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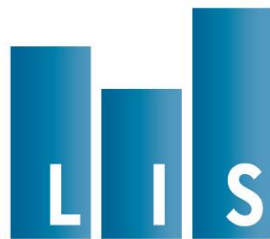
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The End of Welfare States as We Know Them? A Multidimensional Perspective

Jakub Sowula^{1,2}, Franziska Gehrig¹, Lyle A. Scruggs³, Martin Seeleib-Kaiser¹ & Gabriela Ramalho Tafoya⁴

This article highlights the limitations of unidimensional analyses in the comparative welfare state literature and emphasises the need for a more holistic, multidimensional approach incorporating social spending, welfare state outputs, and outcomes. To illustrate the utility of a multidimensional approach, we examine the long-term welfare state trajectories of Sweden and Germany, prototypical social-democratic and conservative welfare states, respectively, and compare them against the baseline of Europe's prototypical liberal welfare state, the United Kingdom. The social spending (expenditure) and output (generosity) allowed us to identify significant changes in the Swedish welfare state (i.e., retrenchment). The outcome dimension alerts us to a policy drift in the German Welfare State, as relatively stable public spending and welfare generosity until the first half of the 2000s were nonetheless associated with sharply increased inequality and poverty. Overall, our findings suggest that a holistic, multidimensional approach is necessary to fully understand the complexities of welfare state change and continuity, as focusing solely on one dimension can lead to analytical misjudgments. The sharp rise in inequality and poverty across countries raises doubts about whether policymakers and researchers rely too much on outdated assumptions of normality that fail to meet the welfare state realities of today.

Keywords: Multidimensional Welfare State Change, Social Spending, Generosity, Poverty and Inequality, UK, Germany, Sweden, Welfare Regimes

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I. Introduction

A major shortcoming in the comparative welfare state literature is that most studies investigate welfare state change unidimensionally, focusing either on social spending, outputs (institutional rules), or outcomes (social inequalities). This leads to issues associated with the *dependent variable problem* (Clasen & Siegel, 2007b). While all these welfare state dimensions have a *raison d'être*, relying solely on unidimensional analyses can mask common trends along different dimensions.

For example, expenditure over time is a good indicator of welfare state commitment to certain transfer programmes and services (Huber & Stephens, 2001). However, analysing only social spending could lead to inferential mistakes, such as when changes in spending levels do not map logically to changes in individual social rights and benefits (cf. Esping-Andersen, 1990). This is because spending levels are a function not only of individual generosity (what benefit level does the welfare state provide to individuals) but also of need (how many individuals need assistance). Moreover, since comparative spending analyses typically measure "spending" ratios (social spending/GDP), measured changes not only reflect changes in benefit commitments and the number in need but also changing macroeconomic aggregates: the state's automatic mechanisms *reacting* to times of crises (e.g., Marx and Rie, 2014; Reinprecht et al., 2018).

This measurement problem is alleviated by considering non-spending indicators, such as institutional rules of benefit entitlements (Esping-Andersen, 1990; Scruggs, 2007). The *welfare generosity index* measures social insurance benefit generosity and strongly resembles decommodification (Scruggs & Ramalho Tafoya, 2022), complementing social expenditure analyses (Clasen and Siegel, 2007a; Clayton and Pontusson, 1998). Welfare generosity and expenditure levels are correlated; applying social programme rules more or less mechanically produces social programme expenditure (Scruggs, 2008; Scruggs and Allan, 2006b). But the year-to-year evolution in commitments (generosity) is much less correlated with year-to-year changes in spending, and considering both have been shown to be associated with social outcomes like poverty rates and redistribution (Brady, 2009; Brady and Bostic, 2015; Scruggs and Allan, 2006a).

However, even social spending and output analyses may mislead if welfare state *needs* are not considered (cf. *policy drift*; Mahoney & Thelen, 2010; Streeck & Thelen, 2005). Such developments require analysing welfare state outcomes *directly* (e.g., Seeleib-Kaiser, 2016). Surprisingly, outcomes have not been the main focus of comparative welfare state research (cf. Clasen and Siegel, 2007b, but see: Goodin et al., 1999; Scruggs and Allan, 2006a) even though outcomes indicate the welfare state's "ability to reach certain societal goals" (Ferragina, Seeleib-Kaiser, & Spreckelsen, 2015, p. 288), which is essential for its legitimacy (Scharpf, 1999).

