Chapter 12
Liberalization and income inequality in worlds of welfare: A comparative analysis (1974-2013)

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Introduction

Christian democracy and the Continental welfare state has been a major topic of Kees van Kersbergen's work (van Kersbergen, 1995). Convincingly, he argued that in Continental welfare states, Christian democratic parties – together with left parties – developed the welfare state with certain features that distinguish it from the liberal and social democratic systems. He argued that in all regimes, the welfare state plays 'an indispensable role in moderating market-induced inequalities and poverty, with the social democratic regime outperforming the conservative regime (to some degree) and the liberal regime (to a considerable extent)' (van Kersbergen and Vis, 2014: 101). In this paper, we start from his perspective on the regime-specific effects of welfare states on income inequality. We focus on liberalization policies – the removal of market barriers or the loosening of restrictions on free markets – that started wave-like in the 1980s, peaking at the turn of the century and leveling off thereafter. How did this wave of liberalization impact income inequality, and how has this impact been moderated by the various welfare regimes?

The empirical analysis of this paper is based on a new dataset on liberalization for 18 mature democratic capitalist countries (in the period 1974-2013) and seven post-communist countries (early 1990s-2013) (Armingeon et al., 2019). The dataset offers encompassing information about liberalizing and de-liberalizing reforms. Our findings suggest that liberalization reforms are associated with substantially higher levels of income inequality in the long run via two channels: a widening of the distribution of market incomes and a reduction in redistribution by the state through taxes and transfers. We show that welfare states moderate the effect of liberalization on

income inequality. Apart from the special case of post-communist countries – where the transition to capitalism and democracy also meant a huge increase in income inequality – these regime-specific effects correspond to van Kersbergen's hypothesis. The hypothesis states that they are most pronounced in the liberal and Mediterranean regimes, while in the social democratic regimes and the conservative regimes, liberalization does either lead not to increased inequality of market incomes or increasing market inequality is compensated by public redistribution leading to much lesser increases in disposable income inequality.

In the next section, we develop our argument about the regime-specific effect of liberalization on inequality. The third section presents the empirical research design, the liberalization dataset, and the operationalization of variables. Furthermore, we will then describe our major statistical tool – error correction models applied to time-series cross-sectional data – before presenting our findings and offering concluding remarks.

Arguments and hypotheses

Opposing views about the beneficial or harmful effects of liberalization have long been part of both the political and academic discourse. While being principally agnostic about whether liberalization increases inequality, we start pragmatically from the plausible assumption that liberalization empowers markets which may lead to higher income inequality via two processes: (1) by removing wage floor and wage ceiling effects, thereby increasing market inequality (or pre-tax pre-transfer inequality), and (2) by retrenching tax and transfer policies that redistribute income from rich to poor. In addition, we assume that the impact of liberalization on income inequality depends on the interplay of various liberalization policies. There are many forms and approaches of liberalization. In one country, the tax system becomes less progressive, and in another, employment protection may be retrenched. All that has to be taken into account. Finally, liberalization happens frequently alongside 'de-liberalization' where for instance the government frees capital markets while introducing minimum wages. We therefore focus on *net liberalization*, which denotes the intensity of liberalization after taking into account all simultaneous de-liberalization reforms.

Welfare state regimes may vary regarding both the intensity of liberalization and the effect by which a set of liberalization policies affects income distribution. We distinguish five welfare regimes:

(a) The *post-communist regime*, which is set apart from all other welfare regimes where social policies emerged after the transition to capitalism. While the post-communist regime had a policy legacy of social intervention during state socialism, with the breakdown of the old economic and political regime, the liberalization of markets occurred simultaneously with the development of democracy. Policymakers were under much stronger pressure to liberalize and hence had far fewer options to control increasing inequality compared to all other regimes. Likewise, the rise of capitalism may have spurred income inequality notwithstanding deliberate reforms. Therefore, in a first step, we compare the liberalization experience in post-communist regimes to all other older democracies.

