Political Reinforcement: How Rising Inequality Curbs Manifested Welfare Generosity

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We propose a political reinforcement hypothesis, suggesting that rising inequality moves party politics on welfare state issues to the right, strengthening rather than modifying the impact of inequality. We model policy platforms by incorporating ideology and opportunism of party members and interests and sympathies of voters. If welfare spending is a normal good within income classes, a majority of voters moves rightward when inequality increases. As a response, the left, in particular, shift their welfare policy platform toward less generosity. We find support for our arguments using data on the welfare policy platforms of political parties in 22 OECD countries.

How does rising inequality affect political parties? Do they adopt programs for more redistribution? In particular, do left parties act as the main guardians of the welfare state in times of increasing inequality?

The conventional approach suggests that all political parties aim at more welfare spending as inequality rises, redistributing more income from the rich to the poor. The reasoning is simple. Rising inequality leads discontented lower-income voters to demand more redistributive social policies (Meltzer and Richard 1981; Roberts 1977; Romer 1975). Political parties compete to cover this social demand. So as inequality goes up, political parties move left. We contest this view, suggesting, instead, that political parties, and in particular left parties, move right when inequality rises. This is the political reinforcement hypothesis, which, if true, strengthens the impact of inequality, rather than modifying it.

Thus, this article adds to the growing literature that applies conventional modeling to argue against the conventional conclusion of how higher inequality is met by more redistribution (see, for instance, Barth and Moene 2012; Benabou 2000; Iversen and Soskice 2001; Lindert 2004; Moene and Wallerstein 2001). It focuses on how party programs are made in an environment where the welfare state offers better terms for the poor than for the rich, but where it does not simply take from the rich and give to the poor. The redistribution is tied to the supply of tax–financed goods and services, such as health care and social insurance. A voter’s individual demand for these welfare goods may depend both on self-interest and sociotropic preferences, that is, both on his social vulnerability and his care for others—in addition to his income.

The pattern across income classes is a poor guide to what will happen when inequality changes. To understand changes and differences, we need to make the distinction between alterations within and between income classes. While the cross-sectional pattern shows that richer voters demand less welfare spending than the poor (Rehm, Hacker, and Schlesinger 2012), individuals demand more welfare spending when they become richer. This puzzle is easily resolved, however, once we account for the feature that the rich may have both higher incomes and higher

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security. Incomes and social conditions are bundled, and as we move from lower- to higher-income classes, we see an overall decline in the support of welfare spending.

A rise in income within an income class, in contrast, improves the individual economic situation, while the social conditions remain unchanged, inducing, as we shall see, an increase in support for the welfare state’s provision of social services and social security. A low-income citizen prefers a generous welfare state because of a high risk of income loss, not because of a low income, and if he becomes poorer, he becomes more concerned with immediate needs and less willing to pay taxes to insure against the probability of income loss.

Intuitively, the effects of variations between and within income classes can be related to the concepts of normal and inferior goods in consumer theory in economics. In that theory, normal goods are any goods that increase in demand, for a given price, when income rises and falls when income declines, whereas inferior goods are any goods that decrease in demand, for a given price, when income rises and increase in demand when income falls. In the following, we make a case for the proposition that welfare spending is a normal good within each income class, but an inferior good across income classes. We use this distinction in an uncomplicated manner. For each voter, it boils down to whether changes in income are associated with basic alterations in the social situation, such as the risk of income loss.

The rise in inequality since the 1980s is likely to reflect changes within income classes, rather than changes in their composition; cross-country variations in the OECD area are likely to reflect variations in the gaps between income classes rather than different class structures. To isolate the effects of rising inequality, we consider changes in the income distribution that preserve the mean income. Voters below the mean experience declining incomes and feel more pressure to cover immediate necessities. As a result, they become discontented and less interested in paying high taxes to finance generous welfare spending. Their political demand goes down as they find that they no longer can afford their previous welfare ideals.

Our reasoning resonates well with the empirical findings in Kelly and Enns (2010), which show that public opinion in the United States has responded to the increases in income inequality by reducing its demand for welfare spending. While Kelly and Enns (2010) find it puzzling that the poor become less supportive of spending when inequality increases, this is exactly what our theoretical model predicts. Accordingly, rising inequality for a given class division would tend to reduce the vote share of the left and increase the vote share of the right as long as party programs remain unchanged. Faced with more inequality, however, parties revise their programs, involving internal negotiations and external competition with the other bloc. To analyze this double interaction, we apply a simple mixture of cooperative and noncooperative games, where party idealists find it costly to deviate from the party ideology, and where party opportunists find it necessary to deviate to win elections.

To see the political trade-offs between ideology and opportunism, let us first consider the case where the ideology of each party (its ideal policy) is unaffected by changes in the income distribution. With one eye on the given party ideology and one eye on the rivalry for voters, left parties downplay the importance of their ideology to attract more voters, whereas right parties drift more toward their ideological position without losing many voters. As party platforms are strategic complements, each party further reduces its welfare generosity because the opposition has reduced its generosity. Both sides of the political spectrum move in a rightward direction for both internal and strategic reasons, resulting in party programs with a less favorable description of the need to expand social services and social security.

When party ideology is also affected by changes in the income distribution, the picture becomes a little more complicated—in particular, for the adjustments of the right party. To the extent that party ideology represents the interests of the core group of voters, higher incomes to the rich may then change the ideal policy of the right party toward a little more generous welfare spending. For the left party, in contrast, the ideal policy of the poor implies lower spending, as their immediate needs become more pressing with declining incomes. The net effect of higher inequality on the left party is therefore an unambiguous move to the right, whereas for the right party, it depends on which is the stronger of opportunism and idealism.

