxism strictly speaking demands a need-based and explicitly not a resource-egalitarian approach — this is a common misunderstanding — the idea of enabling people to live their lives to their full potential is an inherently Marxist view, which however goes at least as far back as Aristotle and his idea of a flourishing life (Aristotle 2000). Marxists have argued that if we take this pursuit of a full dignified life for all seriously, granting formal equality is not enough. To be able to exercise our rights to an autonomous life as free individuals, a certain degree of equality in the economic sphere is a prerequisite (Marx and Engels 1976; Nielsen 1986). Precisely this is captured in Sen’s capability approach:

In contrast with the utility-based or resource-based lines of thinking, individual advantage is judged in the capability approach by a person’s capability to do things he or she has reason to value. A person’s advantage in terms of opportunities is judged to be lower than that of another if she has less capability – less real opportunity – to achieve those things that she has reason to value. The focus here is on the freedom that a person actually has to do this or be that – things that he or she may value doing or being. Obviously, the things we value most are particularly important for us to be able to achieve. But the idea of freedom also respects our being free to determine what we want, what we value and ultimately what we decide to choose. The concept of capability is thus linked closely with the opportunity aspect of freedom, seen in terms of ‘comprehensive’ opportunities, and not just focusing on what happens at ‘culmination’. (Sen 2009, pp. 231–232)

This perspective on the right to individual freedom and realistic opportunities to live a life one values, is also found in Dworkin’s (1981; 2002) resource

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5 Note that this definition of primary goods is taken from Rawls’ revised edition of his *A Theory of Justice*.

6 What Sen criticises about the concept of primary goods was previously criticised by Arrow (1973) who pointed to the fact that e.g. a sick person, needing expensive medical care, would need more primary goods to achieve the same outcome as a healthy person.

egalitarianism and John Roemer's *equality of opportunity* approach (Roemer and Trannoy 2016). To be able to live autonomous lives in dignity, we need to combine both the right to freedom and equality. Expressing his agreement with some of Rawls' fundamental assumptions, Dworkin stresses the importance of equality for our sense of justice:

(...) Our intuitions about justice presuppose not only that people have rights but that one right among these is fundamental and even axiomatic. This most fundamental of rights is a distinct conception of the right to equality, which I call the right to equal concern and respect. (Dworkin 1977, p. xii)

In his defense of the principle of equality against libertarian concerns<sup>7</sup>, Dworkin goes on to state that there is in fact no real tension between the values of liberty and equality. This is because there is no inherent value of liberty in and of itself independently of what it can contribute to individual welfare (Dworkin 2002, pp. 120–183) but as a means, a prerequisite to living a life in dignity. It is the right to equality from which conventional rights are derived and not from a general and abstract right to liberty. He thus contradicts the “popular and dangerous idea that individualism is the enemy of equality. That idea is the common mistake of libertarians who hate equality and egalitarians who hate liberty; each attacks his own ideal under its other name” (Dworkin 1977, p. xiii). The point is that, granting equal formal rights while adhering to a libertarian self-ownership (Nozick 2013) notion, as Western democratic states tend to do, is hypocritical in that people will have very different capabilities or means of exercising their rights and achieving their versions of a *good life*. In democratic societies, people might be formally equal and free, but since people start at very different levels in terms of resources, some people will face horrendous constraints on their choice sets, so that their lives will be more dictated by circumstance than by their choice. Norman's book *Free and Equal* (1987) also takes up this view of freedom and equality requiring each other by arguing that we need a certain amount of equality of power, wealth and opportunity, to be free. Freedom is understood as having the possibility to choose how we want to live our lives, and this is not possible when we live under severe constraints (Norman 1987). Furthermore, even though Cohen (1988) finds much to criticise in Norman's (1987) conceptualisations of freedom and equality, their views on justice are inherently very similar:

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7 Nozick famously argued against equality on the grounds that it interferes with individual liberty to make choices that would lead to unequal outcomes (Nozick 2013).

People's advantages are unjustly unequal (or unjustly equal) when the inequality (or equality) reflects unequal access to advantage, as opposed to patterns of choice against a background of equality of access. (G. A. Cohen 1989, p. 920)

This is also what Roemer (1998) addresses with his equal opportunity approach that stresses the role of unequal initial distributions of resources for advancement and outcomes. A child with disabilities will need more attention by the teacher to reach the same goals as another child, given the same levels of effort (Roemer 1998, p. 14). To equalise their chances of reaching equal outcomes, under the assumption that they are both willing to exert the same efforts to achieve their goals<sup>8</sup>, we would need to address their differing needs. And this is why “‘need’ and ‘equality’ as distributive values are closely linked and sometimes not distinguished. It is commonly assumed that individuals equally deserve the basic human goods that are required to fulfill their fundamental needs; they do not have to earn them”(Deutsch 1985, p. 43).

Summing up, although not everyone (Konow 2000; Graham F Wagstaff 1998) agrees on it, we shall follow the example of many empirical studies on the subject and treat equality as an independent principle of distributive justice (e.g. Robinson and W. Bell 1978; Arts and Gelissen 2001; Lewin-Epstein, Kaplan, and Levanon 2003; d’Anjou, Steijn, and Van Aarsen 1995). Throughout this book, equality will be used in the simplest and purest form. When we refer to the equality principle, we mean a situation in which everyone gets the same amount irrespective of other considerations such as need and merit. Following this resource-egalitarian approach is useful for our purposes because it allows us to conceptually differentiate between the three basic allocation norms of merit, equality and need<sup>9</sup>

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8 Roemer works under the presupposition that inequalities are only unjust when they can be attributed to factors for which people are not responsible. This also corresponds to what Konow (2000) refers to with his accountability principle and generally to what goes under the name of *luck egalitarianism* (E. S. Anderson 1999).

9 On a critical note; in the case that recipients tie on their merit or need scores or a combination of these, splitting the proverbial pie between them does not carry the same qualitative meaning as an egalitarian distribution with the same outcome. If the reason behind an equal division is not motivated by egalitarian concerns but is a result of applying a merit-based or needs-based norm or both, deducing a preference for equality from the equal outcomes will lead to an overestimation of egalitarianism.

### III. Need

In a higher phase of communist society, after the enslaving subordination of the individual to the division of labour, and therewith also the antithesis between mental and physical labour, has vanished; after labour has become not only a means of life but life's prime want; after the productive forces have also increased with the all-round development of the individual, and all the springs of co-operative wealth flow more abundantly— only then can the narrow horizon of bourgeois right be crossed in its entirety and society inscribe on its banners: From each according to his ability, to each according to his needs! (Marx and Engels 1976, p. 19)

Although Marxism and communism are commonly associated with egalitarianism and equality of resources, and this has been a source of academic debate (Nielsen 1988; G. A. Cohen and Graham 1990), it is conceptually more useful for our purposes to associate these philosophies with a needs-based approach. This is not to say that a needs-based and egalitarian approach do not go well together if we want to equalise chances for equal outcomes. Recognising that people have different natural endowments, and thus propensities for reaching certain outcomes, if a society's goal is that every individual should have the freedom to live the life they choose, then *levelling the playing field*, in the sense of compensating people for initial differences, is a must. And this calls for a needs-based approach. Also, as we have seen, much of the work in political theory and moral philosophy that has built on the foundation of the core values of the enlightenment has come to the same conclusion, even though they may have ended up using different frameworks and words. Among these theories are the above mentioned capability approach (Sen 2006) and perhaps most explicitly, Roemer's formulation of *equality of opportunity* (1998). Essentially, what is being said, is that for people to be able to exercise their freedom, they need to have equal opportunities or equal means for developing the capabilities they need in order to be able to live the lives they choose. However, these theories are not conventionally referred to as needs-based, whereas Marxism must be and has led some to name the needs-based approach the *Marxist principle of justice* (e.g. Lerner 1974). In his famous *Critique of the Gotha Project* (Marx and Engels 1976), Marx outlines the actions and resulting developments that would have to precede the rise of a communist order, with a socialist system as a bridge between capitalism and his vision of a communist society. During this transitive phase, the capitalist logic would still prevail and workers would receive back from society according to their contributions in the form of their labour, which is to say, the equity norm would be the dominant allocation rule:

The right of the producers is proportional to the labour they supply; the equality consists in the fact that measurement is made with an equal standard, labour. But one man is superior to another physically or mentally and so supplies more labour in the same time, or can labour for a longer time; and labour, to serve as a measure, must be defined by its duration or intensity, otherwise it ceases to be a standard of measurement. This equal right is an unequal right for unequal labour. It recognises no class differences, because everyone is only a worker like everyone else; but it tacitly recognises unequal individual endowment and thus productive capacity as natural privileges. It is, therefore, a right of inequality, in its content, like every right. (Marx and Engels 1976, p. 18)

It is only after this phase, that a higher state of communism can be reached in which everyone contributes according to their ability and receives according to their needs. While the liberal equity norm focuses on maximising overall efficiency by compensating individuals proportionately to their contributions, invoking the needs-based norm has an overall different goal. This is to say that applying a needs-based approach is motivated by humanitarian considerations<sup>10</sup>, that acknowledge the rights of people to certain resources on the sole basis of their humanity. Instead of distributing resources proportionately to inputs, as the equity norm would require, a needs-based approach often implies that a person forgoes (a share of their) resources for someone else's benefit. Importantly, the person giving up resources receives nothing in return, or is at least not consciously doing it with expectations of future reciprocation (Schwartz 1975, p. 112). Leeds (1963) makes this distinction very clear in her attempt to add to the reciprocity norm the *norm of giving*, as she calls the needs-based approach. Essentially, the distinction lies in the motivation for the giving. To be considered as complying with the norm of giving, which is to say, to qualify as an altruistic act, the allocation of resources to the benefit of another must be benevolent, voluntary and most importantly, the action must be treated "as an end in itself" (Leeds 1963, pp. 230–231). Adopting a needs-based approach is thus associated with assuming social responsibility and helping. The principle guides our behaviour in allocation problems when we are "concerned with the welfare of the needy as human beings, regardless of their other inputs" or applies when people feel "responsible for others even when they are not found in an ongoing relationship of social exchange" (Schwartz 1975, pp. 112–113). This basically constitutes an autonomous altruistic act (Macaulay 1970). However, here we will extend the definition of a needs-based approach to include people we are in a close relationship

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10 This is why, for example, Schwartz (1975) refers to it as the *humanitarian or need-based norm*.

with. And indeed it has often been suggested that the needs-based approach is primarily adopted in intimate relationships and among close kin. These relationships are characterised by a sense of shared *identity* (Lerner 1974). Also, it has been acknowledged that we feel higher expectations to distribute according to needs in intimate relationships (Schwartz 1975, p. 114). There is much evidence suggesting that adherence to the needs-based norm is more likely when our sense of social responsibility has been activated (Schwartz 1975; Leventhal 1976) and that conversely, when we remove responsibility, people tend to be less generous (Charness 2000). Additionally, psychologists have sometimes advocated for the consideration of the so-called *norm of mutual responsiveness* (Pruitt 1972; Leventhal 1976) as an additional factor encouraging a needs-based approach to distributive justice. However, this concept does not add anything to what is already captured by the social responsibility norm and reciprocal altruism (Trivers 1971). Furthermore, the propensity to act altruistically is also structured by attractiveness, liking and emotional involvement with the recipient (Krebs 1970; Golightly, Huffman, and Byrne 1972; Pandey and Griffitt 1974). On the whole, this seems to suggest that the closer we are to someone, the more connected we feel to them, the more likely we are to apply a needs-based approach and the less we will focus on other concerns. While some authors have argued that true altruism must occur outside of close kinship ties (e.g. Schwartz 1975), we will not be making this distinction. In fact this notion is best understood as a response to Hamilton's (Hamilton 1964) proposition on the genetical evolution of (pro)social behaviour, in which he argues that altruistic tendencies developed as a means of maximising *inclusive fitness*. The underlying assumption is that it makes sense to invest in caregiving towards offspring and other close relatives even at a cost to ourselves, because through their survival, we can ensure that copies of our own genes survive. So then, "a gene causing its possessor to give parental care will then leave more replica genes in the next generation than an allele having the opposite tendency" (Hamilton 1964, p. 1). His reasoning leads Hamilton to the following, perhaps somewhat scandalising, conclusion:

This means that for a hereditary tendency to perform an action of this kind to evolve the benefit to a sib must average at least twice the loss to the individual, the benefit to a half-sib must be at least four times the loss, to a cousin eight times and so on. To express the matter more vividly, in the world of our model organisms, whose behaviour is determined strictly by genotype, we expect to find that no one is prepared to sacrifice his life for any single person but that everyone will sacrifice it when he

can thereby save more than two brothers, or four half-brothers, or eight first cousins ... (Hamilton 1964, p. 16)

No wonder then, that others have dismissed this “attempt to explain altruistic behavior in terms of natural selection” as “models designed to take the altruism out of altruism” (Trivers 1971, p. 35). Trivers tries to bring back the altruism to altruism by suggesting reciprocal altruism and its implications as an alternative mechanism for the evolution of prosocial behaviours. In this spirit, altruism will be understood more broadly throughout the book and include all instances motivated by the desire to make someone other than oneself better off.

Summing up, we can say that while we can differentiate between the three principles of justice: merit, equality and need, they are also intricately intertwined and often build on related moral philosophical foundations. Perhaps it is most useful to think of the differing motivation for applying either one as the most striking distinguishing factor between the three principles. While equity/merit is usually associated with the selfishness-motive, need and equality are often perceived as being motivated by altruistic considerations (Graham F Wagstaff 1998). The latter two principles are more similar to each other than the merit principle, since they are both concerned with addressing the moral equality of people as opposed to treating people according to what they have to offer. As a next step, we will take a closer look at some findings on who applies which principles and when, before trying to uncover the mechanisms behind it all.

### *B. When Do We Prioritise Which Principle?*

Factors on the individual level, the context in which individuals are embedded, as well as the situation in which an allocation problem arises, all affect the way individuals will end up distributing goods. That is, the principles of justice people use to guide them in their allocation decisions will depend on a variety of factors and their interactions.

To gain a better understanding of these interdependent effects influencing our perceptions of what constitutes a just distribution, we will think in terms of *mechanisms* (Coleman 2000; Hedström and Swedberg 1998; Elster 1989) throughout. On an individual level, we will assume that people are rational actors trying to maximise expected utility, and their choices regarding justice will be guided by their beliefs and preferences (Elster 2009; Myerson 2004).



With effects of context, I will primarily be referring to socialisation, as a powerful source of influence on attitudes towards distributive justice. Socialisation shapes both our values and beliefs; thus leading to the internalisation of context-specific social norms. Thus, an attempt will be made to “dissect the social” (Hedström 2005) and name the relevant mechanisms behind what normally goes under “socialisation”, because otherwise it is no more than a black box statement (Hedström and Swedberg 1998; Boudon 2014). On top of this, the situation will have an effect on the resulting distribution, because depending on the social relational structure (Deutsch 1975; Fiske 1992), people will be following different goals when allocating resources. Accordingly, their maximisation strategies will differ depending on what they want to achieve.

In this chapter, we will go through some of the most relevant mechanisms on each level, starting with those on the individual level. We will then move on to mechanisms leading to different perceptions of justice according to the situation, and last but certainly not least we will discuss context. Throughout, an attempt will be made to disentangle the various aspects of distributive justice by applying “nuts and bolts” thinking (Elster 1989; Elster 2007; Coleman 2000).

## I. Mechanisms on the Level of the Individual: A Rational Choice Framework

The birth of formal *rational choice theory*<sup>11</sup>, and with it *game theory*, is attributed to mathematician John Von Neumann and economist Oskar Morgenstern and their influential book *Theory of Games and Economic Behaviour* which was first published in 1944 (Neumann and Morgenstern 1953). Building on this foundation, many related frameworks aiming to explain human behaviour, the first and most direct application being *expected utility theory* (EU), emerged. Therefrom, *subjective expected utility theory* (SEU) was developed (L. J. Savage 1972), the conceptually very similar *prospect theory* (Kahneman and Tversky 1979) and the *desires, beliefs and opportunities theory of action* (DBO) (Hedström 2005). To discuss them all in detail would go beyond the scope of this book, however let it be mentioned that next

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11 Alternatively, this will also be called the *theory of rational action* or simply *choice theory*.

to the formal differences of the theories, there has been much controversy surrounding the concept of rational action:

Much of political game theory is predicated on the idea that people rationally pursue goals subject to constraints imposed by physical resources and the expected behavior of other actors. The assumption of rationality is often controversial. Indeed one of the most lively debates in the social sciences is the role of rationality and intentionality as a predictor of behavior. (Myerson 2004, p. 6)

However, without wanting to tap into the ongoing debates on these theories too much, let it simply be noted here that the main differences come down to different views on human nature. These discrepancies culminate in such constructs as *homo economicus* (Persky 1995), *homo sociologicus* (Dahrendorf 2006), or *homo reciprocans* (Bowles and Gintis 1998b). Throughout this book, it will be assumed that human nature corresponds most to what is summarised as *homo reciprocans*, however I will refrain from exclusively relying on one of the constructs and will instead follow a more integrative approach, including insights from different paradigms.

For our conception of rational action, we will rely on a very basic set of axioms that are inherent to all these versions, simply summarised in Jon Elster's work: "When faced with several courses of action, people usually do what they believe is likely to have the best overall outcome" (Elster 1989, p. 22). These courses of action can be understood in terms of what constitutes their *opportunity set*, or in other words, the options they have left after constraints on actions have been taken into account (Elster 1989; Austen-Smith and Banks 1999). From the choices a person believes to be available to them, individuals will choose what suits their preferences best: "In fact, what explains the action is the person's desires together with his beliefs about the opportunities" (Elster 1989, p. 20). These beliefs are a matter of probabilities (Elster 1989, p. 26) and desires are the "only independent element, to which all others are subservient" (Elster 1989, p. 30). To choose what one desires most, given beliefs and constraints, is simply to choose what is optimal in a given circumstance and can thus be said to maximise utility<sup>12</sup> (Elster 1989). At a later stage, Elster uses an even more modest terminology, stating that a "rational actor is one who acts for sufficient reasons" (Elster 2009, p. 2). And he stresses that the "idea of rationality is often but wrongly related to that of the actor's private good or self-interest in the moralists'

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12 While talking about an individual *maximising utility*, Elster would prefer us to keep in mind "that this is nothing but a convenient way of saying that he does what he most prefers" (Elster 1989, p. 23).

sense” (Elster 2009, pp. 2–3). This point is also made in Itzhak Gilboa’s textbook on *Rational Choice*: “To say that someone maximises a utility function is merely to say that she is coherent in her choices” (Gilboa 2010, p. 17). To sum up, in assuming rationality, we simply mean that from the options in their relevant choice set — that is, the options people actually have and also believe in — people will choose what they prefer. There is no assumption of selfishness involved: a rational action can also be brought about by other-regarding preferences or reciprocity considerations.

## 1. Preferences and Distributive Justice

In the following, we will go through some of the most relevant mechanisms through which rational actors can be affected in their perceptions of distributive justice. The elaborated mechanisms primarily affect preference formation processes or motives and beliefs pertaining to justice attitudes.

### a) Self-Interest Motive

In his article on *The justice motive: Some hypotheses as to its origins and forms* social psychologist Melvin Lerner laments: “It appears obvious that at some point justice theory has to accept and incorporate the fact that people do act out of simple desire and greed rather than according to what they deserve or what is just for all concerned” (Lerner 1977, p. 28). While this may seem distressful to some, in the field of economics, it has long been considered the logical way of thinking about human behaviour in the framework of a rational choice approach. In their models, economists have traditionally either explicitly or implicitly implied that only selfish or overtly self-interested behaviour is to be considered rational:

Although not logically required for the pursuit of standard economic analyses, true belief in nonfairness appears to be common among economists. It is often viewed as an embarrassment to the basic theory that people vote, do not always free ride, and commonly allocate resources equitably to others and to themselves when they are free to do otherwise. There is a clear preference for treating apparent indications of fairness (or of irrationality) as isolated phenomena of little economic significance. (Kahneman, Knetsch, and R. Thaler 1986, p. 286)

For this view of humans as inherently self-interested 18<sup>th</sup> century moral philosopher and economist Adam Smith (1976) is commonly held account-

able. However many authors have argued that this is due to a misreading of his *The Theory of Moral Sentiments*:

How selfish soever man may be supposed, there are evidently some principles in his nature, which interest him in the fortune of others, and render their happiness necessary to him, though he derives nothing from it except the pleasure of seeing it. Of this kind is pity or compassion, the emotion which we feel for the misery of others, when we either see it, or are made to conceive it in a very lively manner. That we often derive sorrow from the sorrow of others, is a matter of fact too obvious to require any instances to prove it; for this sentiment, like all the other original passions of human nature, is by no means confined to the virtuous and humane, though they perhaps may feel it with the most exquisite sensibility. The greatest ruffian, the most hardened violator of the laws of society, is not altogether without it. (A. Smith 2002, p. 11)

However, it is true that even in this passage, Smith starts with an assumption of selfishness. And John Stuart Mill's work further encouraged this view of *economic man* pursuing four goals: "accumulation, leisure, luxury and procreation" (Persky 1995, p. 223). While this was always meant as a way of abstraction and reduction for the sake of theory, some have taken it very seriously, such as Francis Edgeworth who insisted that "the first principle of Economics is that every agent is actuated only by self-interest" (Edgeworth 1881, p. 16). In the *Tragedy of the Commons* Hardin (1968) also builds his arguments using a short-term self-interest definition of rationality to show that when individual maximisation conflicts with the preservation of public goods, this often leads to the destruction of the latter. He uses the example of herders sharing a commons: For every individual herder, the gain of one extra animal grazing on the commons outweighs the negative consequences of overgrazing, the costs of which are shared by everyone. He concludes that when we are free to use common goods, this will inevitably lead to their destruction (Hardin 1968).

For a long time, evidence of other-regarding behaviours, such as when participants in ultimatum or dictator games give away (large) portions of what they were given to split between themselves and other players, was treated as somewhat of a puzzle or threat to economic theory. Slowly but surely, this has been changing. For example, in their research on reciprocity and support for the welfare state, Fong et al. (2006) conclude that while there is ample support for the self-interest motive and, e.g. those who are better off are more opposed to redistributive policies, additionally other motives appear to be at work (Fong, Bowles, and Gintis 2006; Roberts 1977). They

argue that in nearly all groups, representatives of homo economicus, the pure altruist and the strong reciprocator will be present. They go on to say that:

(...) the problem of institutional design is not, as the classical economists thought, that uniformly self-regarding individuals be induced to interact in ways producing desirable aggregate outcomes, but rather that a mix of motives — self-regarding, reciprocal, and altruistic — interact in ways that prevent the self-regarding from exploiting the generous and hence unraveling cooperation when it is beneficial. (Fong, Bowles, and Gintis 2006, p. 1445)

These additional motives of behaviour will be looked into in more detail in the following. However, we still have ample evidence suggesting that self-interest is a pervasive and powerful motive in human behaviour. For example, results from a series of studies on support for the welfare state and redistribution show that social class predicts preferences in the direction consistent with self-interest: Those from lower class backgrounds support welfare state measures to a higher degree than those from more privileged backgrounds (Lewin-Epstein, Kaplan, and Levanon 2003; Shepelak 1989; Arts and Gelissen 2001). Using data from the ‘Haves and Have-Nots Perceptions of Fairness and Opportunity’ 1998 Gallup Poll, Fong (2001) also finds that those with higher incomes of \$150,000 and upwards are less supportive of redistribution than those with lower incomes of only under \$10,000. At the same time, those who constantly worry about their bills are more supportive of redistributive measures than those who rarely do. Additionally, next to differential views on distributive justice along class lines, Fong furthermore finds that men, whites, those who are married, those with at least some college education and those who are not union members, are all less supportive of redistributive policies (Fong 2001).

However, even more than they are affected by self-interest, Fong finds that people’s preferences towards redistribution depend on their beliefs about the roles of luck, effort and opportunities on how people fare in life (Fong 2001, p. 240). Fong shows that these beliefs about the causes of life outcomes can be usefully categorised into self-determination versus exogenous-determination. In line with the reasoning of Bowles and Gintis (2000) as well as Kluegel and Smith (1986), preferences surrounding redistribution can then be interpreted as corresponding to an equity or reciprocity norm. This is because people are more willing to support policies that help those they do not blame for their disadvantaged position but simply regard as victims of bad luck<sup>13</sup> (Fong

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13 This will be discussed in more detail in the subchapter on *Beliefs and Distributive Justice*.

2001). Fong rightly points out that these tendencies could also be explained in terms of self-interest. If poverty is predominantly believed to be caused by factors that are out of an individual's control, it makes sense for people to insure themselves against bad luck, because they could end up poor and needing assistance too. However, reciprocity and altruism are further possible reasons for the endorsement of redistributive policies (Fong 2001; Fong, Bowles, and Gintis 2006).

## b) Reciprocity

In 1925 sociologist Marcel Mauss, nephew of Émile Durkheim, published *Essai sur le don: forme et raison de l'échange dans les sociétés archaïques*. In this essay on gift exchange in archaic societies, he states that:

It is easy to find a large number of facts on the obligation to receive. A clan, household, association or guest are constrained to demand hospitality, to receive presents, to barter or to make blood and marriage alliances.(...) The obligation to give is no less important. If we understood this, we should also know how men came to exchange things with each other. We merely point out a few facts. To refuse to give, or to fail to invite, is — like refusing to accept — the equivalent of a declaration of war; it is a refusal of friendship and intercourse. Again, one gives because one is forced to do so, because the recipient has a sort of proprietary right over everything which belongs to the donor. (Mauss 1966, p. 11)

In his work<sup>14</sup>, which stands in the social anthropological tradition, Mauss argues that social conventions should be understood in terms of their broader meaning for the maintenance of social relations between individuals as well as groups. He demonstrates how gift-exchange rituals are a way of creating bonds and dependencies. Through the reciprocity norm, receiving a gift puts an obligation on the receiver to give something back. Until they do so, the receiver is indebted to the donor, which creates a power imbalance between them. This is why in some archaic societies, receiving a gift was dreaded. However, since refusing a gift is not an option unless one wants to endanger the relationship, people and whole societies have created a whole array of customs that bind them to one another through complex perpetual gift-exchange systems (Mauss 1966).

