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# Income Inequality, Credit and Public Support for Redistribution

Credit affects individuals' perceptions and experiences of inequality. Having access to credit enables those in lower- and middle-income groups to consume an array of products and services that they otherwise would not be able to afford, thereby taking the edge off discontent. Citizens with higher incomes who tend to be less supportive of redistribution in the first place may be further convinced that inequality is not a major issue and redistribution need not be a policy goal. All in all, credit may help smooth out class and status differences. This article looks at the impact of credit on citizens' support for redistributive policies. Controlling for a set of national and individual level variables, the findings show a negative association between credit use and public support for redistribution.

Various comparative analyses have repeatedly shown that income inequality in market income<sup>1</sup> has increased across advanced nations during the last few decades.<sup>2</sup> Some nations, it seems, have managed to level out this trend more so than others through redistributive structures and policies. The question of why some governments put more effort into reducing income inequality than others has long occupied public policy scholars. While some scholars attribute cross-national variation in redistribution to various political and institutional forces, such as the strength of left parties or labour unions, another stream of research stresses the role of macroeconomic factors, such as economic globalisation and growth, in affecting the degree to

which governments are able or willing to redistribute. Yet another stream of research – one that is particularly important from the perspective of the present paper – focuses on the importance of public opinion in shaping redistributive policies. According to Meltzer and Richard's well-known theory, higher levels of inequality should lead to higher public support and demand for redistribution, and, ultimately, more redistribution.<sup>3</sup> Existing evidence shows that this, however, is not necessarily the case. In countries with greater levels of pre-transfer inequality – liberal market economies such as the US – citizens typically exhibit less support for government-led redistribution compared to countries with low levels of pre-transfer inequality.<sup>4</sup> This seeming paradox warrants a rethinking of the relationship between inequality and public opinion, and of the factors that mediate this relationship. We argue here that it is not the nominal measures of income inequality but *citizens' actual experiences with, and perceptions of, inequality in their everyday lives that shape their opinions about redistribution*. Furthermore, we hypothesise that citizens' access to, and use of, credit affects their experiences with and perceptions of inequality, therefore affecting their opinions about redistributive policies.

Having access to credit enables those in lower- and middle-income groups to consume an array of products and services that they otherwise would not be able to afford. This matters for citizens' views about inequality and redistribution in several ways. First of all, as several schol-

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1 Market income = income before taxes and social transfers.  
2 L. Kenworthy, J. Pontusson: Rising Inequality and the Politics of Redistribution in Affluent Countries, in: Perspectives on Politics, Vol. 3, No. 3, 2005, pp. 449-471; J. Pontusson: Inequality and Prosperity: Social Europe vs. Liberal America, Ithaca and London 2005, Cornell University Press; J. Pontusson, D. Rueda, C. Way: Comparative political economy of wage distribution: The role of partisanship and labour market institutions, in: British Journal of Political Science, Vol. 32, No. 2, 2002, pp. 281-308; L. Kenworthy, L. McCall: Inequality, Public Opinion, and Redistribution, in: Socio-Economic Review, Vol. 6, No. 35, 2005 pp. 35-68; OECD: Divided We Stand: Why Inequality Keeps Rising, Paris 2011, OECD.

3 A. Meltzer, S. Richard: A Rational Theory of the Size of Government, in: Journal of Political Economy, Vol. 89, No. 5, 1981, pp. 914-927.

4 T. Iversen: The Dynamics of Welfare State Expansion: Trade Openness, De-industrialization, and Partisan Politics, in: P. Pierson (ed.): The New Politics of the Welfare State, Oxford 2001, Oxford University Press, pp. 45-79; W. Kerr: Income Inequality and Social Preferences for Redistribution and Compensation Differentials, 2011, NBER working paper 17701.

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ars have argued, it softens inequality and takes the edge off lower- and middle-class discontent with the actual income distribution.<sup>5</sup> Second, it makes it harder to infer who has and who has not. Citizens with higher incomes who tend to be less supportive of redistribution in the first place may be further convinced that inequality is not an issue and redistribution need not be a policy goal. All in all, credit mitigates class and status differences.

In this article, we look at the impact of credit on citizens' support for redistributive policies. More specifically, we examine whether higher levels of credit use in a society might be associated with lower levels of public support for redistribution. We analyse data from the International Social Survey, the OECD and the European Credit Research Institute. Controlling for a variety of individual and macro-level variables, we find a negative association between credit use and citizen support for redistribution. Given the limitations of the data upon which our analysis rests, which we discuss in length in the coming pages, we are far from making a conclusive statement. Nevertheless, we believe that our analysis might add to our understanding of citizens' views on inequality and their support for redistributive policies and shed some light on why it is that rising earnings inequalities since the early 1980s have not fuelled heightened support for redistribution in liberal market economies.<sup>6</sup>

In what follows, we first provide a brief review of the literature on public support for redistribution. Then, we discuss the link between credit use and public support for redistribution. In the final section, we empirically examine this relationship using multilevel analysis techniques.