Empirically, we should therefore expect a clearer effect of rising inequality on left parties than on right parties. To analyze the changes, we explore information on policy platforms of left and right parties prior to 120 elections in 22 countries. Party manifestos provide a first-hand source of information on policy responses as long as they are real political to-do lists, as we assert, and not just party cosmetics—a feature that we test by studying the link between platforms and implemented policies of the winning party.

Welfare state platforms are tailored in accordance with the costs and benefits of equity as perceived by the party leadership. The platforms provide a much more targeted measure of the policy implications of inequality than policy outcomes such as a country’s social spending.
as percentage of the national income.\(^1\) Outcome measures are contaminated by a host of other factors, including changes in unemployment, income, and other parts of public budgets.

We never observe isolated increases in inequality, however, but rather combined changes in inequality and the mean income. When the rich get richer, we naturally associate the changes with increasing inequality even though the mean income and the tax base go up as well. When the poor get poorer, we naturally associate the change with a declining tax base even though inequality goes up as well. We demonstrate that the effects of a change in the mean income depend on who gets it.

Our measures of the political parties’ welfare policy positions over time are taken from the Comparative Manifesto Project (Budge et al. 2001; Klingemann et al. 2006). We combine these data with observations of wage inequality. Over the last few decades, most developed democracies have indeed experienced increasing wage inequality (OECD 2008) that has led to much research on the determinants of inequality (Mahler 2004; Wallerstein 1999) and the political consequences of inequality (Kelly and Enns 2010; McCarty, Poole, and Rosenthal 2006; Pontusson and Rueda 2010). Yet studies of how income inequality influences party platforms on welfare state generosity are particularly rare.\(^2\)

As we shall see, our key empirical result supports the reinforcement hypothesis. First, however, we present our theoretical model before we present the data and the empirical analysis and, finally, conclude.

### Welfare Platforms and Inequality—Theoretical Links

We emphasize the welfare state as a provider of social services and social security. The insurance logic of welfare spending is important. First of all, broad insurance motives, for one-self and others, have been more important for the expansion of the welfare state than pure redistribution motives (Baldwin 1990). Secondly, social insurance against loss of income (due to unemployment, disability, sickness, and occupational injury) reacts more to changes in the income distribution than other types of public spending (Moene and Wallerstein 2003).

#### Voters: Social Interests and Ideological Sympathies

The electorate consists of three classes of voters: the poor, the middle class, and the rich, \((p, m, r)\), with incomes \(w_p < w_m < w_r\). The social parameter \(h_i\) captures the vulnerability to own risks of income loss and the identification with others who might lose theirs. The bundling of economic and social characteristics produces a pattern: Consistent with rates of job loss and unemployment being higher among low-skilled groups, lower-income groups are more exposed to risk than higher-income groups. In addition, as identification declines with social distance, lower-income groups identify themselves more with others in need. For both reasons, we assert that \(h_p > h_m > h_r \geq 0\).

Finally, no income class is in the majority, and income class \(i\) has a share of voters \(n_i < 1/2\) where \(\sum n_i = 1\). The average income in society is thus \(\bar{w} = \sum n_i w_i\), which is assumed to be higher than the median income \(w_m\).

#### Social Interests Depend on Income Class.

Preferences for redistribution can seldom be fully explained by economic self-interest (Luttmer and Singhal 2011). They might be influenced by economic, political, and social aspects of the current environment, and by the cultural background. We summarize these social preferences over disposable income \(C_i = (1-t)w_i\) and welfare spending \(G\), contingent on the social parameter \(h_i\), by a quasi-concave utility function, \(V_i = v(C_i; G; h_i)\) for members of income class \(i\). In the exposition, we use a simple example:

\[
V_i = U ((1-t)w_i) + h_i G \equiv V_i (G; w_i)
\]

(1)

(but all proofs in Appendix A in the supporting information use the general formulation). In Equation (1), the immediate utility \(U\) has a coefficient of relative risk aversion, \(\mu \equiv -U''C / U'\), that is greater than 1, but not necessarily a constant; the preferences for welfare spending have the simple form \(h_i G\) to capture both self-interested social insurance and more identification with weak groups.\(^3\) In

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\(^1\)Governments do not have complete discretion in implementing public policy, and discretion depends on political institutions. The relationship between party manifestos and government policy is therefore a contested issue, but Stokes (1999, 261) concludes that “most studies do find a substantial consistency between campaigns or pre-election manifestos, on the one hand, and government policy, on the other.” Below, we regress the subsequent actual generosity of welfare policies on pre-election party positions on the welfare state and find support for Stokes’s conclusion in our data.

\(^2\)To our knowledge, Pontusson and Rueda (2010) is the only article examining this issue, and they have a very different approach from us. We discuss their article below.

\(^3\)We can replace \(h_i G\) by \(h_i U(G)\) and think about welfare spending as self-interested social insurance only with \(h_i\) as the odds of income
addition, we assume a balanced budget $t \bar{w} = kG$, where $k$ represents the cost of welfare spending.

The ideal policy for income class $i$ is determined by the first-order condition

$$h_i = \frac{w_i}{\bar{w}} k U'(C_i'), \quad \text{where} \quad C_i'^{\ast} = (1 - \frac{kG^2}{\bar{w}})w_i,$$

which simply states that the marginal gain $h_i$ equals the marginal costs of welfare spending $(w_i/\bar{w})k U'(C_i')$. To be clear, a one-unit increase in $G$ costs a voter in $i$ a reduction in disposable income $k w_i/\bar{w}$ worth $U'(C_i')$ in utilities, where risk aversion implies that this individual cost of welfare spending is convex. Lower-income classes have higher marginal costs, but also higher marginal gains $h_i$. In the exposition, we assume that $h_i$ increases sufficiently as we move to lower-income classes, so that the preferred welfare spending is lower for higher-income classes, confirming that welfare spending is an inferior good across income classes $G_{p}^{\ast} > G_{m}^{\ast} > G_{i}^{\ast}$.

