FOCUS

GIVE AND TAKE

ILLUSTRATION: ALESSANDRO GOTTARDO FÜR MPG

UNDERESTIMATED INEQUALITY

TEXT: RALF GRÖTKER

Despite the fact that social inequities are increasing, no broad alliance for a greater redistribution of income and wealth has emerged in democratic countries. Lisa Windsteiger, Andrea Martinangeli and Marco Serena are conducting research into the reasons for this at the Max Planck Institute for Tax Law and Public Finance. They are also studying the ways in which immigration and poverty influence people's attitudes towards state intervention.

Andrea Martinangeli, Lisa Windsteiger and Marco Serena (from left) are researching social inequality issues at the Max Planck Institute for Tax Law and Public Finance.

“The higher one’s personal income, the higher one presumes the average income to be.”

LISA WINDSTEIGER

PHOTO: STEFANIE AUMILLER FÜR MPG

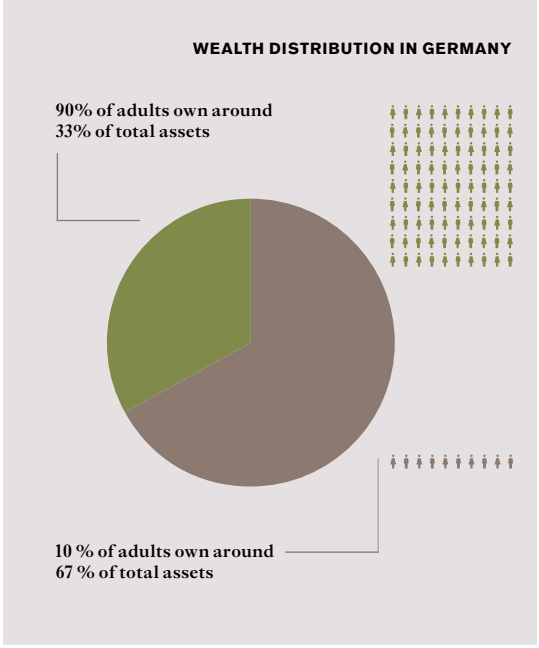
The gap between rich and poor has been widening for a long time. The same trajectory was observable in all industrialized countries throughout the entire 20th century. Even before the First World War, the incomes of the richest – as well as their share of the total national income – had already reached peak values. The two world wars were followed by a phase of realignment and equalization, but the highest earnings soon began to rise again, more or less benefiting from the momentum of the downward trend, once again reverting to the conditions of the early 20th century. The richest ten percent of the German population currently owns 67 percent of the country's assets, and more than half of these – i.e. 35 percent of the country's total assets – are owned by just one percent of the population. In contrast, the poorer fifty percent of Germans have just 1.4 percent of their nation's total assets at their disposal.

A majority opposes the inheritance tax

How are such conditions possible in a democracy? Should we not expect the less affluent majority to come together to demand higher taxes from the rich and to distribute a greater proportion of public funds to those on the losing side in terms of income and wealth distribution? Lisa Windsteiger, an economist at the Max Planck Institute for Tax Law and Public Finance, cites the "demand for redistribution" as one explanation for the fact that even a functioning democracy offers no guarantees against inequalities in income and wealth. Knowledge and the lack of it plays a role in this context. According to recent surveys, for example, around seventy percent of Germans generally consider the inheritance tax (which is rather low in this country) to be unfair. Yet, the fact is that, if one assumes two heirs per tax case, only one in thirteen inheritances is actually taxable, which means that the vast majority of Germans are not subject to the inheritance tax. And yet a political majority has not formed in favor of inheritance tax reform, which would require wealthy heirs in particular to pay a lot more.

However, Windsteiger finds how people react when confronted with certain issues more important than what people know or don't know. "We generally assume that people's preferences or value-based attitudes are essentially constant and don't change in relation to the prevailing situation," she says. "However, people do adapt their behavior under certain circumstances – when certain issues come to their attention, they suddenly agree with different statements about redistribution than before, while rejecting others. We refer to this as 'demand for redistribution'."

Windsteiger conducts survey-based experiments to research this demand for redistribution, often in collaboration with her colleague Andrea Martinangeli. "We present test subjects with very specific issues in these experiments," she explains. "For example, we show them short teaser videos in which already known facts are presented about such things as immigration or poverty." Their hypothesis is that the effect observed when already familiar topics are tested serves as an indicator of the effect a dominant media topic will have on the public over an extended period.



