What we want and what we see: Preferences, perceptions and judgments about inequality and meritocracy
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CHAPTER FOUR
FAILING MERITOCRACY?
INEQUALITY AND CORRUPTION PERCEPTIONS.*

This chapter examines whether and how income inequality is associated with individual corruption perceptions. We argue that this relationship is important, because corruption perceptions are an important violation of the meritocratic legitimation of inequalities. Drawing from existing literature on inequality and corruption, we hypothesize that inequality increases corruption perceptions. Additionally, we develop two rival hypotheses on the effect of inequality on stratification of corruption perceptions. Empirically, we examine the association between income inequality and corruption perceptions in two ways. First, we analyze the short-term dynamic over-time association between inequality and individual corruption perceptions, using cross-sectional survey-data from the Eurobarometer between 2007 and 2011. Second, we assess how inequality affects stratification in corruption perceptions, using Eurobarometer and ISSP-data. Our results suggest that increases in inequality are accompanied with increases in perceived corruption. Furthermore, inequality lessens the gap in perceived corruption between people of different socio-economic status. In more unequal countries, people of higher status perceive more corruption than in more equal countries.

ABSTRACT

This chapter examines whether and how income inequality is associated with individual corruption perceptions. We argue that this relationship is important, because corruption perceptions are an important violation of the meritocratic legitimation of inequalities. Drawing from existing literature on inequality and corruption, we hypothesize that inequality increases corruption perceptions. Additionally, we develop two rival hypotheses on the effect of inequality on stratification of corruption perceptions. Empirically, we examine the association between income inequality and corruption perceptions in two ways. First, we analyze the short-term dynamic over-time association between inequality and individual corruption perceptions, using cross-sectional survey-data from the Eurobarometer between 2007 and 2011. Second, we assess how inequality affects stratification in corruption perceptions, using Eurobarometer and ISSP-data. Our results suggest that increases in inequality are accompanied with increases in perceived corruption. Furthermore, inequality lessens the gap in perceived corruption between people of different socio-economic status. In more unequal countries, people of higher status perceive more corruption than in more equal countries.
4.1 INTRODUCTION

Income inequality has been on the rise for the past few decades in most of the affluent countries (OECD, 2011: 21). While income inequality has been linked to a variety of unwanted societal outcomes, it is also often normatively defended by those who argue that it reflects meritocratic societies, where people are rewarded for their merits, even if this means that some people are more highly rewarded than others. In this chapter, we examine if the recent increases of inequality challenge the meritocratic legitimation of inequality through one of its undesirable potential outcomes: corruption perceptions.

Corruption is perhaps the most clear violation of the meritocratic ideal. When Young popularized the concept of meritocracy in his satirical classic The rise of the Meritocracy, he proposed a narrow definition of merit as “IQ + effort” (Young M., 1961). Modern broader and perhaps more appreciative interpretations of meritocracy behold that people should be rewarded on their merits, i.e. their relevant good qualities and features. While there can be substantial variation between people and/or cultural context in what is considered to be part of these relevant good qualities and features, being corrupt is rarely argued to be one of them. When corruption occurs, people are being rewarded on the basis of distinctively non-meritocratic characteristics. Therefore, corruption perceptions challenge the meritocratic legitimation of inequalities. When people perceive corruption, they implicitly challenge the belief that rewards in their society occur in a meritocratic matter. Rising inequalities in affluent countries could potentially increase the challenge that corruption perceptions pose towards the meritocratic legitimation of inequalities, because inequalities affect the way in which people perceive (rewards in) their society.

Previous research shows that the degree of inequality in a country is an important factor for people’s general attitudes about their society (for a broad review, see: Van de Werfhorst & Salverda, 2012). In this chapter, we contribute to this literature by examining whether there is also a relation between income inequality and individual corruption perceptions. Furthermore, we examine for whom this effect occurs: does it only affect people of lower socio-economic status, or does everyone perceive more corruption when inequality increases?