In this paper, we emphasise a more holistic, multidimensional contextualisation and suggest that this may help to prevent analytical misjudgements, ultimately enhancing scholarly debates. The utility of this approach is illustrated by examining the long-term welfare state trajectories of the prototypical social-democratic and conservative welfare states (Sweden and Germany, respectively) judged against the baseline of Europe's prototypical liberal welfare state (the United Kingdom) (cf. Esping-Andersen, 1990, 1999; Ferragina and Seeleib-Kaiser, 2011). This case selection is not novel but is relevant: these cases

remain widely used in social policy and comparative welfare state research (cf. Emmenegger et al., 2015). By applying our approach, we shed light on the research question of whether Sweden and Germany can still be considered prototypical for the social-democratic and conservative welfare regimes when analysing welfare state trajectories from a multidimensional perspective. In what follows, we set the scene for how to achieve a holistic, multidimensional welfare state change contextualisation, investigate developments over time in the single dimensions for Sweden and Germany and discuss the results of applying our approach.

II. Setting the Scene: Multidimensional Welfare State Change Analysis

Measuring welfare state change is complex and context-dependent (Andersen, 2007; Clasen and Siegel, 2007b). Divergent conceptualisations of welfare state change, often based on decisions to measure (or “explain”) *either* social spending, outputs, or outcomes, have led to different conclusions about the nature and strength of change. It is largely these differences that give rise to the *dependent variable problem* (Clasen & Siegel, 2007a) in comparative welfare state research. While it is right that theoretical considerations and conceptualisations should guide the choice of the dependent variable in explanatory studies (Green-Pedersen, 2004, 2007; Pierson, 2001a), a multidimensional contextualisation can help situate different results and guide further (causality) analyses.

The first step for creating a multidimensional contextualisation is defining an adequate spatial and temporal reference frame. Here, we track changes over roughly a forty-year period from the late 70s to the late 2010s. Importantly, Esping-Andersen’s (1990) original classification of welfare regimes is based on policies around 1980 (cf. Danforth, 2014). The seminal “Growth to Limits” series and other works describe the late 1970s and early 1980s as a possible inflection point (cf. Allan and Scruggs, 2004; Danforth, 2014; Flora, 1986; Pierson, 2001). Lastly, investigating an extended time period alleviates a stability bias (Seeleib-Kaiser, 2016).

We compare developments in Sweden (the social democratic welfare state prototype) and Germany (the conservative welfare state prototype) to the *liberal benchmark*: the UK in 1980-85.¹ Conditions in the early 1980s UK serve as a fixed point of comparison (cf. for a similar approach Lindbom, 2001). How features of Germany’s or Sweden’s performance varies over time on our social spending, output and outcome measures relative to the UK position in the early 1980s provides a basis for evaluating these regimes against a more or less fixed standard. We also check UK development relative to the benchmark (UK 1980-85) where appropriate to see how the *benchmark* may have changed in the last 40 years.

For measuring social spending, we use total gross and net expenditure as % of GDP from the OECD (SOCX) as a renowned and commonly used data source.² For the *output* dimension, we use updated generosity indices from the CWEP dataset (Scruggs & Ramalho Tafoya, 2022). Currently, CWEP is the most extensive social protection indicator dataset allowing to see how social benefits (unemployment,

¹ The UK remains commonly classified as a liberal welfare state (Ferragina & Seeleib-Kaiser, 2011), and the Thatcher era is seen as emblematic of dismantling the welfare state. Moreover, choosing UK instead of US highly increases data availability, which was a central concern for our analysis.

² More information on the social expenditure indices are detailed in OECD (2023e).

pensions, sickness) have evolved since the early 1970s for a wide range of countries. The CWEP dataset includes generosity indices on unemployment insurance, sick pay, old-age pensions, and an additive index of *total welfare generosity*. Each program index is composed of multiple sub-indicators of benefit generosity. The unemployment and sick pay generosity indices consider net income replacement rates, benefit duration, benefit qualifying period, waiting days, and share of the insured labor force. The pension generosity index consists of five indicators: benefit replacement rate, expected pension duration, qualifying period, funding ratio, and coverage. The indicators and the construction of the indices are detailed in Scruggs and Ramalho Tafoya (2022).