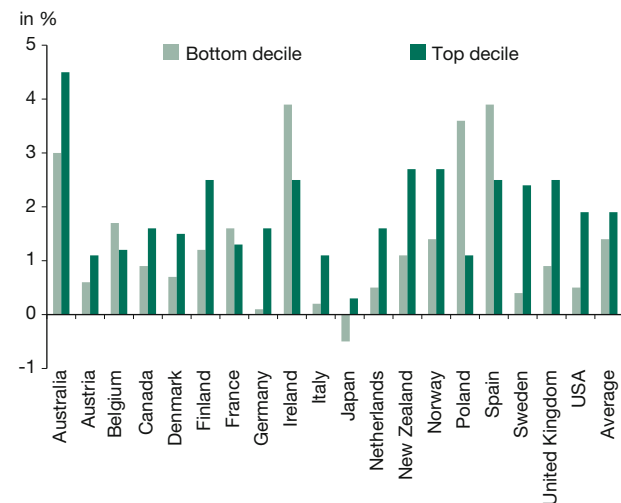
### Income inequality and public support for redistribution

One of the most common ways of measuring income disparity is by comparing the top and bottom percentile groups' shares of total income. The data available from the OECD show that although real disposable household incomes in OECD countries increased by an average of 1.7 per cent annually over the two decades prior to the onset of the global economic crisis, the household incomes of the richest ten per cent grew faster than those

5 R. Rajan: *The Fault Lines*, Princeton 2010, Princeton University Press; B. Kus: *Consumption and redistributive politics: The effect of credit and China*, in: *International Journal of Comparative Sociology*, Vol. 54, No. 3, 2013, pp. 183-186; K. Leicht, S. Fitzgerald: *The Real Reason 60 Is the New 30: Consumer Debt and Income Insecurity in Late Middle Age*, in: *The Sociological Quarterly*, Vol. 55, No. 2, 2014, pp. 236-260; K. Leicht, S. Fitzgerald: *Middle Class Meltdown in America: Causes, Consequences, and Remedies*, London 2014, Routledge; B. Kus: *Sociology of Debt: States, Credit Markets, and Indebted Citizens*, in: *Sociology Compass*, Vol. 9, No. 3, 2015.

6 See B. Kus: *Consumption and redistributive politics ...*, op. cit.

Figure 1  
Average annual change in disposable household income, bottom vs. top decile



Note: Data are from the mid-1980s through the late 2000s.

Source: OECD, 2011.

of the poorest ten percent in the majority of these countries.<sup>7</sup> As Figure 1 shows, this trend is not exclusive to liberal market economies. In traditionally low-inequality social democratic countries, income inequality has also grown substantially.

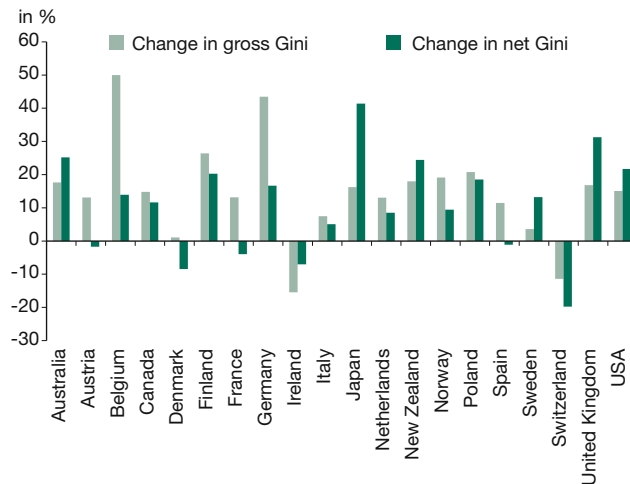
Solt's comparative data set that provides Gini indices on an annual basis presents a similar picture of inequality trends in OECD nations.<sup>8</sup> Again, as seen in Figure 2, the distribution of market incomes has grown significantly more unequal even in social democratic countries such as Germany, Norway, Finland, Sweden and Denmark. Nevertheless, the net Gini coefficients show that these countries have been able to offset the increasing gap in market income with the redistributive structures and policies they have in place. In liberal market economies such as the US, the UK, Australia and Canada, on the other hand, the percentage increase in net Gini coefficients over the period 1980-2007 is higher than the percentage increase in gross Gini coefficients. This indicates shrinking redistributive efforts on the part of these nations.