In contrast, a higher wage, for a given level of the social parameter and a given average wage, raises the ideal policy $G_{i}^{\ast}$. Hence, welfare goods that have an inferior good property across income classes can be a normal good within each income class, as long as the coefficient of relative risk aversion $\mu$ is greater than 1 (as we demonstrate in Appendix A in the supporting information).

When $\mu$ is constant, we can obtain the closed-form solution

$$G_{i}^{\ast} = \frac{\bar{w}}{k} - \left[ \frac{\bar{w}}{kw_i} \right]^{\frac{1}{\mu}} h_i^{-\frac{1}{\mu}}. \quad (3)$$

Hence, the preferred level of welfare spending is increasing in the individual income $w_i$ and in the social parameter $h_i$, while it is declining in the cost of welfare spending $k$. It is also increasing in the average wage $\bar{w}$, but the magnitude depends on how $\bar{w}$ is raised. A proportional increase in all wages implies $d G_{i}^{\ast} / d \bar{w} = 1/k > 0$ as both the individual wage and the tax base increase proportionally; a rise caused by higher wages to other income classes, keeping $w_i$ constant, implies a smaller effect, as the impact only comes through a higher tax base.

**Ideological Sympathies Differ within Income Classes.** We use a probabilistic voting model (Hinich 1977; Lindbeck and Weibull 1993; Roemer 2001) and incorporate voters’ ideological sympathies $\epsilon_i$, which can take positive and negative values. Higher values mean more right-wing sympathies. The distribution of sympathies is not correlated with class characteristics. The cumulative distribution function for $\epsilon_i$ is $F_i(\cdot)$. When parties run on platforms $G_L$ and $G_R$, all voters in income class $i$ for whom the left-right utility threshold

$$\Delta_i = V_i(G_L, w_i) - V_i(G_R, w_i) \geq \epsilon_i$$

vote left. In Equation (4), a voter with $\epsilon_i > 0$ must evaluate the left sufficiently above the right platform in order to vote left. Hence, the expected vote share of the left is $s_L = \sum_{i \in J} n_i F_i(\Delta_i)$. It follows that prosperity generates leftist attitudes within the electorate:

**Proposition 1.** Keeping policies $G_L > G_R$ and the distribution of the social parameter $h_i$ constant, the expected vote share of the left is higher in affluent societies: The left vote share increases with the left-right utility threshold $\Delta_i$ of each income class $i$. All these thresholds increase with higher average incomes. Each individual threshold increases with higher incomes within one’s own class.

Thus, people vote more to the left when society can better afford a more generous welfare policy, but irrespective of whether higher affluence comes within one’s own income class or only within other income classes (see Appendix A in the supporting information for proof). The mirror image, of course, is that an economic decline in society, or within one’s own class, erodes political support for the left’s welfare generosity.

Now, to go from expected vote shares to probabilities of winning, we follow the literature of probabilistic voting by assuming that the actual votes are affected by random popularity waves after the program is written, but before the elections are held. The probability that the left wins is given by $q = q(G_L, G_R)$ (formally derived in Appendix A, assuming that both the ideological sympathies and the popularity shocks have a uniform distribution).

Using Proposition 1, we know that for given policy platforms the probability that the left wins must go up with affluence. Similarly, when the rich get richer, the probability that the left wins goes up, and when the poor get poorer, the probability that the left wins declines. It would be wrong, however, to derive the impacts of rising inequality on this basis. First, these changes are also associated with changes in average incomes (an increase in the first case and a decline in the second), and we would be interested in the isolated effect of inequality per se, keeping the average income constant. Second, policy platforms are not likely to remain constant when the income distribution changes.
POLITICAL REINFORCEMENT

Policies: A Bargaining Approach to Political Programs

Parties rarely act as unitary actors (Roemer 2001, chap. 8). Parties are composed of factions, and the policy platform is a compromise that requires consent from all major factions of the party.\(^3\) We concentrate on the haggling between two factions, the idealists and the opportunists, representing typical political forces in every party. Each party plays a cooperative bargaining game between the opportunists and idealists internally and a noncooperative game externally toward the opposing party.

The idealists may be considered farsighted, or just stubborn. They are concerned with the party ideology. They are the guardians of the eternal flame, as Schumpeter (1942) said.

We represent the preferences of the idealists by \(W_L(G)\) in the left party and \(W_R(G)\) in the right party. Their ideal policies are denoted \(G_L^*\) and \(G_R^*\). Deviating from the ideals feels like a social cost, implying that \(W_L(G) \geq 0\) for \(G \leq G_L^*\) and \(W_R(G) \leq 0\) for \(G \geq G_R^*\).

The preferences of the idealists may represent the basic interests of core supporters of their party: the poor for the left party and the rich for the right. Idealists may insist that their ideals represent these interests in a pure form without the consideration of short-term popularity waves and ideological sympathies.

The opportunists are concerned with the chances of winning elections. They are impatient and shortsighted, obsessed with the coming election. They are willing to design their policies in light of expected popularity waves and (temporary as well as lasting) ideological sympathies in the electorate.

The preference of the opportunists can be summarized simply by \(q\) for the left party and \(1 - q\) for the right party.

Bargaining Needs Consent by Both Factions. If no agreement is obtained, the party loses the election. In the left party, the threat points of the factions, \(\hat{q}\) and \(\hat{W}_L\), are the fallback position when the left is defeated. Thus, we have \(\hat{q} = 0\) for the opportunists and \(\hat{W}_L = W_L(G_R)\) for the idealists. Similarly, in the right party, \((1 - q) = 0\) and \(\hat{W}_R = W_R(G_L)\).