Looking specifically at the older democracies, following van Kersbergen, we distinguish four types:

(b) The *Nordic/social democratic welfare regime*. Here, we expect that liberalization is politically controlled and compensated so that the overall effect is very limited.
(c) In contrast, the *Anglo-Saxon/liberal welfare regime* is the most market-friendly, and hence, we expect the strongest effects here as compared to all other regimes.
(d) The *Mediterranean welfare regime* is weak, fragmented, faulty, and family based (Ferrera, 2021). It already fails in reducing market inequality due to weak collective bargaining and trade union power, and it fails further to redistribute sufficiently large amounts of resources so that disposable income inequality is also high.
(e) Following van Kersbergen, we would expect the inequality indicators of the continental welfare state to be lying somewhere between the poles of Nordic and the liberal (Anglo-Saxon) welfare states.

Table 1 informs about the average Gini indicator (with 1 most unequal, and 0 absolutely equal) for the period under study (1973-2013). It confirms van Kersbergen's argument and encourages us to study how welfare regimes modify the impact of liberalization on inequality. Specifically, we see that the level of market-income inequality is very similar in Continental and Nordic countries and somewhat lower than in the Mediterranean and Anglo-Saxon nations. Looking at inequality of disposable income, it is highest in Mediterranean and lowest in Nordic countries. The index of Continental countries is close to that of the Nordic countries, while Anglo-Saxon democracies are only a little bit less equal than the countries in the European south. Finally, a third measure indicates the redistributive effort of a political system, being the share of market income that is reduced by public intervention. The Nordic and the Continental countries have much higher levels of redistribution than the Anglo-Saxon and Mediterranean countries.

Table 1: Average inequality and relative redistribution by welfare regime, 1973-2013

	Gini market income (1)	Relative redistribution: $\frac{Gini_{Market} - Gini_{Disposable}}{Gini_{Market}}$ (2)	Gini disposable income (3)
Continental	0.45	0.40	0.27
Nordic	0.44	0.46	0.24
Mediterranean	0.47	0.30	0.33
Anglo-Saxon	0.47	0.33	0.31

Based on these arguments about regime-specific effects, we arrive at these hypotheses:

- H1: *Net liberalizing reforms (i.e. the difference between liberalizing and de-liberalizing reforms) are associated with higher income inequality.*

- H2a: *The effect of net liberalization on income inequality is most pronounced in liberal (Anglo-Saxon) and in Mediterranean welfare states.*
- H2b: *Nordic (social democratic) welfare states mute the effects of liberalization on market and disposable income inequality comparatively strongly.*
- H2c: *Continental welfare states mute the impact of liberalization on market and disposable income inequality less than Nordic regimes but more than Anglo-Saxon regimes.*

Data, methods, and research design

In this paper, we focus on liberalization reforms across multiple different policy fields, namely in the area of labor market, product market, and capital market policies. In our view, to study the effect of liberalizing policies on income inequality, it is crucial that we specify the estimated models so that all potentially relevant policy changes for income inequality are included or controlled for. For instance, a study of the effects of lowering the minimum wage must also consider the effects of accompanying policy changes in social assistance (see, for example, Dube, 2019), strengthened trade union power, or enlargement of collective bargaining. A broader coverage of collective agreements can compensate for the inequality-increasing effects of cutting the minimum wage. Therefore, the basic idea of this paper and the underlying dataset is to look at a broad spectrum of liberalization and de-liberalization rather than just considering one or two particular policy areas. We rely on an indicator on the incisiveness of (de)liberalizing reforms that has been based on all the reforms collected and coded in a project on liberalization. For a detailed description of the dataset, operational rules, and the construction of the indicator for decisiveness of net liberalization (liberalizing reforms minus de-liberalizing reforms), see Armingeon et al. (2019).

We use data from the liberalization database for seven post-communist and 18 Western democracies in the period early 1990s-2013, or (in case of mature democracies) 1974-2013: the Czech Republic, Estonia, Hungary, Lithuania, Poland, Slovakia, and Slovenia (post-communist); and Australia, Austria, Belgium, Canada, Denmark, Finland, France, Germany, Greece, Ireland, Italy, the Nether-

lands, Norway, Spain, Sweden, Switzerland, the United Kingdom, and the United States (mature democracies). On average, we have 35 observations (mature democracies) per country in the final sample after accounting for missing data on all variables.