The explanations for public support for redistribution vary. Some theories focus on the role of income inequality in shaping popular attitudes towards redistributive programmes. Most notably, the Meltzer-Richard model

7 OECD: *Divided We Stand ...*, op. cit.

8 F. Solt: *Diversionsary Nationalism: Economic Inequality and the Formation of National Pride*, in: *Journal of Politics*, Vol. 73, No. 3, 2011, pp. 821-830.

Figure 2  
Change in income inequality: gross vs. net Gini



Source: F. Solt: *Diversionary Nationalism: Economic Inequality and the Formation of National Pride*, in: *Journal of Politics*, Vol. 73, No. 3, 2011, pp. 821-830.

(hereafter the “MR” model) holds that income inequality, public attitudes and redistribution policies are causally linked – “when inequality increases, the mass public responds by requesting more government activity, which government then enacts by increasing redistributive welfare state programs”.<sup>9</sup> Conversely, as income distribution becomes more equal, redistribution becomes a less salient issue. The essential idea here is that “those with below-average incomes favour at least some degree of redistribution while those above the mean do not”.<sup>10</sup>

As Kenworthy and McCall explain, this logic rests upon four major assumptions:<sup>11</sup>

1. Citizens/voters are aware of the true level of market inequality.
2. Where market inequality is higher, those below the median income will favour greater redistribution.
3. This preference will be expressed via voting, demands by organised constituencies, and/or public opinion polls and focus groups.
4. The government will respond with more generous redistributive programmes.

9 N. Kelly, P. Enns: *Inequality and the Dynamics of Public Opinion: The Self-Reinforcing Link Between Economic Inequality and Mass Preferences*, in: *The American Journal of Political Science*, Vol. 54, No. 4, 2010, pp. 855-870, here p. 859.

10 Ibid.

11 L. Kenworthy, L. McCall, op. cit., p. 36.

Each of these assumptions remains subject to criticism, as does the MR model, with its inability to explain deviations such as the mismatch between high income inequality and low support for redistribution in the US. Some scholars have directly challenged the theory, arguing that income inequality is indeed negatively associated with social welfare effort: the more unequal the primary income distribution, the less support there is for the poor.<sup>12</sup> Others have argued that inequality alone cannot account for public attitudes towards redistribution, and a range of institutional and macroeconomic factors must be taken into consideration.<sup>13</sup>

According to Esping-Andersen, cross-national variations in public support for redistribution result from different “institutional arrangements of social policy” within nations.<sup>14</sup> The dominating cleavage groups and their social policy interests differ across welfare regimes, which is why one finds high levels of support for welfare state redistribution in Scandinavian countries.

The role of macroeconomic trends in shaping public support for redistribution has also been emphasised in the literature. Blekesaune argues that public support for governmental provision and economic redistribution increases in periods of economic strain and low employment.<sup>15</sup> Pontusson and Lupu, on the other hand, find that public support for social spending and redistribution is likely to decrease during periods of economic decline.<sup>16</sup>

There is a budding literature that focuses on the relationship between credit and the politics of inequality and wel-

12 R. Moffitt, D. Ribar, M. Wilhelm: *The decline of welfare benefits in the US: The role of wage inequality*, in: *Journal of Public Economics*, Vol. 68, No. 3, 1998, pp. 421-452; R. Perotti: *Growth, Income Distribution, and Democracy: What the Data Say*, in: *Journal of Economic Growth*, Vol. 1, 1996, pp. 149-187; A. Alesina, E. Glaeser: *Fighting Poverty in the U.S. and Europe: A World of Difference*, Oxford 2006, Oxford University Press; K. Moene, M. Wallerstein: *Inequality, Social Insurance and Redistribution*, in: *American Political Science Review*, Vol. 95, No. 4, 2001, pp. 859-874.

13 O. Kangas: *The Grasshopper and the Ants: Popular Opinions of Just Distribution in Australia and Finland*, in: *The Journal of Socio-Economics*, Vol. 31, 2003, pp. 721-743; L. Kenworthy, J. Pontusson, op. cit.; L. Kenworthy, L. McCall, op. cit.; U. Dallinger: *Public Support for Redistribution: What Explains Cross-national Differences*, in: *Journal of European Social Policy*, Vol. 20, 2010, pp. 333-349; S. Bowles, H. Gintis: *Reciprocity, Self-interest, and the Welfare State*, in: *Nordic Journal of Political Economy*, Vol. 26, 2000, pp. 33-53.

14 G. Esping-Andersen: *The Three Worlds of Welfare Capitalism*, Cambridge 1990, Polity Press; U. Dallinger, op. cit.

15 M. Blekesaune: *Economic Conditions and Public Attitudes to Welfare Policies*, in: *European Sociological Review*, Vol. 23, No. 3, 2007, pp. 393-403.