In the world of game theory, reciprocity received wide recognition after Anatol Rapoport submitted a program that employed a tit-for-tat strategy in a computer tournament aimed at studying effective strategies for iterated

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14 Mauss' work was mostly written in the first half of the 20<sup>th</sup> century.

prisoner's dilemma games. In the aftermath of these tournaments, launched in 1979 by Robert Axelrod, he sums up tit-for-tat and advocates for the usefulness of the strategy for the resolution of conflict in his paper *Effective Choice in the Prisoner's Dilemma*:

Suppose, for example, that in an interaction between the United States and the Soviet Union, both sides are following a strategy of TIT FOR TAT: cooperate initially, and thereafter cooperate if the other side cooperated last time and defect if the other side defected last time. This pair of strategies would lead to an unending series of mutual cooperation. (R. Axelrod 1980, p. 4)

While the generalisability of the approach as presented in Axelrod's *Effective Choice in the Prisoner's Dilemma* (1980) has recently been questioned (Amnon Rapoport, Seale, and Colman 2015), the reciprocity norm can still be seen as a dominant strategy that can serve individual interests best in the long run (Trivers 1971; Kreps et al. 1982; Bowles and Gintis 2011). In this vein, political economist Elinor Ostrom has shown how individuals operating under conditions of reciprocity, trust and reputation can achieve 'better than rational' outcomes by not succumbing to short run self-interest (Ostrom 1998, p. 1). However, one could say that by establishing a link between actions and time, Ostrom gives a valuable hint. If we look at the consequences of selfish actions over time, we might see how even though they may produce short term benefits, in the long run, they may prove to work against us. Because of the tendency of others to reciprocate, in many cases it would have been in our own best interest to act in a more cooperative manner. And others who have done precisely this and looked at these issues from an evolutionary perspective would say that altruism has been overall fitness-enhancing:

From an evolutionary viewpoint, we argue that ethical behavior was fitness-enhancing in the years marking the emergence of Homo sapiens because human groups with many altruists fared better than groups of selfish individuals, and the fitness losses sustained by altruists were more than compensated by the superior performance of the groups in which they congregated. (Gintis et al. 2008, p. 241)

This is why it seems useful to make the conceptual distinction between self-interest and selfishness.

### c) Other-Regarding / Altruistic Preferences and Rationality

For a long time the self-interest motive (Edgeworth 1881) was a taken-for-granted assumption, or falsely assumed as the only preference in economic models with a rational action framework (Fehr and Schmidt 1999; Fong,

Bowles, and Gintis 2006). As a consequence, the responses to innumerable indications of other-regarding behaviours (many examples of which are summarised in Ostrom and Walker 2003; Bowles and Gintis 1998b; Bowles and Gintis 2011; Kolm and Mercier Ythier 2006) have been diverse. One has been to treat these deviations from the self-interest axiom as indications of other-regarding preferences or *inequity aversion* (Fehr and Schmidt 1999; Andreoni and J. Miller 2002; Eckel and Grossman 1996):

Rational action theory assumes that individuals act in ways that maximise their total utility and assumes that the action taken will be instrumental to gaining rewards given the opportunity set. However, this does not logically imply that the chosen action itself cannot be of value in itself. (Gintis 2007, p. 9)

A second response has been to use this evidence of altruism as a basis from which to construct a new understanding of human nature as an inherently cooperative species and to interpret the departures from self-interest in terms of reciprocity (Ostrom 1998; Gintis 2000; Bowles and Gintis 2011; R. M. Axelrod 2006). A third strategy, which is often explained in reference to the reciprocity norm, was to say that in the long run, altruistic acts are in an individual's own best self-interest. Those building on considerations from evolutionary biology and assuming a *homo reciprocans* understanding of human nature have argued in this vein (Ostrom 1998; Gintis 2000; Trivers 1971). However, even without assumptions of reciprocity, from an evolutionary perspective, altruism and self-sacrifice can still be interpreted in terms of self-interest by integrating considerations of *inclusive fitness* (Hamilton 1963).

It will here be assumed that all these mechanisms apply. While in some cases our behaviour will be guided by genuine other-regarding concerns, sometimes a (seemingly) altruistic act will be performed out of an enlightened self-interest or a reciprocity norm.

## 2. Beliefs and Distributive Justice

Beliefs lead any action. (Boudon 2014, p. 29)

While we choose what we most prefer from our opportunity set, beliefs about what exactly lies in our opportunity set and also beliefs about how we can best reach our goals are a crucial aspect. “The person may fail to be aware of certain opportunities and therefore not choose the best available means of realizing his desire” (Elster 1989, p. 20). Thus, information about



opportunities and also about the effects of actions leading to a preferred state are important. The information that shapes the beliefs of a rational actor are thus “variable rather than a given” (Elster 2009, p. 27). For example, approval of policies that redistribute bottom-up drops once people are provided with information on the true effects of such policies (Faricy and Ellis 2014, p. 53). However, normative beliefs are probably just as crucial for the explanation of choices. Boudon (2014) as well as Peter Hedström and Richard Swedberg (1998) highlight the importance of normative beliefs, saying that if they are included in a rational choice framework, mechanisms can be disclosed and there need be no black boxes. In the following, some of the beliefs relevant to questions of distributive justice will be discussed briefly. These include beliefs about the sources of inequalities, sources of bias in the perception of inequalities and cognitive mechanisms of coping with discrepancies between what one has or does not have and what one thinks would be just.

#### a) Bad Luck versus Lack of Effort

Perhaps one of the most powerful beliefs in the realm of distributive justice are those pertaining to the question of how the poor got poor and the rich got rich. There is a tremendous amount of evidence from around the (primarily Western) world suggesting that regardless of their own socio-economic background, people who believe that poverty is caused by bad luck support redistribution policies more than those who believe poverty is caused by lack of effort. Conversely, if people believe that the rich attained their privileged position by working hard, they are more likely to say that the affluent deserve what they have and that no policies aiming at reducing the gap between rich and poor are necessary (Fong 2001; Fong, Bowles, and Gintis 2006; Gilens 1999; Williamson 1974).

Another finding in the same vein, that has received much empirical support, is that the “nineteenth-century distinction between the deserving and the undeserving poor is still alive and well” (D. Miller 1992, p. 574). Willingness to help only those among the poor who are perceived as deserving, in the sense that they are not to blame for their situation, has been found time and time again (e.g. Cohn, White, and Sanders 2000; Lerner 1977; Graham F. Wagstaff 1994; Fong, Bowles, and Gintis 2006). Both this willingness to help only the *deserving* as well as general beliefs about who got where how can be understood in the context of equity theory (Graham F Wagstaff 1998, p. 118) but are also in line with the related accountability principle:

The entitlement varies in direct proportion to the value of the subject's relevant discretionary variables, ignoring other variables, but does not hold a subject accountable for differences in the values of exogenous variables. (...) In other words, this principle proposes that, for allocation purposes, subjects be held accountable only for factors they can reasonably influence. Of course, different interpretations of what constitutes discretionary or exogenous variables may sometimes be expected. (Konow 2000, p. 1075)

However, not only does the accountability principle lay a foundation for the understanding of whose needs will be met more willingly, it also explains self-deceptive behaviours when it comes to legitimising the status quo.

## b) Self-Serving Bias

In an article on *Social Mobility and Redistributive Politics* Thomas Piketty makes the interesting observation that while “people from different social backgrounds share a wide consensus about abstract principles of distributive justice”, which he describes as very much in line with the merit and accountability principles, the rich tend to think that success is caused by “personal qualities such as effort and ambition”, while the poor attribute the reasons for success and failure primarily to structural factors (Piketty 1995, p. 555). This is no news. In *Wirtschaft und Gesellschaft* Max Weber also mentions this self-serving belief:

The fates of human beings are not equal. Men differ in their states of health or wealth or social status or what not. Simple observation shows that in every such situation he who is more favored feels the never ceasing need to look upon his position as in some way “legitimate”, upon his advantage as “deserved”, and the other's disadvantage as being brought about by the latter's “fault”. That the purely accidental causes of the difference may be ever so obvious makes no difference. (Weber 1978, p. 953)

So while the rich and the poor may for the most part agree on merit as a legitimate norm for the allocation of rewards and punishments in their respective contexts, they will have different sentiments when it comes to explaining how an outcome was achieved, i.e, their causal attributions will differ. And these differences in perceptions matter:

It makes a real difference, for example, whether a person discovers that the stick that struck him fell from a rotting tree or was hurled by an enemy. Attribution in terms of impersonal and personal causes, and with the latter, in terms of intent, are everyday occurrences that determine much of our understanding of and reaction to our surroundings. (Heider 1964, p. 16)

The difference in perceptions by social position is what Piketty (1995) would describe as a self-serving attribution bias. Another form of self-serving bias has been found by social psychologists in regard to the equity norm. People have a higher tolerance threshold for inequitable outcomes if they are profitable for them than in the case of an unfavourable disparity (Adams 1965; Leventhal, Weiss, and Long 1969). From a functionalist perspective, this self-serving bias has multiple purposes. For one, it can provide people with a justification for choosing what best serves their material interests. More generally however, this cognitive distortion can be considered useful in helping to create a balance between the emotional and cognitive selves and thus to restoring cognitive balance (Heider 1964). This roughly corresponds to Parson's (2017) concept of an integration problem within the personality-system. Integration problems are accordingly solved by:

(...) actions which change the perception or cognition of the situation: these may be overt operations which change the situation, and thus change the perception of it, or they may be operations of reorganization of the perceived facts so they no longer conflict, or they may be merely operations which change the perceptions without either changing the situation (as the observer sees it) or getting a new organization of the facts. (Parsons and Shils 2017, p. 122)

Another such strategy that allows us to restore cognitive balance or achieve system integration is the so called *belief in a just world* (Heider 1964; Rubin and Peplau 1975).

### c) Belief in a Just World and Rationalisation

If people primarily think about justice in terms of the equity or accountability norm, then it seems likely they will compare their own situations with the requirements of this merit-based norm. Thus, people who are the “winners” of the status quo, might find themselves in a situation of needing to justify the state of the world and legitimise what is, even if they do this merely for their own peace of mind<sup>15</sup>.

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15 I am not suggesting here that every reasonably well-off or even obscenely rich person will experience cognitive dissonance when comparing their inputs with their outputs or when comparing their lives to someone's who is less fortunate. However, given the commonly observed rhetoric around these issues in the everyday as well as in the public sphere among politicians, for example, I am convinced that people regularly engage in these rationalisation processes.

When we have both a preference for fairness, which is to say, we have a *justice motive* (Lerner 1977), and would also like to maximise our own personal gains, chances are these goals will conflict and lead to cognitive dissonance (Festinger 1954; Konow 2000). In these situations, rules of fairness would have us abstain from a reward, or give up a share of it, which would, however, be against our material self-interest. In this case of conflicting desires, for maximising our gains on the one hand and for living up to standards of fairness on the other, we are thus likely to experience cognitive dissonance (Festinger 1954; Konow 2000). In order to dissolve this tension, people can choose between one of two strategies. Either they can adapt their behaviour, and in our example take less / abstain from a reward, or they can adapt their beliefs and convince themselves that they in fact deserve the reward for whatever reason. If they can convince themselves that this reason legitimises inequalities or what was initially perceived as an inequity, then they can comfortably remain in the status quo and need not change anything (Festinger 1954; Konow 2000; Lerner 1975; Lerner 1977). However, this reason sometimes necessarily involves self-deception (Konow 2000). These rationalisation processes can explain why people who are against redistributive policies or charitable giving often express their beliefs — which may or may not have come about through experiences of cognitive dissonance — that the poor are lazy and don't deserve to be helped, or that helping them would actually harm them (Fong, Bowles, and Gintis 2006; M. Friedman and R. D. Friedman 2002). As we have seen, this can be understood as a form of self-serving bias (Fong, Bowles, and Gintis 2006), but these rationalisations are also a means of coping with perceived injustices, whether one is directly affected or not:

Now these reasons are very often rationalizations, and the correlations claimed are either not really believed, or quite irrationally believed, by those who claim them. But this is a different point; the argument concerns what counts as a moral reason, and the rationalizer broadly agrees with others about what counts as such — the trouble with him is that his reasons are dictated by his policies, and not conversely. (Williams 1964, p. 113)

Thus the question of causality arises: For one thing, we justify the state of affairs in terms of the justice principle receiving dominant support, which in Western societies is allocation according to merit. This is to say that when goods are distributed in accordance with meritocratic ideals, then they are perceived as legitimate. However, the ideal of meritocracy itself, can also be questioned in light of its function for the justification of inequalities. We will assume that while there are historical reasons for why the meritocratic

ideal was established in modern societies (R. Becker and Hadjar 2011), it now also provides legitimacy for the equity norm.

Similarly, as a coping strategy, those who are struggling may tell themselves that there must be a good reason for their suffering. This kind of reasoning leads to the so called *belief in a just world* (Lerner 1975). When suffering from a perceived injustice, we may be tempted to find consolation in expressions such as: ‘Suffering brings wisdom (...)’ or ‘the mill of the Lord grinds slowly, but it grinds exceedingly fine’, suggesting that justice will be done before the day’s end (Berkowitz 1964, p. 25). Additionally, the belief in a just world serves the purpose of excusing those in better positions from getting too emotionally involved in the sufferings of those who are less well off: “If the person wants to avoid being trapped into the world of victims by his own genuine feelings, he can respond only in ways which allow him to maintain his separation from their world” (Lerner 1977, pp. 30–31).

Anyhow, as Lerner (1975) points out: We can expect these cognitive distortions, be they described in terms of a self-soothing belief in a just world, or a cognitive dissonance reduction mechanism, to be pervasive tendencies in any given society. Robinson and Bell (1978) come to a similar conclusion:

Our findings support the generalization that every society, in the face of its particular historical contingencies, provides a rationale, myth or belief, that enables its members to cope with their position in the stratification system. Such a rationale invites people to accept and condone existing inequality as generally just and reasonable. The invitation, however, is not always accepted, as our data show, by young, enlightened or, especially, underprivileged members of society. (Robinson and W. Bell 1978, p. 141)

### 3. Justice and Legitimacy of Inequalities or Inequities

Indeed, the continued exercise of every domination (in our technical sense of the word) always has the strongest need of self-justification through appealing to the principles of its legitimation. (Weber 1978, p. 954)

Because modern democratically organised Western societies subscribe to a set of values, including political equality of its citizens as one of the most important, differences in outcomes must be attributable to reasons accepted as legitimate (D. Miller 1978, p. 3). In Weber’s words:

The modern position of political associations rests on the prestige bestowed upon them by the belief, held by their members, in a specific consecration: the “legitimacy” of that social action which is ordered and regulated by them. (Weber 1978, pp. 903–904)

When we believe in the legitimacy of a system, we do not question the outcomes because we believe they are just. Thus differences in outcomes, such as pertaining to wealth and status, are deemed appropriate if they came about through means perceived as legitimate (Tyler 2006, p. 376). In Western societies, beliefs in the meritocratic ideal and in equal opportunities thus provide us with a rationale for accepting inequalities.

a) Belief in Meritocracy Legitimises Inequalities

Meritocracy, a word created by combining a greek and a latin word, was made up by Michael Young in his famous and satirical essay *The Rise of the Meritocracy* (Young 1961), which was first published in 1958. Written in the style of dystopian science fiction but adding a good portion of humour, the essay intended to argue that although meritocracy is more compatible with modern values than aristocracy, it is still very problematic in terms of social justice (Young 1994). In a meritocracy, high ranking social positions are filled by those with the highest merit, provocatively defined as IQ + effort. Thus, because everyone has to earn their positions, which are in principle open to all, social inequalities are legitimised. Of course this presupposes that people believe that those born with a higher IQ should be rewarded for it, which one could no doubt argue about, especially from an egalitarian perspective:

Even if it could be demonstrated that ordinary people have less native ability than those selected for high position, that would not mean that they deserved to get less. Being a member of the 'lucky sperm club' confers no moral right to advantage. (Young 1994, p. 379)

Shortly after, however, the concept of meritocracy was being taken seriously and used to describe a supposedly legitimate and even desirable allocation of goods and positions in Western societies: "The post-industrial society, in its logic, is a meritocracy" (D. Bell 1972, p. 30) and was being propagated as a just means of realising both equality and liberty in post-industrial societies (D. Bell 1976, p. 264). The arguments for meritocracy draw on the assumption that an allocation of goods according to merit is not only just, but also makes sense for society at large, because the most competent people are in positions in which they can use their talents for the benefit of all.<sup>16</sup> Here we

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16 In his original essay, Young shows how this naive assumption can badly backfire and do great harm to those in lower positions, and in a later piece spells this out: "If the

also recognise the foundational beliefs of a liberal ideology stressing that privilege should be earned and not inherited (R. Becker and Hadjar 2011, p. 39).

The degree to which people endorse meritocracy as a legitimate system of distribution and whether they believe their societies are meritocratic affects their political attitudes. Using data from the 1992 International Social Survey Project, Kunovich and Slomczynski (2007) compare post-communist and capitalist societies in terms of their endorsement of meritocratic ideals. They find that “after controlling for an individual’s position in the social structure, the degree to which their country has achieved a meritocratic distribution positively affects their support for a merit-based distribution” (Kunovich and Slomczynski 2007, p. 660). However, they also find support for the self-interest hypothesis according to which those with higher levels of education and income have stronger meritocratic beliefs (Kunovich and Slomczynski 2007, p. 649). For the US, Shepelak (1989) shows that those who endorse the principles of equal opportunity and meritocracy are less likely to be in favour of redistributive policies (Shepelak 1989, p. 217). This makes sense of course, because meritocracy is a merit-based ideology and redistribution is equalising. For the person who is persuaded that meritocracy is a just system, inequalities will be perceived as legitimate if they are believed to be merit-based (R. Becker and Hadjar 2011; Hadjar 2008).

## b) Equal Opportunities

In modern Western societies, the democratic assumption of formal equality and the meritocratic legitimisation of desert-based inequalities are brought together by the concept of *equal opportunity*. Miller (1978) describes equal opportunity negatively as “the absence of formal barriers to prevent a man entering the occupation of his choice” (D. Miller 1978, p. 3). As such, the concept of equal opportunities has the dual function as a means of honouring the formal equality of citizens of a democratic state as well as laying the foundation for a meritocracy. The concept of equal opportunity runs into problems of legitimacy when the starting points of people competing over

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rich and powerful were encouraged by the general culture to believe that they fully deserved all they had, how arrogant they could become, and, if they were convinced it was all for the common good, how ruthless in pursuing their own advantage. Power corrupts, and therefore one of the secrets of a good society is that power should always be open to criticism” (Young 1994, p. 379).

resources and positions in a society are too unequally distributed. In that case, it becomes close to impossible for some people to benefit from their formal opportunities while others do not have to do much at all to secure privilege. Roemer (2016) draws attention to the fact that with the end of feudalism “inequality of opportunity due to arbitrary social status” was for the most part eliminated, and that we now face problems “due to differential wealth of families” (Roemer and Trannoy 2016, p. 1328). He adds, that: “Of course, ancient forms of inequality of opportunity, due to gender, ethnicity, and race remain as well” (Roemer and Trannoy 2016, p. 1328). Consequently, when people feel that they have not received equal opportunities to achieve the outcomes of their choice, this fuels resentment and the legitimacy of outcomes is questioned (Graham F Wagstaff 1998, pp. 120–121). Thus, the legitimacy of a society built on the foundations of equal opportunity and meritocracy is threatened if the achieved outcomes are disproportionate between different groups and if this could be equalised through further reforms (Williams 1964, p. 127). In this vein, Scanlon (2018) concludes his book on *Why Inequality Matters* by arguing that allocation based on deserts fails to acknowledge that the ability of an individual is not something a person possesses independently from the structure of the institutions and “developmental conditions that are available in a given society” (Scanlon 2018, p. 144). Thus, the justification of inequalities on the grounds of differential choice and effort (which are regarded as legitimate in Western societies) does not hold under conditions of unequal possibilities for exerting those efforts. This is because “(...)the fact that a person had an opportunity to choose a different outcome can have this legitimating effect only if the person had that opportunity to choose under sufficiently good conditions” (Scanlon 2018, p. 144).

#### 4. Differential Beliefs and Preferences

“It is not the consciousness of men that determines their being, but their social existence that determines their consciousness” (Marx 2010, pp. 11–12)

As we have seen, the legitimacy of a system and the endorsement of its dominant allocation norm, which is merit in the case of Western democratic societies, will to a large degree depend on people’s beliefs and perceptions of reality. These beliefs, as well as our preferences, are in turn shaped by our experiences and as such, we can expect them to differ across social class and gender as important factors shaping our life experiences (Parsons and Shils 2017).



a) Class

As mentioned above, class differentials have been found for meritocracy belief, as in the tendency to believe that rewards within a given society are allocated according to merit (Kunovich and Slomczynski 2007; Duru-Bellat and Tenret 2012). However, since there is a self-serving bias in this belief, we do not know whether those who enjoy more privileges choose to believe they deserve them and thus justify their position by appealing to meritocracy or whether they really believe that they have reached their positions thanks to their merit (Duru-Bellat and Tenret 2012, p. 226). Analogously, we can also assume that the belief in the legitimacy of meritocracy could depend on social class in a self-serving way. However, in the context of belief in school meritocracy, Wiederkehr and colleagues (2015) have even suggested the opposite, because for lower status students, belief in meritocracy can be motivating if their best bet in getting ahead is by their own efforts. While higher-status students do not necessarily need to rely on meritocratic sorting mechanisms, lower status students might see it as their only available option for attaining an advantageous social position in life (Wiederkehr et al. 2015). In addition, quoting Jean de La Fontaine, Elster reminds us that believing what one fears and what one desires comes very easily (Elster 2009).

Also, because meritocracy belief is so widespread (Wiederkehr et al. 2015; Mijs and M. Savage 2020; Duru-Bellat and Tenret 2012) and can be understood as a context effect of liberal democratic societies, class differentials regarding this belief may not be very large. Another reason not to expect many differences in this regard is that, because of growing inequalities:

Citizens come to see the world through the prism of their own socioeconomic circles. As people surround themselves with friends, partners and colleagues with a similar level of education and social class background, they lose sight of the lives lived under circumstances different from their own. They normalise the advantages or disadvantages they share with those around them. Consequently, citizens of more unequal societies underestimate the extent of economic inequalities and underappreciate the non-meritocratic, structural forces that produce, promote, and perpetuate the structural barriers between rich and poor. Elites fail to feel the following wind of privilege, and those born into disadvantage are convinced they have themselves to blame for their inability to overcome the sizeable barriers to social mobility. (Mijs and M. Savage 2020, p. 7)

Nonetheless, since people adhering to different social classes find themselves in different contexts, they will undergo a differing socialisation<sup>17</sup>.

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17 More will be said on context and socialisation in the subchapter *Context Matters*.

Additionally, Piketty suggests that differing preferences by socio-economic background might also be caused by differences in information on the effects of policies (Piketty 1995, p. 578). We can thus expect to find mild class differentials in the allocations people make in the distributional survey experiments:

**Hypothesis 1** *The choice of justice principles differs across social class.*

More precisely, we shall assume that people will be self-interested and hold self-serving opinions:

**Hypothesis 1.a** *People from higher social classes place a higher value on merit than people from lower social classes.*

**Hypothesis 1.b** *People from lower social classes place a higher value on equality than people from higher social classes.*

## b) Gender

As for gender and issues of justice, there have been inconsistent findings (Hysom and Fişek 2011). However, it has been suggested that due to gender-specific socialisation, women are more inclined towards establishing harmony through equality, and conversely it could be said that men are expected to more readily adhere to a merit-based approach (Lerner 1977; Davison 2014; Auspurg, Hinz, and Sauer 2017). A potential reason for this is that men react stronger to competition than women and often choose competition over cooperation whereas women do the opposite (Kivikangas et al. 2014; VanVugt 2008). Research on the paradoxical finding that women are satisfied with their pay, although they are underpaid and although women and men value pay equally, has pointed to the importance of reference groups and feelings of entitlement (Davison 2014). Although women know that men receive higher pay on average, on a personal level, they do not feel entitled to more than they receive (Crosby 1984). Furthermore, a psychological study with preschool-aged children has shown that boys who performed better at a task took more of the reward (stickers) for themselves and gave less to a fictitious peer, while girls did not exhibit this behaviour and instead divided equally (Leventhal and D. Anderson 1970). This is also the case for American men in a similar study; men who performed worse in a task compared to their partners made a larger claim on the rewards than women in the same situation (Mikula 1974). These pieces of evidence can be understood as indications

of gender-specific socialisation. Regarding preferences for redistribution, results from the *World Values Survey* suggest that women are more in favour of redistributive policies (Alesina and Giuliano 2009). Furthermore, in a modified version of a dictator game, Andreoni and Vesterlund (2001) find that when the *costs of kindness* are high women are more altruistic; but men are more so when the costs are low. The authors add that, while men are either “perfectly selfish or perfectly selfless”, women “prefer to share evenly” (Andreoni and Vesterlund 2001, p. 293). On the whole, there seems to be a higher tendency towards egalitarianism amongst women. Furthermore, since on average, a woman’s position in society, e.g. in regard to earnings, is still less advantageous than a man’s, one could also argue that women might prefer more egalitarian distributions out of self-interest. We can thus expect to find a higher prevalence of egalitarian distributions among women:

**Hypothesis 2** *Women place a higher value on equality than men.*

## II. Situations

In his attempt to formulate a *positive theory of justice*, economist James Konow wondered why *justice* has remained such an elusive concept, even though it is certainly a topic so many people from different fields have devoted much thought to. His answer was that essentially, questions of distributive justice have to be put into context. With this, Konow means that the *situation*<sup>18</sup> in which the question of just allocations arises is in itself an important piece of the puzzle that needs to be considered. Depending on the situation, principles of justice will be of different relative importance (Konow 2001, p. 157). By pointing out that the situation will guide an allocator in their choice of allocation norm, Konow (2001) makes a very valuable contribution to the understanding of the processes behind allocation decisions. From the perspective of the standard microeconomic model, “judgments of fairness are influenced by framing and other factors considered irrelevant in most economic treatments” and can be understood as an inconsistency of prefer-

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18 Note that Konow (2001) does not make clear differentiations between the concepts *context* and *situation*. What Konow mostly refers to as *context* corresponds to what falls in the category of effects of the *situation* throughout this book. Situation is primarily understood in terms of the relational structure that people associate with a particular setting in which an allocation problem arises (Deutsch 1975; Deutsch 1985; Fiske 1992).

ences (Kahneman, Knetsch, and R. Thaler 1986, p. 299). By understanding that “the effects of context should also not be seen as contamination of some ideal, because no such pristine context-free justice exists” (Konow 2003, p. 1232), Konow points out that justice is an inherently context-dependent phenomenon (Konow 2001). This perspective on justice enables us to reconcile findings that would otherwise appear contradictory or that we would fail to understand. While such context-dependency might cause irritation in economics, other fields, such as sociology, social psychology and social anthropology, are more accustomed to integrating the interdependencies that exist between the individual and the groups they belong to in their theories and models. The structure of the social relations between individuals and groups will determine how a given situation is interpreted and affect the choice of allocation norm.

From a systemic point of view, Leventhal (1976) argues that the context (social system) we are in provides us with sets of rules and practices we will be encouraged, if not feel pressured to follow when making allocation decisions. For one thing, we feel a social pressure to conform to rules adopted by our group of reference (Blake, Rosenbaum, and Duryea 1955), but complying can also be seen as rational in the sense that it is less costly than non-compliance (Thibaut and Kelley 1959). However, even if we feel certain pressures to act the way we are expected to, we usually still have a variety of valid options to choose from. In regard to questions of just allocations, we will also be motivated to act in line with our perceptions of justice. These resource allocations, which are sometimes understood as rewards, have the dual purpose of satisfying individual needs and helping to achieve group goals (Leventhal 1976, p. 92). While both compliance norms and norms of fairness are beneficial as ends in themselves, in addition, we will also have motivation to apply the principle of justice that brings about the highest benefits for the system<sup>19</sup> at hand. Since each allocation role has its unique set of benefits and works towards a unique set of goals, the choice of an allocation norm is also of instrumental value (Leventhal 1976, pp. 94–95). This instrumentality is also what lies at the heart of Morton Deutsch’s (1975; 1985) social-psychological framework of distributive justice.