The main explanatory variable of our study is net liberalization, an annualized index for the incisiveness of the liberalizing reforms in a given country minus the incisiveness of de-liberalizing reforms.

Our overall measure for income inequality is the Gini coefficient. It is based on the Lorenz curve plotting the total income of all income earners (y-axis) cumulatively earned by the bottom part of the population (x-axis). If everybody earns the same income, the Lorenz curve would be a straight 45-degree line running through the origin of the graph (the line of complete equality). If only one person would earn all income, the curve would correspond to the x-axis with a sudden increase at its utmost pole, i.e. the position of the earner who gets all income. The Gini coefficient is the ratio of the area below the 45-degree line and the actual Lorenz curve and the total area below the 45-degree line. A coefficient of 0 indicates perfect equality, and a coefficient of 1 stands for perfect inequality (one person earns all income).

Liberalization may affect market income directly, for example if competitive pressures and weak collective bargaining lead to almost unconstrained use of wage incentives for individual skills and work effort. Frequently, liberalization also concerns redistribution, i.e. the extent to which the welfare state corrects market income through taxes and social security transfers. Inequality of disposable income is the result of inequality of market income after redistribution of the state via taxes and transfers.

Therefore, in our study, we use three inequality-related outcome variables. Our main focus is on the Gini coefficient for disposable income: the amount of market income (wages and capital income) net of public transfers and taxes. We also consider the Gini coefficient for market income, which is less directly amenable to government intervention. Finally, we consider ‘relative redistribution’, i.e. the share of Gini market that is reduced by public intervention through taxes and transfers.

For our main analysis, we use data from the most recent version of the Standardized World Income Inequality Database (Solt, 2020).

We coded Australia, Canada, Ireland, the United Kingdom, and the USA as liberal (Anglo-Saxon) welfare states; Denmark, Finland, Norway, and Sweden as social democratic (Nordic) welfare regimes; and Italy, Spain, Portugal, and Greece as Mediterranean welfare states; while Austria, Belgium, France, Germany, the Netherlands, and Switzerland make up the group of Continental (conservative) welfare states.

We use a number of control variables: globalization, technological change, de-industrialization, economic cycles, and external economic shocks are likely drivers of income inequality (Atkinson, 2015: chapter 3; Nolan, Richiardi and Valenzuela, 2019; Dorn, Fuest and Potrafke, 2022). We control for globalization by entering current accounts and the size of imports and exports (measured as percentage of GDP). Economic cycles and shocks are measured by the change rate of real economic growth and by the level of unemployment. Finally, liberalization and income inequality may be correlated simply because both have a common cause: the political complexion of government.

While some authors argue that the political make up of governments is irrelevant for liberalization (Baccaro and Howell, 2017), others hold that politics influences government decisions on liberalizing and de-liberalizing reforms (Potrafke, 2010, 2017; Obinger, Schmitt and Zohlnhöfer, 2014; Obinger, Schmitt and Traub, 2016). Likewise, the partisan composition of government is also a driver of redistribution, correcting market income. Avoiding the danger of spurious correlation, we enter the indicators of the governmental strength of left and center parties, respectively, with the strength of conservative–liberal parties as a reference category. Finally, in order to control for contemporaneous correlation, we also enter year dummies in our regression models. If not otherwise indicated, data for control variables come from Armingeon, Engler and Leeman (2021).

We use error correction models (ECMs). Tests show that our data might contain unit roots (we cannot reject the null that all panels contain unit roots) and that log net liberalization and disposable income inequality might be co-integrated, although the co-integration tests are not fully conclusive. ECMs are frequently used with co-integrated data, but they represent a general type of model suitable even in the absence of co-integration (de Boef and Keele,

2008). Our interpretations are focused on long-run multipliers (LRMs). While short-run coefficients show the immediate effect of a reform, LRMs inform about the effects distributed over a range of years. For estimating the LRM and its standard error, we apply the Bewley transformation (de Boef and Keele, 2008: 192). Arguably, it takes time for reforms to have an effect on income distribution, and therefore, the LRM is the major interesting coefficient. This is in line with an argument of J-curve effects: 'The simple, compelling idea is that economic reforms generate transitional costs in the short term before they begin to produce their promised economic gains' (Hellman, 1998: 206). The idea originates from the literature on currency devaluations but can be applied to broader economic reform (liberalization) as well. Reform might create losers and inequality in the short run but perhaps less in the long run, or on the contrary, there may be null effects on inequality in the short run followed by strongly increasing inequality over the following years.