16 N. Lupu, K. Pontusson: *The Structure of Inequality and the Politics of Redistribution*, in: *American Political Science Review*, Vol. 105, No. 2, 2011, pp. 316-336.

fare.<sup>17</sup> For many scholars in this literature, the reliance on credit constitutes a larger systemic shift away from the post-war political and economic organisation of “embedded liberalism” and towards neoliberalism.<sup>18</sup> However, Crouch, while agreeing that expansion of credit has been a structural part of the political economic transformation in advanced nations since the early 1980s, conceptualises it as the rise of “privatised Keynesianism” – a policy regime whereby households and individuals, rather than governments, take up debt to stimulate the economy and create economic and social stability.<sup>19</sup> This paper attempts to contribute to this literature by looking into the role of credit in shaping citizens’ view of inequality and preferences towards redistribution. We do so by controlling for a set of variables that capture the alternative theories discussed here.

### Credit and support for redistribution

Our argument remains in agreement with the line of scholarship that sees inequality as an important input to the political equation of redistribution. However, we argue that focusing on *nominal* measures of income inequality may be misleading. We also need to look at the extent to which citizens *experience* and *are aware of* the discrepancies in income distribution. This is where credit comes into the picture. Credit, for one, enables lower- and middle-income groups to consume at a higher level than their

17 E. Warren, A. Tyagi: The two income trap: Why middle-class parents are going broke, New York 2004, Basic Books; A. Barba, M. Pivetti: Rising household debt: Its causes and macroeconomic implications – a long-period analysis, in: Cambridge Journal of Economics, Vol. 33, No. 1, 2009, pp. 113-137; R. Rajan, op. cit.; M. Prasad: The Land of Too Much: American Abundance and the Paradox of Poverty, Cambridge 2012, Harvard University Press; J. Spooner: Long overdue: what the belated reform of Irish personal insolvency law tells us about comparative consumer bankruptcy, in: American Bankruptcy Law Journal, Vol. 86, No. 2, 2012, pp. 243-304; M. Doty, J. Edwards, A. Holmgren: Seeing Red: Americans Driven into Debt by Medical Bills. Results from a National Survey, in: Issue Brief Commonwealth Fund, Vol. 837, 2005, pp. 1-12; J. Sullivan: Borrowing during Unemployment: Unsecured Debt as a Safety Net, in: Journal of Human Resources, Vol. 43, No. 2, 2008, pp. 383-412; J. Wheary, T. Draut: The Plastic Safety Net: The Reality Behind Debt in America, New York 2005, Dēmos and The Center for Responsible Lending; K. Leicht, S. Fitzgerald: The Real Reason ..., op. cit.; K. Leicht, S. Fitzgerald: Middle Class Meltdown ..., op. cit.; C. Crouch: Privatised Keynesianism: An Unacknowledged Policy Regime, in: The British Journal of Politics and International Relations, Vol. 11, No. 3, 2009, pp. 382-399; B. Kus: Consumption and redistributive politics ..., op. cit.; J. Montgomerie: The Pursuit of (Past) Happiness? Middle-Class Indebtedness and American Financialisation, in: New Political Economy, Vol. 14, No. 1, 2009, pp. 1-24; J. Montgomerie: America’s Debt Safety-Net, in: Public Administration, Vol. 91, No. 4, 2013, pp. 871-888; J. Montgomerie: The financial crisis has exposed the shortcomings of America’s ‘debt safety net’, LSE American Politics and Policy, January 2014; S. Soederberg, op. cit.

18 B. Kus: Consumption and redistributive politics ..., op. cit.; J. Montgomerie: The Pursuit of (Past) Happiness? ..., op. cit.; J. Montgomerie: America’s Debt Safety-Net ..., op. cit.; S. Soederberg, op. cit.

19 C. Crouch, op. cit.

income levels would afford them. As such, it mitigates the discontent that highly unequal income distribution is likely to produce on the part of lower-income citizens and may decrease their demand for redistribution. However, the effect of credit on redistributive support is not limited to those on the lower end of income distribution. In an environment of credit-fuelled consumption, it becomes harder to infer who have low incomes and who have high incomes.

The theoretical underpinnings of our theory can be summarised in the following way:

- We agree with the MR theory that the level of inequality affects citizens’ views of inequality and the desirability of redistribution.
- However, we argue that the link is not as direct as the MR model suggests. People are not necessarily aware of the true level of market inequality, and even if they were, the assumption that this would necessarily cause discontent, which would then be channelled into public support for redistribution, is not realistic. There may be mechanisms in place that decrease citizens’ awareness of or discontent with the actual level of inequality.
- Credit plays a significant role in shaping attitudes towards redistribution. For one, it significantly affects the degree to which lower-income households can consume and thus mitigates the impact of income inequality. Credit may also impact the views of those in higher-income groups – when there is ample consumption that goes around, those with higher incomes who tend to be less supportive of redistribution in the first place may be further convinced that inequality is not a major issue and redistribution need not be a policy goal.