By applying the Nash bargaining approach for the internal negotiations, with bargaining powers of \(\alpha_i \in [0, 1]\) to the opportunists and \((1 - \alpha_i)\) to the idealists, the Nash products can be written

\[
N_L(G_L, G_R) = [q(G_L, G_R)]^{\alpha_L} [W_L(G_L)]^{1 - \alpha_L}
\]

\[
N_R(G_L, G_R) = [1 - q(G_L, G_R)]^{\alpha_R} [W_R(G_R)]^{1 - \alpha_R}
\]

The equilibrium in the mixed cooperative-noncooperative game consists of values \(\tilde{G}_L\), \(\tilde{G}_R\) that fit in the internal bargaining solution and that are consistent best responses to the program of the opposing party, that is, where \(\max_{G_L} N_L(G_L, \tilde{G}_R) = N_L(\tilde{G}_L, \tilde{G}_R)\) and \(\max_{G_R} N_R(\tilde{G}_L, G_R) = N_R(\tilde{G}_L, \tilde{G}_R)\).

Using the notations \(\partial q(G_L, G_R)/\partial G_L \equiv q_1\) and \(\partial q(G_L, G_R)/\partial G_R \equiv q_2\), the first-order conditions can be written

\[
\alpha_L q_1 [W_L(G_L) - W_L(G_R)] + (1 - \alpha_L) q W_L(G_L) = 0
\]

\[
-\alpha_R q_2 [W_R(G_R) - W_R(G_L)] + (1 - \alpha_R)(1 - q) W_R(G_R) = 0
\]

The left reduces its welfare ambitions, \(G < G_L^*\), to increase the probability of winning, until the gain of winning, \(\alpha_L [W_L(G_L) - W_L(G_R)]\), times the increase in winning chances equals the marginal costs of a less ambitious program, \(-(1 - \alpha_L) q W_L(G_L)\). Similarly, the right party increases its welfare program, \(G > G_R^*\), until its gain of winning, \(\alpha_R [W_R(G_R) - W_R(G_L)]\), times the increase in its winning chances equals the marginal ideological cost of more welfare spending, \(-(1 - \alpha_R)(1 - q) W_R(G_R)\).

In each party, the members perceive the policy of the other party when the internal negotiations over own policy take place. Figure 1 illustrates the consistency across parties by the intersection of the response curves for the outcome of the internal bargaining for each party, contingent upon the policy of the opposing party \(G_j(G_i)\). The equilibrium is in the intersection \(a\) in the figure. As seen from the figure (and demonstrated in Appendix A in the supporting information), party platforms are strategic complements—higher levels of \(G_R\), for instance, induce more generous welfare programs of the left.

Inequality Affects Party Platforms. Since the expected vote share of the left declines with higher inequality, the winning probability of the left also declines for given policies. To increase its vote share, the left party lowers its welfare ambitions to attract more middle-class voters, who now favor a lower \(G\). Similarly, the declining vote

\(^3\)What we do below can be considered a simplistic version (for the case of one-dimensional politics) of what John Roemer (2001) calls a party unanimity Nash equilibrium (PUNE).
Figure 1: The Political Party Equilibrium.

share for the left means that the right party moves toward its ideologically preferred welfare policy platform without losing as many voters as before. These effects hold as long as the ideal party policies, \( G^*_L \) and \( G^*_R \), remain unchanged. As discussed above, the ideal party policies may represent the interests of core voters. If so, the ideal of the left party becomes less ambitious, whereas the ideal of the right party may become more ambitious with a higher level of \( G^*_R \) (if \( h_r > 0 \)).

We can show the following proposition for \( 0 < \alpha_i < 1 \) with \( i = L; R \):

**Proposition 2.** (i) As long as party ideals remain unchanged, a mean-preserving increase in earnings inequality leads each party to offer a less generous welfare policy in its programs. (ii) If the party ideals reflect the interests of the core group of each party, the adjustments of ideals reinforce the effect of inequality on the welfare policy of the left party, whereas it moderates the effects on the welfare policy of the right party.

Part (i) of the proposition is shown in Appendix A in the supporting information. Part (ii), the partial effects of rising inequality on party ideals, follows from the discussion of pure idealism below. Notice that Part (ii) implicitly states a right-wing policy indeterminacy to higher inequality.

Proposition 2 states the effects of a mean-preserving increase in inequality. Most changes in the income distribution are not mean preserving, however. When the rich get richer, the rise in inequality is mean increasing, implying a higher tax base. The welfare policies of the left and right parties both become more generous because of the higher tax base (and for the right party with \( h_r > 0 \) because the income of its core group goes up). When the poor get poorer, however, the rise in inequality is mean declining, implying a lower tax base. The welfare policy of the left party becomes less generous because both the income of its core voters and the tax base decline. The welfare policy of the right party becomes less generous because of the lower tax base.

When the higher inequality is not mean preserving, the generosity of the welfare policy of each party moves in the same direction as the tax base. When the rise in inequality is mean preserving, in contrast, the tax base remains unchanged and the resulting policies are a combination of the two cases, implying a more narrow gap between the right and the left.

**Special Cases.** For specific values of the bargaining power of the factions, there are interesting special cases.

- **Pure idealism:** \( \alpha_L = \alpha_R = 0 \): When idealists are all powerful and their preferences reflect the interest of core groups, a mean-preserving increase in inequality implies that the left party moves to the right, whereas the right party, if anything, moves to the left. These changes mean less polarization and more convergence of welfare platforms since \( G^*_L = G^*_R \) goes down and \( G^*_R = G^*_L \) goes up (as long as \( h_r > 0 \); see Appendix A in the supporting information for proof).