Findings

We begin with descriptive findings. Figure 1 shows the overall development of net liberalization and the development in the post-communist world as compared to the mature democracies. Clearly, the post-communist countries are set apart from the mature democracies, both by the extent of liberalizing reforms and the 'early' peak in the 1990s and the subsequent decline of liberalizing efforts. In contrast, in the mature democracies, liberalization starts in the 1970s/1980s, reaches a peak in the 1990s and the first years of the new millennium, and then declines.

Figure 2 depicts liberalizing in four welfare regimes in older democracies. The Mediterranean countries have the most erratic developments, while the development of liberalization in the remaining three welfare regimes is very similar: liberalization starts in the late 1970s, peaks in the first years of the new millennium, and then starts to decline.

We now move to the results of the ECMs. Here, we do not discuss the coefficients of the other variables; rather, we focus on the theoretically interesting coefficients of the liberalization variable and its coefficient by welfare regimes.

Figure 1: Liberalization in post-communist and non-post-communist countries

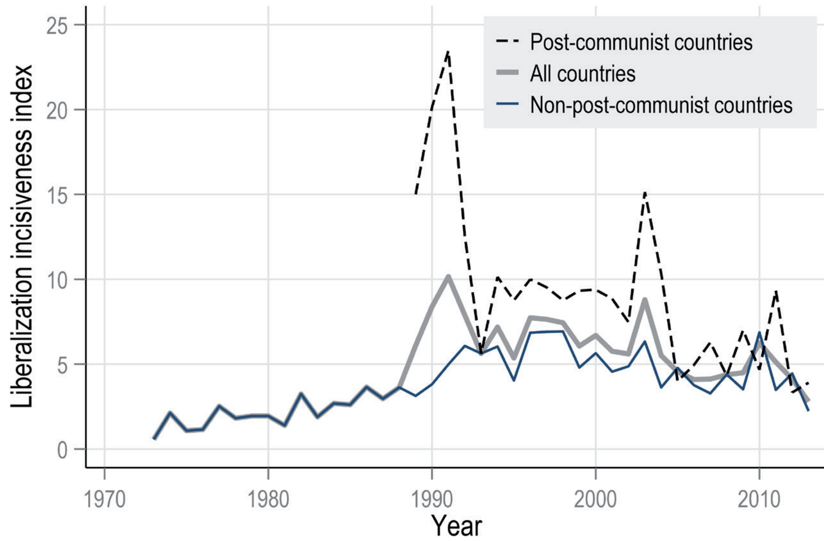
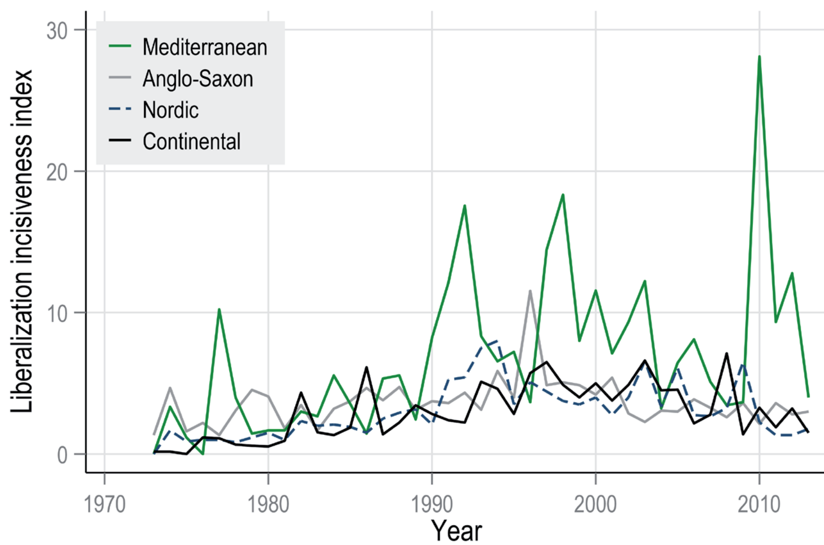
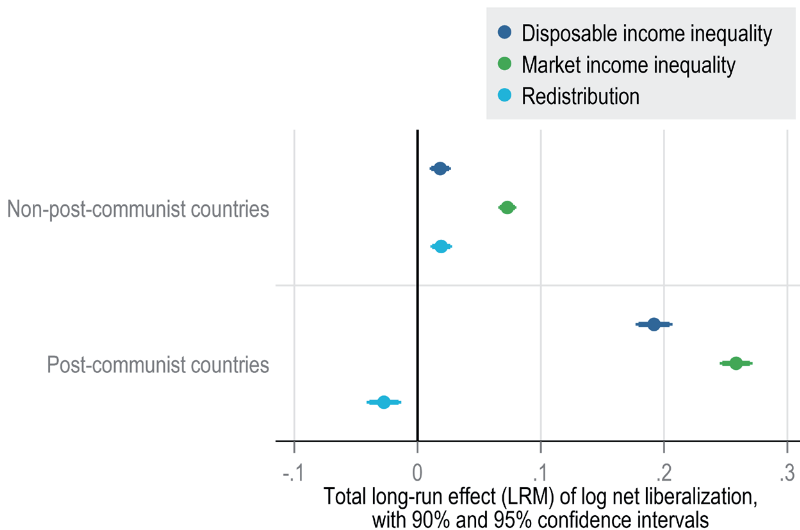