GRAPHIC: GCO ACCORDING TO THE SOCIOECONOMIC PANEL (SOEP),

These experiments are conducted via an online platform. Between two and four thousand test subjects are invited to participate per experiment, and all have voluntarily registered with a commercial survey panel provider. Windsteiger explains: "Although we pay more than the statutory minimum wage for completing a survey that takes about a quarter of an hour, these clearly aren't people who do this kind of thing full-time. I myself, for example, am registered with a survey panel provider and get inquiries every now and then. I not only do this because I'm interested in how others structure their surveys, but also because they often involve political issues on which I would like to voice an opinion."

The influence of social isolation

Step by step, Windsteiger tests various hypotheses that are partly based upon one another, and for which she has usually already developed mathematical models. What influence does social isolation (i.e. when people interact exclusively with others of a similar social standing) have on opinions about redistribution? What effect does the degree of homogeneity have within

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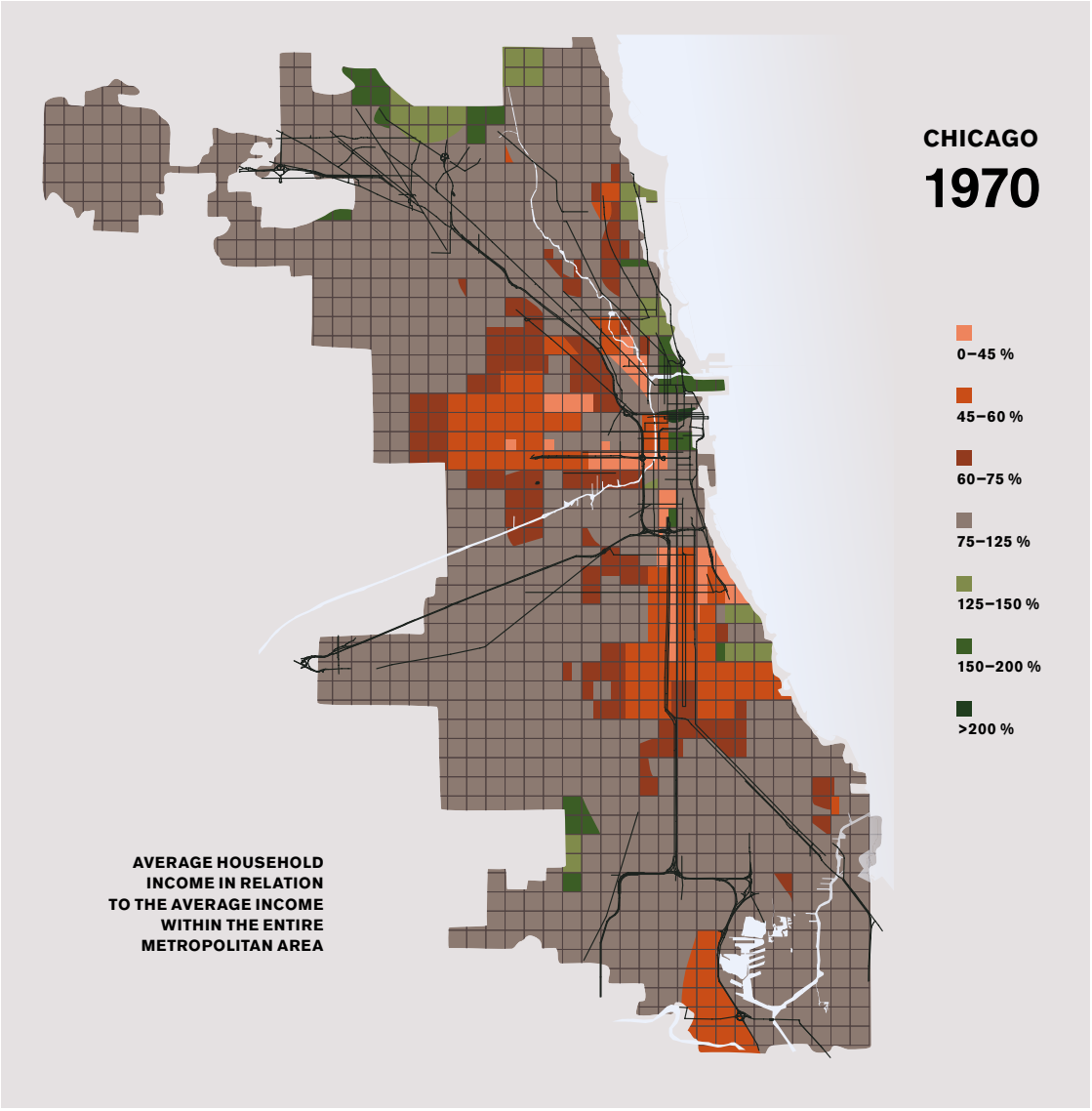
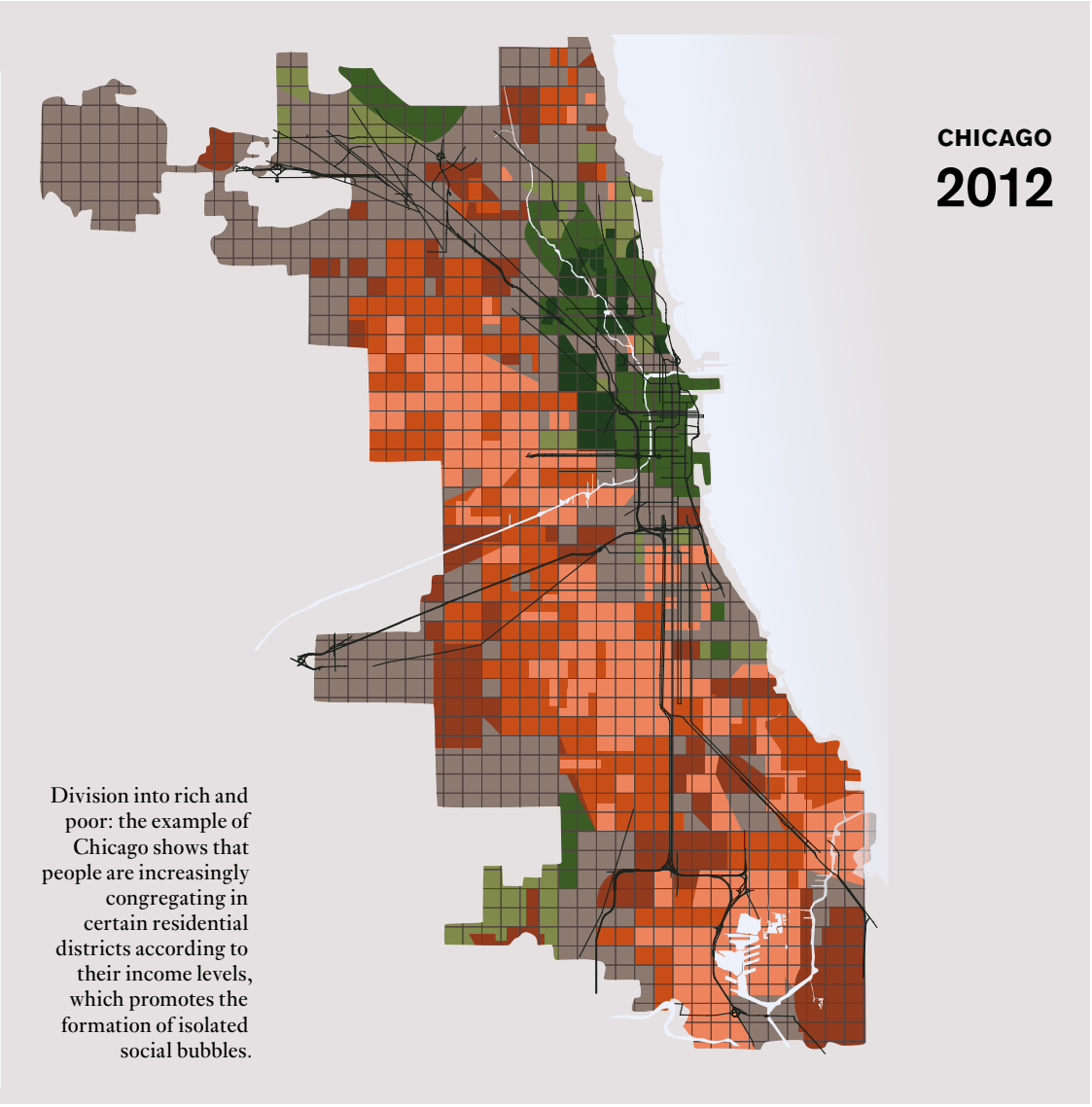