We aim to contribute to the existing literature on inequality and corruption in three ways. First, studies on corruption often conceptualize corruption perceptions as an indicator of actual corruption (e.g. Treisman, 2007 or Uslaner 2008) rather than an as important object of study in itself. We believe that the classical Thomas theorem - “If men define situations as real, they are real in their consequences” (Thomas & Thomas, 1928, pp. 571-572) -
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applies especially to the subject of corruption. We share this view with Melgar et al. who argue that corruption perceptions are an important object of study because “High levels of corruption perceptions could have more devastating effects than corruption itself (...)” and who argue that “high levels of corruption perception are enough to cause negative effects in the economy (the growth of institutional instability and the deterioration of the relationship among individuals, institutions and states)” (Melgar et al., 2010).

Individual corruption perceptions are important for an additional reason, apart from these possible societal consequences. We argue that perceived corruption reflects a tension with meritocratic defenses of inequalities. Drawing from the insights from the existing literature on inequality and actual corruption we hypothesize that increases in inequality increase individual corruption perceptions.

Second, an important contribution lies in our examination of the question if and how inequality affects stratification in corruption perceptions. In other words: if inequality is associated to corruption perceptions, does that association hold for everybody to the same degree? The issue of stratification in corruption perceptions has hardly been addressed in the literature. Findings from previous research do suggest that corruption perceptions are stratified: people of higher socio-economic status perceive less corruption (e.g. Yhou & Khagram, 2005). But socio-economic status can have a different effect in different economic contexts; having a high socio-economic status in an unequal country can be rather different compared to an egalitarian country. The degree to which corruption perceptions are stratified could thus very well depend on the degree of inequality in a country. To our knowledge, no previous study has examined this. We therefore propose two rival theoretical mechanisms through which inequality can either increase or decrease stratification in corruption perceptions.

Our third contribution results from the possibilities offered by an increasing number of cross-nationally comparative individual level survey-data. Historically, individual-level over time data on social and political attitudes were scarce, or in the case of corruption perceptions even non-existent, leading many studies to rely on cross-sectional data, or on country-aggregates.

The heavily contested median-voter hypothesis- which argues that higher inequality leads to more demand for redistribution (Meltzer and Richards, 1981)- is perhaps the best example that cross-sectional studies of the effect of inequality on attitudes can lead to very different results than over-time studies. In an elaborate analysis of cross-sectional data and case studies of eight countries over time Kenworthy and Mccall (2008) found no proof for the hypothesis that rising inequality increases demand for redistribution. Using recently available longitudinal pooled-survey data, Schmidt-Catran (2014) however found significant effects of within-country inequality on demand for redistribution, while finding no effect of between-country inequality.
With survey-data from the Eurobarometer waves in 2007, 2009 and 2011, we have comparable cross-sectional data from different timepoints. By accounting for time- and country-specific variation we can examine the within country-effects of income inequality on individual corruption perceptions, allowing for a test of the (short-term) dynamic effects of changing inequality on corruption perceptions. In our examination of the effect of inequality on stratification in corruption perceptions, we use both Eurobarometer and ISSP-data. By using several data sets, we can assess different forms of corruption perceptions. The Eurobarometer captures the perception that corruption is problematic, while the ISSP measures the perception that corruption is necessary to be successful.

4.2 THEORY

An important normative-philosophical defense of existing inequalities lies in the claim that inequalities emerge from meritocratic selection and reward. Scientifically, it is important to study to what extent people indeed perceive their societies as meritocratic. Perhaps the most extreme violation of the ideal of a meritocratic distribution of inequalities is corruption. Therefore, it is important to assess to what extent people perceive corruption and to what extent and how increasing inequality affects these perceptions.

In this section, we first position corruption perceptions in the larger literature on the social and political consequences of contextual inequality. Then, building from the specific insights from the literature on inequality and corruption, we develop a hypothesis on the effect of income inequality on corruption perceptions. Subsequently, we review literature that is relevant to the stratification of individual corruption perceptions and subsequently develop two rival hypotheses on how inequality can affect stratification of individual corruption perceptions.

4.2.1 INEQUALITY EFFECTS

The rise in inequality in affluent countries in the past few decades has been accompanied by increased scholarly interest in the effects of income inequality on society. High levels of income inequality have been linked to a variety of (unwanted) societal outcomes, such as (among many others) increased crime (Kelly, 2000), increased homicide rates (Elgar & Aitken, 2011), increased gambling (Bol et al., 2014), decreased happiness (Oishi et al., 2011), decreased social participation (Lancee & van de Werfhorst, 2012) and decreased health (Pickett & Wilkinson, 2015). However, the inequality effects hypothesis has also met substantial opposition, concerning health (Beckfield, 2004; Lynch et al. 2004), happiness and crime (Salverda et al. 2014).  