Figure 2: Liberalization across country groups (non-post-communist countries)



In a first step, we compared the liberalization effects in seven post-communist countries with those in the other 18 established democracies. The overall finding is that in the West and the East, liberalization increases inequality of both market and disposable income. The effect is most pronounced for market income and less so for disposable income. The latter is a result of public redistribution due to social spending and taxes. In the Central and Eastern European countries, liberalization has increased both market and disposable income, while the coefficient for 'relative redistribution' indicates that liberalizing reforms were not accompanied by political effort at muting this increasing inequality; rather, it was even further supported (albeit to a small extent).

Figure 3: Distributional effects of liberalization (ECM regressions)

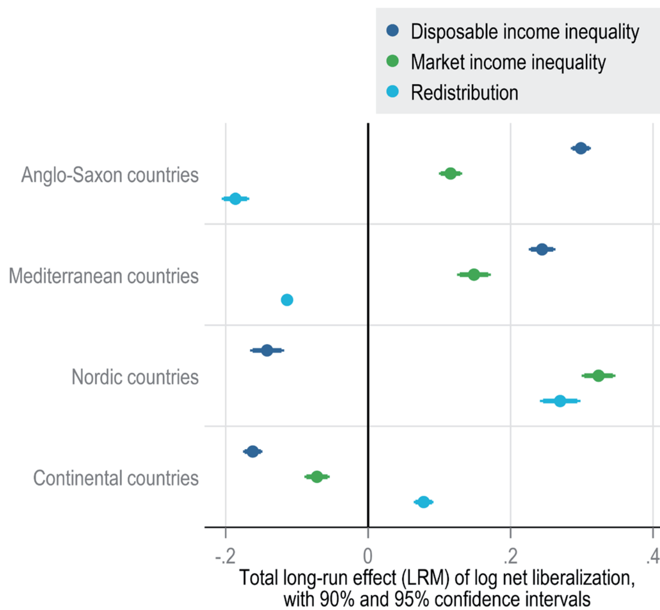


In contrast, in the 'old' democracies, liberalization was correlated with strongly increasing market inequality, which met political efforts at redistribution and resulted in a much lesser impact of liberalization on disposable income in the end.

Within the old democracies, our hypotheses, deducted from Kees van Kersbergen's work, are clearly supported. The pattern in Mediterranean and Anglo-Saxon countries is very similar: Liberal-

ization leads to greater inequality in the market, a strong redistributive effort by the state is absent, and instead, the increasing inequality of market incomes is reinforced by policies that drive rather than dampen the development of inequality in the market.