AVERAGE HOUSEHOLD INCOME IN RELATION TO THE AVERAGE INCOME WITHIN THE ENTIRE METROPOLITAN AREA

these isolated social pockets? How does thinking about such issues as immigration or poverty change the demand for redistribution? In addition to surveys, laboratory experiments are carried out at the Institute's premises in Munich involving a smaller number of participants (mostly students), who use computers to play through situations that primarily focus on interaction. As Windsteiger explains: "In this kind of setting one can, for example, closely study how a participant's expectations of another person can change in certain situations."

Isolation, for example: increasing inequality is often accompanied by an equal increase in socio-economic isolation – "segregation" – which is particularly evident in relation to the gentrification of urban districts. A survey-based experiment was carried out to identify the causes and effects in this context. The basic hypotheses (which were set out in a mathematical model) were that people misjudge their own position on the wealth and income scale and therefore hold a distorted view of the extent to which others have significantly more or fewer resources at their disposal, and that the prevailing level of homogeneity within such isolated social bubbles increases those distortions. What the survey experiment showed was that the higher one's own income is, the higher the average income of others is assumed to be. In relative terms, people earning a lower income underestimated the average national income to an even greater extent. As a result, their expectations of the additional income they could personally gain through social redistribution are probably lower than what could actually be achieved. The experiment also showed that the greater one's own social isolation, the more distorted one's perception of the income of others is (and thus of one's own position on the income scale). This effect also leads to division into rich and poor: the example of Chicago shows that people are increasingly



GRAPHIC: GCO ACCORDING TO DANIEL HERTZ

Division into rich and poor: the example of Chicago shows that people are increasingly congregating in certain residential districts according to their income levels, which promotes the formation of isolated social bubbles.

congregating in certain residential districts according to their income levels, which promotes the formation of isolated social bubbles. The conclusion that a consequence of isolated social bubbles is that people who earn less, in relative terms, underestimate the gap that separates them from the wealthy. As a result, their expectations of the additional income they could personally gain through social redistribution are probably lower than the actual reality.

Contrasting reactions to controversial topics

Immigration and poverty are another set of issues, in relation to which several different initial hypotheses were posited. One of them is that higher levels of ethnic diversity due to increased immigration causes non-immigrants to withdraw their support for redistribution and aid programs for the socially deprived. The reason: long-term residents suspect that the immigrants – with whom they themselves feel little social affinity – benefit most from the relevant services. Another hypothesis is that while immigrants are certainly viewed as competitors by population groups who themselves are in the low-wage sector, they nevertheless favor redistribution, as this competition may well put them in a situation in which they themselves might need social support. On the other hand, higher wage earners are more likely to withdraw support for such programs because, as net contributors to the social security system, they worry that their burden will increase.

The results of the survey experiments partially confirm these hypotheses. When confronted with the issue of immigration, lower wage earners actually respond by increasing their demands for (progressive) tax in- →

"When the number of disadvantaged people becomes too great, the tendency is towards less redistribution."

MARCO SERENA

creases, whereas middle-class income groups reduce their demands under the same conditions. High income earners – show no reaction. When confronted with the issue of poverty, none of the groups showed any change whatsoever in the demand for progressive taxation. On the whole, however, the issue of poverty has a positive effect on another factor – the demand for public expenditures on education. But a more detailed analysis shows that this effect is due solely to the behavior of the middle income groups. Low wage earners, on the other hand, withdraw their support for spending on public education when confronted with the issue of immigration.

A simulated Matthew effect

Deriving clear policy advice from these observations is difficult. Instead, the results reveal how complex the situation is. Should a party with a social redistribution agenda more openly broach the issues of poverty or immigration, or not? "What our results show," says Windsteiger, "is that different voter groups often react very differently, even in opposite ways, to specific thematic messages." But, she adds, this does not make strategic issue management impossible. "To be able to predict the impact that specific effects will have on the whole, it is necessary to understand them very precisely." The behavioral experiments conducted at the Institute of Tax Law and Public Finance provide the foundation for this.