Also in this case, the generosity of the welfare policy of each party moves in the same direction as the tax base, when the higher inequality is not mean preserving. When the rise in inequality is mean preserving, in contrast, the tax base remains unchanged and the resulting policies reflect rising incomes of the rich and declining incomes of the poor. The net result is a more narrow gap between the right and the left policies.

- **Pure opportunism,** \( \alpha_L = \alpha_R = 1 \): When opportunists are all powerful, policies converge and rising inequality leads to a lower common value of \( G^*_L = G^*_R = G^* \). Each party is simply interested in maximizing its vote share (the left maximizes \( q_L \) and the right maximizes \( 1 - q_R \)). Policies converge since the two parties end up maximizing the same thing. As higher inequality spurs a right-wing movement of a majority of voters, political parties would change their platforms to benefit from the trends. The platforms that maximize the probability of winning must maximize the expected vote share. Rising inequality bends the interests of a majority of voters more toward less generous spending. Opportunistic parties run after the voters, and this is reflected in the welfare statements of their policy platforms. If opportunists think that voters cast their votes according to popularity or ideological sympathies, they would design policies in order to benefit from these sentiments. Formally, the wider the spread of popularity waves and sympathies, the less impact do the real interests of voters have on the policy platforms.
Fair compromise, $a_L = a_R = 1/2$: When opportunists and idealists are equally strong, the equilibrium outcome is as if both parties maximize their expected party utilities, $q W_L(G_L) + (1 - q) W_L(G_R)$ for the left and $(1 - q) W_R(G_R) + q W_R(G_L)$ for the right, using the idealists’ preferences $W_L(\cdot)$. The equilibrium platforms satisfy the following first-order conditions:

\[ q L (W_L(G_L) - W_L(G_R)) + q W_L(G_L) = 0 \quad (9) \]

\[ -q L (W_R(G_R) - W_R(G_L)) + (1 - q) W_R(G_R) = 0 \quad (10) \]

Compared to the case with pure ideals, there is some convergence in equilibrium, but the convergence is not complete. Fair compromise is a special case where Proposition 2 applies.

**In Sum.** The bargaining approach to policy platforms shows that mean-preserving rises in inequality spur a less generous welfare policy of the left parties irrespective of whether their policy platforms are written out of idealistic identification with core groups of supporters, out of opportunism in the hope of winning elections, or out of a combination of the two.

The same also holds for right-wing parties as long as their ideal party policies are unaffected by the rise in inequality. If higher incomes of the core groups lead to a more generous ideal policy of the right party, the net effect on its policy platform is ambiguous, depending on which is the strongest—idealism or opportunism.

So, the core implication of rising inequality is a less generous welfare policy by the left bloc and a less clear tendency to follow suit by the right bloc. In addition, our theory predicts that a higher average income raises the welfare generosity of the policy platforms. Conversely, when the poor get poorer—rising inequality combined with declining average incomes—this erodes manifested welfare generosity.

The political reinforcement effects are more substantial the stronger the opportunists in the internal bargaining. The party with a higher weight on opportunism also increases its chance to win elections. This can easily result in competing opportunism, which in the end leads to a complete convergence of policies and to the strongest reinforcement effects.

**Welfare Platforms and Inequality—Empirical Links**

Our key propositions are tested comparing party positions as announced in their manifestos. We distinguish between the position of the left and right bloc parties. Data on party positions are from the Comparative Manifesto Project (CMP; Budge et al. 2001; Klingemann et al. 2006), which quantifies the content of party manifestos prior to each election.\(^6\)

**Measures: Party Platforms and Wage Inequality**

We construct a measure of party positions on the welfare state, *Welfare support*, using two variables from the CMP data set: the variable “Welfare State Expansion” and “Welfare State Limitation” (see Budge et al. 2001, 226). Following the recent recommendations by Lowe et al. (2011), our measure is the difference between favorable mentions of welfare expansion and limitation in the programs.\(^7\)

We classify each political party as belonging to the left bloc, or the non-left bloc based on the CMP’s party family classifications, and calculate bloc *Welfare support* as the weighted sum of the party positions within the respective bloc.\(^8\) A more positive score implies a more pro-welfare state platform.

Wage inequality is measured as the ratio of pretax earnings between the 90th and the 10th percentile.\(^9\)

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\(^6\)The CMP is the only source to test hypotheses requiring longitudinal data on party positions. Volkens (2007) shows that there is a high level of correlation between the CMP data and alternative measures of party positions.

\(^7\)There is a long-standing debate regarding whether the CMP data measure the saliency of a policy area for a political party, or the policy position of the party on that policy area. Lowe et al. (2011) show how to empirically separate these two dimensions. We follow the suggestion for how to capture a party’s policy position on the welfare state. See Appendix B in the supporting information for details.

\(^8\)We weight the influence of each party on the bloc score, based on its percentage of total seats within the respective bloc, to make sure that the positions are not unduly influenced by extreme parties. We have cross-validated the CMP’s party family classifications by examining the parties where the left-right positioning of the party differs between the CMP and Benoit and Laver (2006). We rely on the party family classifications, not the left-right positioning, to classify the parties into blocs, but the comparison in Benoit and Laver (2006) is useful to identify potentially problematic parties. We identify two problematic parties. First, the CMP inaccurately classifies the Portuguese party PSD as a social democratic party (Freire 2006); we assign it to the right bloc. Second, the CMP and Benoit and Laver (2006) disagree on the placement of the Canadian party Bloc Québécois. We assign it to the left bloc, as "the party’s political discourse and platform are distinctly centre-left” (Gagnon and Hérivaut 2007, 113). No conclusions hinge on the classification of these two parties.

\(^9\)We present results using the 50:10 and 90:50 ratios in Appendix C in the supporting information.
The data are mainly from OECD’s earnings inequality database. We consistently include country fixed effects to account for country-specific unobserved, time-invariant heterogeneity, and for time trends by including a second-order polynomial in time. Control variables, and why we account for them in the regressions, are described in Appendix B in the supporting information.