Figure 4: Distributional effects of liberalization (ECM regressions)

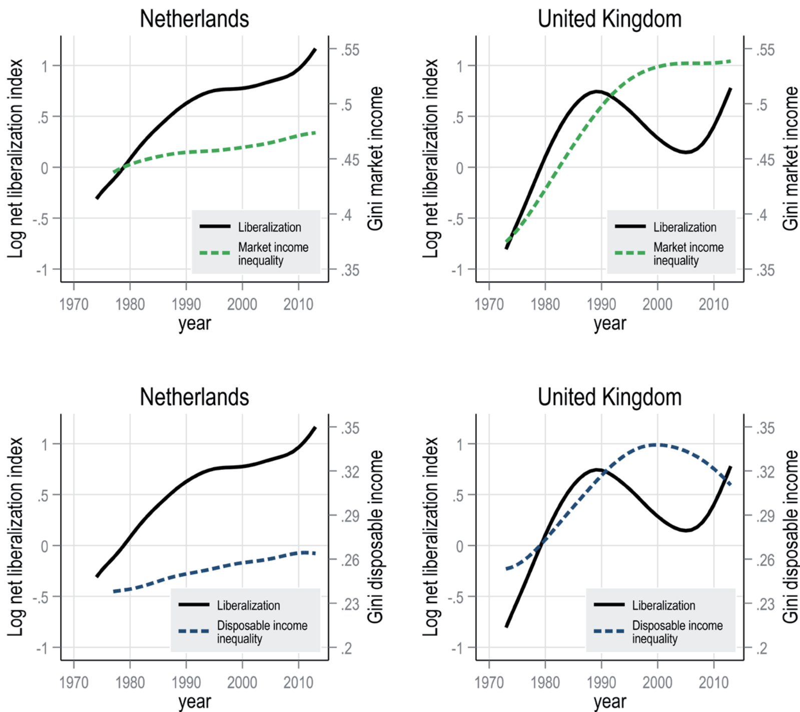


A common feature of Nordic and Continental countries is the counter-intuitive finding that in these countries, liberalizing reforms are systematically combined with policies leading to lower (instead of higher) disposable income inequality. In the Nordic countries, governments empower markets in the process of liberalization but simultaneously develop a huge effort in redistribution, even overcompensating for the effects of liberalizing reforms. This corresponds well to Thelen's (2014) account of the Scandinavian way of liberalization. In the Continental countries, redistributive effort is much smaller; however, liberalization goes together with even lower inequality of market income.

We can illustrate this by studying a particularly influential and significant case in the group of Continental countries: the Netherlands. Figure 5 compares the Netherlands with the UK, an influen-

tial case of the liberal welfare regime. The figure shows that since the 1980s, the Netherlands liberalized to a similar extent as the UK. However, income inequality developed very differently. Market income inequality and disposable income inequality increased substantially over time in the UK but increased only minimally in the Netherlands. Hence, the major effect seems to be that while Continental governments liberalize, certain policy fields and institutions that are highly relevant for income developments (e.g. the system of labor relations) are spared from liberalizing interventions in comparison with other welfare regimes. These are, of course, only assumptions that align well with our broadly based quantitative findings, and further qualitative analysis is needed to show how this Continental pattern of liberalization works.

Figure 5: Liberalization and inequality in the Netherlands and the UK



Conclusion

Based on an encompassing dataset on liberalizing reforms in 25 countries in the period 1973-2013, we showed that liberalization has contributed to increasing income inequality. The post-communist countries are a special case. In particular, this case underlines the erosive effect of liberalization on income inequality. Conforming with Kees van Kersbergen's work, our results indicate that in the Mediterranean and the Anglo-Saxon countries, this erosive potential is unleashed most. In contrast, in the Continental European and Nordic regimes, policies and institutions either constrain market inequality in times of liberalization (Continental countries), or the political system accepts that market inequality increases while simultaneously mustering considerable resources for redistribution (Nordic countries). Both strategies in the end lead to an even (slightly) egalitarian effect of liberalizing reforms on the distribution of disposable incomes – but, of course, only under these regimes.

Here, we do not enter the discussion of the shortcomings of this analysis and the need for further (qualitative) analysis. To us, it is important to show that Kees van Kersbergen's argument still holds when confronted with a new and encompassing dataset.

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