For the *outcomes* dimension, we look at poverty and inequality levels and trends. From the wide range of possible measurements (cf. Besharov & Couch, 2012; Salverda et al., 2009), comparative welfare state change scholars typically rely on income-based approaches for reasons of data availability and comparability (cf. Förster & D’Ercole, 2012). We harmonised measures from three different data sets (EU-SILC³, OECD Income Distribution Data (IDD, OECD), and Luxembourg Income Studies (LIS)) to create integrated historical indices of inequality (GINI) and poverty (50% and 60% of median disposable household income) before and after taxes and transfers. Our approach allows us to overcome the serious limitation that no single source provides a series extending over the entire 40-year period we evaluate here and to compare countries over a much longer period of time than previous studies. The methodology for creating the integrated indices, as well as benefits and limitations, are detailed in the appendix. In the following, we present the results of the social spending, output, and outcome analyses for Sweden and Germany compared to our liberal benchmark (UK 80-85).

III. Welfare State Change in Sweden and Germany since 1975

a. Social Spending (Expenditure)

Figure 1 displays total social expenditure in three formats. Panel 1 (G1) displays gross spending as a share of GDP, panel 2 (G2) displays real spending per person in US dollars (as PPP), and panel 3 (G3) shows net spending as a share of GDP. The UK baseline is represented as a dashed line in panels 1 and 2 (G1, G2). Circa 1980, "social-democratic" Sweden outpaced "conservative" Germany, which in turn outpaced the "liberal" UK in social spending (G1). This is consistent with the idea that the variable "spending ratios" can identify welfare regimes. The difference in spending between Sweden and Germany grew slightly in the 1980s, accelerating in the 1990s, before converging towards German levels (in both gross and per capita spending; G1, G2) in the late 1990s. Swedish spending accelerated in the 1990s due in part to a major banking crisis (Englund, 1999). German spending rose slightly in the 1990s (partly due to German unification). After 1993, Sweden made large cuts in the social budget and converged rapidly on German social spending ratios, where it has been tracked consistently since the creation of the Euro in 2001. With the ups and downs in the 1980s and 1990s, Swedish spending ratios in 2019 were quite close to what they were in the early 1980s. Germany's spending increased slightly in the period. These expenditure ratios are clearly higher than the UK80-85 baseline. The same is true

³ For the years before the launch of EU-SILC we relied on data from the European Community Household Panel (ECHP).

for actual UK developments, although there are noticeable long-term increases in spending, lifting the “floor” slightly. However, a decreasing trend in spending is visible from 2013 onwards (G1, G2).

[Insert figure 1 around here]

What is more interesting about spending ratios is that it is Germany (since 1996) that spends the most if we ignore the Swedish spending that is clawed back in taxation (G3, see also: Adema et al., 2011). Overall, the social spending data implies that Germany and Sweden spent considerably more on social protections over the years than the “liberal” UK80-85 baseline, suggesting that neither country has seriously converged on a liberal model in this area, rather displaying a *growth to limit*. UK spending (crossed-line in G1 and G2) grew somewhat from the early 80s, with a strong increase in the 2000s and a strong decrease in the 2010s, with little evidence of a catch-up over the long run. However, looking at social spending over time does create some ambiguity about the relative positions of Sweden and Germany. Sweden had higher overall social protection spending than Germany through the mid-1990s, but since then, the evidence suggests that Sweden has lagged behind Germany on the spending side. While it has a comparable gross spending ratio, net spending has consistently tracked somewhat lower since 1995. This implies some lasting retrenchment in the Swedish welfare state.

Investigating programme spending helps disentangle changes in total spending (panels G1-3 in figure 2) and can indicate shifting policy priorities (Castles, 2009). For pensions (G1) and family spending (G2), we again witness relative stability when only comparing 1980 to 2019, although there is a wide variation between 1990 and 2015. The biggest changes in programme expenditure ratios are visible for unemployment spending, with UK spending being highest in 1980 and lowest in 2019 (G3). However, such trends must be put into perspective by considering economic and socio-demographic parameters (cf. Marx and Rie, 2014), like the proportion or number of benefit recipients.