To operationalise this argument, we can contrast the situations of two hypothetical individuals, A and B. Let us imagine that both individuals live in nations with similar degrees of income inequality and work in similar jobs making an annual income of \$40,000. However, the country in which A lives has a more developed credit market which makes it possible for individuals to get credit to finance their purchases and maintain their lifestyles. Individual A was able to purchase a home last year since she was able to get a mortgage at a competitive rate. She also was able to buy a new car thanks to available financing options. Individual B, on the other hand, lives in a country where access to credit is restricted. She, therefore, has to live according to her means. She rents her house, although she aspires to become a homeowner one day. She is driving the same car that she drove 12 years ago. Although she would like a new car, she has not been able to save

enough money to buy one. These individuals live in societies with similar levels of inequality, but their lifestyles and their experiences of income differences are entirely different.

The circumstances of individual A in our hypothetical example are akin to the experience of American citizens. According to the International Social Survey, in the early 1990s, less than 50 per cent of Americans considered it the government's responsibility to reduce the differences between high- and low-income groups.<sup>20</sup> Credit has been central to the maintenance of middle-class Americans' living standards since the end of the Second World War and in recent decades has been even more pronounced.<sup>21</sup> This rise in credit use in the US has occurred in tandem with the increase in income inequality, as Krueger and Perri have shown.<sup>22</sup> As different types of credit with varying characteristics have become available, households, especially lower- and middle-class households, have increasingly turned to these financing tools to enjoy consumption opportunities that would have not been available otherwise.<sup>23</sup>

There is no denying that low-income families have historically faced more constraints and higher borrowing costs compared to their higher-income counterparts. However, recent research has shown that differences in credit access by income have diminished during the past two decades – a process often referred to as the “democratization of credit”.<sup>24</sup> As Evans reports, according to data from the Survey of Consumer Finances, in 1970 only two per cent of all low-income households in the US had credit cards; by 1983 more than ten per cent had them, and by 2001 about 38 per cent of all low-income households had at least one card.<sup>25</sup> In 1983 credit cards accounted for 35 per cent of low-income households' non-mortgage debt; by 2001, on average, credit card debt accounted for about

46 per cent of low-income households' total consumer debt holdings.<sup>26</sup> Similarly, a recent analysis by the Center for American Progress concludes that income differences show no statistically significant effect on the chance of loan applications being denied in the period after 1995.<sup>27</sup> All of this indicates that the socio-economic base of credit usage in the US has expanded tremendously.

The expansion of credit usage has not remained an exclusively American phenomenon. Over the past few decades, we have seen increasing access to and use of credit in virtually every advanced country. Since the early 1990s, “easy credit” has emerged in other rich countries as well, as a “seductive” way of improving the material lives of voters whose income distribution is becoming increasingly unequal.<sup>28</sup> Households' credit use as a percentage of GDP increased in all OECD countries between 1995 and 2007, albeit to varying degrees. The available data show that households began to use more and more consumer credit to finance their expanding consumption expenditures (see Figure 3).

### Data and methods

Our primary aim here is to discern the effect of credit use, a country-level characteristic, on individuals' attitudes about redistribution. Multilevel regression techniques are suited for this kind of empirical inquiry involving a hierarchical data structure whereby the data of individuals are nested in single countries.

We measure our dependent variable – individuals' preferences for redistribution – using International Social Survey data from 1996, 1999 and 2006. In the 1996 and 2006 surveys, the exact same question was asked to capture individuals' preferences regarding the redistribution of income: “Do you think it should be or should not be the government's responsibility to reduce income differences between the rich and poor?” Respondents' answers are coded on a scale of 1 to 4: “Definitely should”, “Probably should”, “Probably not” or “Definitely not”. In 1999 the survey question was slightly modified. Respondents were asked how much they agree or disagree with the following statement: “It is the responsibility of the government to reduce the differences in income between people with high incomes and those with low incomes”. The answers are coded on a scale of 1 to 5: “Strongly agree”, “Agree”, “Neither agree nor disagree”, “Disagree” or “Strongly disagree”. In our analysis, for purposes of simplicity and

20 This is relatively low. As a reference of comparison, more than 70 per cent of the French public agreed with this statement in the same time period.

21 J. Logemann: Different Paths to Mass Consumption: Consumer Credit in the United States and West Germany during the 1950s and '60s, in: *Journal of Social History*, Vol. 41, No. 3, 2007, pp. 525-559; G. Trumbull: Regulating for Legitimacy: Consumer Credit Access in France and America, Harvard Business School BGIE Unit Working Paper No. 11-047, 2012.