The economic causes of increasing inequality include globalization, technological change, and, above all, the Matthew effect of accumulated advantage, i.e., the concept that "the rich get richer", rather like the Bible quotation: "Whosoever hath, to him shall be given." The non-economic causes of increasing inequality include limited mobility within the labor market, self-isolating elites and, in terms of income, the self-reinforcing tendencies in remuneration practices, especially within senior management circles. The role of politics in all of this is in dispute. Inequality increased in virtually all industrialized nations, not after, but before conservative governments had come to power and had begun to reduce redistribution. There is something else that suggests that the role of politics is rather less dominant: using game theory, Marco Serena – like Lisa Windsteiger a Research Fellow at the Max Planck Institute in Munich – conducted research into how inequality can influence elections. He reached the perhaps surprising conclusion that, rather than it being a larger percentage of financially disadvantaged citizens who vote in favor of greater redistribution, on the contrary, election results tend towards less redistribution when the group of disadvantaged people exceeds a certain size.

This effect can be best explained by using a highly simplified example. Peter, Marie and Sabine differ in terms of wealth. While Sabine has four gold pieces, Peter and Marie have just one each. An election is being held, in which a decision on redistribution of gold will be made. In the event of a tie, the decision will be made by flipping a coin. All three are now considering whether it is worth the effort to sacrifice their free time on a Sunday to go to the polling station, which results in a complex nexus of mutual expectations and possible outcomes. If all three go to the polls, Peter and Marie will gain the majority and will be able to enforce redistribution, as a result of which each of the three would have two gold pieces, i.e. Sabine would lose two gold pieces, whereas Peter and Marie would each gain one gold piece. Peter and Marie are thinking that, based on this probable outcome, Sabine may not even take part in the election, although she stands to lose more than either of them could win. In this case, however, it would be sufficient for only one of them, Peter or Marie, to cast a vote for both to receive one gold piece. However, the problem is that, if both think the same way and neither Peter nor Marie go to the polls, there will be no redistribution as Sabine may anticipate their strategic considerations and, therefore, be sure to go to the polls herself. Even this simple example involving only three people shows that accurately modeling possible scenarios – which in turn have an effect on mutual behavioral expectations and therefore on voter participation – is no trivial matter. It is now possible to use the model developed by Marco Serena to precisely track the effect that group size and wealth disparity have on an election's outcome. "Mathematically, the most dif-

SUMMARY

The social exclusion of income groups in society means that people underestimate the real average income and therefore also the impact of redistribution.

Topics that are covered by the media, such as the immigration of refugees, leads to an increase in support for redistribution in poorer groups of the population, while decreasing among the middle classes.

A game-theoretic simulation shows for small groups that redistribution tends to be supported during elections when the number of poor does not exceed the number of rich to a very high degree.

ficult thing was to represent the asymmetrical benefit," Serena explains. "This leads to several tipping points, at which the situation changes in favor of either the haves or the have-nots."

Rule of thumb for small groups

Summing up his innovation, Serena explains that "This is in fact the first model capable of mathematically predicting the conditions under which those voters in an unequal group (who are among the have-nots but are in the majority) would have no incentive to vote." In real terms, the model analyzes election processes based on the majority voting system in relatively small groups, such as a supervisory board. The reason: it is only in such smaller groups that voters can expect their votes to make a difference. "In municipal or national elections," says Serena, "people tend to vote because they feel a moral obligation to do so or because they wish to express their political beliefs in some way." In this context, specific expected benefits cannot be calculated, as the probability that a single vote changes the election's outcome is negligible.

However, a rule of thumb can be derived for smaller groups based on Serena's model: redistribution would take place only if the number of have-nots were smaller than the number of rich people squared. So if there were ten rich people in a village and less than a hundred poor people, there would be a good chance that the mayor would be permitted to redistribute the tax revenues. But no redistribution would take place if there were exactly one hundred or more poor voters. Serena's summary of this methodological approach is also applicable to the work of the other two researchers: "We are focusing on a single effect, which could plausibly play a role in the overall event. We are not claiming that there are no other effects. But if we had models for all of the effects that have a bearing on a situation, we'd be able to create an overall model that would make very far-reaching predictions."

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