In his work, Deutsch takes a functionalist-systemic view on distributive justice, which builds on his work on conflict resolution (Deutsch 1973). His proposition suggests that justice essentially concerns “both individual well-

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19 System in this context is understood in terms of relatively small-scale organisations such as families and companies and not, e.g. countries.

being and societal functioning” (Deutsch 1975, p. 140). This implies that the distribution rule that will be followed in a given situation is one that is best suited to both promoting cooperation on the group level and also rewarding the individual in one form or another. To fully comprehend the contribution of Deutsch (1985) to research on distributive justice, his work must be put into the context of the prevailing view in social psychology at the time. This view was that with the equity principle, *the* universally valid justice principle had been identified (e.g. E. Walster, Berscheid, and G. W. Walster 1973). A reason why this belief prevailed is because most of the empirical research was set in the economic sphere, usually the workplace. Deutsch (1975) drew attention to the fact that this was a limiting view and that issues of distributive justice not only occur in the economic sphere but also among people embedded within non-economic social relations.

This idea was developed further and much enriched by the works of social anthropologist Alan Fiske, who was also convinced that “people are fundamentally sociable” and “that they generally organise their social life in terms of their relations with other people” (Fiske 1992, p. 689).

This means that people’s intentions with regard to other people are essentially sociable, and their social goals inherently relational: People interact with others in order to construct and participate in one or another of the four basic types of social relationships. (Fiske 1992, p. 689)

In a next step, the models of both Deutsch (1975) and Fiske (1992) will be elaborated on. The implications drawn from their combined works will guide us in an attempt to shed some light on the cogs and wheels behind our sense of distributive justice.

## 1. Justice, Social Relations and Group Functioning

How do we decide on a justice principle? According to Deutsch (1975) and Fiske (1992), the structure of the social relations among the people involved is decisive. Depending on the type of social relation, different allocation norms will work best towards the goal of the individual and the group. Since the concepts of *group*, as well as *cooperation* and *competition* are so central for the understanding of Deutsch’s (2006; 1985) framework, a clarification is in order.

There are at least three conditions that must be met in order for a cluster of at least two people to qualify as a *group* as we will use the term here (Deutsch

2006). First, these individuals must share at least one common characteristic. Second, they must perceive themselves as an identifiable entity. Third, the members have a mutual positive interdependence in regard to at least one goal or common interest. While people generally define group in such a way as requires that these three conditions are met, others working with a narrower conception of group impose additional criteria. These are that members interact with one another; that they jointly pursue their promotively interdependent goals<sup>20</sup>; that there be a set of shared norms regulating and guiding interaction between members; and that there exists a set of rules coordinating the interactions by shaping behaviour, duties, as well as rights of members (Deutsch 2006, pp. 20–66). As mentioned, for our purposes — that is for a mechanism-based approach of situational effects — the first three minimal conditions will suffice for our understanding of a group. As the social psychologist Henri Tajfel who is prominent for his work on social identity theory and intergroup behaviour (Tajfel 1970; Tajfel, Fraser, and Jaspars 1984; Tajfel 1974) states:

Socialization into "groupness" is powerful and unavoidable; it has innumerable valuable functions. It also has some odd side effects that may — and do — reinforce acute intergroup tensions whose roots lie elsewhere. (Tajfel 1970, p. 102)

Above all, the distinction into ingroup and outgroup is useful for the understanding of how identity and sociality are linked and what role they play in regard to cooperative and competitive endeavours (Tajfel 1974). *Cooperation* and *competition* can be distinguished by looking at the goal interdependence of the people involved. If the goals of the participants are positively linked, the table is set for cooperation, whereas if they are linked negatively, a competition for resources and privileges is likely to ensue:

In a cooperative situation the goals are so linked that everybody ‘sinks or swims’ together, while in the competitive situation, if one swims, the other must sink. (Deutsch 1973, p. 20)

More technically, a situation, such as a zero-sum game, in which every outcome that is better for one party is automatically worse for the other, so that *the winner takes it all*, is a pure conflict interaction. By contrast, a pure coordination interaction is given “when all feasible outcomes can be ranked such that if one outcome is better than another for one of the actors the same will be true for the other actor” (Bowles and Gintis 1998a, p. 17). While such

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20 Promotive interdependence is understood as a situation in which individual goals of group members are linked in such a way that the goal attainment of one member positively affects the probability of the others’ reaching their respective goals.

pure situations are rare, and people are usually dealing with a set of different and sometimes opposing goals in a given interaction, the relative strengths of these goals and the nature of the general orientation towards one another will “largely determine the nature of the conflict process” (Deutsch 2006).

Additionally, there is evidence that people are much more altruistic in prisoner’s dilemma games<sup>21</sup> when they are playing against someone they perceive as an ingroup member. Furthermore, they feel less negatively when their trust has been broken, because they do not feel the loss so badly when the reward goes to an ingroup member as when it goes to a member of the outgroup (Kollock 1998). Kollock argues that when teamed up with an ingroup member, players are actually playing an assurance game<sup>22</sup>, where, through trust, cooperation becomes more likely. Participants playing with an ingroup member said they did not want to feel guilty about exploiting their partners and they wanted both themselves and their partner to make a profit. When playing with an outgroup member, such as someone from a different fraternity, they had no problems defecting (Kollock 1998). These examples illustrate how the situation in which resources are distributed greatly influences what we perceive as just, and thus which allocation norm is applied. Furthermore, the group identity of people, the nature of their social relationship and their respective goals in regard to their interaction also have an effect on whether they interact in cooperative or competitive mode. Depending on these social relational factors different principles of distributive justice will be instrumental to achieving the preferred outcome.

## 2. A Relational View on Distributive Justice

Morton Deutsch differentiates between three main modes within which we interact with one another. These are either primarily *economically-oriented*, *solidarity-oriented* or *caring-oriented* social relational frameworks (Deutsch 1975). Similarly, Alan Fiske’s theory on the four relational modes (Fiske 1992) also suggests that how people solve allocation problems is fundamentally shaped by the structure of the social relations between those involved. The two frameworks are very compatible and will be discussed jointly in the

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21 This game has been discussed in detail by Anatol Rapoport and colleagues in their book *Prisoner’s Dilemma: A Study in Conflict and Cooperation* (Anatol Rapoport, Chammah, and Orwant 1970).

22 For an overview on the crucial differences between a prisoner’s dilemma game and an assurance game, see Sen’s article on *Rationality and Morality* (Sen 1977).

following. As Fiske points out, it is important to bear in mind that people rarely interact in pure versions of these relational modes; they should be understood as ideal types (Weber 1949).

a) Economic Orientation

An economic orientation leads to the development of a set of values, such as “maximization, a means-end schema, neutrality or impartiality with regard to means, and competition”, that follow the logic of the market (Deutsch 1975, pp. 147–148). Second, under the economic orientation, everything including (*wo*)*man* becomes a commodity. Third, measurement methods are developed so that these commodities can be compared. Fourth, economic activities have the tendency to grow in scope and size. Deutsch (1975) argues that whenever human interactions are economically oriented, maximisation and competition being the prevailing values, then *equity* will be the predominant justice principle. Other psychologists (among them Lawler and Worley 2006; Thibaut and Kelley 1959; Leventhal 1976; Sampson 1969; R. L. Cohen 1974) have elaborated on how distributing according to an equity rule in an economically-oriented setting is productivity-enhancing. The main mechanisms are summarised in Leventhal (1976, p. 96):

1. Recipients whose behaviours are useful in that they contribute towards the achievement of group goals have access to resources and can continue with their work.
2. Rewards act as strong positive reinforcements for those who are working towards the group goal. This motivates people to stay in the group and continue behaving in ways that benefit the group.
3. Conversely, low-performers are motivated to adjust their behaviour or leave the group, which could lead to an increase of average productivity in the group.

It is noteworthy that Deutsch’s (1975) take on the equity principle is rather unorthodox and in some ways quite the opposite of the mainstream conception of the concept. While normally, with equity we mean that an individual is rewarded according to their input to the group (E. Walster, Berscheid, and G. W. Walster 1973; Homans 1961), Deutsch takes a more group-centric view within which it is functional to assign limited means to those individuals who can produce the largest outcomes for the system (Deutsch 1975, p. 144).



The main difference to the conventional view is that instead of starting from the presumption of competition, he envisions a cooperative situation, in which everyone's fate is positively linked to everyone else's. Within this framework, it is rational to give more to a person not because they deserve a reward for it, but because it is functional for the system: this nonetheless fits well with the above mentioned mechanisms through which rewards are productivity-enhancing. However, even in economically-oriented situations, allocations by merit do not always have these positive effects. Negative effects arise in situations where people need to cooperate to achieve a goal. In such a situation, allocating different rewards on the basis of performance is counterproductive because people try to maximise their own productivity while at the same time blocking competitors (Steiner 1972; Lawler and Worley 2006; L. K. Miller and Hamblin 1963). And this can lead to resentment and socio-emotional problems, which can be expected to further hinder group productivity (Leventhal 1976, pp. 97–98).

Deutsch's (1975) economic orientation closely corresponds to Fiske's (1992) *market pricing* (MP) mode, which he understands as one out of four elementary forms of human sociality. When social relationships are organised in terms of market pricing, people usually reduce and are reduced to "a single value or utility metric that allows the comparison of many qualitatively and quantitatively diverse factors" (Fiske 1992, pp. 691–692). Like all relational modes, MP is a culturally formulated rather than natural mode of relating to other people (Fiske 1992, p. 706). Fiske (1992) sees the primary usefulness of MP as an efficient way for the large-scale organisation of labour and exchange. It is less useful for the production of public goods such as roads and education systems (Fiske 1992, pp. 714–715). Since it can be said that the provision and maintenance of such public goods require cooperative efforts, this is in line with the above quoted findings in the fields of business and social psychology, demonstrating that the merit-based approach is not constructive in these situations (Steiner 1972; Lawler and Worley 2006). Additionally, it should be noted that these findings on the positive effects of the merit-based approach were all focused on the workplace as a situational frame. In other realms of social life in which maximising economic productivity is not the goal, this approach can be detrimental. Creating explicit rewards and punishments can actually undermine prosocial tendencies people would have had without this offered compensation or sanction (Bowles 1998). When people are offered a compensation for something they would have gladly done voluntarily for one reason or another, some of which might have been purely altruistically motivated, it can undermine their original good intention. This

is because introducing a form of compensation shifts the relational structure of the situation from one psychological mode to another. An example of this effect is that when financial compensation is offered for prosocial acts such as hosting nuclear waste (Frey, Oberholzer-Gee, and Eichenberger 1996; Frey and Oberholzer-Gee 1997) or donating blood (Upton 1973), this actually erodes the willingness of citizens who were formerly willing to comply. This constitutes a change from something corresponding to a relational mode somewhere between a solidarity and a caring orientation (which will be discussed in more detail next), to a market orientation which calls for the equity rule. However, under these new conditions the potential blood donors, to take up one of the mentioned examples, actually feel that they are not being compensated enough for their altruistic act and, as a way of restoring balance, they withdraw. Another objective that MP or an economic orientation is not good at achieving is the fostering of enjoyable social relations or personal development and welfare. These are better addressed by a caring or solidarity orientation, which we will turn to next.

#### b) Solidarity Orientation

Compared with an economic orientation, solidarity oriented groups place an emphasis on a totally different set of values, focusing on those that serve to strengthen personal ties to other members of the group. These are, among others, “group loyalty, mutual respect, personal equality, and cooperation” (Deutsch 1975, p. 148). While people acting through an economic orientation assign different values to other people according to their achievements and personal power, in solidarity oriented interactions, people are seen as of unique and unexchangeable absolute value. To maintain these group ties, procedures that reduce in-group tensions and hostility are embraced. Regarding allocation problems, the principle of equality is the evident choice in this relational mode, because it has useful properties for the promotion of enjoyable relations. In contrast to equitable distributions that invite invidious comparisons, the most important of these properties is that equal distributions foster mutual respect and self-esteem of group members (Deutsch 1975, p. 148). Lerner stresses the importance of a feeling of oneness or connectedness for situations in which the equality principle is applied:

A justice of parity, where everyone shares alike, is commonly found in our society among people who see themselves as a team. A familiar part of our culture is the slogan, often presented as public affirmation of a common bond, ‘One for all, all for

one.’ ‘Share and share alike.’ The main consideration among team members is that everyone shares equally in the common fate. How much each member invested in terms of effort, etc., or his relative inputs are irrelevant considerations when it comes to dividing up the winnings or losses. (Lerner 1977, pp. 25–26)

This mode largely corresponds to Fiske’s *equality matching* (EM) mode. Equality matching is characterised by “turn taking, egalitarian distributive justice, in-kind reciprocity, tit-for-tat retaliation, eye-for-an-eye revenge, or compensation by equal replacement” (Fiske 1992, p. 691). People interacting in this mode are concerned about balancing things out and maintaining equality. As examples of people we usually interact with in EM mode, Fiske mentions acquaintances and colleagues we are not very intimate with. People are seen as distinct individuals and as equals and maintaining this balance is what maintains the relationship. Another way of seeing this is that EM mode does not:

(...)presuppose the prior existence of a group: EM is itself a common blueprint for connecting people. Many social groups are composed on the basis of equality among members, and balanced egalitarian relationships are significant in most parts of the world. Indeed, a principal focus of anthropology has been on the mechanisms by which balanced exchange between individuals and groups generates and maintains social structures. In every society, people give matching gifts back and forth, although the actual gifts vary from culture to culture (e.g., Christmas cards, birthday presents, dinner invitations, Kula shells, potlatch coppers, or wives, as the case may be). Sometimes people even give back to the donor precisely the same thing they received in the first place (see Sahlins, 1965). The implication of the anthropological evidence is that what people get out of such even exchanges is not some kind of long-term gain or material security, but the EM relationship itself. (Fiske 1992, pp. 703–704)

Empirical findings support these theoretical arguments. When maximising productivity as well as preserving harmony and heightening solidarity are the goals of allocators, then they will deviate from the equity principle to make outcomes more equal (Leventhal 1976; Hysom and Fişek 2011). Similarly, Liebig et al. find that cooperative relationships induce preferences for the equality norm, while use of incentives leads to higher levels of inequality (Liebig et al. 2015, p. 57). We see how in solidarity oriented social relations, *equality* is considered the just allocation norm and it is valuable and instrumental in terms of its stabilising effect on the relationship. When there are higher degrees of identification with the group and we organise our relations through a caring orientation, this balancing becomes unnecessary.

c) Caring Orientation

The caring orientation is the prevalent mode of social interaction when the relationship revolves around the fostering of the development and welfare of group members (Deutsch 1975). The caring orientation is closer to the solidarity orientation than the economic orientation in that it focuses on emotional and relational values. Next to the possibility of equal status among group members such as under solidarity orientation, traditionally unequal relations such as between parents and their children are also common. The set of adopted values in the caring orientation mode include sensitivity and responsiveness to the needs of others. Additionally, people in caring relationships feel mutually responsible for each other and tend to each other's well-being and nurturance. The primary principle of justice in this relational structure type is *need* (Deutsch 1975, pp. 148–149). There is evidence showing that participants of an experiment taking on the role of allocator are more likely to distribute according to the needs of a hypothetical recipient if they are described as a close friend (Lamm and Schwinger 1980). Additionally, there is also evidence suggesting that we exert more effort to help someone if they are dependent on us (Berkowitz and Daniels 1963).

The caring orientation corresponds to a high degree with Fiske's relational model of *communal sharing* (CS). Communal sharing relationships are characterised by high values of solidarity and kindness. In CS relationships, people are motivated by the need for intimacy and a sense of unity with others. Because of the strong bond that CS creates, another's pain or pleasure is experienced as one's own (Lerner 1975, p. 14) and basically "my needs and your needs are the same thing" (Fiske 1992, p. 698). CS relations give people a feeling of belonging that they also draw a sense of identity from. People tend to idealise these relationships as something eternal. The group is understood in an essentialist<sup>23</sup> way, with people often alluding to some form of shared inherent, natural *essence* they share, such as a sense of identity derived from a close emotional bond between two or more people. Since people also derive this essence from ancestry or ethnicity, next to close intimate ties such as those found in families or among lovers, we can abstract the concept of CS and apply it in a more generalised form to more large-scale groups (Fiske 1992).

Fiske associates CS mode with social anthropologist Mead's (1937) understanding of cooperation or Triandis' (1988) collectivism. By doing so,

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23 In contrast with EM relations, the existence of the group is presupposed.

he broadens the scope of Deutsch's understanding of a caring orientation to include more abstract forms of group membership and identity such as communities and cultures, as opposed to merely close kin relations. This slightly more inclusive approach leads Fiske to characterise whole societies and cultures as more or less organised towards CS. From this perspective, he classifies the idea of communism as the most prominent political expression of CS mode (Fiske 1992, p. 699).

Communal sharing is the most common mode used between people with strong kinship ties such as in modern nuclear families or in hunting gathering societies throughout the world (Deutsch 1975; Fiske 1993; Lerner 1977). However, the flip side of a strong collective identity within one's ingroup, in which people exaggerate the feeling of sameness and downplay differences between group members, is the exaggeration of the otherness of outgroup members (Tajfel 1970; Fiske 1992). Applied more generally to the political sphere, we can see how CS mode has a potentially very dark side. When group identity and the traditions that are associated with them are seen as sacred, people are motivated to protect and defend them against threats; and this can culminate in war and even genocide (Fiske 1993). Weber famously pointed out that the oldest and most powerful type of legitimacy of a given social order is derived from its sacredness and tradition as an embodiment of "that which has always been" (Weber 1978, pp. 36–37).

#### d) Order and Authority

Fiske (1992) also lists *authority ranking* (AR) as a fourth mode of social interaction. AR mode is characterised by an asymmetry and hierarchy among people. Interactions revolve around differences in rank. In AR mode, people organise social interactions around these hierarchical differences, so that those occupying a higher position have prestige and privileges that those occupying the lower ranks do not have. Those on the lower end of the hierarchy are thus subject to the control of those higher up and also typically depend on them for protection. The distribution of resources is thus very unequal, with higher ranking people getting more and better resources sooner, including by appropriation. AR mode is associated with power, authority and obedience and is typical of organisations led by charismatic leaders and/or highly hierarchical ones like the military (Fiske 1992). There is no equivalent in Deutsch's (1975) typology, however, a fitting goal of AR interaction would be the maintenance of *power* relations and the *existing order*. The allocation

norm that best describes this situation in which subordinates can be subjugated to overt exploitation is perhaps *force*. In social relations structured by authority ranking, those in power can make a claim on resources by force and it will usually be in their best interest to do so. Because this is typically a win-lose situation and does not fit in a cooperative framework, there is no inherent interest in maintaining the social relation, it is more a means to ends. This makes it different to the other modes of interaction which can all fit under a cooperative framework. The stability of AR relationships must depend on their degree of perceived legitimacy and as Weber pointed out, the basis therefore is usually ideological (Weber 1978). While this mode will not be central for the following, the other three relational modes will be.

e) A Situational Framework

The implications of the above are summarised in table 2.1. It seems that the allocation rule to be implemented naturally depends on the nature of the relational structure. This leads us to hypothesis 3:

**Hypothesis 3** *Depending on the situation, other principles of distributive justice will be dominant.*

Specifically, among people operating in MP mode (economic orientation), and where the goal is to raise productivity, there is incentive and it is functional to allocate resources according to merit. Allocating resources according to individual merit can help boost efficiency and help produce the highest outcome benefiting all group members (Deutsch 1985; Fiske 1993). This leads us to expect that:

**Hypothesis 3.a** *The merit principle dominates the need and equality principles in the work situation.*

Distributive Justice and Sociality		
Relational Structure	Maintenance / Fostering of:	Allocation Norm
market pricing	economic productivity	merit
equality matching	enjoyable social relations	equality
communal sharing	personal development & welfare	need
authority ranking	power relations and the existing social order	force

Table 2.1: Typology of distributive justice in terms of social relations; adapted from the relational frameworks of Deutsch (1975) and Fiske (1992)

In the solidarity-oriented or EM mode, the goal of the social interaction is to foster or maintain agreeable social ties because they are seen as valuable in themselves. Under these conditions, such as are found among friends, or other groups of people who perceive themselves as equals, equality is the principle of justice that is best suited for maintaining existing bonds (Deutsch 1985; Fiske 1993). This leads to hypothesis 3.b:

**Hypothesis 3.b** *The equality principle dominates the need and merit principles among friends.*

In the communal sharing mode, people are oriented towards caring for each other and providing (mutual) aid is the norm. Since personal development and welfare come first, people are given what they need. As Deutsch points out, this mode is especially prevalent when dealing with people we feel responsible for (Deutsch 1975). This is why we expect that:

**Hypothesis 3.c** *The need principle dominates the merit and equality principles among family members.*

In a situation involving public goods, in our case the allocation of scholarship money, we can define the goal as twofold. First, when spending public money, efficiency considerations are usually invoked in the sense that it is often expected that public investments will bring about some kind of returns to society. This invokes a MP relationship with the goal of raising overall welfare or productivity (Fiske 1992; Deutsch 1975). When productivity

becomes a primary motive, input-output considerations become salient, so that distributions according to the proportionality norm or merit can be expected. On the other hand, another kind of justification for public spending is to guarantee fairness in the sense of equality of opportunity. A distribution according to need is best suited for reaching this goal, leading us to expect that need will also be salient in the case involving public goods. In any case need and merit considerations will probably dominate equality:

**Hypothesis 3.d** *In a public goods situation the merit and need principles dominate equality.*

### III. Context Matters

In regard to the effects of context on justice evaluations, the research by Henrich and colleagues (2004), who performed a series of game experiments in 15 small-scale societies, is a rare jewel. For one thing, non-Western, non-industrialised societies are seldom included in studies on distributive justice. Instead, a disproportionate number of studies has been conducted using Western student populations, and among these, students of economics and psychology have been grossly overrepresented (e.g. Roth et al. 1991; Loewenstein et al. 1993; Charness and Rabin 2000; Fisman, Jakiela, and Kariv 2015; R. H. Thaler 2018; Andreoni and Vesterlund 2001; Mikula 1974). For another thing, performing the same experiments across societies generates rich data that broadens our understanding of the workings and importance of context effects. One of the most important findings is that there is in fact a wide variability of outcomes across societies and that group belonging is the strongest predictor on the individual level (Henrich, Fehr, and Gintis 2004). For some of the societies under study, Henrich and colleagues (2004) find that when they use more fine-grained operationalisations of context, such as the community level or the population size of a camp, the predictions of the participant's game experiment outcomes become more precise. These more immediate contexts are more predictive of the outcomes, even if there is no spatial segregation between communities (Henrich, Fehr, and Gintis 2004, p. 37). This illustrates that life under similar contextual circumstances leads to more homogeneous behaviours, as seen in the game experiments. This is suggestive of a socialisation mechanism. However, as Boudon and others have argued, the term *socialisation* represents a black box and in itself cannot be considered a sufficient sociological explanation for



anything. Therefore, breaking it down to plausible observable mechanisms is important (Boudon 1998; Hedström and Swedberg 1998). One way of thinking about socialisation is that through shared experiences and a shared set of values and norms they are exposed to, as well as educated to endorse, people develop certain group-specific ways of thinking about the world (Durkheim 1982; Durkheim 2005; Walle 2008). Before we delve any deeper, let us find a useful definition of context and define the mechanisms through which they shape individual behaviour.

## 1. What is Context?

In his thesis on *Contexts of Inequalities*, in line with Friedrichs and Nonnenmacher (2014) as well as Hedström (2005), Christoph Zangger defines *social context* as a “socio-spatial, temporary social structure that is associated with expectations and offers opportunities and restrictions for people’s actions” (Zangger 2017, p. 5). For our purposes, the focus will lie on a social notion of contexts, suggesting they “(...) are made up of people, their behavior and their beliefs” (Zangger 2017, p. 6).

Although abstract and hard to grasp, context is a central concept in sociology, given that it is a field primarily involved in explaining human behaviour in light of their embeddedness in groups, structures and institutions as well as their interactions with others (Esser 2002). Given this interdependency of humans with one another within their context:

A fruitful analysis of human action requires us to avoid the atomization implicit in the theoretical extremes of under- and oversocialized conceptions. Actors do not behave or decide as atoms outside a social context, nor do they adhere slavishly to a script written for them by the particular intersection of social categories that they happen to occupy. Their attempts at purposive action are instead embedded in concrete, ongoing systems of social relations. (Granovetter 1985, p. 487)

Contexts thus constitute the frame within which individuals interact and create social outcomes. Ultimately, context is important because our preferences, beliefs and actions are influenced by our environment in fundamental ways (Hedström 2005; Zangger 2017; Durkheim 1995; Esser 2002). This conceptualisation corresponds to what Peter Blau calls structural effects (Blau 1960). We will next turn our attention to the mechanisms through which contexts affect individual preferences, beliefs, and as a consequence, their actions.

a) How Contexts Shape Individual Outcomes

Durkheim's work has frequently been cited as exemplary in the way that he explained puzzling (to the Western observer) Aboriginal rituals in *The Elementary Forms of Religious Life* by literally putting them into context. Another such example is the way Durkheim described the social element of suicide in *Suicide: A Study in Sociology* (Esser 2002; Blau 1960; Boudon 2014). Part of what makes his analyses exemplary is that he distinguishes between the individual and the collective consciousness, which he understands as more than a sum of its parts:

The greater part is diffused. There is a large collective life which is at liberty; all sorts of currents come, go, circulate everywhere, cross and mingle in a thousand different ways, and just because they are constantly mobile are never crystalized in an objective form. Today, a breath of sadness and discouragement descends on society; tomorrow, one of joyous confidence will uplift all hearts. For a while the whole group is swayed towards individualism; a new period begins and social and philanthropic aims become paramount. Yesterday cosmopolitanism was the rage, today patriotism has the floor. And all these eddies, all these fluxes and refluxes occur without a single modification of the main legal and moral precepts, immobilized in their sacrosanct forms. (Durkheim 2005, p. 279)

Boudon refers to something similar when he says that people are usually not conscious of the moral feelings they endorse, but these feelings are deeply structured by the groups and spatial-temporal contexts they belong to. This is why, looking back in history, we often feel that people had bizarre views. After all, "generations live in different contexts" (Boudon 2014, p. 33). Individual actions must therefore always to some degree be understood both in terms of individual propensities, as well as of the relevant context. Context shapes people's behaviour by providing them with norms and values embraced by their relevant reference or peer group (Esser 2002; Merton 1967; Merton 1938; Blau 1960). These norms and values are commonly subsumed under the term *culture*. And while an individual's beliefs and preferences are shaped by the culture they are embedded in, they are also distinct from it:

Individuals can be described in terms of their orientations and dispositions, just as groups or entire societies can be described in terms of the prevailing social values and norms; and individuals can be distinguished on the basis of their social status, just as communities can be distinguished on the basis of the status distribution in them. These parallels tend to conceal the fundamental difference between the implications of group structure and those of the individual's own characteristics for his conduct. Even socially acquired or socially defined attributes of individuals are clearly distinct in their effects from attributes of social structures. (Blau 1960, p. 178)

Therefore, while people's behaviour can be explained in terms of their individual preferences and beliefs, it is unreasonable to assume that these will remain uninfluenced by the contexts they are embedded in.