22 D. Krueger, F. Perri: Does Income Inequality Lead to Consumption Inequality? Evidence and Theory, in: *The Review of Economic Studies*, Vol. 73, No. 1, 2006, pp. 163-193.

23 P. Krugman: *The Conscience of a Liberal*, New York 2007, W.W. Norton & Company; R. Rajan, op. cit.; B. Kus: Consumption and redistributive politics ..., op. cit.; K. Leicht, S. Fitzgerald: *The Real Reason 60 ...*, op. cit.; K. Leicht, S. Fitzgerald: *Middle Class Meltdown in America ...*, op. cit.

24 C. Weller: *Access Denied*, Washington DC 2007, Center for American Progress.

25 D. Evans: *The Growth and Diffusion of Credit Cards in Society*: SSRN Working Paper, 2004, p. 69.

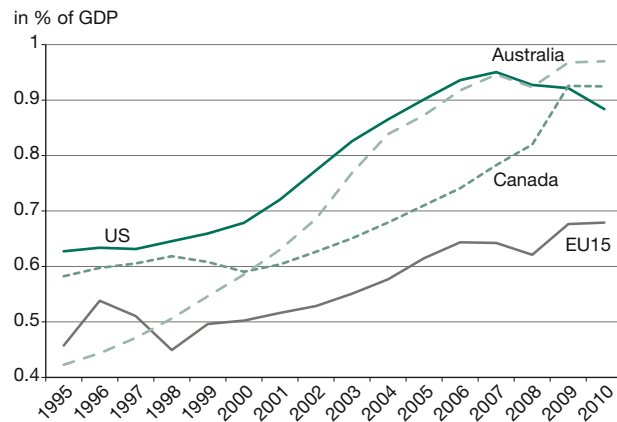
26 Ibid.

27 C. Weller, op. cit.

28 R. Rajan, op. cit.



Figure 3  
Household credit use



Source: European Credit Research Institute.

conceptual clarity, we recode the answers into two categories, where 0 equals “Disagree” and 1 equals “Agree”.<sup>29</sup>

Six nations in the International Social Survey have data on individual attitudes about government redistribution for all three years: Canada, France, Germany, Norway, the UK and the US. After missing data were dropped, the total number of individuals surveyed in these countries is 15,106. We first conduct our analysis using this sample. We then replicate our analysis to see if the results hold by pooling all the available data from the larger sample of 17 nations including Austria, Australia, Denmark, Finland, Ireland, Japan, the Netherlands, Portugal, Spain, Sweden and Switzerland, where data on individual preferences about redistribution is missing for one or two years. When missing data were dropped, the total number of individuals surveyed in these 17 nations is 29,852. The total missing covariates dropped amount to less than ten per cent of the sample size in our analysis. Though this is not a large enough number to cause a serious problem, we check the sensitivity of our results with respect to the way missing data is handled.

Table 1 shows the average percentage of surveyed citizens who agree/disagree with the statement that it is the responsibility of the government to reduce the differences in income between people with high incomes and those with low incomes.

Our key explanatory variable is households’ credit use measured at the national level. We measure it in terms

29 “Agree” includes “Definitely should” and “Probably should” in 1996 and 2006, and “Strongly agree” and “Agree” in 1999; “Disagree” includes “Probably not” and “Definitely not” in 1996 and 2006, and “Disagree” and “Strongly disagree” in 1999.

Table 1  
Citizen support for income redistribution in advanced nations

“It is the government’s responsibility to redistribute”: Agree/Disagree in %

Country	Agree	Disagree
Australia	59.68	40.32
Austria	83.10	16.90
Canada	54.74	45.26
Denmark	54.99	45.01
Finland	76.85	23.15
France	74.98	25.02
Germany	71.33	28.67
Ireland	80.52	19.48
Japan	65.62	34.38
Norway	73.08	26.92
Netherlands	71.53	28.47
Portugal	93.88	6.12
Spain	87.53	12.47
Sweden	67.53	32.81
Switzerland	61.60	38.40
UK	70.61	29.39
US	50.50	49.50

Source: International Social Survey.

of “total credit to households as a percentage of GDP”. The data come from the Lending to Households in Europe (1995-2010) data set compiled by the European Credit Research Institute, which provides various measures of credit use by households.