[Insert figure 2 around here]

For example, with respect to pensions (G1), the picture of relative stability in the three countries is somewhat misleading as it does not account for the share of elderly people. This is best exemplified by focusing on Germany, where the percentage of the elderly population until 2003 has been between or below the Swedish and UK levels. However, with a fast ageing society, Germany’s share of elderly people from 2005 onwards is considerably higher than in the UK or Sweden (2019: Ger 21.65%; SWE: 19.95%; UK: 18.53%; OECD, 2023a). Given that spending levels in 2019 are similar to those of 1980, whilst the number of benefit recipients has increased considerably (elderly population average 1980-2000: 15.22%; Average 2001-2019: 19.99%), a decline in generosity of German pensions has occurred. At the same time, the moderate increase in family spending (G2) in Germany does not account for the decreasing number of children and dependent youth (OECD, 2023c); spending stability de facto transpires into higher spending per child. Accordingly, only when accounting for the size of the benefit recipient population is it possible to depict shifting policy priorities (for further information on Germany, cf. Bleses and Seeleib-Kaiser, 2004).

Similarly, comparing Swedish unemployment spending levels (G3) in the early 1980s to 2019 could be misinterpreted when not considering the unemployment rate, which was much higher in 2019 than in

the 1980s (1983: 3.67; 2019: 8.8; OECD, 2023f). In addition, Sweden has witnessed large reductions in spending for active labour market policies (ALMP) (OECD, 2023d). When comparing Swedish spending on unemployment and ALMP during the global financial crisis (GFC; circa 2008-2013, unemployment rate of about 7.9%) to the phase of economic hardship in the 1990s (circa 1992-1997, unemployment rate of about 8.7%), combined average spending on ALMP and unemployment decreased from 4.5% to 1.6% of GDP. In contrast, the UK spent 2.5% on one of those programmes between 1983-1987 (unemployment rate of about 10.8%) and 0.7% in the GFC (unemployment rate of 7.48%). Whether we would judge unemployment support in Sweden during the GFC to be more “liberal” than social protection in the 1980s in Thatcher-ite Great Britain is not so clear, but we can say that there is considerable evidence of retrenchment in Swedish labour market protection expenditure.⁴

Output (Generosity)

Figure 3 shows total generosity scores from the 1970s to 2018 for Sweden, Germany, and the UK and its 80-85 benchmark (dashed line). Sweden has undergone the most dramatic changes in benefit generosity, which is in line with the social spending data. The largest generosity gap between the three countries was in the early 80s, just after the Thatcher government short-circuited the prior Labour government’s efforts to create more earnings-related social insurance benefits.⁵ Cross-national gaps in generosity are at their minimum since the GFC, reflecting continuing retrenchment in the Swedish welfare state. Despite convergence of total social programme generosity scores, Sweden continues to rank above Germany and Germany above the UK and the 80-85 benchmark. Overall, we witness considerable Swedish retrenchment throughout the period, especially in the 1990s and to a lesser extent in the mid-2000s. UK developments align with the benchmark in the long run, supporting the argument for a continuance of liberal social policy. For Germany, we witness more or less continuity.

[Insert figure 3 around here]

In figure 4 (panels G1-G3), we decompose total generosity to compare trends for unemployment, sickness, and pension generosity scores in Germany and Sweden relative to the UK. The decline of generosity since the “golden age” is most clearly manifest in unemployment insurance programmes in the UK and Sweden (G1). Unemployment benefit generosity decreased by about 40% between 1992 and 2019 in Sweden. Although Sweden is still visibly more generous than the UK in 2019, Sweden scores slightly lower in 2019 than the UK did in the early 1980s. In Germany, unemployment benefit generosity has been more stable over the last 50 years. Most of the time, it is about 50% higher than the British 80-85 baseline and, from the mid-2000s to 2019, it scores remarkably higher than Sweden.

[Insert figure 4 around here]

⁴ Overall, we can see that the rise and decline in overall social spending ratios in Sweden is the result of reduced spending on those in the labour market (workers and their families) more than those on pensions, although relative spending per recipient also declined given that the elderly population continuously increased (OECD, 2023a).

⁵ Reforms to provide a meaningful earnings-related element to the sickness unemployment and public pension systems in the 1970s reflected a short-lived effort to transform the UK welfare system along the lines of a more continental model. They would almost certainly have produced much higher unemployment benefit spending in the early 1980s than the UK actually experienced.