## b) Socialisation and Culture

Bringing cultural socialisation and preferences together, Bowles and Gintis (2011) make the point that social norms, that are taught to children growing up in different societies from a young age, are internalised. In the learning process, they become what we usually call *preferences* that act as motivations in their own right and not only instrumentally as means to ends or as constraints on behaviour (Bowles and Gintis 2011, pp. 168–171). Cultural transfer is a transfer of information, leading to the internalisation of norms and shaping preferences. Children learn what the society they are living in promotes as values and if they internalise these norms, these norms affect their behaviour precisely because they have become preferences. This is very close to Durkheim's idea of how socialisation shapes our identity. He goes as far as to say that through our education in the family and at school, we are reborn as social beings (Walle 2008; Durkheim 2011). On a psychological level, through observation and learning, through the reactions of relevant caregivers, a child gradually internalises specific processes, norms and values of the society they live in (Hoffman 1977; Parsons and Shils 1977; Lerner 1977). Socialisation can thus be understood as the process through which dominant value and belief systems of groups are transmitted from generation to generation. And this is very much in line with the perspective of evolutionary biology, which understands cultural transmission, or socialisation, as a non-genetic transmission of those traits that are desirable, depending on environmental conditions, from one generation to the next (Boyd and Richerson 1985; Bowles and Gintis 2011). This understanding of culture as an “evolutionary force in its own right, not simply an effect of the interaction of genes and natural environments” (Bowles and Gintis 2011, p. 13), provides the link to understanding how the institutions that shape our societies have a causal effect on our beliefs and values through the socialisation of children into their respective societies.

To come back to our original example, one of the main conclusions of *Foundations of Human Sociality* (Henrich, Fehr, and Gintis 2004) is that while there was not much within-group variation, there was substantial intragroup variation in behaviour in the ways the ultimatum game was played. Henrich

and colleagues find that “behavior in the experiments is generally consistent with economic patterns of everyday life in these societies” and that intragroup differences in the organisation of the economic system and the degree of market integration are the best predictors of the variations (Henrich, Fehr, and Gintis 2004, p. 50). Market integration refers to the prevalence and importance of market exchange for the functioning of the society<sup>24</sup> and organisation of the economy refers primarily to the differing degrees of within-group cooperation necessary in people’s everyday lives<sup>25</sup>. The level of prosociality in the game experiments was higher, “the higher the degree of Market Integration and the higher the Payoffs to Cooperation” in participants’ everyday lives (Henrich, Fehr, and Gintis 2004, p. 50).

These findings suggest that the institutions that our lives are organised around affect our perceptions of justice. Of course reverse causality is to be expected as well: The organisation of our societies could be a result of our preferences and probably to some degree is an expression of them. However, since changing an existing system takes a lot of time and effort, we can safely assume that it is more likely that we will be affected by the system than that the system will reflect differences in preferences. Therefore, we can expect cross-cultural disparities in beliefs and preferences to evolve due to different socialisation processes (Lerner 1977). Of course much comparative research has dealt with these issues, and we will only barely touch on them here. Some examples include the finding that in a survey on *Popular Attitudes Toward Free Markets* survey participants from the US were more used to engaging with friends using the equity norm than participants from the former Soviet Union (Shiller, Boycko, and Korobov 1991, p. 393). Cross-cultural differences in opinions have also been found to be based on information. In their study that aimed at breaking down the effects of context, Aarøe and Petersen (2014) suggest that “cross-national differences in welfare support stem more from differences in available information such as media stories and mental pictures, than from differences in the psychological predispositions used to process this information” (Aarøe and Petersen 2014, p. 6). However, in their study on *Preferences for Redistribution*, using data from the *World Values Study*,

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24 In agricultural societies, the amount of land used for cash cropping in relation to what is used for subsistence cropping is another measure of market integration (Henrich, Fehr, and Gintis 2004, p. 35).

25 For example, “the economy of the whale hunters of Lamalera depends on the cooperation of large groups of non-relatives” (Henrich, Fehr, and Gintis 2004, p. 29).

Alesina and Giuliano (2009) still find evidence of cultural differences<sup>26</sup>. They conclude that next to individual characteristics, preferences for redistribution are also

a product of history, culture, political ideology and a perception of fairness. In particular, women, youth and African-Americans appear to have stronger preferences for redistribution. Individuals who believe that people try to take advantage of them, rather than being fair, have a strong desire for redistribution; similarly, believing that luck is more important than work as a driver of success is strongly associated with a taste for redistribution. (Alesina and Giuliano 2011, p. 127)

Alesina and Giuliano point out that there is a substantial cross-cultural variation in preferences for redistribution and that their results suggest that this could be attributed to “differences in religion, histories of macroeconomic volatility and more generally defined culture” (Alesina and Giuliano 2011, p. 127).

In this study, the relevant contexts are Switzerland and the United States, and within them, the student populations of two universities (Bern and Princeton). As Western democratic countries that have endorsed liberal ideologies (Phelan and Dawes 2018) and subscribe to meritocracy, differences due to context are expected to be of much lower relevance than in the study by Henrich et al. that included very heterogeneous societies. In the US and Switzerland, two highly individualised societies in which the capitalist logic prevails, we are taught the rules of competition early on and, presumably unthinkingly, take them for granted in many situations. Because economic values tend to spill over to other areas of culture or society, this has led to a pervasiveness of economic rationality, apparent in the commodification of virtually every sphere of life (Diesing 1973; Deutsch 1975): “Given the nature of Western society, whose characteristics predispose it to have an economic orientation, it has been natural for social psychologists to focus on equity as the central principle of distributive justice” (Deutsch 1975, p. 149). And Lerner summarises this desert orientation in terms of an endorsement of the values of competition under the condition of equal opportunity, fair play, self-interest and a resulting sense of entitlement:

It appears to be a rather commonly held assumption in our society that under certain conditions each person has the right, if not the obligation, to ignore everyone else’s interests, efforts, investments, and merely stay within the rules while attempting to

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26 The authors cleverly separate the effects of culture and the national context in which people live by focusing on immigrants in the US and using average preferences for redistribution in their countries of origin as a measure of culture (Alesina and Giuliano 2009, pp. 114–115).

achieve — deserve — something he wants. [...] in situations of parallel competition it is assumed that all the participants begin with an equal right to the desired outcome. They have equal relevant investments and they begin with equal opportunity to attain the goal. Under these conditions the norms of justified self-interest then apply. If the decision concerning the allocation of the desired resource comes down to ‘him or me’ and that is all there is to it — then obviously — ‘I have every right to see to it that I come out on top. Otherwise I would be a fool or simply a loser’. According to the norms of justified self-interest, the winner deserves to win — as long as he didn’t cheat — and it was a ‘fair’ competition. (Lerner 1977, pp. 18–19)

However, differences are expected in the degree to which people believe in the *rags to riches* narrative.

### c) The American Dream

The US is in many regards an interesting case for research on distributive justice. While levels of inequality are high, redistribution policies are kept to a minimum, and social mobility is considerably less likely than in any other Western country, people’s beliefs about their chances of social mobility are very optimistic (Alesina, Di Tella, and MacCulloch 2004; Robinson and W. Bell 1978; Hochschild 1981; Piketty 1995; Almås, Cappelen, and Tungodden 2016; Alesina and La Ferrara 2005, p. 2009). In her book *What’s fair? American beliefs about distributive justice* Jennifer Hochschild (1981) delves on the question as to why the American working class is not organised in a socialist movement. Her explanation is that because American workers generally believe in individualism and the American dream, egalitarianism is unattractive. “People often point to equality of opportunity as the great safety valve of American politics; they argue that Americans do not seek equality because they hope to become unequal” (Hochschild 1981, p. 13). The chance of upward mobility and belief in a just world make equality seem undesirable to the average American. And the poor “limit their aspirations and dreams to reduce cognitive dissonance between desires and possibilities” (Hochschild 1981, p. 21).

In general, Americans seem to endorse and believe in the *rags to riches* narrative much more than people from other countries, which means they believe they are living in an open, socially mobile society where, if you put in the effort, everything is possible (Robinson and W. Bell 1978; Piketty 1995; Fong 2001; Fong, Bowles, and Gintis 2006; Gilens 1999; Shepelak 1989). Because of this, and a strong belief in the legitimacy of meritocracy, resulting

inequalities are perceived as fair, since everyone is thought to have had their chance at success. This might also be the reason for the peculiar finding that, while in Europe the left and the less well off have traditionally been concerned with inequality, in the US, happiness levels of the poor and the left are largely unaffected by inequality (Alesina, Di Tella, and MacCulloch 2004, p. 2009). In a cross-cultural comparison of the US and Norway, using a large-scale online experiment, Almås and colleagues find that Americans have much higher preferences for inequalities than the Scandinavians. The size of the country-level differences in mean choice of inequality level was larger than the respective within-country differences between “conservatives and non-conservatives” (Almås, Cappelen, and Tungodden 2016, p. 22). Contrary to what might be suggested by the debate surrounding the topic, the different preferences across cultures are not caused by variation in equality-efficiency considerations but by a differing view of fairness (Almås, Cappelen, and Tungodden 2016, p. 23). While Scandinavians are more egalitarian and the modal answer to the question whether they think society should equalise income was to completely agree, for Americans who are more libertarian, the mode was to completely disagree with the statement (Almås, Cappelen, and Tungodden 2016, p. 22). In both countries meritocratic distribution is the preferred mechanism of distribution of pay. In line with previous studies (Fong, Bowles, and Gintis 2006; Alesina and Angeletos 2002; Alesina, Di Tella, and MacCulloch 2004), the essential factor predicting redistributive preferences are beliefs about the sources of inequality. As has been discussed in the subchapter on *Beliefs and Distributive Justice*, this finding has shown up consistently in research, and is especially relevant since in America, the belief that poverty is caused by the laziness of the poor, or some other non-exogenous reason, is widespread (Williamson 1974; Fong, Bowles, and Gintis 2006; Fong 2001; Gilens 1999; Alesina and Angeletos 2002). Furthermore, the US is a highly individualistic country that holds the meritocratic norm in high regard and typically reserves the needs-based approach for very intimate relationships, such as among family (Triandis et al. 1988; Noddings 2013). Taken together, this leads us to expect that:

**Hypothesis 4** *The choice of a justice principle will be shaped by context.*

Because in the United States belief in meritocracy is particularly high, we can expect people to more readily adhere to a merit-based approach:

**Hypothesis 4.a** *In the context of the United States, merit is a more dominant principle of justice than in Switzerland.*

Furthermore, because of the belief in equal opportunities and the beliefs on the causes of poverty in the United States, inequalities will be legitimised to a higher degree. This is why we would expect that resource egalitarian concerns are less prevalent:

**Hypothesis 4.b** *In the context of the United States, equality is a less dominant allocation norm than in Switzerland.*



## Chapter 3: Data and Methods

### A. Data

This work draws on data from the project *Justice, an individual, contextual or situational affair?* (JInCS) which were specifically collected for the purpose of enabling a disentanglement of the factors contributing to our perceptions of distributive justice. The project aims to contribute towards a deeper understanding of perceptions of distributive justice. JInCS was fully funded by the Doc.CH program of the Swiss National Science Foundation (SNSF — P0BEP1\_168648). Doc.CH is a support program, financing young academics in the Humanities and Social Sciences for the duration of their PhD studies.

The data stemming from the JInCS project were collected from three different samples. While it was originally planned as a general population survey in Switzerland, including all language-regions, it was then expanded to include two student samples. The student data were collected at the University of Bern, Switzerland and Princeton University in the United States. Prior to data collection, both quantitative and qualitative pretests were performed in October and November 2017.

### I. Samples

While the data for the Swiss general population were collected using both paper and pencil as well as online questionnaires — the respondents chose what suited them best — the student data were solely collected using an online questionnaire. While it was cheaper and more efficient to collect data digitally, the respondents from the general population sample had to be contacted via letters sent through the mail, because home addresses were the most reliable source of contact data. Because the Swiss general population data included all age groups, contacting respondents by email was not a realistic option.

## 1. General Population Sample in Switzerland

The respondents from the Swiss general population sample were drawn from a stratified random sample (using region, gender and age as stratifying variables) by MS Direct, a marketing company with a large address register. The Italian-speaking region was oversampled to allow for a differentiation of context-level effects within Switzerland<sup>1</sup>. In late 2017, when the contact data of the respondents were drawn, MS Direct had over 3 million entries. In a population of approximately 8.4 million at that time, this corresponds to over a third of the Swiss population. The data were collected between February and June 2018.

To raise response rates, Dillman's (2007) tailored design method (TDM) was closely followed. TDM is based on social exchange theory and the assumption that by reducing the costs for the participants and increasing the benefits of participation, they will be more likely to cooperate and provide researchers with their data (Dillman 2007). To establish trust and try to convince participants of the relevance of their contribution, participants were contacted three times. First, they received a letter announcing that they had been selected at random to participate in the survey. The second letter contained six items. Next to the paper-pencil (PAPI) questionnaire, these were: a letter to inform the participants on how to proceed, including an individual code for online participation; a post-paid envelope to reduce the costs of participating; a card they could send back with their contact data if they wanted to be informed of the results; as an incentive, they received two customised printed webstamps worth CHF 1.00 each; as well as a thank you note to which the stamps were attached. About two weeks later, the respondents were contacted once again to thank those who had already participated and to remind those who had not yet gathered the willingness or had time to respond of the importance of their participation. On the whole, with a response rate of 40%, the measures seem to have paid off. Of the approximately 4500 people contacted, 1.789 people responded.

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1 While there are slight differences, these within-country context effects will not be discussed further here.

## 2. University of Bern

The Swiss student data were collected at the University of Bern in February and March 2018. The students were invited to participate via email. Because of strict data protection regulations, the emails were sent out by the admissions office (*Zulassung, Immatrikulation und Beratung*). Also due to the strict rules, it was not permitted to contact the students more than once. Of the 12.735 (doctoral) students who received the email (everyone enrolled that term) 1.081 students participated. A reason for the rather low response rate of 8.5% might have been that Unipark, the tool used for the survey, allows for only 100 people to be active in the survey simultaneously and the time point of the highest response rates was more or less immediately upon receipt of the email.

## 3. Princeton University

The data collection at Princeton University was kindly organised by Edward Freeland, associate director at the Survey Research Center (SRC), Princeton University. Email invitations were sent out to all 2.910 enrolled graduate students at Princeton. Of these, 358 students participated in the online questionnaire, yielding a response rate of roughly 12%. The data were collected between March and April 2018.

In total, 1.439 students from the University of Bern and Princeton University participated in the survey. Together with the respondents from the Swiss general population that makes up a total of 3.228 respondents or, since each of distributional survey experiments consisted of three outcomes, 9.684 observations for the experiments.

## *B. Methods*

In this section, first survey experiments in general are discussed, before the distributional survey experiment (DSE) is introduced as a new approach. In a next step, the designs of the four DSEs are presented before delving into the question of analytical strategies.

## I. Survey Experiments

Since questions of distributive justice can be considered sensitive issues from an ethical and political point of view, social desirability bias can be a problem worth thinking about when collecting the data. Survey experiments can be a very powerful tool for the reduction of social desirability bias (Auspurg, Hinz, Liebig, et al. 2015). First, through the hypothetical nature of the question, respondents feel less threatened (Badgett and Folbre 2003). Second, the dimensions/variables of interest are not brought to the attention of the respondents explicitly, but indirectly as part of a whole description. This makes respondents less aware of the experimental context. Evaluating characteristics of interest in bundles, as is the case with survey experiments, makes the situation closer to life, while also lowering the potential for social desirability bias (Alexander and H. J. Becker 1978; Badgett and Folbre 2003; Wallander 2009). Furthermore, another advantage of survey experiments is that they are a highly efficient data collection method. The researcher can manipulate several treatments in one and the same experimental setup. So as not to overburden the respondent, researchers should restrict the number of variables to seven (+/-2) (Auspurg and Hinz 2015). Additionally, survey experiments combine the advantages of conventional population-based surveys and experiments (Angrist and Pischke 2009; R. Becker and Zangger 2015). Since survey experiments are integrated in a questionnaire, they are more economical than experiments in laboratory settings and can reach more people, thus raising external validity. Also, because they use efficient designs, in which the dimensions that make up a vignette are brought into a nearly orthogonal array, survey experiments have the valuable property of circumventing the problem of multicollinearity of different dimensions (Rossi and A. B. Anderson 1982; Badgett and Folbre 2003). Because of these design properties, it is possible to compute the relative importance of the single dimensions for the overall assessments (Rossi and A. B. Anderson 1982).

## II. The Distributional Survey Experiment

The distributional survey experiment incorporates all the above mentioned useful properties but the design is more suited to capturing the essence of the problem inherent in allocation decisions. The design of the DSE combines some of the useful features of a factorial survey experiment, a choice experiment and game experiments in laboratories. While in a factorial

survey experiment (FSE) respondents are presented one vignette at a time and asked to make ratings on a scale (Auspurg and Hinz 2015), in choice experiments (CE) respondents are shown a collection of typically three vignettes as a group, usually presented in the form of a table, and they are asked to select the alternative they think is best (Street, Burgess, and Louviere 2005; Kuhfeld 2005).

The DSE combines the advantageous properties of both approaches but adds a new element that makes it better suited for the issue at hand: By asking the respondents to distribute a prespecified sum among three<sup>2</sup> people described in vignettes. This is a more active task that involves the weighing up of justice principles across vignettes and thus captures the relevant evaluative processes people undergo when attempting to make a just distribution better than in a FSE or a CE. The DSE brings the advantage of incorporating the fact that in real life, given that resources are limited and sometimes scarce, people making allocation decisions are faced with the necessity of making trade-offs between competing claims. It is rarely possible to give to everyone in such a way so as to, for example, simultaneously satisfy both need and merit claims of different people; when resources are limited, giving more to one person, automatically leaves less for the other two. This means that people need to prioritise, and that what the three people receive is inherently interdependent.

To account for this interdependence, the DSE is designed in the same way as a choice experiment, meaning that the vignettes were constructed using a D-efficient arrangement and that the single vignettes were additionally grouped efficiently into choice sets (Kuhfeld 2005). Therefore, the dimensions/variables making up the vignettes are arranged in a way that maximises orthogonality and optimises level-balance. Visually, and perhaps task-wise, because it forces respondents to integrate the information from three vignettes in the making of one decision, the DSE is more similar to a choice experiment than a factorial survey experiment. However, in a choice experiment we would only be left with the information on which of the three alternatives was most attractive for the respondent — in our case, this would correspond to the answer given in response to a question like: “Who would you want to give the reward to?” — and we would not know which of the other alternatives ranked second or third and by how much. The DSE leaves us with more abundant information on the preferences of the respondents.

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2 Of course this number can be modified, however, in choice experiments it is most common to group vignettes in choice sets of three.

While the outcomes are metric, just as is usually the case with FSEs, the difference is that instead of independent ratings for each “vignette person” — in our case, this would correspond to the answer to a question like: “How deserving is this person of a reward?”<sup>3</sup> — the outcome is the sum each person described in a vignette receives, given the combination of attributes of the other two people. This is the biggest advantage of the DSE compared to other methods. Because of the inherent interdependence of the three outcomes per DSE, we are doing more justice to the nature of the problem than would be possible with either a factorial survey experiment or a choice experiment.

As in real life allocation problems, respondents are faced with a complex situation, in which they need to weigh up the attributes of one person against those of another and decide who should get how much based on their sense of justice. This is complex, because even within one person we might have conflicting information, so that in some regards the person can be seen as deserving on the grounds of merit and in others less so, and the same goes for variables depicting the person’s need. And then, one person who is needy might not also be very deserving. Furthermore, these evaluations need to be performed keeping the relevant criteria of the competitors (the other two people described in the DSE) in mind. Additionally, factors that have nothing to do with merit or need, such as ethnic origin or gender, could have an effect on justice evaluations, even if subconsciously.

Summing up, the DSE creates a situation in which respondents evaluate a set of people (here three) — each of whom has their own individual combination of attributes — simultaneously and in direct comparison with the others in the set. As in a real life allocation problem, one person’s gain is another’s loss. In real life, problems of distributive justice become especially salient in cases where we feel that scarce resources are not being justly distributed. What do we do when we have less resources than what would be necessary to make ideal distributions according to our individual sense of justice? We are forced to prioritise and an efficient way to do this is to take interactions of need and merit variables into consideration — this is possible with a DSE. Additionally, as in a real distribution problem, respondents have to make an implicit relative positioning of the people described in the vignettes in comparison with the other two people in the choice set. Compared to a FSE or a CE, a DSE is arguably psychologically more satisfactory for the

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3 Or, as has been done frequently (Auspurg, Hinz, and Sauer 2017), respondents are asked to rate the fairness of a described person’s wage, for example, by rating it on scale from *much too high* to *much too low*.

respondents, since it allows them to make more detailed differentiations in line with their preference order. For example, they can distribute something (or even the same amount) to everyone, if that is what they think is the fairest option. It is not possible to capture preferences this precisely using FSEs or CEs, especially because these methods do not allow for interdependencies to be accounted for to this degree. The case for the DSE becomes especially apparent when we think of radical egalitarians, for whom it is never possible to reveal their preference when forced to make a justice evaluation on a scale or to pick one individual over the other two. The DSE offers respondents much more freedom to express their underlying preferences. For these reasons, the DSE is a powerful tool for the collection of data on distributive justice. It provides the researcher with data that depict the real-life trade-offs that people are forced to make when distributing goods according to their justice preferences more precisely compared to alternative methods. On top of that, the flexibility of the DSE enables us to measure and take into consideration the complex interplay of individual-level effects, the effects of context and the situation.

### III. Designs of The Distributional Survey Experiments in Four Situations

To include situation as a relevant factor in justice evaluations, four DSEs were designed in different settings. Money was to be distributed among friends, at the workplace, among family members and among prospective students applying for a scholarship. While in general any kind of resource that can be subdivided is a possibility, monetary resources are convenient. For one thing respondents are familiar with using money in allocation problems and for another, money allows them much freedom in subdividing the amount into shares as proportionally small or large as they please. The sum to be distributed varied randomly between the choice sets, with either CHF 3000.00, CHF 9000.00, CHF 18000.00 or CHF 30000.00<sup>4</sup>. In all DSEs, all two-way interactions between dimensions were included in the design. In the following, each of the distributional survey experiments will be presented separately. They will be presented in the order as they appeared in the questionnaire. Additionally, a short introductory text explaining the task, shown in figure 3.1, was placed immediately preceding the first DSE:

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4 Different sums were used so as to allow for an evaluation of the effects of the size of the sum. However, this will not be our focus here.

*In the following 4 questions, you can distribute a specified amount of money among the people described in the table. You can give one person everything and nothing to the other two. Of course, you could also give everybody the same share or distribute the money any other way. You decide!*

*In any case, everyone will be asked to keep the received amount a secret, so no one gets jealous.*

Figure 3.1: Introductory text to the DSEs

1. The DSE in the Friends Situation

In the DSE representing the friends setting, the vignettes were constructed using nine dimensions with two or three levels each<sup>5</sup>. In the end, a setup consisting of 144 vignettes arranged in 48 choice sets of groups of three was found. Table 3.1 provides an overview of the variables included in the DSE and their levels.

Characteristics	Values
Gender	1 male, 2 female
Ethnic origin	1 local name, 2 Slavic name, 3 Arabic name
<b>Need</b>	
Private life	1 lives with partner, 2 single
Children	1 no children, 2 two children
Health	1 in good health, 2 in poor health
Financial situation	1 easy, 2 tight
<b>Merit</b>	
Reliability	1 a good friend when times are good, 2 you can count on them when times are rough
Trustworthiness	1 you better watch out what you tell them, 2 you can trust them with anything
Friends since	2 years , 8 years , 14 years

Table 3.1: Characteristics included in the DSE in the friends situation

Four of the variables operationalise need, while three of the variables are merit indicators. Additionally, the information on gender (male or female) and ethnic origin is provided through the name, which was chosen to sound either local (depending on the context either Swiss or American), Slavic or

5 In the literature on survey experiments, two levels are recommended, unless more is necessary due to the particular research interest or if non-linear effects are expected (Auspurg and Hinz 2015).



Arabic. The names chosen to represent local (Swiss or American) names are: “Sarah” and “Ben”. “Leila” and “Youssef” are used as the male and female Arabic names while “Jelena” and “Nenad” represent a Slavic ethnic background. Need is operationalised using information on whether a person lives with their partner or whether they are single; whether they have children or not and whether they are in good or poor health. The assumptions were that people living with a partner, those without children and those who enjoy good health *need* less, because they can share expenses, do not have dependants and do not have special health related costs. In the combination: single with children, the person was described as a “single parent” instead of just “single”. Additionally, a “tight financial situation” indicates a higher need than an “easy financial situation”. Merit is operationalised through reliability and trustworthiness as well as by how long they have been friends for. A friend was described as reliable if “you can count on them when times are rough” as opposed to only “when times are good”. A trustworthy friend was described as someone “you can trust with anything”, while if “you better watch out what you tell them”, the friend is not very trustworthy. The length of the friendship is set to 2, 8 or 14 years.

In some of the analyses, the merit variables were combined in one variable constructed as an additive scale with values ranging from 3 to 7, depending on the levels of the single merit indicators reliability, trustworthiness and years of friendship. The story introducing this DSE was that respondents were asked to imagine having won a large sum in the lottery and that to celebrate, they were going to share a portion of their win among three of their friends. An example DSE in the friends setting is shown in figure 3.2.

2. Imagine you actually won quite a bit of money playing lotto and – to celebrate – you would like to buy your friends Nenad, Sarah, and Youssef presents for a total of CHF 18'000. Who would you spend how much on?

	Nenad	Sarah	Youssef
private life	lives with partner	lives with partner	single
children	no children	2 children	no children
health	in poor health	in good health	in good health
financial situation	tight	easy	easy
as a friend	you can count on him when times are rough	you can count on her when times are rough	a good friend when times are good
friends since	you better watch out, what you tell him	you can trust her with anything	you better watch out, what you tell him
sum	14 years	2 years	8 years
	+	+	= 18'000

Figure 3.2: DSE in the friends situation

2. The DSE in the Work Situation

The second distributional survey experiment was constructed using eight dimensions with two to three levels each. From the vignette universe, a subset of 216 vignettes was selected and arranged into 72 different choice sets. The dimensions and their levels are summarised in table 3.2.

As in the above described DSE, gender (male, female) and ethnic origin (local, Slavic, Arabic) are operationalised through the names: “Laura” and “Lukas/Luca” for the local version, “Salma” and “Ahmad” (Arabic) and “Milena” and “Marko” (Slavic). Furthermore, information on the merit and need of the hypothetical employees was provided. Need is operationalised using three of the same variables used in the first DSE: whether a person lives with their partner or is single, whether they have children or not, and the state of their health.

Characteristics	Values
Gender	1 male, 2 female
Ethnic origin	1 local name, 2 Slavic name, 3 Arabic name
<b>Need</b>	
Private life	1 lives with partner, 2 single
Children	1 no children, 2 two children
Health	1 in good health, 2 in poor health
<b>Merit</b>	
Dedication	1 not very dedicated, 2 more or less dedicated 3 very dedicated
Performance	1 under average, 2 average 3 above average
Years at the company	2 years , 8 years , 16 years

Table 3.2: Characteristics included in the DSE in the work situation

3. Imagine you are Marko's, Laura's and Salma's boss. After a successful year at your company, you would like to distribute bonus money totaling CHF 18'000 among the employees. Who would you give how much to?