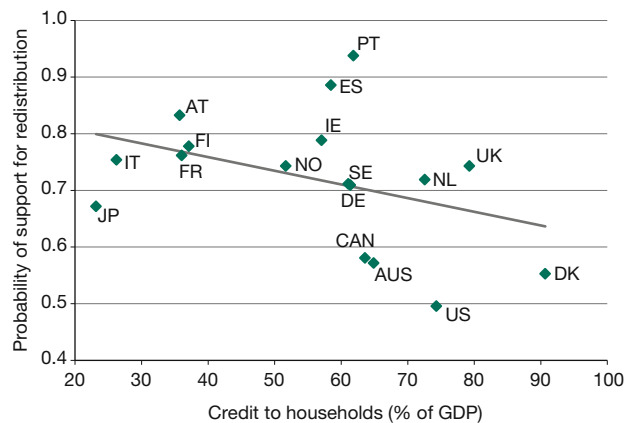
The scatterplot in Figure 4, which we use to visually examine the association between these two variables – namely, support for redistribution and credit – points to a negative association. We analyse the relationship more rigorously by controlling for various country and individual level variables that are relevant for our analysis. The International Social Survey contains data on several individual level variables that are useful in predicting individuals’ positions on income redistribution, such as age, sex, level of education,<sup>30</sup> employment status,<sup>31</sup> family income and trade union membership, all of which we include in our models.

The country-level variables we include in our analysis are income inequality (gross Gini), log of GDP per capita, unemployment rate, degree of openness to trade and welfare spending. We measure welfare spending both in

30 A bigger figure indicates a higher education level.

31 A bigger figure indicates less participation in the labour market: 1 indicates full-time job, 2 indicates part-time job, 3 indicates employed less than part-time job, and so on.

**Figure 4**  
**Correlation between probability of support for redistribution and credit to households**



Source: Authors' calculations.

terms of social spending as a percentage of GDP and social security transfers as a percentage of GDP. Each of these country-level variables may influence individuals' ideas about government redistribution, and not including them in the model could lead to omitted variable bias.

We use multilevel logit models allowing for random intercept as presented in Equation (1):

$$(1) \quad y_{ij} = \gamma_{00} + \gamma_{01}Z_j + \beta_1 X_{ij} + \mu_{0j} + \varepsilon_{ij},$$

where  $y_{ij}$  denotes preference for income redistribution for individual  $i$  in country  $j$  as defined.

The first two terms on the right-hand side are fixed effects, where  $\gamma_{00}$  denotes average attitude toward reducing income difference over all countries;  $\beta_1$  and  $\gamma_{01}$  represent the effect of individual and country characteristics over all countries. The rest of the terms on the right-hand side are random effects, where  $\mu_{0j}$  is the random intercept and  $\varepsilon_{ij}$  is the idiosyncratic error term. The major advantage of this setup is that it helps us understand to what extent certain macro-level variables explain cross-country differences in public support for redistribution.

The method we use in this paper is the multi-level analysis using maximum likelihood estimation. Unlike ordinary least squares (OLS) regression, which often yields incorrect standard errors by ignoring the clustering of the data, our multilevel model improves statistical inference because the hierarchical structure is explicitly taken into consideration. While OLS assumes there is constant variance and no clustering, multi-level models are tailored to

a situation in which the data are clustered and the variance is not constant.<sup>32</sup>

Table 2 reports the regression estimates.<sup>33</sup> In each of the models, we control for the individual level variables of age, sex, level of education, employment status, family income and trade union membership – although we do not report the results since our focus is on the macro-level variables.

The first column presents estimates from our regression analysis using data from six nations for all three years. We measure welfare spending in terms of social spending as a percentage of GDP. In the second column, we repeat the same exercise with a larger sample, using data pooled from all 17 nations, including the 11 where data on individual preferences about redistribution is missing for one or two years. In the third and fourth columns, we add GDP growth as a control variable. The third column presents estimates using data from six nations for all three years, and the fourth column presents estimates using data from all 17 nations. Our results are consistent. The credit-to-GDP ratio is inversely associated with support for redistribution.

The intraclass correlation coefficient (ICC) is .054 in the full model with six nations, and .132 for the large sample with 17 nations, as seen in columns 3 and 4 respectively. This suggests that the variance at the country level accounts for about 5 per cent and 13 per cent of the whole variance respectively.

For a robustness check, we first used social security transfers as a percentage of GDP as a measure of welfare spending. We also used a dummy variable for a liberal welfare regime in lieu of welfare spending. The main results are consistent across different samples – namely, we observed a negative association between citizens' support for government redistribution and credit. In addition, we replicated our analysis by replacing missing values with the variable mean to test the sensitivity of the results with respect to the dropping of missing values. Again, the results are consistent – where there is more credit use, there is less agreement that it is the government's responsibility to redistribute.

### Conclusion

It has remained a matter of debate in the literature whether higher levels of income inequality lead to higher public support for redistribution. In this article, we attempt to

32 M. Steenbergen, B. Jones: Modeling Multilevel Data Structures, in: American Journal of Political Science, Vol. 46, No. 1, 2002, pp. 218-237.