For a review of studies on the consequences of inequality, see Neckerman and Torche (2007)
Moreover, income inequality has been argued to influence people’s general outlook on life, as well as many of their social and political attitudes. These attitudes include among others, solidarity (Paskov & Dewilde, 2012), tolerance for homosexuality (Andersen & Fetner, Economic Inequality and Intolerance: Attitudes, 2008), political engagement (Solt, 2008), support for democracy (Andersen, 2012) and generalized trust (e.g. Uslaner & Brown, 2005, Bjørnskov, 2007). The underlying theoretical mechanisms for potentially adverse effects of inequality differ per outcome. In a review on the social and political effects of inequality, and following earlier scholarship (Lynch et al. 2004), van de Werfhorst and Salverda (2012) propose a division of the effects of inequality in two types of general theories: psychosocial and neo-material. The psychosocial theory argues that inequality affects outcomes, because the degree of inequality in a country affects the distribution of status. Under higher levels of inequality, status becomes more desired and social distances between people of different statuses increase. These developments are in turn argued to affect all sorts of psychological outcomes, such as stress and unrelatedness (as argued by Wilkinson and Pickett, 2009). The neo-material theory in turn, argues that inequality affects outcomes, because the degree of inequality in a country affects the distribution of resources, both at the individual and contextual level. Under situations of higher inequality, a larger group of people lack resources that are crucial to a satisfying life. As van de Werfhorst and Salverda, argue (alongside Elgar and Aitken, 2011) these two mechanisms are not necessarily competing, but complementary. Because the mechanisms lead to similar hypotheses about the effects of inequality, it is often difficult to test them separately.

In our study of the relation between inequality and corruption perceptions, we do not distinguish actively between the psycho-social and neo-material mechanism. Rather, we emphasize that they occur simultaneously. In the literature on inequality and actual corruption, which we discuss in the next section, traces of both the psychosocial and the neo-material mechanism of inequality effects can be found. These mechanisms lead to similar outcomes and are often argued to reinforce one another.

4.2.2 INEQUALITY AND CORRUPTION PERCEPTIONS

One of the many eroding effects that inequality is argued to have is that it fosters corruption. The literature on inequality and corruption is highly relevant for our interest in corruption perceptions, because corruption and corruption perceptions are so closely linked. Research shows that people are relatively well aware of the level of corruption in their country (Treisman, 2007), indicating that changes in actual corruption might lead to changes in corruption perceptions. Furthermore, the literature on inequality and corruption often implicitly or explicitly addresses corruption perceptions.
With regards to actual corruption, Glaeser et al. (2003) argue that inequality can encourage institutional subversion, because it divides society into haves and havenots. The havenots are incentivized to seek redistribution from the haves through “violence, the political process, or other means” while the haves can “redistribute from the have-nots by subverting legal, political and regulatory institutions to work in their favor” (Glaeser et al., 2003). Yhou and Khagram follow a similar logic, arguing that under high inequality the rich “have greater motivation to use political corruption to lower the tax rates and bureaucratic corruption to further circumvent the collection of taxes” while the poor are “more likely to rely on petty corruption or to be targets of bureaucratic extortion in their efforts to secure basic services” (Yhou & Khagram, 2005). Uslaner, finally, argues that there is an inequality trap, a vicious cycle of high inequality, low social trust and high corruption: “High levels of inequality go hand in hand with high in-group trust and low out-group trust. The struggle to make do and to help one’s family and friends may take moral precedence over engaging in corrupt activities that people would prefer to shun” (Uslaner, 2008:28). Van Deurzen (2015) also showed a significant relationship between income inequality and corruption, and moreover demonstrated that citizens’ well-being is more strongly affected by corruption than by inequality in a multivariate model.