	Marko	Laura	Salma
private life	single parent	lives with partner	single
children	2 children	no children	no children
health	in poor health	in good health	in poor health
effort	very dedicated to his work	not very dedicated to her work	sometimes more, sometimes less dedicated to her work
last year's achievement	below average	above average	average
years at the company	8 years	2 years	16 years
sum	+	+	= 18'000

Figure 3.3: DSE in the work situation

Merit is operationalised with information on dedication to job (“not very”, “more or less” or “very” dedicated to job), performance levels (“under average”, “average” or “above average”) as well as duration of employment (2, 8 or 16 years). For some of the analyses, the variables operationalising merit were combined in one additive scale variable with values ranging from

3 to 9, depending on the levels of the single variables. In the work situation, respondents were asked to imagine they were the boss of the employees described in the DSE. The money involved was said to be an end of year bonus. Figure 3.3 shows an example DSE for the work setting.

3. The DSE in the Family Situation

The third DSE is set in a family context. More specifically, participants were asked to divide an inheritance among their hypothetical grown-up children. The vignettes in the family DSE consist of six dimensions with two levels each except for one three-level variable.

Characteristics	Values
Gender	1 male, 2 female
<b>Need</b>	
Private life	1 lives with partner, 2 single
Children	1 no children, 2 two children
Health	1 in good health, 2 in poor health
Financial situation	1 easy, 2 tight
<b>Merit</b>	
Attentive & helpful	1 not very, 2 mostly, 3 very

Table 3.3: Characteristics included in the DSE in the family situation

The design is summarised in table 3.3. As in the other DSEs, information on the gender of the hypothetical family member was provided through the name. However, since the “vignette people” in this DSE are all members of the same family, the information on ethnic origin was not added as an additional dimension but kept constant at a local name. “Anna/Anne” or “Sylvia” were used for women and “Lorenz/Laurence” or “David” for men. Need was operationalised using the same four variables as in the first DSE indicating: whether they live with a partner or are single; whether they have children or not; their health status as well as their financial situation (tight or easy). In this DSE merit was operationalised using only one variable: the degree of attentiveness and helpfulness in the past. This variable has three levels describing whether the family member was very, mostly, or not very attentive and helpful in the past. This DSE consists of a subset of 96 vignettes, which were grouped into 32 choice sets. Figure 3.4 shows an example DSE in the family situation.

4. Imagine having to distribute CHF 3'000 inheritance among the siblings Anne, Sylvia and David. How would you distribute the money if they were your grown-up children?

	Anne	Sylvia	David				
private life	single	lives with partner	single				
children	no children	2 children	no children				
health	in poor health	in good health	in poor health				
personality	highly considerate and has always helped out in the past when needed	not very considerate and has not been very helpful in the past	usually considerate and has often helped out in the past				
financial situation	easy	tight	easy				
sum	<div><div></div><div></div><div></div><div></div><div></div></div>	+	<div><div></div><div></div><div></div><div></div><div></div></div>	+	<div><div></div><div></div><div></div><div></div><div></div></div>	=	3'000

Figure 3.4: DSE in the family situation

#### 4. The DSE in the Public Goods Situation: Scholarships

In the fourth DSE portraying a public goods situation, respondents were asked to divide scholarship money among three hypothetical students. Table 3.4 provides an overview of the dimensions and levels used to describe them. In total, eight variables, with either two or three levels each, provided information on the gender, ethnic background as well as the need and merit of the “vignette people”.

The names used to operationalise gender and ethnic origin were: “Daniela/Danielle” and “Stefan/Steven” (local), “Amal” and “Amir” (Arabic) and “Lidija” and “Matia” (Slavic). Need was operationalised using parental education, set to either compulsory schooling, vocational education and training (VET), or university education, as an indicator of social class. Furthermore, information on the financial situation (described as easy or tight) of the student’s parents was also provided. Merit was operationalised through school leaving grades as well as through information on how much effort the student puts into their work. They were described as either “not very hard-working”, “more or less”, or “very hard-working”. Additionally, two dimensions were neither clearly merit nor need indicators. One of these variables provides information on whether the prospective student needs to move for their studies or whether they can continue living with their parents. The other dimension

Characteristics	Values
Gender	1 male, 2 female
Ethnic origin	1 local name, 2 Slavic name, 3 Arabic name
<b>Need</b>	
Parental education	1 compulsory schooling, 2 vocational education and training (VET), 3 university
Financial situation of parents	1 easy, 2 tight
<b>Merit</b>	
Effort	1 not very hard working, 2 more or less hard working 3 very hard working
Grades	4.5, 5.0, 5.5 (Switzerland) or: 2.0, 3.0, 3.7 (United States)
<b>Additional information</b>	
Working student	1 up to 1/2 day per week, 2 1/2 to 1 day per week, 3 1 to 1 1/2 days per week
Relocation	1 can live at home, 2 has to move out

Table 3.4: Characteristics included in the DSE in the public goods (scholarship) situation

that is neither clearly a need nor merit indicator is how many hours the student will spend working at a side job during their studies.

This DSE was constructed using a subset of 216 vignettes that were grouped into 72 choice sets containing three vignettes each. The values of the merit scale variable range between 2 and 5. Figure 3.5 shows an example DSE in the public goods setting. There are two additional features in this distributional survey experiment. For one thing, the mentioned subject was randomly set to either history or medicine. For another, the last sentence in the example in figure 3.5 (“Please keep in mind that, in some cases, your decision greatly influences whether the young adults can afford to study”) was only included in about half the cases (also random variation). This sentence was added to test for potential priming effects of the stimulus which was meant to trigger a sense of responsibility in the respondents. However, these two treatments are not directly relevant to the question at hand and will not be used in the analyses<sup>6</sup>.

6 Results of preliminary analyses show that including these variables in the analyses only has a minor effect on the results. While the subject seems to have virtually no effect on the distributions, there seems to be a minor effect of the added sentence aiming to make the respondents feel more personally responsible. However, this additional information primarily influences the results indirectly through the side-job variable.

5. Amir, Steven and Lidija have just graduated from high school. They would like to study history and have all applied for a scholarship. How would you distribute the total sum of CHF 9'000 (per year) among the three, if it were for you to decide?

*The scholarships are funded by tax money and will be paid to the recipients for the duration of their studies. Please keep in mind that in some cases your decision greatly influences whether the young adults can afford to study.*

	Amir	Steven	Lidija
final grade	5	5.5	4.5
learning habits	very hard-working	very hard-working	not very hard-working
for his/her studies	can stay at home	can stay at home	has to move out of parents house
will work	0-10%	20-30%	10-20%
parent's highest education	university degree	vocational education and training	compulsory education
parent's financial situation	tight	easy	tight
sum	+	+	= 9'000

Figure 3.5: DSE in the public goods / scholarship situation

## IV. Analytical Strategies

Since this is the first application of distributional survey experiments, suitable methods for analysis needed to be developed. Because money is distributed among three people described in vignettes, each DSE leads to three metric outcomes. There are at least three strategies we can use to analyse this data and they will each be described briefly in the following.

## 1. Treating Outcomes as Independent

The most straightforward method for the analysis of a DSE is to treat the three metric outcomes it generates as if they were single factorial survey experiments. Then the amount each of the three people receives in a DSE is

The dimensions operationalising merit and need are not affected in any substantive way.

the dependent variable. In our case, with randomly varying total sums that were distributed, this needs to be accounted for in the analysis. One way to do this is to standardise the values. Before analysis, the data set needs to be reshaped into long format, so that we have three observations per respondent. To account for the fact that one and the same person is responsible for three outcomes per DSE, and that the distributions are thus interdependent, using a multilevel model is advised. This method has the benefit of allowing us to look at the effects expressed in monetary terms.

## 2. Treating the Outcomes as Ranks

The second approach pays more tribute to the interdependency of the individual outcomes by, for example, ranking the sums from 1 for the highest to 3 for the lowest values. In the case of equal splits, everyone is assigned a shared value, such as e.g. 1. In contrast to the first method, this procedure ensures that the interdependency of the single vignette outcomes in a DSE is respected. Instead of focusing on the individual amounts, in this approach, we focus on the rank positioning of the single vignettes.

## 3. Treating the Outcomes as Shares

And third, we can analyse the data from the DSE after first converting the sums of the single vignettes within a DSE into shares of the total sum. This method incorporates some useful properties of both the aforementioned analytical strategies. For one thing, information on the rank is included implicitly. For another, this approach enables a higher exploitation of the information compared to using ranks. The advantage of using shares compared to ranks is that the magnitude of the differences between the sums of the single vignettes is taken into account. This method incorporates the available information in a maximally efficient manner, while accounting for the interdependency of the single outcomes. This is ensured in that the shares, just like ranks, include information on the relative position of each vignette outcome compared to the other two vignettes in a choice set making up a DSE. It is thus the method with the highest statistical power and smallest standard errors. However, most importantly, this procedure is most in line with the theoretical considerations that led to the development of the DSE in the first place. Since all outcomes are treated as inherently interdependent, this method does most justice to a



core property of distributive justice: that allocation problems are usually a zero-sum game. When resources are finite, each individual outcome affects all others and one person's gain is another's loss.

#### 4. Considering the Multilevel Structure

Given that next to the information on the level of the experiment (level 1), additional data were collected on the level of the respondent (level 2), all of the above described strategies require multilevel modelling. Because multilevel and longitudinal data structures rely on the same framework, to take up standard notation, I will speak of *timepoints*. However, in our case, these refer to the fact that we have three observations per person and experiment, which is why we can think of *timepoints* as an indicator for a single vignette. Equation (1) is then a linear multilevel model for a set of individuals  $i$ , for which we have observations on at least two “timepoints”  $t$ , or in our case three vignettes per distributional survey experiment.

$$y_{it} = \mu_t + \beta x_{it} + \gamma z_i + \alpha_i + \varepsilon_{it} \quad (3.1)$$

The dependent variable  $y_{it}$  can be considered interval scaled or ratio scaled when using shares. The constant  $\mu_t$  is allowed to vary by timepoint; the regression coefficients are given by  $\beta$  and  $\gamma$  for the time-varying predictors  $x_{it}$  and the time-constant predictors  $z_i$  respectively. We also have two error terms;  $\alpha_i$  is a constant that varies over individuals but not over time and  $\varepsilon_{it}$  that varies randomly by individual as well as by timepoint. Depending on whether we are estimating a fixed effects or random effects model however, we rely on different underlying assumptions for  $\alpha_i$ . In the fixed effects models,  $\alpha_i$  represents all unobserved time-constant variables and as such is allowed to be correlated with the time-specific predictor variables  $x_{it}$  and also with the time-constant variables  $z_i$  (Allison 2009). This latter property is at once the main strength and, depending on the research question, also “weakness” of the fixed effects model. Since we are controlling for all individual-specific variation, both observed and unobserved, we can make a causal claim. However, if we are interested in the coefficients for  $z_i$ , we have to use other models, since the fixed effects model cannot provide estimates for these level 2 variables. The random effects model offers a solution to this “problem”, if we look at it as such, by assuming that  $\alpha_i$  represents just another source of random variation: a set of random variables that have a prespecified probability distribution.

This implies that the individual error term  $\alpha_i$  is uncorrelated with all other independent variables as well as with the time-specific error term  $\varepsilon_{it}$ . If this assumption holds true, then we yield unbiased estimates and the model is more efficient than the fixed-effects model. Luckily we can easily test whether this is the case, using either the Hausman test<sup>7</sup> or by comparing the within and between effects of a hybrid model (Allison 2009; Firebaugh, Warner, and Massoglia 2013). If the individual time-constant error term proves to be non-random, the estimates from a random effects model would be biased. The hybrid model is very convenient in that it allows us to combine the best traits of fixed and random effects models, so that we can exploit the efficiency of a random effects model and the consistency of a fixed effects model at the same time. Hybrid models are in essence equivalent to random effects models that control for time-constant unobserved heterogeneity (Schunck 2013). By demeaning or centering the time-variant variables, that is, by calculating unit-specific means and then calculating the deviation scores from the means for the single values, we can decompose the effects of time-varying variables into within and between variance. We can then add these within and between effects separately into our random effects model and also include the time-invariant variables (Allison 2009; Schunck 2013).

For the models shown in chapter 4, random-effects models were always used in the case that they yielded consistent estimates; where this was not the case, fixed effects models were computed<sup>8</sup>. When effects of respondent level characteristics were of theoretical interest, hybrid models were estimated (Rabe-Hesketh and Skrondal 2012; Schunck 2013; Allison 2009).

All the analyses are based on the four distributional survey experiments collected from three different populations: the Swiss general population, students at the University of Bern and students from Princeton University. The aim of the DSEs was to make it possible to differentiate between the principles of merit, equality and need. Additionally, the DSE enables us to collect data efficiently on the individual level (respondent characteristics) and the level of the situation (DSEs in different settings) as well as to include context, by administering it to different populations. Since the distributive survey experiments made up the core element of the JInCS project, they

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7 The Hausman specification test can be used to compare the fixed effects estimator, which always yields consistent coefficients, with the random effects estimator, which yields consistent estimates only if there are no significant differences between the two estimators (Hausman 1978; Rabe-Hesketh and Skrondal 2012).

8 This was the case when the Hausman test was positive, thus indicating systematic differences between the fixed effects and random effects models.

were placed at the beginning of the survey, directly after the ice breaker question<sup>9</sup>. Placing the DSEs at the beginning of the questionnaire ensured that, at least in the online version, the most relevant data were secured even if people decided to break off the survey. Additionally, the DSEs were placed early on because they are somewhat more cognitively taxing than the more traditional questions that followed. These were a set of questions on a wide range of issues of distributive justice. Furthermore, at the very end of the questionnaire, respondents were asked a set of socio-demographic questions.

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9 The ice breaker question uses an example from Amartya Sen's book *The Idea of Justice*. In this example three children are fighting over a flute. Each of the children makes a claim on the flute, but they all appeal to a different principle of justice (Sen 2009). At the very beginning of the questionnaire, respondents were presented with this scenario and asked to decide which of the three children, Anne, Bob, or Carla, should get the flute.



## Chapter 4: What is Fair? Empirical Results

In the following chapter, the results of the analyses will be shown separately for each of the four distributional survey experiments depicting either a situation with friends, at work, among family or regarding public goods. We will look at how need, merit and equality considerations affect distributions for each of these settings. While the findings will be presented for each individual situation, the main point of interest lies in comparing how the settings of the DSEs translate into different distribution patterns in regard to allocation norms. Additionally, we will look into whether and how the social class and gender of the respondents affect their distributive choices.

Most of the analyses are based on the data from the Swiss general population sample. However, to test for effects of context, the data from the two student samples comes into play. Using the student samples, we can test whether students from Switzerland (University of Bern) and the United States (Princeton University) have different conceptions of distributive justice.

### *A. To Each According to Needs or Merit?*

The results are presented and discussed for each of the distributional survey experiments, each depicting a specific situation, separately. We will start by looking at the role of need and merit for people's distribution decisions in the four DSEs. Since the importance of equality cannot be directly tested through the DSE dimensions, findings on this principle of justice will be discussed separately in subchapter *Who distributes equally and when?* While all variables making up a DSE are included in the analyses, the focus will lie on the dimensions operationalising need and merit. In a next step, the respondent level variables are included in the analyses to see whether respondents with different characteristics differ in their perceptions of what constitutes a just distribution.

However, before diving into the analyses, we shall start with a short description of the main characteristics of the respondents. We will then move on to the results from the multivariate analyses using data from the Swiss general population sample.

I. Descriptive Statistics of Respondent Attributes in the General Population Sample

Table 4.1 summarises the general population sample in terms of gender, class, education, region and age of respondents. We see that women are

	mean	sd	N
<b>Gender</b>			
female	.546	.498	1732
male	.451	.498	1732
other	.00346	.0588	1732
<b>Class</b>			
EGP I	.257	.437	1518
EGP II	.284	.451	1518
EGP IIIa	.179	.383	1518
EGP IIIb - V	.159	.366	1518
EGP VI - VIIb	.121	.326	1518
<b>Education</b>			
at most compulsory education	.0722	.259	1677
vocational education & training	.415	.493	1677
general education	.096	.295	1677
higher vocational education	.176	.381	1677
university (of applied sciences)	.241	.428	1677
<b>Region</b>			
German-speaking region	.612	.488	1782
French-speaking region	.185	.388	1782
Italian-speaking region	.204	.403	1782
<b>Age</b>	51.8	17.6	1717

Table 4.1: Respondent characteristics in the general population sample

slightly overrepresented compared to men<sup>1</sup>. The respondents' class was

1 Because of the low number of those identifying with "other", these cases were excluded from the analyses differentiating by gender

constructed using the ISCO-08 classification system for their occupation, and then converting it into the Erikson-Goldthorpe-Portocarero (EGP) class scheme (Erikson and Goldthorpe 1992). EGP-class was then categorised into five groups of comparable size. The high number of upper class respondents is rather representative of the Swiss context (FSO 2020), as is the fact that a large majority has undergone vocational education and training. Respondents living in the German-speaking region represent the biggest group, followed by those from the Italian-speaking region<sup>2</sup> and the French-speaking region. The mean age of the respondents in the general population sample is 52 years old.

## II. Need and Merit – Different Situations, same Principles?

To account for the fact, that the three outcomes of a DSE are interdependent, all analyses are based on multilevel models. The interdependence is a consequence of the design: in the DSEs, respondents distributed a prespecified sum among three hypothetical people situated in different settings. This makes each outcome dependent on the other two; one (hypothetical) person's gain was another's loss, since the amount to be distributed was limited. Depending on the given conditions, the estimates are obtained from random effects, fixed effects or hybrid multilevel models.

To begin with, we will look at the basic models including just the DSE / level 1 variables for each of the four situations. The data is based on the Swiss general population sample. Figures 4.1 to 4.8 show coefficient plots from multilevel models including just the DSE variables with the share of the total received as the dependent variable. While figures 4.5 and 4.6 show the results from random effects models, all others are fixed effects models<sup>3</sup>. For easier readability, the variables are grouped according to whether they operationalise need or merit or the ascriptive characteristics ethnic background and gender.

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2 As mentioned in the methods section, this group was oversampled to allow for separate analyses by region.

3 The Hausman test indicated significant differences between the random effects and fixed effects estimates, which is why the more conservative approach was chosen.

## 1. Friends: Justice in an Equality Matching Setting

The distributional survey experiment we will look at first represents a solidarity-oriented relationship as is typically found among friends (Deutsch 1985). Friendships are ideally created and cultivated as an end in itself, enabling its participants to enjoy each other's company and the many social as well as psychological benefits of a cooperative and benevolent relationship (Badhwar 1993). Because it is the main goal of people interacting in such a solidarity-oriented relationship to maintain and foster these enjoyable social relations, we would expect *equality matching* (EM) to be a dominant strategy in allocation problems (Fiske 1992; Deutsch 1985). Following EM logic, which requires a carefully regulated balancing of reciprocal exchanges, we would expect people to divide resources equally among three of their friends, since this would mean treating the people they are in reciprocal relationships with as equals (hypothesis 3.b). In the introductory text to this DSE, the respondents were invited to imagine they had won a sizeable sum in the lottery and wanted to redistribute some of it among their three friends. Figure 4.1 shows the results as average effects of the included dimensions on the shares they received of the total sum (here 1 is 100% of the total). The results were computed using a fixed effects multilevel model with data from the Swiss general population sample.

While the need and merit indicators are key for distinguishing which principle of justice was followed, the name, conveying information on gender as well as ethnic origin enables us to additionally test for potential discrimination effects. We see that while gender did not affect the allocation decisions, there are negative effects for minority groups. While the negative effects for friends with a Slavic name are not significant at the 5% level, friends with an Arabic name received significantly smaller shares compared to those with a Swiss name. The non-local names presumably conveyed stereotypical information, leading to a more negative evaluation of the person and thus to lower amounts.

Following the theoretical arguments in chapter 2, in this situation involving friends, respondents were expected to distribute equally (hypothesis 3.b). However, we see at first glance that we have to refute this hypothesis: equality was clearly not the most relevant allocation norm. Contrary to our expectation, both merit and need factors were highly relevant for the allocator. When it comes to need, we see that all variables signalling that the friend has higher needs show positive effects. While singles receive 3 percentage points (pp) higher shares than those living with a partner, those with two children receive



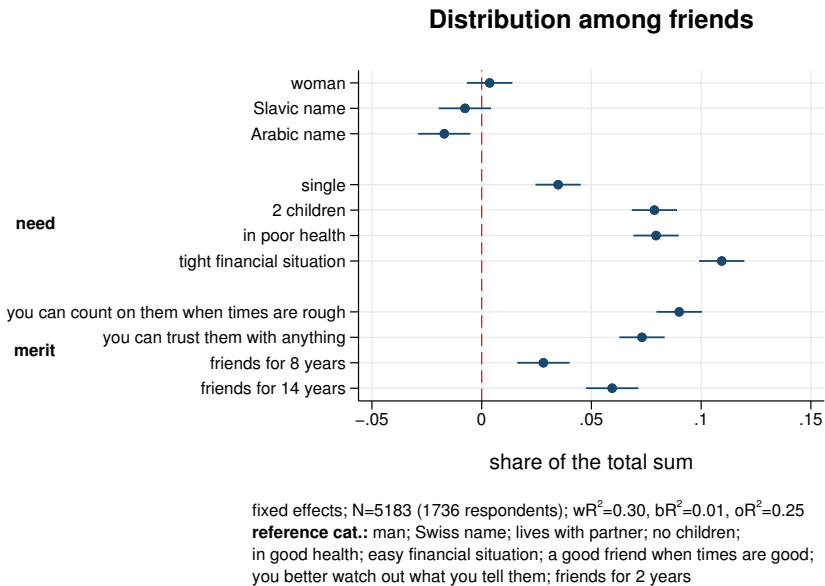


Figure 4.1: DSE 1 – Share of sum distributed among friends

8 pp higher shares. Friends in poor health are also given higher amounts by 8 pp. Hypothetical friends in a tight financial situation receive 11 pp higher shares, which is also the strongest effect of all the manipulated dimensions in this DSE. However, next to the effects of need, we also see comparable effects for variables operationalising the friend's merit. With 9 pp, a friend's reliability has the highest effect of the merit variables on the apportioned share. This is closely followed by trust with 7 pp and duration of friendship, with long-term friends of 14 years receiving 6 percentage points higher shares and friends of eight years receiving 3 pp more than friends of only two years.

To illustrate, the average share of a Swiss man who is a single parent of two children, has poor health, is in a tight financial situation and is a very reliable and trustworthy friend of 14 years, would receive, on average, 60% of the total. His counterpart, a woman with an Arabic name who lives with her partner, has no children, enjoys good health, has a relaxed financial situation, has not always been completely reliable and trustworthy during the two year friendship, receives on average only 7%. This is roughly a tenth of what the first person, with both high need and merit, receives.

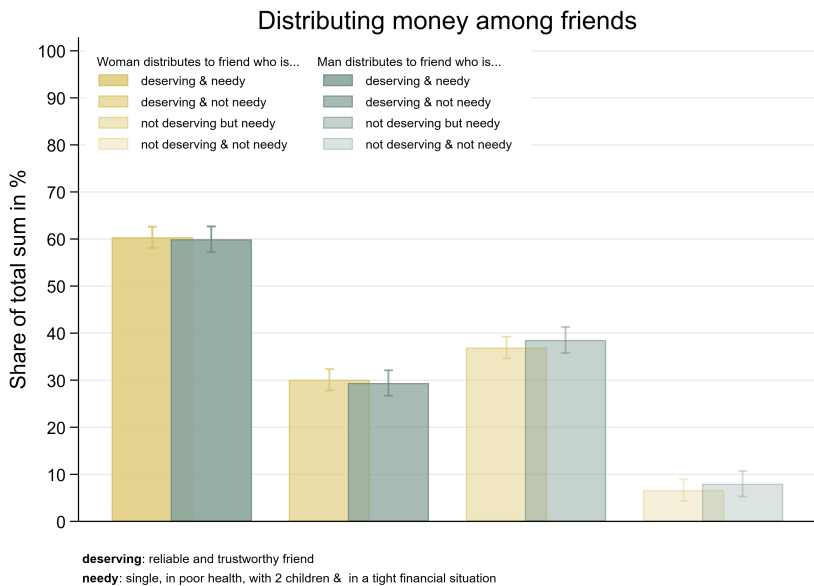


Figure 4.2: Predicted shares for different merit & need combinations in the friends setting

Summing up, while we find no significant effects of gender, there seems to be a slight bias based on ethnic origin. All else equal, those with an Arabic name were apportioned less than friends with a Swiss name. Also, and contrary to expectations, both need and merit factors are relevant for justice evaluations in this situation involving friends. To examine these effects of need and merit in more detail, the average shares for the four need-merit combinations: high merit - high need (deserving and needy); high merit - low need (deserving and not needy); low merit - high need (not deserving but needy) and low merit - low need (not deserving and not needy) were computed. Figure 4.2 illustrates the results for each of the combinations of need and merit holding the variables ethnic origin and gender constant at Swiss male. The bars show the overall predictive margins for each of these combinations differentiated by gender of respondent: teal for men and yellow for women.

It is striking that there seem to be high requirements for both merit and need, so that a friend in need and who has proven deserving over the years

receives 60% of the total, while a friend with low need and merit values receives an average of only 7%. Furthermore, a friend with high need and low merit receives higher shares, on average, than a friend with low need and high merit. Looking at these distributions by respondent's gender, we see that there are no significant differences. The above results clearly contradict hypothesis 3.b suggesting equality as the dominant allocation strategy among friends. Instead, respondents weighed up both deservingness and neediness factors to reach their decisions.

## 2. Work: Justice in a Market Pricing Setting

The second distributional survey experiment depicts a workplace setting in which the respondent was asked to imagine they are the boss of the three described people and that they can decide how to distribute a prespecified sum among them as end of year bonus money. The workplace setting, which is the most common setting in survey experiments on distributive justice (Jasso and Rossi 1977; Alves and Rossi 1978; Sauer et al. 2009; Auspurg, Hinz, and Sauer 2017), depicts a situation in which people are economically oriented (Deutsch 1975) and the *market-pricing* (MP) (Fiske 1992) relational mode applies. The goal of social interactions in an MP setting is to raise economic productivity and, with some exceptions (such as when high levels of cooperation are necessary), this can usually be achieved effectively with a system that rewards according to contributions (Leventhal 1976). In other words, people interacting in MP mode seek proportionality in terms of cost-benefit ratios (Fiske 1992), and a merit-based approach is functional in terms of these goals and intentions. It is thus to be expected that, in this workplace setting, resources are predominantly allocated according to merit (hypothesis 3.a).

Figure 4.3 summarises the results for the Swiss general population sample in the form of average effects of the employee characteristics on the total sum they were apportioned by respondents. The estimates were obtained using a fixed effects multilevel model. In this setting, we find no effects of the hypothetical employee's gender and ethnic origin. However, we see, at first glance, that the variables operationalising merit have the strongest effects on the distributions. In the workplace setting, merit is more important than need and it also seems to be more relevant for allocations than in the friends situation. With an additional 5 pp for an average performance and dedication level and around 15 pp for a high performance and dedication level compared

to low performance and dedication, these two merit indicators have the largest effects on the distribution of bonus money among employees at work.