A Simple Estimate of the Reinforcement Mechanism

Consistent with our main theoretical results, Table 1 shows that higher inequality shifts the position of the left parties in terms of welfare policies to the right, whereas the position of the right is not significantly changed. Columns 1 and 3 present “stripped-down” models including the country fixed effects, the controls for the time trend, and the source dummies only. Columns 2 and 4 include control variables.

The coefficient for wage inequality is negative and significant for the left: Rising wage inequality implies a rightward shift in the platforms. The coefficient is robust to the vector of controls. The results are politically significant as well: The size of the coefficient in column 2 suggests that a one standard deviation increase in the 90:10 ratio implies a rightward shift in the left bloc’s position, amounting to a shift of two-thirds of a standard deviation of the dependent variable.

For the right, we find no significant relationship between wage inequality and welfare state policy platforms, consistent with the right-wing policy indeterminacy. The opportunistic effect appears to dominate for the right bloc, as the coefficient is negative, but it is imprecisely estimated and smaller compared to the coefficient for the left bloc.

The signs of the coefficients for the control variables are similar for the left and the right, suggesting that these variables first and foremost move the political center of gravity, yet only a few of them reach conventional levels of significance. Table 1 suggests an underlying polarization, but this polarization is independent of changes in the wage distribution and the other controls (see Appendix C in the supporting information). The main message from Table 1 is that rising inequality leads to less, not more, welfare generosity in party platforms. Before we explore a causal interpretation of this link, we consider the roles of affluence, political cosmetics, and alternative explanations.

The Effect of Higher Affluence Depends on Who Gets It. Table 1 also shows the effects of economic growth for

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**Table 1: Welfare support**

<table>
<thead>
<tr>
<th></th>
<th>(1)</th>
<th>(2)</th>
<th>(3)</th>
<th>(4)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Left Bloc</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Wage inequality</td>
<td>−0.717***</td>
<td>−0.757***</td>
<td>−0.284</td>
<td>−0.251</td>
</tr>
<tr>
<td></td>
<td>(0.249)</td>
<td>(0.234)</td>
<td>(0.594)</td>
<td>(0.505)</td>
</tr>
<tr>
<td>Economic growth</td>
<td>0.079*</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>(0.045)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Percentage elderly</td>
<td>0.069</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>(0.065)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Trade openness</td>
<td>1.147</td>
<td>4.163***</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(log)</td>
<td>(1.018)</td>
<td>(1.393)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Union density</td>
<td>0.064</td>
<td>0.003</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>(0.040)</td>
<td>(0.088)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Union density-sq.</td>
<td>−0.001*</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>(0.0004)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Trend</td>
<td>−0.026***</td>
<td>−0.047</td>
<td>−0.004</td>
<td>−0.118*</td>
</tr>
<tr>
<td></td>
<td>(0.008)</td>
<td>(0.040)</td>
<td>(0.028)</td>
<td>(0.057)</td>
</tr>
<tr>
<td>Trend-sq.</td>
<td>0.002***</td>
<td>0.002**</td>
<td>0.001</td>
<td>0.0004</td>
</tr>
<tr>
<td></td>
<td>(0.001)</td>
<td>(0.001)</td>
<td>(0.001)</td>
<td>(0.001)</td>
</tr>
<tr>
<td>Country fixed effects</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Adj. R—squared</td>
<td>0.23</td>
<td>0.28</td>
<td>0.27</td>
<td>0.44</td>
</tr>
<tr>
<td>Number of countries</td>
<td>22</td>
<td>22</td>
<td>22</td>
<td>22</td>
</tr>
<tr>
<td>Number of elections</td>
<td>120</td>
<td>120</td>
<td>120</td>
<td>120</td>
</tr>
</tbody>
</table>

*Note: Dependent variable is party bloc position on welfare. Robust standard errors adjusted for country clustering in parentheses. *** p < 0.01, ** p < 0.05, * p < 0.1 (two-tailed tests).
The International Social Survey Program's more generous in election periods where the left ran on the left bloc, implying that policies of the left become government. respective election period with left bloc representation in actual welfare state policies on the manifested positions. In Table 2, we regress Scruggs's (2004, 2006) indices of decline in support translate into actual welfare policies? consistent with our reinforcement hypothesis. Does this Higher wage inequality leads to lower support for the social group. Increasing income per capita then means uniformly stronger support for the welfare state among the electorate, transformed into higher ambitions in the party programs.

If the economic growth is unevenly distributed across groups, however, the strength of the effect on manifested welfare generosity depends on the vulnerability of the group that gets the most growth. For instance, if the economic growth is distributed to high-wage groups only (the rich get richer), the effect is weakened compared to the benchmark because inequality increases. If, in contrast, the growth is mainly distributed to low-wage groups, the effects of higher average incomes are enhanced by the positive effect of lower inequality.

According to our estimates, with a decline in national income that mainly hurts low-wage groups, the ensuing rightward shift is larger than if the decline hits the high-wage groups the most. The reason is simple: When the poor get poorer, declining affluence is associated with rising inequality, implying two negative effects on the manifested welfare generosity. When the rich get poorer, however, declining affluence is associated with declining inequality, implying two effects in opposite directions.

**Party Platforms Are Not Only Political Cosmetics.** Higher wage inequality leads to lower support for the welfare state, in particular among the parties of the left, consistent with our reinforcement hypothesis. Does this decline in support translate into actual welfare policies? In Table 2, we regress Scruggs's (2004, 2006) indices of actual welfare state policies on the manifested positions of the left bloc. Each index is averaged over the election period, and we regress it on the bloc position from the respective election period with left bloc representation in government.