Both implicitly (when perceptions are used as an indicator for actual corruption) and (in scarcer occurrences) explicitly, the literature on inequality and actual corruption theorizes that inequality increases corruption perceptions. Empirically, we found no study that has examined the relation between inequality and corruption perceptions over time. However, in cross-sectional or country-aggregate analyses, most studies find that corruption perceptions are higher in more unequal countries. Yhou and Khagram (2005: 140) explicitly hypothesize that both the tolerance for and perceptions of inequality are higher in more unequal countries and find significant positive effects for the average level of inequality in the previous three decades on these outcomes. In an article on the causes of individual corruption perceptions, Melgar et al. (2010:129) also report a positive effect of income inequality. Uslaner argues that inequality causes distrust, which also leads people to believe that there is more corruption and reports similar findings (Uslaner, 2008). Furthermore, Uslaner finds strong links between beliefs about inequality in society and perceptions of corruption (Uslaner, 2008: 180-213).

On the basis of these theoretical arguments and empirical findings, we hypothesize that:

H1: When inequality in a country increases, individual corruption perceptions rise.
4.2.3 INEQUALITY AND STRATIFICATION IN CORRUPTION PERCEPTIONS

Our second research interest lies in how inequality affects stratification in the perception of corruption. Perhaps because data on individual corruption perceptions have only become available recently, existing evidence on the stratification of these perceptions is scarce. Melgar et al. report that people of higher education are less likely to perceive corruption. They attribute this effect partially to improved access to information and capability to process this information that these groups possess but also argue that "corruption perceptions decreases with socio-economic status, the better-off people are materially and the higher their standing, the more likely they are to view the world and other people in a favorable light” (Melgar et al. 2010:125). You and Khagram do not hypothesize on individual-level variables but do report that people of higher (self-perceived) class are less likely to perceive corruption and less likely to believe that society is run by a few big interests (You and Khagram, 2005:152). These results indicate that people of higher socio-economic status are less likely to perceive corruption.

But does this finding hold for all countries equally? Imagine for example a country where a small group of people is very rich while the overwhelming majority is relatively poor. Having a particularly good or bad socio-economic status will be rather different in such country than it is in an egalitarian country. Indeed, Mau et alia (2012) find that income inequality increases class cleavages in subjective socio-economic risks. We would thus expect the association between socio-economic status to depend on the level of inequality in a country. Whether inequality increases or decreases stratification in corruption perceptions boils down to the question to what extent people attribute their own and other peoples (lack) of economic success to the non-meritocratic element of corruption and how inequality influences these self-evaluations. With no existing empirical results on this subject to rely on, we examine both the possibility that higher inequality increases and decreases stratification of corruption perceptions.

Inequality could increase the stratification in corruption perceptions, because it increases social distances and divides society in “winners” and “losers”. Many studies have argued that inequality negatively affects generalized and out-group trust (for an overview of these studies, see Nannestad, 2008). If inequality increases the social distances between people of high and low-socio-economic status, “winners” and “losers” start living in increasingly separate worlds, making it harder to relate to each other. In such a context, it is less likely that people nourish favorable opinions about people from a different status than their own. Therefore, with regards to economic outcomes, high levels of inequality might create a blame game between people of different socio-economic status. Under such a scenario, people of lower socio-economic status attribute their worse-off positions to the system being stacked against them and/or believe that people of higher socio-economic status attained their positions through corruption. People
of high socio-economic status on the other hand, could attribute their success to their own merits rather than to corruption. These contrasting beliefs would then lead to larger differences in perceived corruption, than in a society where the social distances between people of different socio-economic status are smaller.

As such, we hypothesize:

H2A: The difference in corruption perceptions between people of low and high socio-economic status is larger in more unequal societies.

We can however, also imagine a scenario where inequality decreases stratification in corruption perceptions, because it can change the way in which people of higher socio-economic status perceive their society. Ceteris paribus, people of low socio-economic status have more incentive to perceive corruption, as they are relative worse-off and corruption can (partially) function as an explanation for their lack of socio-economic success. People of higher socio-economic status lack such an incentive. Indeed, as mentioned earlier, previous research suggests that people of low socio-economic status are more likely to perceive corruption than people of higher socio-economic status (Yhou and Kagram, 2005; Mau et al., 2010). Because corruption perceptions among people of higher economic status can be expected to be lower, there is, both substantially and statistically, more room for contextual factors to influence them. High inequality can influence the corruption perceptions of people of higher socio-economic status in two ways: first, because there is more actual corruption to be noticed and second, because under higher levels of inequality it might be more difficult for people of higher socio-economic status to attribute their own success and the success of others entirely to meritocratic factors. With regards to the former point, it is important to note that most studies find that experts and citizens have relatively similar assessments of the degree of corruption in their country (for an excellent discussion see Treisman, 2007: 215-221). This indicates that people are relatively good at noticing corruption. If actual corruption increases with higher inequality, we can thus expect that people of higher socio-economic status also notice this, lowering the gap in perceived corruption between people of high and low socio-economic status. Furthermore, in more unequal countries it might be harder for people of high socio-economic status (much like people of lower socio-economic status) to deny that their own economic success (and/or that of others) can at least partially be attributed to non-meritocratic influences like corruption, than it would be if their society was more equal. If people of high socio-economic status have less problems attributing part of their own success to non-meritocratic characteriscs or even corruption, this would also contribute to an decreased gap in perceived corruption.
We therefore hypothesize:

**H2B: The difference in corruption perceptions between people of low and high socio-economic status is smaller in more unequal countries**

### 4.3 DATA

In assessing the over time effect of inequality on corruption perceptions hypothesized in H1, we rely on data from the Eurobarometer. We pooled Eurobarometer 68.2 (2007) 72.2 (2009) and 76.1 (2011), creating an analytical sample of 77,783 respondents, nested in 81 country-years and 27 countries.

**Corruption perceptions** are measured by responses to the statement “Corruption is a major problem in [country of respondent]” with (recoded) answer options 1 “Totally disagree”, 2 “Tend to disagree”, 3 “Tend to agree” and 4 “Totally agree”.

**Income Inequality** is measured at the level of country-survey year using the Gini-coefficient from the Standardized World Income Inequality Database, version 5.0 (SWIID, Solt 2009). Figure 1 shows the country-average corruption perceptions for all three years against the degree of income inequality.

We control for national wealth, also at the level of country-survey year, measured as GDP per capita from the Penn World Tables version 8.0 (Feenstra et al. 2013), gender, age and marital status. Unfortunately, social-background characteristics in the Eurobarometer are scarce, so we do not have accurate measurement for relevant factors such as education or employment status.

For hypotheses 2A and 2B, we only use the most recent data from 2011, as no relevant socio-economic status data is available in 2007, prohibiting a pooled analysis. We measure **socio-economic status** by self-assessed status on a 10-point scale, ranging from 1 “Box 1- lowest level in society” to 10 “Box 10 – highest level in society”. All previous controls are included in the models.

We replicate the test of hypotheses 2A and 2B on data from the ISSP 2009 wave on Social Inequality, with an analytical sample of 36,797 respondents, from 32 countries. Here **corruption perceptions** are measured by responses to the statement “To get all the way to the top in [country of respondent] you have to be corrupt”, with (recoded) answer options ranging from 1 “Strongly disagree” to 5 “Strongly agree”. **Income inequality** is once again derived from the SWIID. **Socio-economic status** is measured by self-assessed social status on a scale ranging from 1 “Bottom, lowest” to 10 “Top, highest”. We control for national wealth (GDP per capita from PWT), gender, age and marital status. Table 1 presents descriptive statistics of all used variables, for both datasets.
FIGURE 1: Country average corruption perceptions against the degree of income inequality.
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**TABLE 1:** Descriptive statistics for both datasets.

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<tr>
<th>VARIABLES</th>
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<th>SD</th>
<th>MIN</th>
<th>MAX</th>
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<td>Other</td>
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### ISSP

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### CATEGORICAL VARIABLES

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<td>Widow</td>
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### TABLE 2: Multi-level linear regressions of corruption perceptions

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<td>SE</td>
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<td>SE</td>
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<td>0.043** (.016)</td>
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<td>0.050* (.021)</td>
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<td>0.047* (.020)</td>
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</tbody>
</table>

Income Inequality as Gini-coefficients, GDP in $1,000 at 2005 price parity

* p<0.05, ** p<0.01, *** p<0.001

Source: Eurobarometer 2007-2009-2011

### TABLE 3: Income inequality & stratification in corruption perceptions

<table>
<thead>
<tr>
<th></th>
<th>M1</th>
<th></th>
<th>M2</th>
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* p<0.05, ** p<0.01, *** p<0.001

Source: Eurobarometer 2011 & ISSP 2009
FIGURE 2: Marginal effects of self-perceived status under different levels of income inequality.
4.4 RESULTS

4.4.1 INEQUALITY AND CORRUPTION PERCEPTIONS

We examined the first hypothesis empirically with increasingly restrictive models. For all models, we estimated a multi-level linear regression, with individuals $i$ nested in country-years $j$. The general equation for these models is:

$$Y_{ij} = \beta_0 + \beta_1 X_{1ij} + \beta_2 X_{2ij} + \ldots + u_j + \epsilon_{ij}$$

In the first two models, random intercepts for countries (which are nested in country-years) are included. The final two models include a fixed effect for countries.