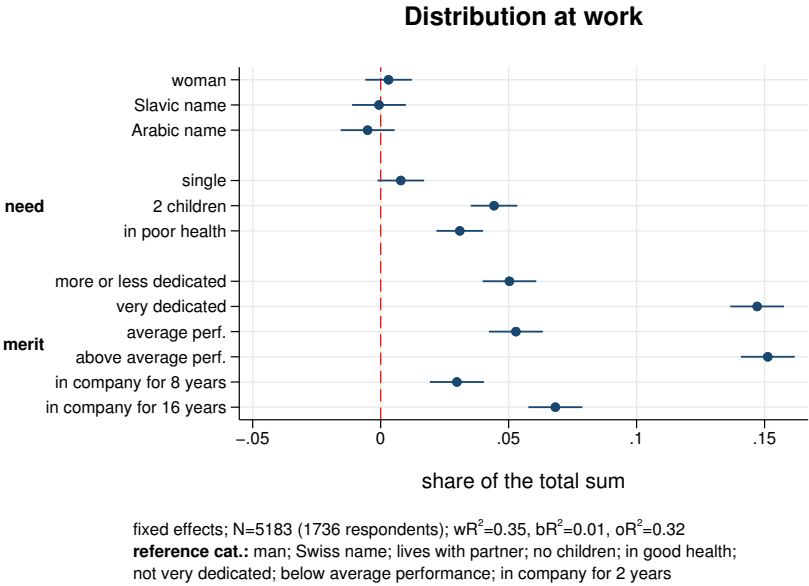


Figure 4.3: DSE 2 – Share of sum distributed among employees

For a better illustration of the effects of need and merit, we again compare two cases: A Swiss single father with health problems and who is very dedicated to his job, has a high performance level and has been in the company for 16 years receives an average of 35%. Note that this is just two percentage points more than he would have received in the case of an equal split. By contrast, a healthy woman with an Arabic name, living with her partner, who is not very dedicated to her work, has below-average performance levels and has been in the company for only two years, receives only 12% of the total.

To see how different combinations of need and merit influence allocations in a workplace situation, figure 4.4, showing the average shares of people with the four need-merit combinations — high merit - high need (deserving and needy); high merit - low need (deserving and not needy); low merit - high need (not deserving but needy) and low merit - low need (not deserving and not needy) — is informative. Once again, the results were obtained by computing the predictive margins from the fixed effects multilevel model

introduced above for the four combinations of merit and need. Gender and ethnic origin are held constant at Swiss male.



Figure 4.4: Predicted shares for different merit & need combinations among employees

With a range of 12% for the low merit - low need combination to 57% for the high merit - high need combination, we see that equal splits are far from normal in the work scenario. Following our theoretical reasoning and hypothesis 3.a, we would expect merit-based distributions to dominate in the workplace setting. While we see that, as in the friends setting, employees with high levels of both merit and need receive the highest shares (57% on average), contrary to the friends situation, those with high merit and low need are next in line with an average of 48%. Employees with low levels of merit receive 20% on average if their need values are high and otherwise 12%. Or put differently, those with the highest merit values receive 57% or 48%, on average, depending on whether they are also in need, while those with low merit values receive 20% (high need) or 12% (low need), on average. These findings show that merit is much more important than need or equality in the work situation and confirm hypothesis 3.a. Once again, there

are no significant gender differences in the respondents’ weighting of the two principles of justice. Respondents of both genders seem to be in agreement in their assessments of the relative importance of need and merit.

3. Family: Justice in a Communal Sharing Setting

In the third distributional survey experiment, respondents were asked to imagine they were distributing inheritance money among their grown-up children. Because families are ideally places where group members are interested in and work towards fostering the well-being and development of each other (Deutsch 1985), the primary relational mode they interact in is *communal sharing* (Fiske 1992). As an example of a caring-oriented setting (Deutsch 1985), need was expected to be the predominant criterion for the distribution of resources in families (hypothesis 3.c).

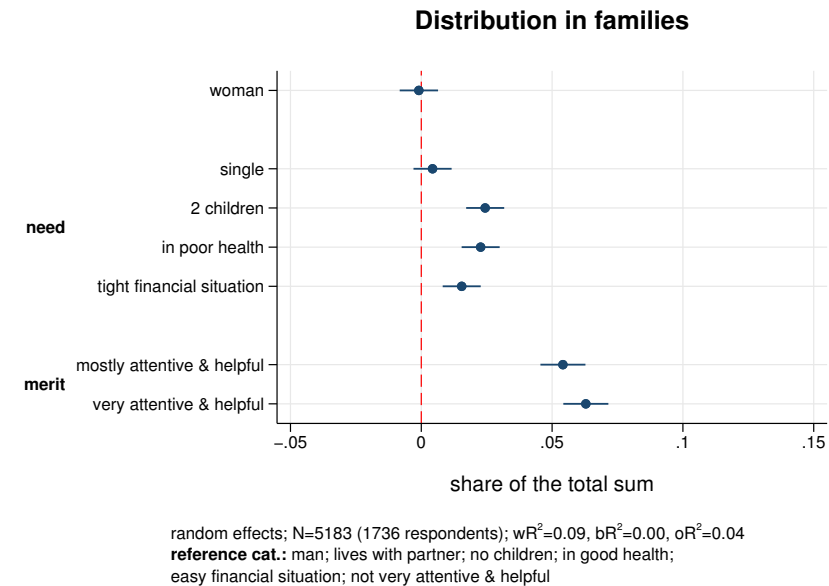


Figure 4.5: DSE 3 – Share of sum distributed among family

In this DSE, people were described using information on gender as well as various need and merit indicators. Ethnic origin was not included, as it

would not make sense to alternate this variable in the setting of a family. Figure 4.5 shows the average effects of the attributes of these hypothetical siblings obtained using a random effects multilevel model for the Swiss general population sample. While the gender of the person described in the DSE has no effect, we see that all the need indicators, except for the variable indicating whether someone is single or lives with a partner, have positive effects in the expected direction. However, the effects are relatively small: Those with two children receive, on average, 3 pp more than those without; those with poor health receive 2 pp more than those who are healthy and those with financial troubles receive only 1 pp more than their better off siblings. Attentiveness and helpfulness in the past, on the other hand, which serves as a merit indicator, leads to 5 pp (mostly attentive and helpful) and 6 pp (very attentive and helpful) higher shares compared to those who failed to be attentive and helpful in the past. However, it should be noted that compared to the friends and work situations, all the DSE factors have relatively small effects on the chosen distributions. This is because the strategy of splitting equally was particularly common in the family setting<sup>4</sup> as we will see in figure 4.9.

These results were not expected and are surprising for two reasons. Following Deutsch (1975) and Fiske (1992), we expected need to be the dominant principle in a family setting (hypothesis 3.c). We can refute this hypothesis for two reasons. On the one hand, with roughly 60% equal splits, equality is clearly the dominant principle most people use to guide their allocation decisions among family members, at least in this particular example. On the other hand, the information given on a person's merit proved more important than the factors operationalising need. While equality seems to be a strong social norm in the family setting, when people deviate from strict equality, the scales tip more in favour of those who have been meritorious in the past than towards the needy.

Figure 4.6 illustrates this slight difference in the relative importance of merit and need in more detail. Holding gender constant at male, the predicted shares for the four combinations: “deserving and needy”; “deserving and not needy”; “not deserving but needy” and “not deserving and not needy” are shown. The results shown in figure 4.6 further highlight the above finding that, compared to the situations involving friends and in the work settings, merit and need have only minimal effects on distributions within families.

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4 With 26 pp, the constant (not shown) is close to the equal split of a third, or roughly 33% per person.

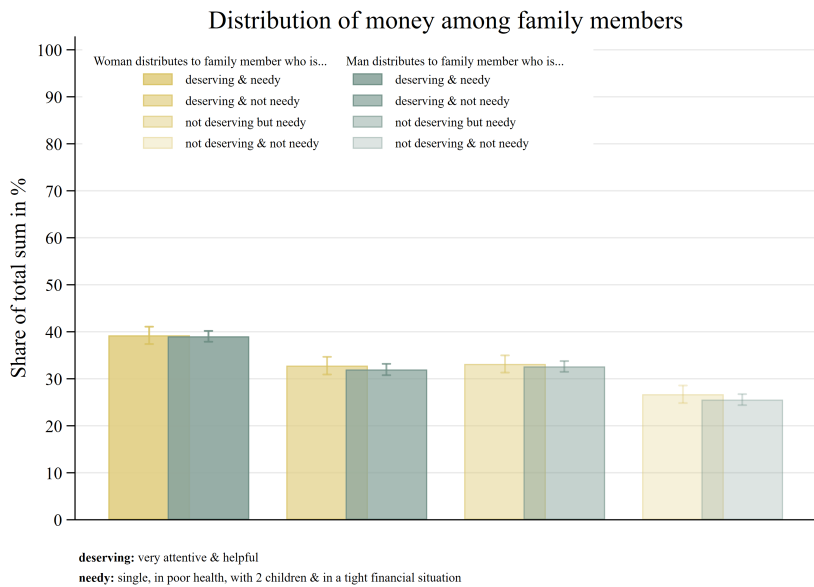


Figure 4.6: Predicted shares for different merit & need combinations among family

With a range of average shares between 26%, for those with low need and low merit, and 39% for those with both high levels of merit and need, we see that there is clearly a large tendency towards equal distributions and that neither merit nor need are regarded as very important factors guiding the distribution. As was the case above in the friends and work settings, both male and female respondents are in agreement when it comes to honouring merit and need in the family setting. Contrary to predictions — that need would be especially important — the predominant strategy was dividing the pie equally among family members and thus disregarding their neediness and deservingness in terms of merit. We must therefore reject hypothesis 3.c.

4. Scholarship: Justice in a Public Goods Setting

Finally, the results of the fourth distributional survey experiment representing a public goods scenario, and using data from the Swiss general population



sample, are presented. In this DSE, respondents were asked to distribute scholarship money among hypothetical students. Because this is a situation involving public goods, both merit and need considerations were expected to matter more than equality. This is because giving scholarships can be seen as fulfilling two purposes with different goals. First, public investments usually need to satisfy some level of efficiency in order to be supported by the people. Efficiency considerations would lead us to expect people to reward merit. On the other hand, public investments in education also serve the purpose of equalising opportunities, so that we would also expect need to matter. In any case, both merit and need will likely be taken into consideration for the allocation of public goods and these two principles are expected to dominate the equality principle (hypothesis 3.d).

Figure 4.7 shows the results for the public goods setting using a fixed effects multilevel model. For one thing, we see that the gender and ethnic origin of the student described in the DSE had no effects. Turning our attention to the variables operationalising need and merit, we notice that both principles seem to affect justice evaluations much more than in the previous DSE in the family setting. With an up to 13 pp higher average share for those whose parents have low financial means, it is clear that need considerations are considered rather relevant in the public goods situation examined here. Additionally, those students whose parents have lower educational degrees receive higher shares (3 pp) than students whose parents are university graduates. Furthermore, scholarship applicants who have to move out of their parents' house for their studies, and thus have to pay for accommodation, are given larger average shares (by 9 pp) compared to those who can stay at home.

Looking at the merit indicators, which were operationalised through school leaving grade point averages and industriousness, we see that these factors also influence the distributions, although to a lesser extent than the need indicators. Those with the highest grade (5.5 out of 6) received, on average, 2 percentage points higher shares than those with a 4.5. In the same vein, very hard-working students received 6 pp higher shares than their peers who were described as not very hard-working. Furthermore, to make the situation more lifelike<sup>5</sup> and to see whether putting in the effort of earning money with a side job has an effect on the distribution, we examine whether there are differences across working hours per week. This variable is neither an obvious need nor merit indicator but depends on the perspective and the attitudes of the respondent. Working more hours could be seen as raising merit, since the

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5 With 75%, a large majority of students in Switzerland have a part-time job.

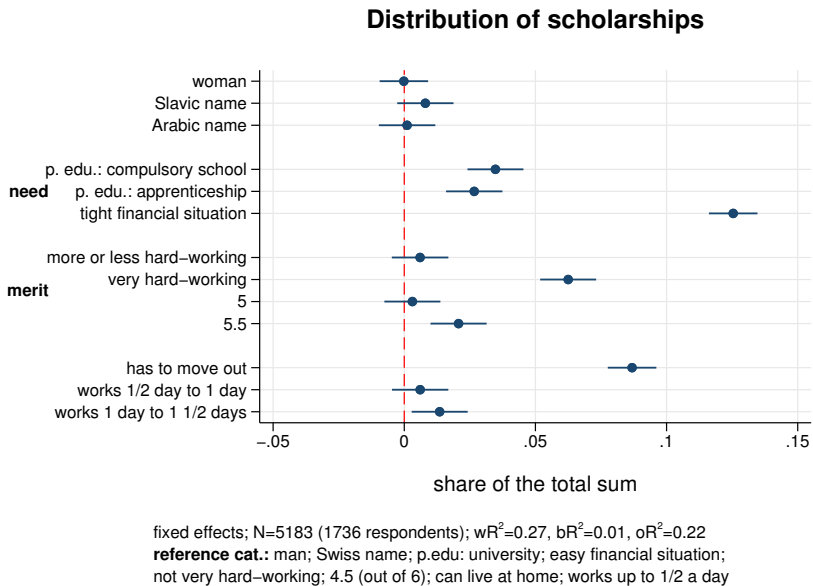


Figure 4.7: DSE 4 – Share of sum distributed among applicants for a scholarship

students are putting in an effort. On the other hand, since it is possible for the students to earn money themselves, working more hours could have the effect of lowering their perceived need for public assistance in the form of scholarship money. We see that, with an increase of only 1 pp for the highest number of working hours per week, whether students are earning money on the side only seems to have a small effect on allocation decisions. A possible explanation for this finding could be that the need and merit signals of the variable on working hours could cancel each other out.

For a better understanding of the relative importance of the merit and need indicators in this particular situation, once again the predicted shares were computed for each of the four need and merit combinations: high merit - high need (deserving and needy); high merit - low need (deserving and not needy); low merit - high need (not deserving but needy) and low merit - low need (not deserving and not needy). Figure 4.8 shows the average shares for the hypothetical students by these four categories in the public goods situation. Ethnic background and gender of the student are kept constant at Swiss and

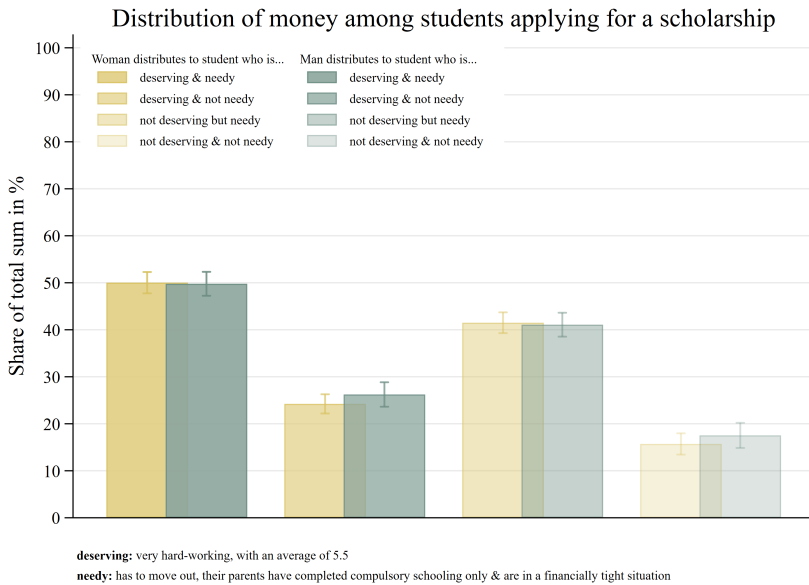


Figure 4.8: Predicted shares for different merit & need combinations in the public goods setting

male. With an average share of 49% of the total, a person that combines the highest merit and the highest need receives the most. This is followed relatively closely (41%) by a person with high need and low merit. A person with low need receives an average of 25% in the case of high merit values or else 16% if they score low on the merit indicators as well. This shows that need is clearly considered most important, but merit is rewarded as well. In this situation also, the gender of the respondent makes no difference in the importance attributed to merit and need. All in all, since both merit and need indicators were important for distributions in the scholarship setting, so far, we have support for hypothesis 3.d. We will next take a look at equal distributions.

B. Who distributes equally and when?

Following the theory of Deutsch (1975) and Fiske (1992), we expected equality to be the principle of choice among friends. This was expected because in solidarity-oriented groups, the goal of people's interaction is to foster enjoyable social relations, and equal treatment works towards this goal. In Fiske's (1992) framework, friendships are understood as relationships that are built and taken care of through an elaborate series of interactions in *equality matching* mode. Equality was not expected to be a dominant strategy in any other situation. In the work setting, we expected merit to be the dominant principle of distributive justice, since it is an obvious example of a *market pricing* situation (Fiske 1993). Due to efficiency considerations, the public goods situation can also be regarded as economically oriented. Thus, as a further example of a situation functioning in market pricing logic, merit was assumed to be an important factor in people's assessments of just distributions of scholarship money. However, from the point of view of the ideal of equal opportunities, need considerations were also expected to be important in this situation. For the family situation, we expected need to be the dominant principle because, according to Fiske (1992), this is an example where the psychological model of *communal sharing* applies. Likewise, in Deutsch's (1975) terminology, this is a situation where people interact in a caring-oriented way.

We also expected differences along class lines (hypothesis 1.b) and gender (hypothesis 2). We will first focus on gender and then turn our attention to social class.

I. Gender Differences

Figure 4.9 shows the percentages of equal splits separately for women and men and for each of the four DSE situations. We see that women and men have similar preferences for equal distributions across the different situations. Both genders show much lower probabilities of distributing equally in the situations involving friends, work and scholarships than in families. In the case of scholarships, there is no gender difference. Furthermore, this is the situation with the lowest number of egalitarian distributions, thus offering further support for hypothesis 3.d assuming that in the public goods situation need and merit considerations are more important than equality.

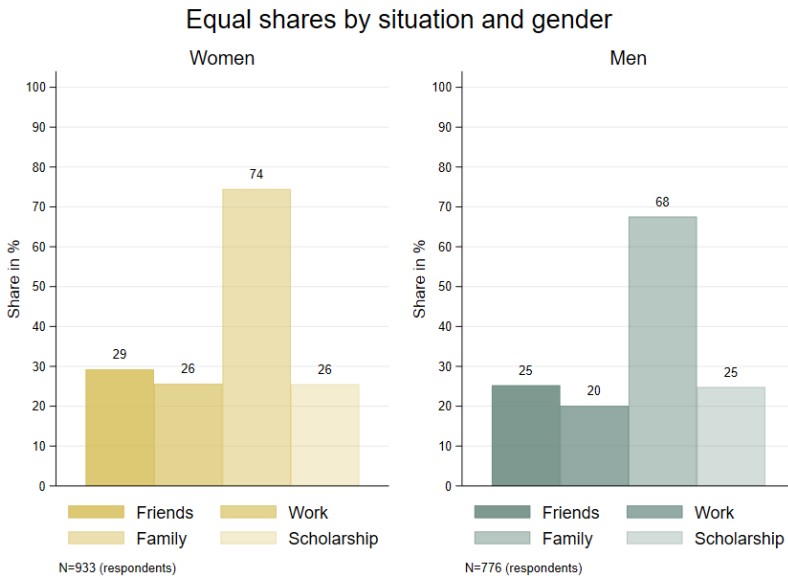


Figure 4.9: Percentage of equal splits by situation & gender

When it comes to differences by gender; with a range of 20% to 25% for men and 26% to 29% for women across the first three mentioned situations, and 74% (women) versus 68% (men) in the family situation, we see that women are overall more likely to distribute equally. With the exceptions of the scholarship setting ( $\Pr(T > t) = 0.3799$ ), where there are no significant differences between men and women, these gender differences are highly significant. We can thus conclude that, in agreement with hypothesis 2, women do seem to have a higher preference for equality. In a next step, we will investigate whether respondents differ in their allocation decisions by social class.

## II. Class Differences

Next to gender, we assumed that the social class of respondents would affect their attitudes towards distributive justice. In line with the theoretical background presented in chapter 2, we expect people from lower social classes

to have a higher propensity for distributing equally than people from higher social classes (hypothesis 1.b).



Figure 4.10: Percentage of equal splits by self-proclaimed class

Figure 4.10 shows the share of equal splits by respondents’ self-proclaimed class for each situation separately. We see that across all four situations, respondents who self-identify as lower class are consistently more likely to distribute equally than those who self-identify as higher class. However, this difference is only significant for the work ( $\Pr(T > t) = 0.0025$ ) and scholarship ( $\Pr(T > t) = 0.0007$ ) situations. In the friends and family situations, the shares of equal splits do not differ substantially across self-proclaimed class background.

If we take a look at the Erikson-Goldthorpe-Portocarero (EGP) (Erikson, Goldthorpe, and Portocarero 1979) class measure<sup>6</sup>, as an indicator of the objective class position, the results are somewhat different. Although here too, it seems the greatest variation is found in the work and scholarship

6 This measure was obtained by classifying respondent’s jobs into the respective ISCO08 (International Standard Classification of Occupations) codes and then converting these into EGP categories.

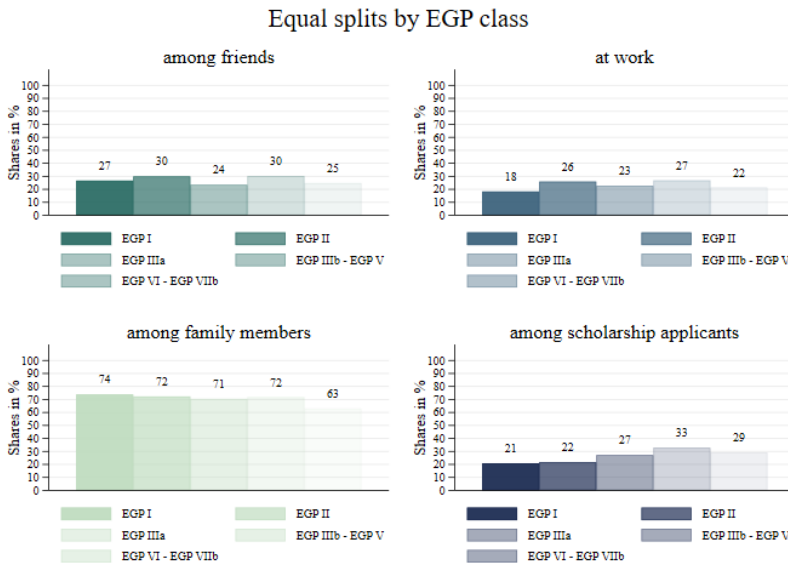


Figure 4.11: Percentage of equal splits by EGP class

situations, the differences are not significant. Only in the family situation do we see significant class differences ( $\Pr(T > t) = 0.0042$ ) between the highest (EGP I) and lowest EGP groups (EGP VI - EGP VIIb). This effect runs contrary to our expectation of higher propensities for equality in lower social classes (hypothesis 1.b). However, a potential explanation is that there is more money to distribute in wealthy families and so, for example, even if everyone receives an equal share, the person in need will be provided for. When there is less money to distribute, people might feel a more pressing urge to prioritise those in need<sup>7</sup>. Furthermore, needy relatives are more likely in families with less privileged backgrounds.

A possible reason why the results using self-proclaimed class are more in line with hypothesis 1.b, is that the mechanism behind our expectation was self-interest. And beliefs pertaining to class position are arguably more central for this mechanism to take effect than objective class. However, since the hypothesis assumed effects of actual class position, in the following, we shall focus on the objective class measure.

<sup>7</sup> Additional analyses (not shown), provide support for this explanation.

### III. Class Differences Regarding Merit

Based on the theoretical considerations discussed in chapter 2, we expect to find class differentials in the relative weight of the merit principle. Figures 4.12 to 4.15 show the interaction of objective class and merit for all four distributional survey experiments. All models, except for in the family situation, where a random effects model was computed<sup>8</sup>, control for unobserved heterogeneity by including respondent fixed effects. To test hypothesis 1.a claiming that people from higher social classes place a higher value on merit than people from lower classes, interaction terms of respondent's social class and the merit scale variable were included in the models. As described in the methods chapter, the merit variable was constructed by adding up the values of all merit indicators that were included in the distributional survey experiments.

#### 1. Class and Merit in the Friends Setting

In the friends situation the merit scale variable was constructed using information on the reliability and trustworthiness of the friend, as well as how long they have been friends for. The scale variable took on values of 3, for the lowest values in all three merit variables (*a good friend when times are good, you better watch out what you tell them, friends for 2 years*), to 7, for the highest values in all three variables (*you can count on them when times are rough, you can trust them with anything, friends for 14 years*). For the analysis, this merit-scale variable was interacted with EGP as an objective class measure, to see whether people from different social classes differ in the importance they attribute to merit. Figure 4.12 shows the plotted results from a fixed effects multilevel model for the friend situation. The graph shows the effect of merit — being a trustworthy, reliable and long-term friend — on the linear prediction for each value of EGP class. Even though there is a general tendency for a declining value of merit across class background, the effects are not significant (overlapping confidence intervals). This means that, in the setting of friends, people from different socio-economic backgrounds do

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8 The random effects model is more efficient and, since the Hausman-test indicated no significant difference between the unbiased fixed effect estimates and those of the random effects model, the latter was computed (Hausman 1978).



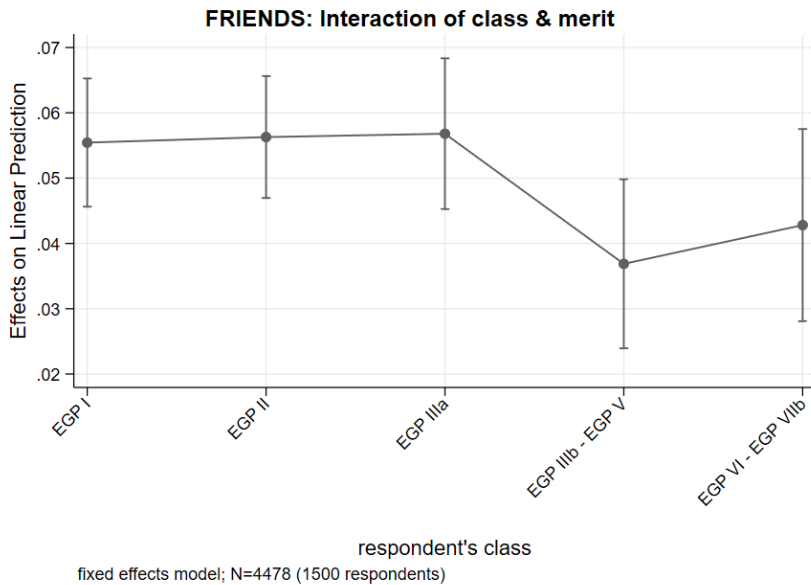


Figure 4.12: Effects of merit on linear prediction by class in the friends setting

not react in substantially different ways to merit. The findings are thus not supportive of hypothesis 1.a.