33 Note that we dropped all missing values.

**Table 2**  
**Multilevel random intercept logit regression support for income redistribution**

	[1]	[2]	[3]	[4]
Intercept	-1.972 (-0.90)	1.748 (1.11)	-5.384** (-2.02)	-.970 (-0.66)
<b>Country level variables included</b>				
Credit to GDP	-.010** (-2.56)	-.0006** (-2.06)	-.009** (-2.34)	-.006* (-1.90)
Gross Gini index	.027* (1.66)	.026* (1.89)	.031* (1.78)	.027* (1.95)
Log of GDP pc	.858*** (3.84)	.821*** (5.07)	1.280*** (4.21)	.932*** (4.66)
Unemployment rate	-.024 (-0.65)	.026 (1.14)	.023 (0.52)	.043* (1.73)
Trade openness	-.002 (-0.51)	-.005* (-1.64)	-.012** (-2.22)	-.009** (-2.53)
Social spending	.143 (0.22)	-1.109** (-2.42)	.847 (1.21)	-.412 (-0.94)
GDP growth			.077*** (2.89)	.058*** (2.64)
<b>Variance</b>				
Country	.102	.497	.191	.501
Individual	.581	1.281	.794	.932
ICC	.030	.131	.054	.132
-2 log likelihood ratio	-87.92	-1032.15	-124.15	-1011.68
N	15,106	29,852	15,106	29,852

Note: Dependent variable: Individual support for redistribution (z-statistics in parentheses). Individual variables included (not reported): age, sex, level of education, employment status, family income and trade union membership.

Source: Authors' calculations.

bring a new perspective to the table that takes into account not only citizens' class positions and income levels but also their experiences and perceptions of inequality. We particularly focus on the relationship between credit and inequality. Combining national and individual data, we examined whether higher levels of credit use diminish the importance of redistribution for citizens. Our analysis provides support in favour of this hypothesis.

This analysis might help shed light on some important questions. Why is it that, despite increasing inequalities, we have not seen more public demand for redistribution? How is it that redistributive efforts have not kept up with income inequalities in many nations? We argue here, first of all, that people are not necessarily aware of the true level of inequality that prevails in their countries. And even if they were, the assumption that income inequality would cause discontent and lead to public support for redistribution is not all that realistic. There may be mechanisms

in place that decrease citizens' awareness of the actual level of inequality or that decrease the discontent that might emerge out of such awareness. People's actual experiences of inequality and their perceptions of whether they "have" or "have not" often depend on what they are able to consume. Credit plays a significant role here. It changes their perceptions of how much they do or do not have relative to others. In other words, it makes the question of distribution less salient to the so-called median voter.

Pierson argued that governments can afford to remain unresponsive to rising inequalities and welfare needs to the extent that they can diminish the salience of such circumstances to voters, in other words, by "obfuscating" them.<sup>34</sup> The reason that redistributive efforts have not kept up in many nations despite increasing income inequality has, at least in part, to do with credit being an "obfuscating" mechanism.<sup>35</sup>

More research needs to be conducted to examine where credit and credit-reliant consumption fits in the political economy of growth and welfare in advanced nations. On the one hand, credit makes it possible for citizens to create wealth and enjoy a higher standard of living. In fact, for lower-income citizens who cannot sustain a livelihood – a "modicum of economic welfare and security," to cite Marshall<sup>36</sup> – without it, credit has become a safety net of sorts. Yet this net is only be a temporary solution. Access to credit might immiserate lower- and middle-income citizens in the long run by pushing them into debt. Moreover, as opposed to the social and redistributive provisions that come from the welfare state, credit does not come free. It is not a social right. It is a loan that must be paid back. For these reasons, while it is interesting to see – and explicable from a sociological perspective – why support for redistribution is lower in nations where credit use is high, access to credit and redistribution are not equivalent. Access to credit does not decrease the relevance of rising income inequality as a socio-economic and policy concern. After all, as Crouch notes, inequality cannot be seen solely in terms of consumption.<sup>37</sup> Inequality is also about power. There are long-term consequences to widening income disparities for democracy and social trust in society, and the role of the state in dealing with such disparities shall not be obliterated.

34 P. Pierson: The New Politics of the Welfare State, in: World Politics, Vol. 48, No. 2, 1996, pp. 143-179.

35 Also see B. Kus: Consumption and redistributive politics ..., op. cit.

36 T.H. Marshall: Citizenship and Social Class and other essays, Cambridge 1950, Cambridge University Press.

37 C. Crouch: Does Inequality matter in Rich Societies? in: Social Europe, 2011.