Table 2 shows a consistently positive coefficient for the left bloc, implying that policies of the left become more generous in election periods where the left ran on more generous platforms. The coefficient on pensions is, however, not statistically significant. This may be because the long-term nature of pension systems implies that reforms are implemented only rarely, often as a result of large negotiated packages involving several parties and social partners, and they are often implemented in a staggered way, at a different pace for different generations.

**The Reinforcement Effect Survives Robustness Checks.** In Appendix C in the supporting information, we show that the inequality coefficient is robust to a long list of checks, including additional control variables such as left majority in government, welfare state generosity, the unemployment rate, immigration, and voter turnout. Next, while major parties tend to change their policy position in response to changes in voter preferences (Adams 2012), there is a discussion on whether electoral system and party fragmentation impact on the strength of this relationship (Budge and McDonald 2007). We control for country fixed effects, which should account for the impact of electoral systems since such institutions rarely change. We show, using an interaction model, that the relationship between wage inequality and party positions is slightly stronger in majoritarian systems, but the interaction term is insignificant. Neither does the relationship between wage inequality and party positions change when we control for the effective degree of party fragmentation of the legislature. It also survives when we use alternative measures of wage inequality and party positions, when we account for measurement errors in the party positions, and when we include a lagged dependent variable. It is not driven by outliers or the data from a single country. In addition, we show that the competing claim in Pontusson and Rueda (2010) receives no support once we account for time trends. Thus, the reinforcement mechanism seems remarkably robust.

We also find indications in opinion data that voters demand less social insurance when wage inequality increases. The International Social Survey Program's

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13Our argument says that the majority of the voters demand less social insurance when wage inequality increases. Direct evidence is hard to come by. The “policy mood” literature is partly related to our study; Durr (1993) and Wlezien (1995) show that U.S. public opinion shifts to the right when the public expects the economy to decline, whereas Erikson, MacKuen, and Stimson (2002) find a shift to the left when unemployment increases. Soroka and Wlezien (2005) find a positive correlation between “economic misery” and demand for public spending in the United Kingdom, but a negative one in Canada (Soroka and Wlezien 2004). Stevenson (2001), the only cross-national study, finds a rightward shift when the economy contracts. Thus, there is no consensus in this literature, and it appears that some economic variables have procyclical effects that are sometimes outweighed by countercyclical effects of other economic variables. Nonetheless, this literature is not very informative
**Table 2** Actual Welfare Generosity of Left Governments

<table>
<thead>
<tr>
<th></th>
<th>(1) Overall Index</th>
<th>(2) Unemployment</th>
<th>(3) Sickness</th>
<th>(4) Pensions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Left bloc position</td>
<td>0.838***</td>
<td>0.385***</td>
<td>0.321*</td>
<td>0.132</td>
</tr>
<tr>
<td>Country fixed effects</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Time trend</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Adj. R-squared</td>
<td>0.95</td>
<td>0.96</td>
<td>0.97</td>
<td>0.83</td>
</tr>
<tr>
<td>Number of countries</td>
<td>18</td>
<td>18</td>
<td>18</td>
<td>18</td>
</tr>
<tr>
<td>Number of elections</td>
<td>68</td>
<td>68</td>
<td>68</td>
<td>68</td>
</tr>
</tbody>
</table>

Note: Robust standard errors adjusted for country clustering in parentheses. *** p < 0.01, ** p < 0.05, * p < 0.1 (two-tailed tests).

(ISSP) modules on Role of Government from 1996 and 2006 include suitable measures on support for social insurance spending (i.e., health, unemployment benefits, and pensions) at two time points for 13 of the countries in our sample. We take the mean of these survey items for each country and module to represent support for social insurance among the voters and use the mean as a dependent variable in regression models including country and module fixed effects.

For all three variables, we find a negative coefficient for wage inequality, i.e., public opinion moves toward less spending on social insurance when wage inequality increases (Table 3). The coefficient is significant for unemployment benefits, but not for health and pensions. However, we have a very small sample of only 26 observations from 13 countries, which makes it difficult to achieve precise estimates. Thus, although we readily admit that this evidence of shifts in public opinion is far from conclusive, the results are at least consistent with a reinforcement effect among the voters.

**A Search for Independent Variation**

We cannot give a causal interpretation to the correlation between wage inequality and welfare state platforms reported above. Wage inequality might be correlated with the error term due to an omitted variable. It is also conceivable that changes in welfare state platforms have an impact on wage inequality, as more generous welfare policies raise the effective reservation wage, thus reducing wage inequality from below (Barth and Moene 2012).

Instrumental variable (IV) regressions are one solution to this problem. The key challenge is to find variables that provide independent variation in wage inequality. Variations in bargaining institutions and unionism are known to affect the wage distribution (Wallerstein 1999) but are known to affect politics as well. In our view, unions' influence on politics arises mainly through their sheer weight as voters, which is why we include union density in our main model. Yet conditional on union density and country fixed effects, we argue that certain properties of the bargaining system are likely to affect wages, but not union involvement in politics. These properties are the adjusted bargaining coverage among employees and the effective number of union confederations.14

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14Measured as the inverse of the Herfindahl index. The data are from Visser (2011). See Appendix B in the supporting information for details.
We expect an increase in bargaining coverage to reduce wage inequality. Measured by the scope of bargaining, we also expect the effective number of union confederations to have a negative impact on wage inequality. Our claim is that coverage and the number of union confederations mainly influence the wage distribution, through the obvious direct channel of affecting wage setting, whereas the political influence of unions mainly depends on the unions’ power in terms of vote share, not directly on how the wage bargaining is organized. However, since the two variables are relatively close in terms of what independent variation in wage setting they provide, we cannot rely on overidentification tests to substantiate our claim.¹⁵

To investigate our claim that the wage bargaining institutions do not have an independent effect on union involvement in politics, we analyze the relationship between our instruments and the involvement of unions in tripartite bargaining and policymaking. In Appendix D in the supporting information, we show that our instruments, conditional on union density and country fixed effects, are neither significantly correlated with whether a social pact is announced (Table A9, column 1) or signed (Table A9, column 2) in a given year, nor significantly correlated with routine involvement of unions and employers in government decisions on social and economic policy (Table A9, column 3). This strengthens our confidence that the exclusion restriction is satisfied.