## 2. Class and Merit in the Work Setting

In the work setting, the values of the merit scale variable range from 3 for the lowest level of merit, to 9 for the highest level of merit of the hypothetical employee. An employee with the highest score is very dedicated to their job, demonstrates above average performance levels and has been in the company for 16 years. Figure 4.13 depicts the interaction effects of merit and EGP class in the work situation. The estimates were once again obtained using a fixed effects model to account for the multi-level structure. We see a general tendency for a declining importance of merit across social class. The differences between the effects of merit on the distributed shares are

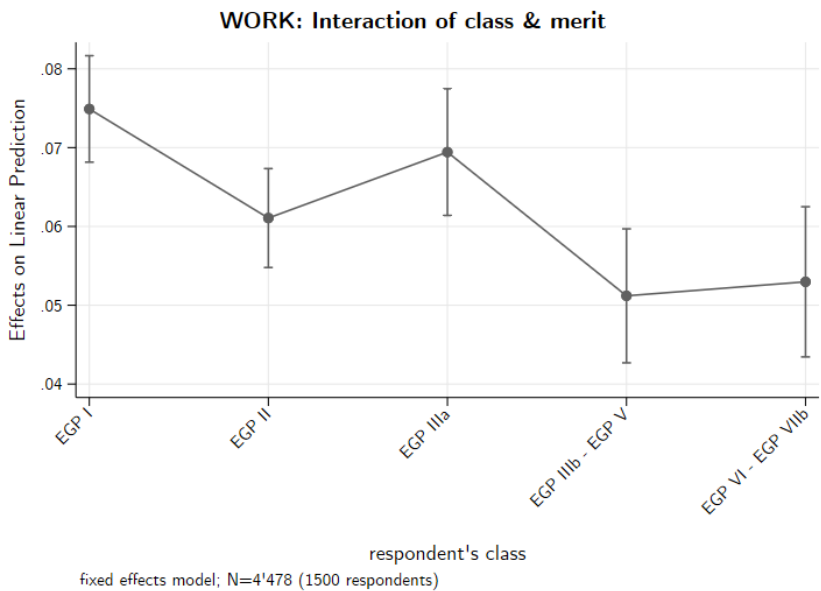


Figure 4.13: Effects of merit on linear prediction by class in the workplace setting

significant for the highest (EGP I) versus the lowest two EGP categories (EGP IIIb-EGP VIIb). This finding is in line with hypothesis 1.a.

### 3. Class and Merit in the Family Setting

In the family setting, merit was operationalised by the attentiveness and helpfulness of one's child in the past. This variable took on values from 1, not very attentive and helpful, to 3, very attentive and helpful. Figure 4.14 shows the results of the linear predictions for each level of merit by EGP class. The estimates were obtained using a random effects model. Looking at the relatively straight, horizontal lines and overlapping confidence intervals, we see that there are no interaction effects of class and merit in this setting. Hypothesis 1.a is thus not supported in this scenario. However, it would have been surprising to find differences in the effects of merit for different class backgrounds in the family situation. Given that the overwhelming majority

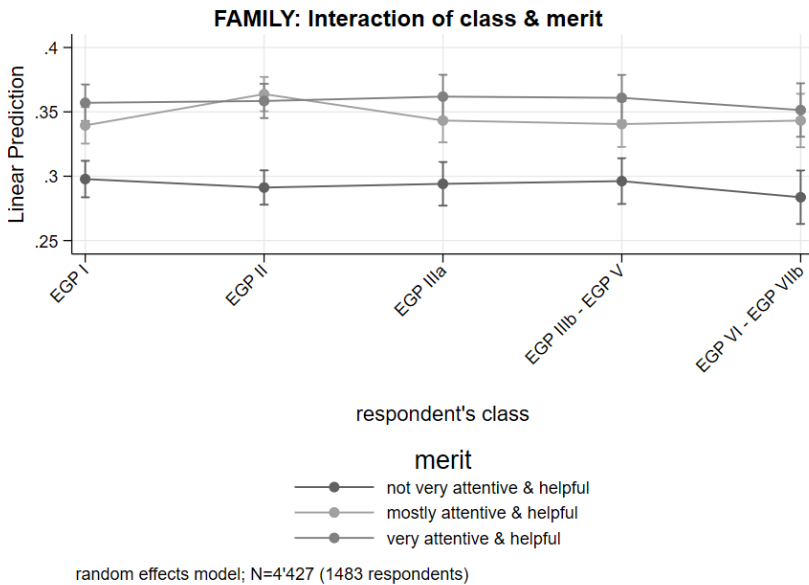


Figure 4.14: Predicted shares by merit & class in the family setting

of respondents distributed equally among family members, the need and merit variables had little effect on the distributions. Additionally, there were only minor class differences in the propensities to distribute equally in this situation, as can be inferred from figure 4.11.

#### 4. Class and Merit in the Public Goods Setting

In the scholarship setting, the merit scale variable has a range of 2, for the lowest values of merit, to 5, for the highest combination. High merit in this setting means that a student was described as very hard-working and with high grades of 5.5 (6 is the highest grade in the Swiss educational system). Figure 4.15 depicts the effects on the linear prediction of merit across EGP class categories in the scholarship situation. The underlying model is a fixed effects multilevel model. Yet again, we see no significant differences in the effects of merit by social class background. People of all classes had similar

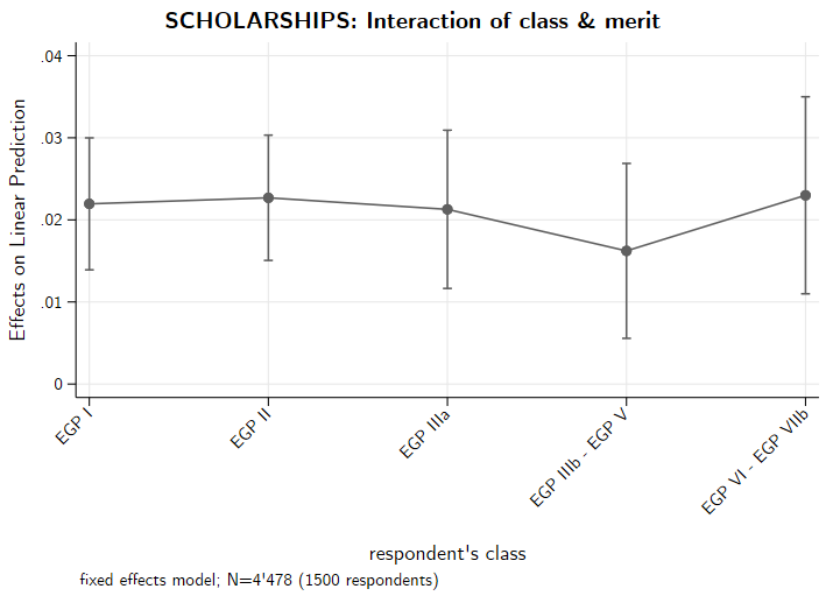


Figure 4.15: Effects of merit on linear prediction by class in the public goods setting

views on how merit should be rewarded in the scholarship situation. This finding contradicts hypothesis 1.a.

Summing up, in three of the four settings of the distributional survey experiments, there are no interaction effects of social class and merit. At least when using the objective class measure operationalised through the EGP class schema (Erikson, Goldthorpe, and Portocarero 1979), there were no significant variations in the way people with different backgrounds reacted to merit while deciding on what constitutes a just distribution. We do, however, find slight class differentials in the DSE depicting a workplace setting. While, all in all, this offers only very weak support for hypothesis 1.a, we are once again reminded of the situation-dependency of justice evaluations.

### C. How Context Matters

Additionally to the general population sample, data from two student populations were collected. There were two reasons for this. First, sampling students at a US university and a university in Switzerland offered the possibility to compare the effects of context on a larger scale. The underlying assumption is that student populations are relatively similar across the world<sup>9</sup> and that differences in (implicit) judgements on distributive justice can be attributed to context. Comparing data from two student surveys in two different populations thus seemed a relatively straightforward and inexpensive way to test for context effects. Second, much research on distributive justice has been conducted using student samples (e.g. Roth et al. 1991; Loewenstein et al. 1993; Charness and Rabin 2000; Fisman, Jakiela, and Kariv 2015; R. H. Thaler 2018; Andreoni and Vesterlund 2001; Mikula 1974). Since we have data on both students as well as the general public, we can use this as a rare opportunity to roughly test their comparability. First, however, we will briefly compare the two samples in regard to the most important respondent characteristics.

#### I. Descriptive Statistics of Respondent Attributes in the Student Samples

Table 4.2 summarises the descriptive statistics of the participating students by university. Comparing the two student samples, we see that there are almost three times as many respondents from the University of Bern as from Princeton University. Furthermore, while male students are slightly overrepresented in Princeton, in Bern, it is the other way around, with a slight majority of female respondents. Additionally, class was operationalised using a subjective measure of parental class background with values ranging from 0 (low) to 10 (high) on an 11-point scale. We see that the students in both contexts assessed their parents' class background very similarly. When it comes to age, the students in Princeton are a little bit older, since the sample here consisted of graduate students, while in Bern, undergraduates were also invited to participate.

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9 However, since studying is much more expensive in the United States, this assumption could be challenged on the grounds of possible prior underlying differences in the populations, notably in social background.

	Princeton			Bern		
	mean	sd	N	mean	sd	N
<b>Gender</b>						
female	.427	.496	288	.636	.481	888
male	.563	.497	288	.347	.476	888
other	.0104	.102	288	.0169	.129	888
<b>Parental class (0–10)</b>	6.24	1.9	286	6.38	1.74	890
<b>Age</b>	26.9	4.47	283	25.5	5.54	889

Table 4.2: Respondent characteristics by university

II. Effects of Context on Allocation Decisions

In the following, the results for the two student samples are presented and compared. We will look at the results more generally but the focus lies on testing the context-level hypotheses on the differences between students in Switzerland and the US. Differences are expected because the students are socialised in two very different societies with different views on opportunities for social mobility and attainment. Even though they live in a society that is characterised by a, in international comparison, quite low rate of social mobility, Americans have an apparently very unshakeable belief in the *rags to riches* narrative, and are convinced that individual effort is what counts most for success (Bowles and Gintis 2002; Alesina, Di Tella, and MacCulloch 2004). Those who believe that people are responsible for their own fates are less in favour of redistributive policies, that generally benefit the needy and aim to equalise resources to a certain degree (Fong 2001; Fong, Bowles, and Gintis 2006). This is why hypothesis 4.a assumes that merit considerations play a more important role in the conception of a just distribution in the US context than in Switzerland. Similarly, hypothesis 4.b assumes that people in the US are less likely than Swiss people to regard equal distributions as just.

## 1. Belief in Meritocracy and Context: Students in Switzerland and the United States compared

In the following, while we will also compare the results of the student populations with those of the Swiss general population<sup>10</sup>, we will focus on comparing the results from the two student populations. According to the theoretical considerations on beliefs about the causes of poverty, meritocracy and equal opportunity, we expect to find effects of context. More specifically, we expect merit to be more important as a principle of justice for the Princeton students than those from Bern (hypothesis 4.a). Figures 4.16-4.19 show the predicted shares for the four combinations of need and merit: high merit & high need; high merit & low need; low merit & high need; low merit & low need. The underlying models are fixed effects multilevel models.

### a) Students in Bern and Princeton in the Friends Setting

Figure 4.16 depicts the effects of the four merit-need combinations in the friends situation. The pattern is comparable to the results obtained using the Swiss general population sample. We see that friends who are at the same time very needy and deserving (meaning high values of merit), receive, on average, 63% (over both student populations) of the total sum, which is by far the highest outcome. With 39%, this is followed by the combination of low merit and high need, indicating that, like the respondents from the Swiss general population, students also think that need is a more important principle of distributive justice than merit among friends. Very reliable and trustworthy friends who are not in need receive 30%, on average, while those who are neither particularly reliable and trustworthy, nor very needy, receive an average of only 6%.

When it comes to the differences between students in Princeton and Bern, we see that they differ significantly in only two cases. First, and contrary to our expectation (hypothesis 4.a), students from Bern give, on average, more to the deserving friend who is not needy than Princeton students (32 % compared to 24%). Second, when the friend was described as neither particularly needy nor deserving, they still received 8% from Bernese students compared to

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10 This comparison is made as a way of gaining a rough understanding of the potential bias resulting from studies on distributive justice using data from student populations only.

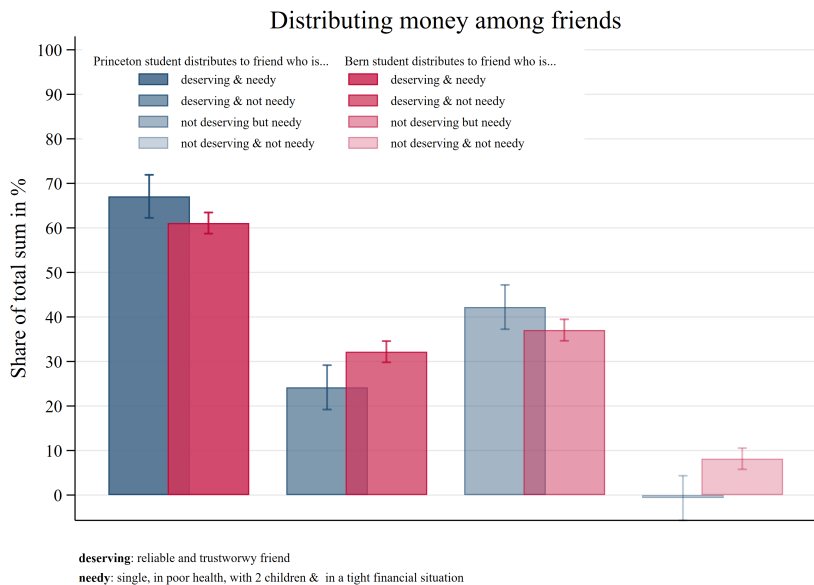


Figure 4.16: Friends – Predicted shares for different merit & need combinations by university

next to nothing (1%), from Princeton students. This could either mean that for students from Princeton need and/or merit is more important than for Bernese students, or that Bernese students are more egalitarian and prefer more equal distributions. Or both statements could be correct.

b) Students in Bern and Princeton in the Work Setting

In the situation at work, depicted in figure 4.17, the pattern is again similar to the results from the Swiss general population. We see that merit counts more than need, since the person who is both deserving and needy receives the most (on average 57%), but not considerably more than the person who is deserving but not needy (on average 50%). With 20%, there is a sharp drop for an employee who is needy but not deserving and, with an average share of merely 12%, employees who are neither particularly needy nor deserving receive the least. This is further support for hypothesis 3.a assuming



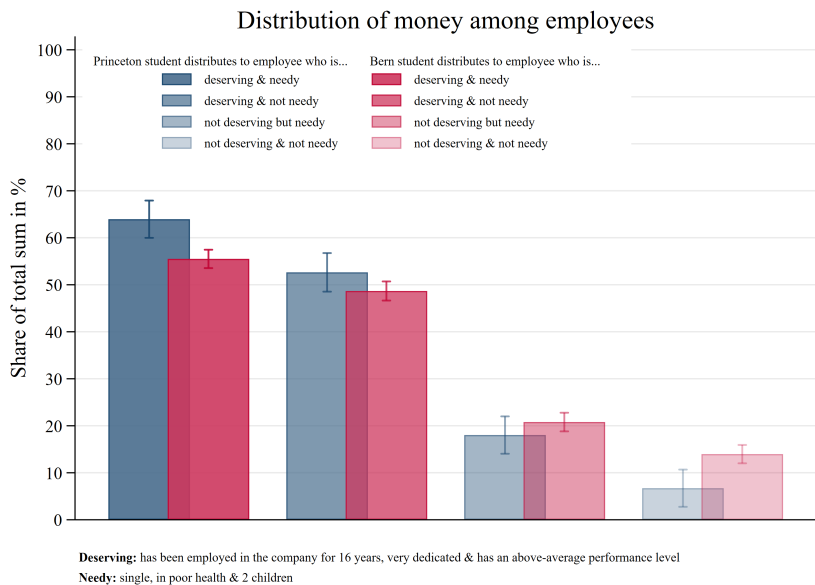


Figure 4.17: Work – Predicted shares for different merit & need combinations by university

that the merit principle dominates in the work setting. When it comes to differences between the two groups of students, we see that, while they are largely in agreement and attach similar weights to need versus merit considerations, there are nonetheless slight differences. For one thing, the students at Princeton seem to generally attach more weight to both the merit and the need principle. While the very deserving and needy employee is rewarded a share of 64% of the bonus money in Princeton, students from Bern assign somewhat less, with an average of 55%. At the same time, while employees who are neither particularly needy nor deserving would still receive 14% of the share, according to students from the university of Bern, Princeton students think they deserve merely half that amount. Also, there is a tendency for Bernese students to react more favourably to the need of the employees and less to merit (combinations *deserving & not needy* and *not deserving but needy*), than is the case for Princeton students. However, these differences are not significant. Consequently, hypothesis 4.a cannot be confirmed for the workplace setting. Overall, the effects in the work situation

can be interpreted as weak evidence that equality is less important among students in Princeton than in Bern (hypothesis 4.b).

c) Students in Bern and Princeton in the Family Setting

Figure 4.18 shows the results of the students’ preferred distributions in the family situation. Again, the results are very similar to the results obtained

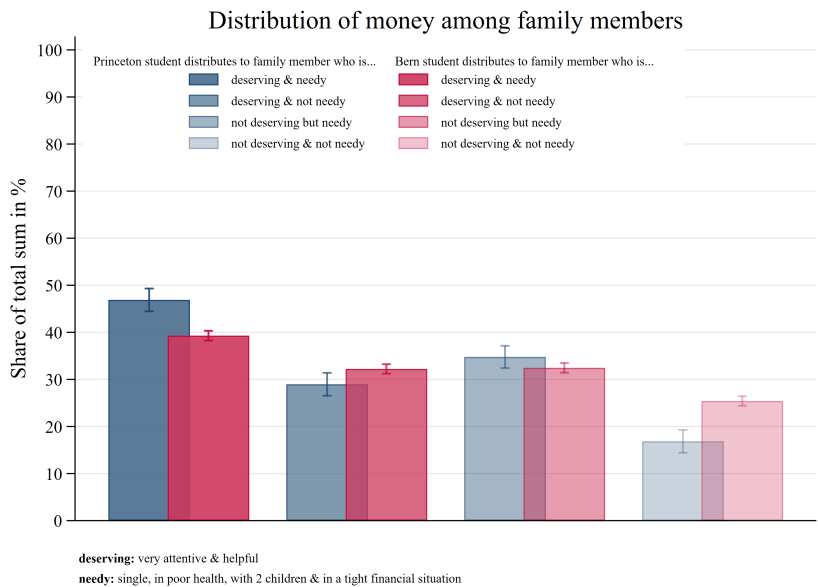


Figure 4.18: Family – Predicted shares for different merit & need combinations by university

using the data from the Swiss general population survey. Since there is an overriding tendency to distribute equally among family members, the differences across the four combinations of need and merit are comparatively small. However, the range of the distributions is much wider for the student populations. While family members with the combination high need and high merit receive 42% of the total amount, those with the combination low need and low merit receive only 23%. Consequently, students are less egalitarian

than the Swiss general population, where a smaller range of 26% to 39% was observed in the same situation.

With regard to differences between the student populations, we see a similar pattern to that in the friends situation. In line with expectations (hypothesis 4.b), Bernese students appear to be more egalitarian, having a smaller overall range of outcomes. However, again, we cannot confirm hypothesis 4.a stating that merit is more important in the US context than in Switzerland. On the contrary, it seems that the Princeton students attached a higher relative importance to the principle of need in this situation (family members with the combination of *low merit - high need* received more than those with the combination *high merit - low need*).

d) Students in Bern and Princeton in the Public Goods Setting

The results of the fourth DSE, in which respondents were asked to distribute scholarship money among three applicants, are depicted in figure 4.19. Com-

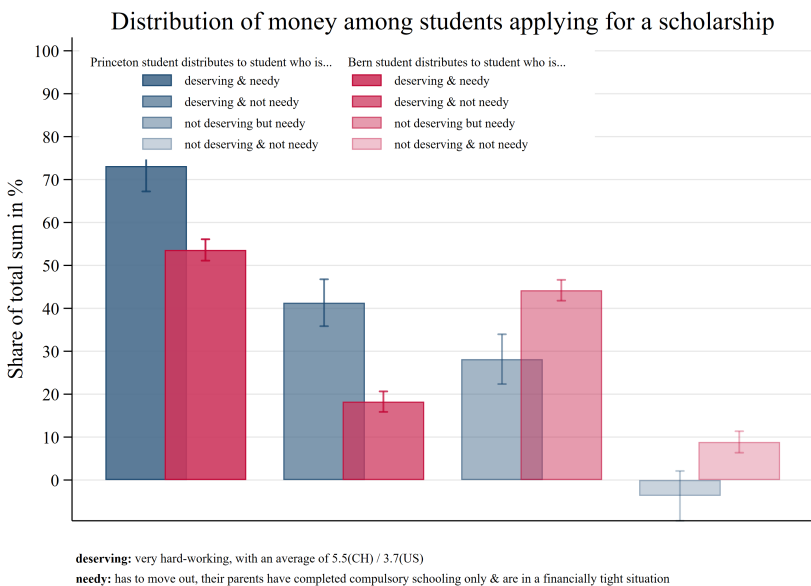


Figure 4.19: Scholarships – Predicted shares for different merit & need combinations by university

pared to the results for the Swiss general population in figure 4.8, we see that the general pattern is very similar for the student populations. However, and this is very much driven by the results for the students from Bern, with a much wider range of 8% to 53% (average over the university populations) compared to 17% to 49% for the Swiss general population, students are less egalitarian. Accordingly, the students attach more importance to the merit or need factors, and depending on the context they are from, more to one than the other.

In this public goods situation, the differences between the two student populations are most striking as they even show a different pattern. While Princeton students distribute similarly as in the work situation and clearly attach more importance to the principle of merit over need and equality, students from Bern show a pattern similar to the one in the friends situation. Additionally, students from Bern show a much higher preference for the need principle in this situation, giving 44% of the total to scholarship applicants with the combination *high need - low merit* compared to 18% for the combination *low need - high merit*. For Princeton students, the priorities are the other way around, with 28% (*high need - low merit*) and 41% (*low need - high merit*) respectively. These results are in line with hypothesis 4.a stating that merit is more important in the US context.

On the whole, once again we see very different patterns of distributions across the four situations. Differences between student populations are also more or less pronounced depending on the situation. Contextual differences in regard to what constitutes a just distribution are most apparent in the scholarship situation, where students from Bern apply a more needs-based approach, while Princeton students attach more importance to merit. It seems that there was most agreement, across both student and general population samples, on how to distribute bonus money in the work situation.

## 2. Egalitarianism among students in Switzerland and the United States

Differences in egalitarianism were also expected among the two student populations. We hypothesised that in the context of the US equality is less important than in Switzerland (hypothesis 4.b). Accordingly, we expect students at Princeton University to be less likely to divide money equally among the three hypothetical people described in the distributional survey experiments throughout the situations. Figures 4.20 to 4.23 display the shares of equal splits for the two student populations differentiated by gender of

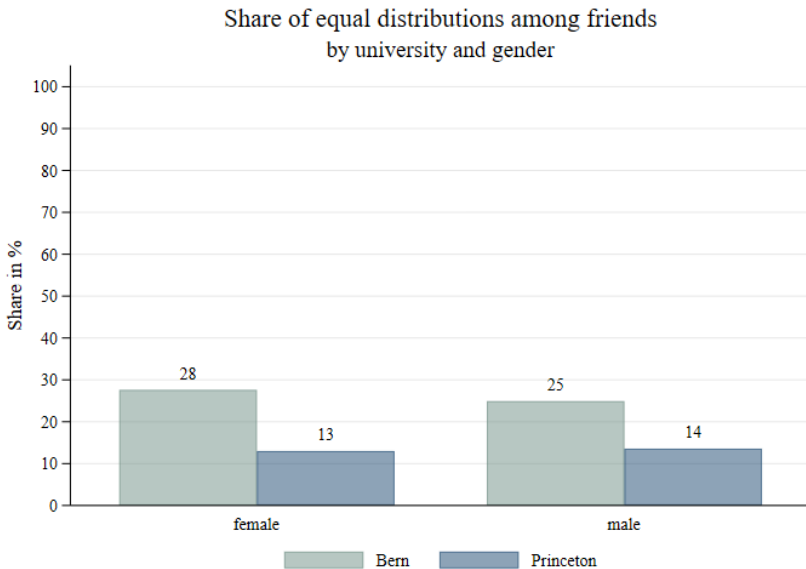


Figure 4.20: Percentage of equal splits in the friends situation by university & gender

respondent and situation. From a first glance at the four figures, we see that there are pronounced differences in the prevalence of equal distributions across both populations and gender. A closer look reveals that the degree to which the student populations differ in regard to egalitarianism depends on the situation. Figure 4.20 shows the share of equal splits in the friends situation. There are large differences in the prevalence of equal distributions between the two student populations, with an average (not shown) of 27% for students from Bern University and 14% for students at Princeton (t-test of difference:  $\Pr(|T| > |t|) = 0.0000$ ). This result is clearly in line with our hypothesis 4.b stating that equality is less important in the US context. We also see that in this situation the gender differences are not pronounced and they are not significantly different at the 5% level ( $\Pr(T > t) = 0.0580$  — not shown). Although the direction of the effect is in line with hypothesis 2 claiming that women value equality as a principle of justice more than men, we cannot refute the null hypothesis of no differences for this situation.

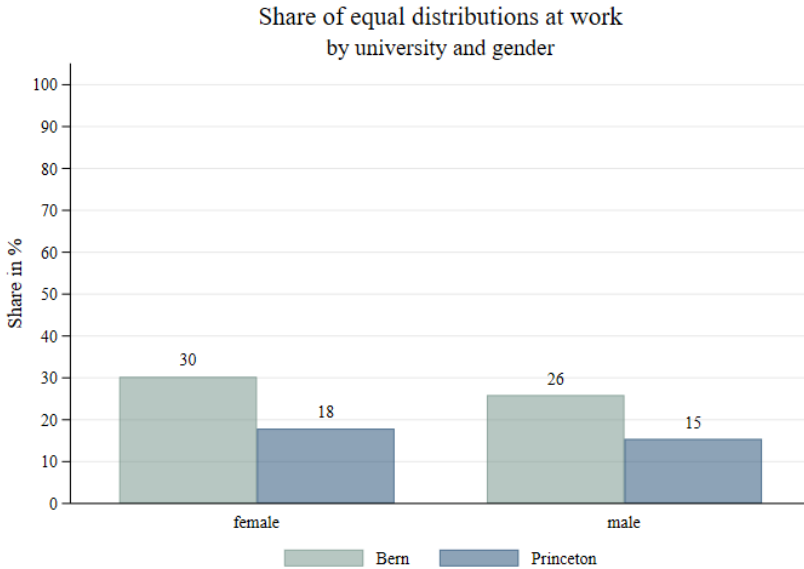


Figure 4.21: Percentage of equal splits in the work situation by university & gender

In the work situation (figure 4.21), we see both differences between the student populations as well as across gender. The pattern is the same as above, with students at the University of Bern showing, with 29% (average for both genders, not shown), a much higher prevalence for egalitarian distributions in the work setting than students at Princeton University (17% — average for both genders, not shown). Also, in both student populations, women were more likely than men — 30% as opposed to 26% in Bern and 18% as opposed to 15% at Princeton — to distribute equally. For the work situation, both hypothesis 2 and hypothesis 4.b, claiming stronger preferences for equality among women and among students from Bern, are confirmed.