Table 2 shows the results for these models. In the first model with no country-level controls, inequality has a statistically significant positive effect on corruption perceptions. This effect remains significant if we control for GDP per capita (model 2). With the inclusion of country fixed effects in the third model, the average differences in corruption perceptions between countries are accounted for. Therefore, all variation in corruption perceptions on the country level that is due to contextual differences between countries that are static over time, including the initial level of inequality in a country, as well as cultural and historical differences, is accounted for. Substantially, we interpret this model as reflecting how within-country variation in income inequality affects corruption perceptions. The positive effect of income inequality in this model thus indicates that increases in inequality within a country lead to higher individual corruption perceptions. This effect remains robust when we control for year-specific variation in corruption perceptions in model 4.

The reported effect size is substantial; a one point increase in the Gini-index of a country is associated with a 0.05 point increase in the four point agreement-measure of corruption perceptions. However, to accurately assess the possible size of the effect of inequality on corruption perceptions, we would need data over longer time periods, as there was relatively little within country variation in inequality in the time frame of our study. The fact that we find significant effects of income inequality on corruption perceptions in such a small time period (four years) in even the strictest model is in clear support of Hypothesis 1.
4.4.2 INEQUALITY AND STRATIFICATION IN CORRUPTION PERCEPTIONS

We examine rival hypotheses 2A and 2B with two different data-sets. Once again, we estimate multi-level linear regressions, respectively on data from the ISSP and from the Eurobarometer, with individuals $i$ nested in countries $j$. Table 3 shows the results for these models.

Although the models are based on different measures of corruption perception, the results for the Eurobarometer and ISSP-data are strikingly similar. The initial models show a significant negative effect of self-perceived status on corruption perceptions across the entire sample. This means that across the entire sample, in line with earlier findings from the existing literature, people of higher socio-economic status are *ceteris paribus* found to perceive less corruption than people of higher socio-economic status. The second models show a significant positive cross-level interaction with income inequality. The negative effect of self-perceived status on corruption perceptions is smaller in more unequal countries.

Figure 2 shows the *ceteris paribus* marginal effects of self-perceived status on corruption perceptions under different levels of income inequality. The range of the values for income inequality is determined by the range of income inequalities of the respective countries included in the survey.

Holding all others constant a respondent with a self-perceived status of 10 (highest) has a 0.3 point lower corruption perception (on a four point scale) in the most equal country in the Eurobarometer than they would have in the most unequal country. In the ISSP (on a five point scale), this difference is 0.88 points. These results clearly point towards Hypothesis 2B, which predicted that the discrepancies in corruption perceptions between people of low and high socio-economic status would be smaller in more unequal societies.

4.5 DISCUSSION

This study examined whether and how income inequality is related to corruption perceptions. In the first part of our analyses, we contributed to existing research on inequality and corruption by looking at the relation between inequality and corruption perceptions over time. Using pooled survey-data from the Eurobarometer, we found a significant positive association between income inequality within a country on individual corruption perceptions, controlled for unobserved stable variation between countries (such as history, or culture). We interpreted this as support for our first hypothesis, which predicted that increases in inequality are associated to higher perceived level of corruption.
In the light of increasing income inequality in many affluent countries, this is an important finding. We have argued that corruption perceptions are an important object of study because they are at odds with the meritocratic legitimation of inequalities. People who perceive corruption in their society identify clear violations of the meritocratic ideal. In this study, we have shown that increases in inequality are accompanied with an increase in these perceived violations. The fact that people in countries that become more unequal increasingly perceive violations of the meritocratic ideal poses a challenge to the meritocratic legitimation of inequalities in these countries. Our results indicate that inequality threatens the belief that rewards in society are distributed in accordance with the meritocratic ideal.