To show which countries are important in the “experiment” underlying our IV analysis, Appendix B in the supporting information shows the percentage change in the instruments from the first to the last observation by country. As is evident from the table, there is movement in these variables for most of the countries. Large reductions in coverage are found in New Zealand, the United Kingdom, and the United States, along with large increases in Finland and France. The effective number of union confederations has risen in Canada, France, and Norway and declined in Japan and the United States.

In line with our expectations, the coefficients for our instruments are negative and significant in the first stage of the IV regression.¹⁶ The F-value from the first stage is large (11.69) and above the “threshold” of 10, suggesting that the relevance criteria is fulfilled (Murray 2010).

Turning to the substantive results from the second stage, reported in Table 4, we find that higher wage inequality, as picked up by changes in the instruments, moves both blocs in a right direction. Only the coefficient for the left bloc, however, is significant.¹⁷ These results clearly weaken potential concerns that the results in Table 1 are driven by omitted variables or reverse causality.

### Conclusion

We derive the political reinforcement mechanism from a bargaining approach to political party platforms, utilizing probabilistic voting models with welfare provision as a normal good within each income class. We demonstrate how rising inequality can push party platforms rightward, why this pattern is clearer in the left bloc than in the right

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¹⁵ Even though the Hansen J-test statistic is very low and suggests that the instruments are valid.

¹⁶ **Number of confederations**: $\beta = -0.15$, robust SE = 0.08, $t = 1.99$. **Coverage**: $\beta = -0.01$, robust SE = 0.004, $t = 2.08$.

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### Table 4 Instrument Variable Regression Models

<table>
<thead>
<tr>
<th></th>
<th>Left Bloc</th>
<th>Right Bloc</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wage inequality (90:10)</td>
<td>$-1.426^{**}$</td>
<td>$-1.685$</td>
</tr>
<tr>
<td>Economic growth</td>
<td>$0.099^{**}$</td>
<td>$0.093$</td>
</tr>
<tr>
<td>Percentage elderly</td>
<td>$0.070$</td>
<td>$0.001$</td>
</tr>
<tr>
<td>Trade openness (log)</td>
<td>$0.980$</td>
<td>$3.947^{**}$</td>
</tr>
<tr>
<td>Union density</td>
<td>$0.066^{*}$</td>
<td>$-0.039$</td>
</tr>
<tr>
<td>Union density-squared</td>
<td>$-0.001^{**}$</td>
<td>$-0.0003$</td>
</tr>
<tr>
<td>Trend</td>
<td>$-0.048$</td>
<td>$-0.128^{**}$</td>
</tr>
<tr>
<td>Trend-squared</td>
<td>$0.002^{**}$</td>
<td>$0.002$</td>
</tr>
<tr>
<td>Country fixed effects</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Adjusted R-squared</td>
<td>0.26</td>
<td>0.48</td>
</tr>
<tr>
<td>Number of countries</td>
<td>21</td>
<td>21</td>
</tr>
<tr>
<td>Number of elections</td>
<td>117</td>
<td>117</td>
</tr>
<tr>
<td>Kleibergen-Paap F-statistic</td>
<td>11.69</td>
<td>11.69</td>
</tr>
<tr>
<td>Sargan statistic p-value</td>
<td>0.77</td>
<td>0.34</td>
</tr>
</tbody>
</table>

**Note:** Dependent variable is party bloc position on welfare policy. Excluded instruments are the adjusted bargaining coverage and the effective number of union confederations (see Appendix B and Appendix D in the supporting information). Robust standard errors adjusted for country clustering in parentheses. *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$ (two-tailed tests).
bloc, why the rightward policy shift is larger when the opportunist becomes stronger within the parties, and why the effects are most distinct when the average income per capita drops as inequality increases. How rises and declines in average incomes affect party platforms depends on how the rises and declines are distributed over income classes in the first place.

We find empirical support for the reinforcement mechanism in the platforms of the left bloc. The negative effect of higher wage inequality on the manifested welfare generosity of the left is clear and strong; the implemented welfare generosity by left parties in power is highly correlated with their manifested welfare policy prior to the elections, indicating that their party programs are not political cosmetics only. There are also signs of political polarization in our data, but our estimates indicate that rising inequality does not contribute to polarization, as it mainly shifts the left to the right.

Do these political shifts indicate that left parties are not particularly important for social policy? Huber, Ragin, and Stephens (1993) claim that “left of Christian democratic presence in government” is indeed crucial. Our results do not question that left parties normally propose a more generous welfare policy than the right parties. What our results emphasize, however, is that left parties are less efficient guardians of welfare spending whenever inequality rises without much growth in average incomes. Under such circumstances, welfare expansion may be most needed, but still the manifested welfare policy of the left becomes less generous. Indeed, regardless of the color of the government, most European countries have experienced rising wage inequality and declining welfare generosity since the end of the 1980s, in particular after the financial turmoil in 2008. Thus, the protection offered by the welfare state can be weakened by the same economic and social forces that it was meant to protect against.

References


Supporting Information

Additional Supporting Information may be found in the online version of this article at the publisher’s website:

Appendix A: Mathematical Appendix.
Appendix B: Data definitions and descriptive statistics.
Appendix C: Robustness checks.
Appendix D: Additional results.