In the family situation (figure 4.22), we see that — as is the case for the Swiss general population — the students in both the United States and Switzerland show a high prevalence for equal distributions compared to the other settings. Additionally, the same patterns of gender-based and contextual differences we found elsewhere emerge here too. Women and students from Bern have higher propensities for equal divisions compared to men and

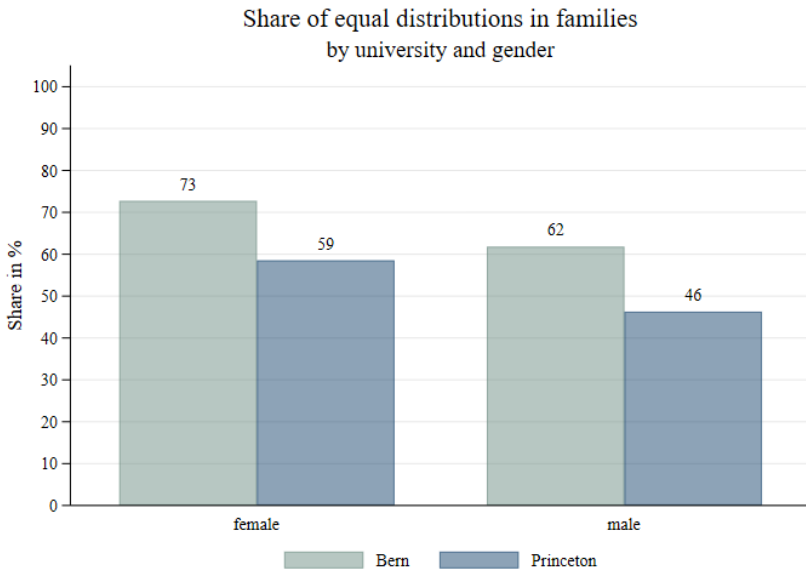


Figure 4.22: Percentage of equal splits in the family situation by university & gender

students from Princeton University. Students from Bern have a prevalence of 73% equal splits for women and 62% for men. In Princeton, the difference between genders is not quite as pronounced but still evident with 59% for women and 46% for men. Both the gender and population differences are highly significant.

The fourth situation (figure 4.23), in which the respondents had to distribute money among pupils applying for a scholarship, has the lowest shares of equal splits by far (and it is markedly lower than in the general population sample). While it is still the case that students at the university of Bern were more likely to distribute equally (19% of the women and 17% of the men) than students at Princeton university (9% of the women and 10% of the men), the gender differences are not that large and not statistically significant ( $\Pr(T > t) = 0.1651$ ).

Summing up, students at the University of Princeton consistently display lower preferences for equality as a principle of distributive justice than students from the University of Bern. Therefore, hypothesis 4.b, stating that

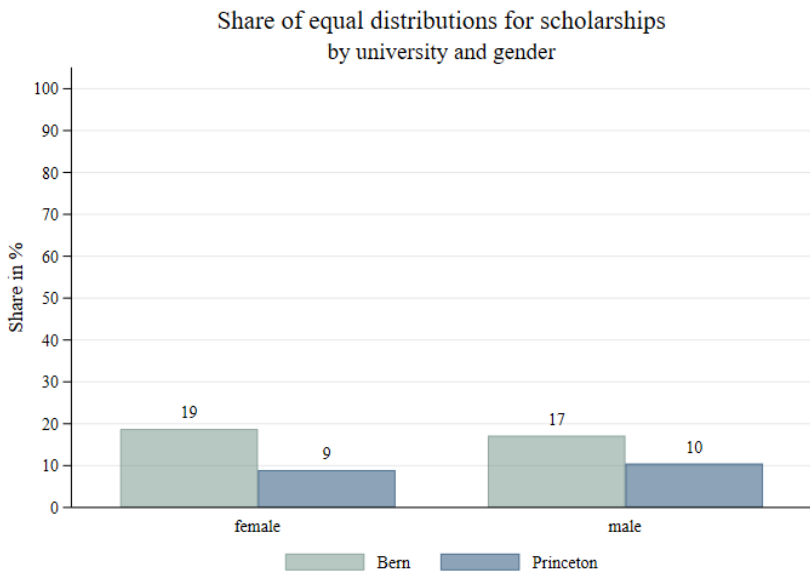


Figure 4.23: Percentage of equal splits in the public goods situation by university & gender

equality is a more relevant principle in the Swiss context compared to the US, receives strong support. On the individual level, the findings generally support hypothesis 2, claiming that women are more likely than men to favour the principle of equality, across both student populations. Where we find no such effects, we also find no evidence to the contrary; there are simply no significant gender differences in these cases.



#### D. Context Effects in Short

Comparing the results from different contexts, we see that the students from both Bern and Princeton have similar views on what constitutes a just distribution as people from the Swiss general population survey. The most notable differences are found in the public goods situation in which scholarship money was distributed. This makes sense if we assume that students are more informed about the scholarship policies in their respective contexts. Alternatively, they might also have stronger opinions in favour of a certain principle of justice, be it a more needs-based or merit-based approach, depending on the prevailing policies at their respective institutions.

In regard to the expected differences for the US and the Swiss contexts, we find support for both hypothesis 4.a, according to which merit is more important in the US context, and hypothesis 4.b stating that equality is more important in the Swiss context. We can thus say that the results from the student populations speak strongly in favour of a cultural difference in the perceptions of justice.

#### E. Short Summary of Results

Summing up, we see that there are factors affecting the justice evaluations of the respondents (both the general population sample and the student samples) operating on three distinct levels: the individual, the contextual and the situational. In regard to individual-level effects, we find that women are generally more egalitarian. We also find tentative effects of social class on distribution choices, however not throughout all situations.

Generally speaking, we find very different patterns of distributions by situation. While both merit and need are central for distributions among friends, merit is the single most important factor in the workplace situation. Among family, equality dominates as an allocation norm. In the public goods setting the results are somewhat mixed, as they vary by context, however, both need and merit considerations matter. We also find further differences by context, with students from the US being less egalitarian and more meritocratic in their distributions than Swiss students.

While previous research has focused on individual level differences as well as context effects, the present study highlights the importance of the situation in which resources are distributed. As we have seen, far from being an inconvenience or *framing effect*, the setting within which resources are

divided is an essential factor influencing our perceptions of distributive justice and, as such, guiding our allocation decisions. Dissecting the situation into the underlying relational structure – whereby allocation norms can be either functional or dysfunctional for achieving certain relationship-dependent goals – helps us understand when and why which principle of justice is applied. This functionalist approach is particularly useful in our quest for a deeper understanding of distributive justice, as it reveals the relevant mechanisms shaping our perceptions of what is fair, and thus which allocation norms should be applied when distributing limited goods.

## Chapter 5: Discussion and Conclusion

Questions of distributive justice arise in many small ways in our everyday lives, such as when we are deciding whether to pay extra for a product bearing a fair-trade label, or in bigger ways, such as when we are voting on a policy that is going to affect many people's lives through its redistributive effects. Whether we are in the position to distribute goods according to what we consider fair or whether we find ourselves at the receiving end of an allocation, these decisions, big and small, have an impact on both our individual well-being and on the functioning of groups (Deutsch 1975; Leventhal 1976). Using different allocation norms can either foster cooperation or be the cause of conflict, even leading to wars (Fiske 1993; Deutsch 1973; Deutsch 1985). In face of the rich literature on both normative theories of justice (among others: Rawls 2005; D. Miller 2003; Sen 2009; Dworkin 2002; Scanlon 1998; Nozick 2013; Roemer 1998) as well as empirical work on what people perceive as fair (e.g. Andreoni and Vesterlund 2001; Robinson and W. Bell 1978; Alesina and La Ferrara 2005; Fong 2007), this book set out to make a contribution to the field in several ways.

First, a structured overview of the philosophical underpinnings of the three most important principles of justice: *merit*, *equality* and *need*, was presented. Second, drawing on the multifaceted findings from different fields, an attempt was made to distil some of the mechanisms explaining people's perceptions of justice. Since many different factors on the individual and contextual level, but also the relational structure of the situation in which an issue of justice arises, affect the choice of justice principles, the goal was to try to disentangle these effects. Based on the theoretical arguments and previous findings, hypotheses were formulated for all three aforementioned levels to structure the analyses.

The individual level hypotheses are primarily based on considerations in line with rational self-interest. It was expected that due to differences in beliefs and preferences, women and people from lower classes would endorse the principle of equality more than men and people from higher classes (hypotheses 2 and 1.b). It was also expected that people from higher classes would endorse the merit principle more than people from lower classes (hypotheses 1.a).

Furthermore, because situational effects are underexplored in research on distributive justice, prioritising this aspect of distributive justice is perhaps one of the main empirical contributions of the present book. In contrast to a typical approach from economics which would treat issues pertaining to the situation as biases in the form of *frames* (e.g. R. H. Thaler 1991; Kahneman and Tversky 2000), in this book, following a more systemic approach, justice was treated as an inherently situation-dependent phenomenon (Fiske 1992; Deutsch 1975; Konow 2001). Because we are a fundamentally social species, our actions are guided by the social relational structures of our interactions and the anticipated consequences of our actions on those relations. Because equal allocations have a positive effect on mutual cooperation and harmony (Deutsch 1975; Lerner 1977), it was expected that in a situation involving a *solidarity-oriented* setting (or in Fiske's 1992 terminology: *equality matching*), such as commonly found among friends, people would distribute goods using primarily the equality principle. In the workplace setting, where the goal of social interaction is usually economically oriented (*market pricing mode* (Fiske 1992)) and because of its productivity enhancing properties, merit was expected to be the dominant allocation norm (Deutsch 1975; Thibaut and Kelley 1959; Leventhal 1976). In the family setting on the other hand, need was expected to be the predominant allocation norm, because this is one of the rare situations in Western culture where the *communal sharing* relational mode (Fiske 1992) prevails, where people are *caring-oriented* (Deutsch 1975). Furthermore, in the public goods situation in which respondents were asked to distribute scholarship money, it was expected that people would use a combination of both the need and merit principles so as to attain an efficient use of public goods, while at the same time ensuring a certain degree of equality of opportunity.

Additionally, it was expected that context shapes people's beliefs and preferences on issues of distributive justice. To test this, surveys were also administered to two student samples at Princeton University in the United States and the University of Bern, Switzerland. Differences were expected primarily due to a discrepancy in beliefs about meritocracy, the realisation of equal opportunity, and the causes of inequalities. Because of the widely documented cultural differences in belief systems, inequalities are per se perceived as more legitimate in the US (e.g. Alesina, Stantcheva, and Teso 2018). Accordingly, equality was expected to have a lower priority as a principle of justice in the US context, while merit was expected to be more important.

Third, as a means of addressing the complexity and many challenges pertaining to (research on) distributive justice, and as a means to test these hypotheses empirically, the distributional survey experiment (DSE) was developed. To introduce the DSE as a new tool for research on distributive justice was thus a further aim of the book. The DSE incorporates useful design features of choice experiments and factorial survey experiments, however, is also inspired by game theoretic approaches in which people make active allocation decisions.

However, the biggest strength of the DSE is that it was designed to capture the nature of the problem of distributive justice by creating a setup in which respondents actively distribute resources among a group of three people, described using experimentally varying combinations of need and merit. First, in order to reach a conclusion on who should receive how much, respondents must compare and evaluate the bundled attributes of the people described in the vignettes. The method thus forces respondents to mentally assess the trade-offs between competing principles of justice (merit, need and equality) and apply some kind of weighting or prioritising. Second, in the (re)distribution of resources, outcomes are inherently interdependent. Giving more to some leaves less over for the others. This property is captured in the design of the distributional survey experiment. A further advantage of the DSE is that the design can easily be adapted to include allocation tasks in different settings, such as in our case: among family members, friends, students applying for scholarships and at the workplace. The DSE is thus designed to allow us to differentiate between different justice principles as well as the three levels (individual, contextual & situational) affecting the choice thereof. Compared to previous possibilities, the DSE thus generates rich data efficiently and parsimoniously.

## *A. Discussion of the Main Findings*

### *I. Gender and Class Effects*

Assuming that people are motivated by both self-interest and fairness considerations, it was argued that people apply various strategies in order to reconcile these two, oftentimes conflicting, interests. When wanting to feel and be able to argue that what is in one's own self-interest is also what is fair, we may experience cognitive dissonance. As a mechanism to reduce the negative feelings that are caused by cognitive dissonance, people can

react by adapting their belief and value systems to bring these two concerns into alignment (Festinger 1957). It was thus expected that people would opt for distributions in line with their self-interest and that people with more privileged backgrounds would distribute more in line with the merit-principle (hypothesis 1.a), while people who are less privileged would choose to divide resources equally more often (hypothesis 1.b). Furthermore, due to previous findings, a gender difference in the propensity for equal divisions was also expected. Due to both gender-specific socialisation, that promotes different qualities depending on gender, as well as enduring labour-market and status inequalities between men and women, we expected to find a higher preference for egalitarianism among women (hypothesis 2).

The findings offer weak support for the hypotheses on class effects. While there was a general tendency for people from lower socio-economic backgrounds to distribute more in line with the principle of equality than people from higher socio-economic backgrounds, the effects hardly ever achieved statistical significance. And the same can be said for the hypothesis claiming that higher class people would support the merit principle more. These findings offer tentative support for the claim made in Henrich et al. (2004), where a series of game experiments in fifteen small-scale societies show that context effects are stronger than individual level effects. Because members of a society are exposed to the same institutions, through socialisation processes, their beliefs and preferences can be assumed to be relatively homogeneous within societies, albeit also structured by individual factors. However, the hypothesised gender difference in the propensity to divide equally was strongly supported. In all cases with significant gender differences, women were more egalitarian.

## II. Situations and Relational Structures – Fair is What Works Best for the Relationship

Instead of treating expected situational effects as a nuisance to be dealt with, it was a primary goal of the approach followed here to understand these seeming irregularities as functional from the point of view of relational structures. Depending on the goal of a social interaction and the nature of the underlying relationship, other principles of distributive justice will prove most useful. In economically oriented interactions (MP mode) (Deutsch 1985; Fiske 1993) where raising productivity is a central concern of the people involved, people were expected to primarily distribute according to merit (hypothesis 3.a). By

contrast, in the solidarity-oriented or EM mode, people's interactions revolve around the building and maintenance of agreeable social connections, such as friendships, as ends in themselves (Deutsch 1985; Fiske 1993). Because treating each other as equals is functional in these settings, we expected people to predominantly distribute resources equally among friends (hypothesis 3.b). People in caring-oriented groups, such as commonly found in families, can be said to interact in communal sharing mode. In these interactions, people strive to foster each other's well-being and personal growth (Fiske 1992; Deutsch 1975). It was thus expected that among family members people would distribute according to need (hypothesis 3.c). Furthermore, in a situation involving the distribution of public goods, more specifically scholarship money, two distinct goals are relevant. Next to efficiency considerations, public spending in education is also a way to equalise educational opportunities. Because the goal of the allocation in this setting is twofold, we expected both merit as well as needs to matter (hypothesis 3.d).

The support for these hypothesised effects of the situation is mixed. In the situation involving friends, merit is more important than would have been expected, and contrary to expectations, equality is not the dominant principle. In fact, people (in the general Swiss population as well as students) distributed equally to a similar degree—falling in the range between 20-30% of the cases—in the situations involving friends and the workplace. With only up to 20%, equal distributions were least likely in the public goods setting. In the family setting on the other hand, instead of the expected dominance of the need principle, with over 60%, a clear majority chose to distribute equally. However, this effect might be explained by the fact that there is a very dominant social norm to distribute inheritance money equally among one's children (e.g., Wilson et al. 2020). In the workplace situation, the findings were most in line with expectations, showing a clear dominance of the merit principle. In the public goods setting, merit and need considerations were both important. In this setting, the context was an important factor affecting people's choice of one principle of justice over the other. While students from Bern prioritise need over merit, respondents from Princeton University display a much more merit-based approach.

On the whole, while not every finding was expected, the different allocation strategies across situations can still very well be interpreted in light of the functional models of Fiske (1992) and Deutsch (1975). Next to differences in the nature and goal of a given social interaction, the four basic relational structures (Fiske 1992), of which we focused on three, can further be characterised by the degree of intimacy and reciprocity involved. While

*authority ranking* (AR) and *market sharing* (MP) modes are usually very low on intimacy and also do not require it for an interaction to take place, intimacy is a key component of *equality matching* (EM) and *communal sharing* (CS) relationships. In the equality matching interaction mode a certain degree of intimacy has already been built up and it is precisely the wish to maintain or further deepen this intimacy, that constitutes an integral part of the relationship itself. To achieve this goal, the people involved participate in a cycle of balancing processes, such as through mutual gift-giving. In contrast, a *communal sharing* (CS) relationship is, by definition, one with extremely high levels of intimacy so that there is even, to some degree, a merging of identities. Unlike in EM mode, meticulously keeping track of individual contributions so as to be able to reciprocate is unnecessary for a CS relationship to persist (Fiske 1993). This difference illustrates how one way of relating reciprocity to the relational structure is to look at in which ways it is either relevant or not in contributing to the group-goal<sup>1</sup>.

As mentioned, reciprocity is least relevant in situations involving a communal sharing relational mode, which can be understood in terms of *Gemeinschaft* (Tönnies 2012). Here the sense of personal responsibility for one another's well-being will lead to higher levels of cooperation and generosity. In CS mode, gains and losses of one partner are felt as gains and losses of the other. The results of a series of game experiments support this implication, with participants displaying higher levels of generosity and cooperation when they are playing with someone they know or when their contributions will go to a cause they support (e.g. the Red Cross) (Eckel and Grossman 1996; Kollock 1998). Furthermore, when an external authority figure is introduced and the participants of an experiment feel less personal responsibility, they will display less generous behaviours (Charness 2000). In market pricing settings, which are inherently depersonalised and functional (Weber 1978), we feel less personal responsibility and reciprocity is highly regularised in the form of equity. By contrast, the equality matching mechanisms of gift exchange are a perfect example of overt reciprocity among people trying to maintain and foster enjoyable relations (Deutsch 1985; Mauss 1966).

While we expected equal splits in the EM situation and needs-based distributions in CS relationships, the findings that people instead distributed equally in the family situation and more according to a merit-based approach than was expected among friends, can still be explained with this framework.

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1 Following Deutsch 1985, with *group-goal*, I mean the goal of the interaction and/or the relationship.



Equal divisions can be understood as a way of expressing the non-importance of the reciprocity norm. And because the equality norm promotes harmony and maintaining harmony among families will usually be considered an important goal, the predominance of equality among families can still be interpreted in light of the relational-mode framework. The other surprising finding on the importance of merit in the situation involving friends can also be explained in terms of the logic of equality matching mode. Since this relational mode demands a balancing of contributions for the maintenance of the relationship, distributing according to merit can also be interpreted in terms of reciprocity. Equality of contributions to the relationship might then be an overarching aspiration which is achieved through a cycle of tit-for-tat responses. To be able to appropriately reciprocate, keeping track of the respective contributions or merit of friends, and responding accordingly, can thus be understood as a means of achieving equality in the relationship itself as well as equality, in the sense of equal treatment, among multiple EM relationships. This brings us back to Sen's question: "equality of what" (Sen 2009, p. 292) discussed in chapter 2. Additionally, we see that the reciprocity norm can either be necessary in working towards achieving the group-goal or not. In other words, reciprocity can be a more or less efficient strategy in achieving the goal of a given interaction embedded within a relational structure.

In regard to achieving efficiency *per se*, it is considered one of the characteristics of a market-pricing or economically-oriented situation (Fiske 1992; Deutsch 1975), such as at work. It can thus be appropriate or expected to act according to self-interest, as opposed to altruistically or following a reciprocity norm in such settings. However, in other situations, this kind of behaviour would be inappropriate and bear the danger of harming group members and destroying the relationship between the parties involved. For example, in an equality matching relationship, such as between two friends, where maintenance of enjoyable social relations is the goal, the selfish pursuit of one's own interests is not considered acceptable. Because in EM mode, maintaining the relationship is a primary goal in itself, it can most effectively be achieved through investing in one another through constant overt reciprocal exchange (Mauss 1966; Fiske 1992). Similarly, in a communal sharing relationship, such as between two lovers, someone who is constantly looking to maximise individual gains would run the risk of angering or hurting the other party and thus endangering the relationship. Nurturing the well-being of group members with whom one interacts in communal sharing mode is

thus effectively achieved by giving according to needs (Fiske 1992; Deutsch 1975).

### III. Context Shapes our Opinions on What is Fair

To test for effects of context, two student populations, in the US and Switzerland, were compared. Because there is a strong belief in meritocracy in the United States, we expected Princeton students to show more support for the merit principle than students from the University of Bern (hypothesis 4.a). Additionally, due to a higher acceptance of inequalities in the United States, we expected equality to be less important for Princeton students (hypothesis 4.b). The findings generally offer support for the expected context-dependency (Konow 2001) of issues pertaining to distributive justice. As was expected, compared to students from Switzerland (University of Bern), students from the US (Princeton University) were more motivated by the merit norm, in the public goods setting especially, but also as a general tendency in the other situations. Additionally, students from Switzerland were much more egalitarian across the board. Generally speaking, comparing the results from the student samples with those of the Swiss general population, the patterns of distributions according to different need and merit combinations were very similar. The biggest difference was found in the scholarship situation in which the students were less egalitarian than other people. A reason could be that students are more affected by this particular situation and know more about how scholarships are distributed in reality.

#### *B. Limitations*

While the distributional survey experiment has proven very useful in many respects — e.g. simultaneous data collection on different levels, accounts for the inherent interdependency of outcomes — there are some potential problems that must be addressed. Generally speaking, while it was necessary to vary the operationalisations of need and merit across the four DSEs, so that they were suited to the respective situations, this is not ideal from the standpoint of comparability. It would be important for future research in this field to create more uniform designs that still take into account that different things will be considered as indicators of merit or need in different situations.

Also, as has been pointed out by Leventhal (1976), equal splits are not necessarily evidence of egalitarian concerns. Respondents may have come to the conclusion that an even split was the best way to honour the specific combinations of need and merit present in a group of people. For example, were the respondent to apply a merit-based or needs-based approach, two or more people who are perceived as equally deserving or needy would receive the same amount. We would not be able to distinguish this respondent from a strict resource egalitarian. Consequently, if the reason behind an equal division is not motivated by egalitarian concerns, but is a result of a merit-based or needs-based approach — or indeed a combination of the two — then the approach used here will lead to an overestimation of egalitarianism.

Furthermore, even though the division of inheritance money was an obvious example of an allocation task within a family setting, since there seems to be a strong norm to distribute inheritance money equally among siblings, it would be fruitful to come up with other CS situations in the future. This way, we would be better able to test for more general mechanisms. Varying the settings within situations would generally be a useful way to further differentiate the specific from the more general effects and thus attain a deeper understanding of the underlying mechanisms.

Another issue that could potentially be more serious is that the merit and need effects might also be “forced” by the design, since most of the information provided in the experiments was either information on need or merit. However, the finding that, across contexts, an overwhelming majority chose to distribute equally in the family setting but not in other situations is reassuring: respondents evidently did not feel compelled to consider the information on need and merit when they deemed it irrelevant.

Furthermore, the contexts under study are very similar in many respects: Both Switzerland and the United States are prime examples of Western democratic capitalist countries and the findings are thus prone to ethnocentric bias (Lerner 1975). To test whether the here identified mechanisms underlying perceptions of distributive justice are universal, and to further our understanding of these mechanisms, more cross-cultural studies are needed.

Regarding the DSE, the fact that the patterns of the distributions by various need-merit combinations varied so greatly across situations, but also in some cases across contexts, can in itself be understood as encouraging evidence that the distributional survey experiment managed to capture some relevant differences and “worked”. However, we should keep in mind that the vignettes depict artificial hypothetical situations and the responses to survey experiments have no real-world consequences for respondents. Be-

cause of these properties, validity concerns can arise and we should thus be cautious about generalising the results (Collett and Childs 2011). Research that specifically aims to cross-validate the results from survey experiments with other data sources is thus very valuable and promising (e.g. Hainmueller, Hangartner, and Yamamoto 2015).

### C. Concluding Thoughts and Implications

Justice is more than the sum of its parts. The three principles of justice must be weighted, and context provides the weighting scheme in specific cases (Konow 2003, p. 1190).

While I would substitute *context* with *situation*, on the whole the findings presented here lead to a similar conclusion. We set out to find out *who* thinks *what* about justice in *which* situations. In the end, we have come a little closer to a more comprehensive and less fragmented understanding of these issues by applying a systematic approach and carving out possible testable mechanisms. Using the distributional survey experiment, specifically developed for the purpose, some first attempts have been made to differentiate between the individual and the social, in the form of both context and the situation.

One of the main conclusions of the presented research is that more than the individual factors and the context, the situation is a highly relevant factor influencing people's choice of allocation norms. Instead of looking at the situation as a form of bias and distortion, as has often been the case in the discussion of framing effects, we should recognise that the setting within which a just distribution is to be achieved is an essential factor in the evaluation process. Depending on how people interpret the situation in terms of the relational structure between the individuals involved, they will attach different relative weights to the principles of merit, equality and need. This shows that when we want to find out empirically "what the people think" (D. Miller 1992), it is absolutely necessary to incorporate the situation as an inherently relevant factor and not just treat it as a nuisance. This is not to say that there are not people who consistently give one of the basic allocation norms precedence over the others, such as when someone has deep-rooted egalitarian beliefs and thus leans towards distributing equally out of principle. However, we can expect even the most convinced egalitarian to stray from an equal division if they perceive someone as very needy and they have it in their power to help out. The present research underlines the potential of

taking on a functionalist perspective in order to gain a mechanism-based understanding of situational effects.

For such a deep-rooted understanding of situational effects, it is thus crucial to decompose the setting and lay bare the issues of group identity, social relational structure and the goals of interaction involved. Depending on the nature of the relational structure and the degree of cooperation or competition involved, different allocation norms will best be suited to reach a respective goal. We should furthermore keep in mind that in (Western) (neo)liberal democracies we are socialised to endorse meritocracy and are wired to see things in competition mode (Tan 2008). We are taught to think that what we have is earned and should be used for our benefit only. We can choose to share resources in order to help someone if we want, of course, but generally speaking there is agreement that no one is entitled to what we have “earned”. This makes it hard for us to give away and give up privilege in order to meet other people’s needs, even if we have more than we need to satisfy our own needs. If we feel entitled to what we have, we then experience loss aversion (Kahneman and Tversky 1979) against the prospect of giving some of our resources away. And this is where, in face of finite resources and glaring inequalities between the global North and South, it seems we need to find ways of broadening our concept of communal sharing mode. Because “the narrower one’s conception of one’s community, the narrower will be the scope of situations in which one’s actions will be governed by considerations of justice” (Deutsch 1975, p. 142).

*It is not possible to be in favor of justice for some people and not be in favor of justice for all people. — Martin Luther King Jr.*



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