While our study is the first to assess the relation between inequality and individual corruption perceptions longitudinally, our results have to be seen in the light of some limitations. Perhaps due to the limited time-frame of our study (3 data points ranging from 2007 to 2011), the effect size is relatively small. To further test the relation between inequality and corruption perceptions, longitudinal survey data over a longer time period is needed. It is therefore a pity that the most recent Eurobarometer-wave on corruption (Eurobarometer 79.1, 2013) has opted for a different measure of corruption perceptions. For assessing social change it is important that surveys like the Eurobarometer maintain stability in measurement instruments.

Another limitation is that with our data we are unable to control for or explicitly model reverse causality. In this study we have mainly explained the association between inequality and corruption perceptions as a unidirectional effect. There are however good arguments to believe that the effect runs, at least partially, in the opposite direction. We therefore have to be careful in interpreting the association between inequality and corruption as causal; rather we would emphasize that rising income inequality goes hand in hand with rising public concerns with corruption.

An obvious example of the argument for reverse causality is that the degree of actual corruption influences both corruption perceptions and inequality. Increased actual corruption can affect both the top of the income distribution (as grand corruption) and the bottom of the income distribution (as petty corruption), increasing the level of inequality in society. As people are relatively aware of the level of corruption in their country, corruption perceptions would rise accordingly. Gupta et al. (2002) develop such an argument, arguing that corruption increases income inequality, through (among others) reduced growth of the economy and biased tax systems. If this is the case, it is actual corruption, rather than inequality that is the instigator of the reported association. Given our design, we are unable to determine where the association between inequality and corruption perceptions originates.

The literature on inequality and corruption predominantly theorizes that inequality, low trust and high corruption are mutually reinforcing. It lies beyond the ambitions of our study, to determine where this reinforcing
relationship might originate. However, given the established literature on the causes of rising inequality - which includes factors like globalization, technological development and the decline of trade unions - it is unlikely that short-term changes in corruption can be a major driver of rising inequalities. Rather, subjective concerns with corruption may be seen as a response to rising levels of income inequalities.

Another major contribution of our chapter is that we focused on the stratification in corruption perceptions. Previous studies had reported that people of higher socio-economic status have lower corruption perceptions. As no previous study had examined how inequality influences this stratification in corruption perceptions, we developed rival hypotheses respectively predicting that higher inequality leads to increased or decreased differences in corruption perceptions on the basis of socio-economic status.

Empirically, we found substantial support for the hypothesis that predicted that the differences in corruption perceptions on the basis of socio-economic status would be smaller in more unequal countries. Both the analyses with Eurobarometer data, where corruption perceptions are measured by seeing corruption as a major societal problem and the analyses with ISSP-data, where people were asked to what extent corruption was needed to reach the top of society, point in this direction. In both analyses, the differences on the basis of socio-economic status are substantial in the most equal countries, but almost disappear in the most unequal countries.

These findings are in line with the expectation that both actual corruption as well as perceptions of corruption increase when inequality rises. We suspect that the degree of inequality primarily affects the corruption perceptions of people of high socio-economic status. People of low socio-economic status are likely to perceive corruption, even when the income distribution is relatively equal. Only when the income differences are substantial do people of high socio-economic status start to agree with these perceptions. This finding suggests that higher inequality increases the amount of people who perceive corruption. Because we see corruption perceptions as clear violations of the meritocratic ideal, our results suggest that higher inequality goes hand in hand with a decreased social legitimacy of the meritocratic legitimation of inequalities among people of higher socio-economic status.

The aforementioned findings are the results of cross-sectional analyses, leaving some uncertainty as to how increases in inequality within a country influence stratification. Because insufficient harmonized measures of socio-economic status were included in the three Eurobarometer, we only examined in the most recent wave. Therefore, here we were only able to show that differences in corruption perceptions between people of different socio-economic status are smaller in more unequal countries. More longitudinal survey data is needed to better test this argument over time.

Overall this chapter has contributed substantially to the question if and how inequality affects corruption perceptions. We demonstrated that increases in inequl-
ity are accompanied by increases in corruption perceptions. Our examination of stratification in corruption perceptions suggest that this is primarily due to increased corruption perceptions among people of higher socio-economic status. To better deal with reverse causality, to examine the long-term dynamics between inequality and corruption perceptions and to assess the effect of inequality on (stratification of) corruption perceptions over longer time periods, more longitudinal data on corruption perceptions with accurate measurement of socio-economic status is very much needed.
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