Changes in unemployment generosity in Germany and Sweden have been driven mainly by changing programme replacement rates and coverage. Between the mid-1970s and 1994, Swedish replacement rates for single, average earners fluctuated between 75-95% but then declined to an average of 69%. Coverage under Sweden's Ghent unemployment insurance system also fell significantly from about 87% in 1998 to 66% in 2019, mainly due to several institutional changes (Lindellee & Berglund, 2022). The unemployment replacement rate for average earners in Germany declined for single workers beginning in 1984 (68%) to 60% in 1994. Unemployment benefit coverage declined from its peak in 1996 (93%) to just 78% in 2007 but bounced back to 89% in 2018.

However, the picture of a continuously generous unemployment benefit in Germany is somewhat misleading as CWEP measures replacement rates for the initial six months of unemployment. By relying on data from the OECD Benefits and Wages portal (OECD, 2023b), it is possible to compute benefit replacement rates at different unemployment durations since 2001. After the *Hartz reforms* at the beginning of the new millennium, long-term unemployment (>12 months) replacement rates were radically reduced to the social assistance level regardless of previous work history, a considerable decline in unemployment protection generosity for the many long-term unemployed in Germany (Seeleib-Kaiser, 2016). To illustrate, the replacement rate for a single individual who was long-term unemployed (12-24 months) and had earned average wages before losing their job fell from 55% in 2004 to 27% in 2005 and further declined to 17% by 2011 (OECD, 2023b).

G2 displays sickness benefit generosity. Germany and Sweden score significantly above the UK80-85 baseline throughout the period. Despite drastic changes, generosity has declined to some degree for Sweden and Germany, while it has increased slightly for the UK. For Sweden, fluctuations in sickness generosity are mainly due to changes in the (official) replacement rate. Germany's sick pay generosity mirrors changes in the unemployment generosity, caused by a decline in the replacement rate in 1997 from 80% to 70% of earnings, with a cap of 90% of net earnings (MISSOC, 1998).

The third panel (G3) displays changes in pension generosity. Though the distinctive generosity of the Swedish system declined gradually from a peak in the 1980s and witnessed "radical" reforms" in '94-98 (Anderson & Immergut, 2007, p. 349), it remains programmatically more generous than the German or the UK system. Swedish pension generosity declines mostly result from decreased standard and minimum pension replacement rates (after 1998), changes in funding (after 1998) and an increase in the qualification period for a full pension (in the 1980s). Germany also considerably cut the benefits for standard workers over the years. The standard pension replacement rates will continue to decline until 2030 due to the *Riester pension reform* of 2001 (which provides for a gradual reduction in the replacement rate to approximately 52%, cf. Seeleib-Kaiser, 2016). Rates for the minimum pension, on the other hand, experienced more stability.⁶

⁶ Depicting UK pension generosity is complicated due to the high degree of institutional instability and complexity of the UK pension system (cf. Blake and Blake, 2003; Bozio et al., 2010). Given these difficulties, the increasing UK pension generosity after 2000 can be attributed to increasing replacement rates in standard pension and especially minimum pension replacement rates during the Labour government. Furthermore, the UK experienced a relatively stronger increase in life expectancy after 2000.

One important trend reflected in pension generosity is the large increase in life expectancy at age 65 across countries. In 2018, an average pensioner retiring at 65 will, on average, receive pension benefits for 6 years longer in the UK, 6.4 years longer in Germany and 7.25 years longer in Sweden than their counterpart in 1970. This trend in life expectancy has strongly mitigated retrenchment in other pension measures since life expectancy has increased more than the standard age at which people claim their pensions. Despite the longevity, 'Sweden's pension generosity still declined over the period, and Germany is still below the UK80-85 level, indicating a liberal (i.e., commodifying) turn.

Overall, there is no change in the relative order of total generosity for the three countries, although there is a slight convergence between Germany and Sweden due to stark retrenchment in Sweden in the 90s and more moderate retrenchment since 2005. However, when looking at programme generosity scores, we see a large change in Sweden's unemployment benefit generosity, taking it below the UK80-85 baseline. Although pension generosity seems relatively stable due to generally increased life expectancy in all three countries, it masks relevant programme retrenchments in the income replacement rate and contribution period, e.g., the *Riester reforms* in Germany. Also, a decline in long-term unemployment assistance in Germany (due to the *Hartz reforms*) is not captured in the CWEP scores. Both the *Hartz* and *Riester reforms* undermined the normative goal of the conservative German welfare state to maintain the achieved living standard, making the system overall less generous (cf. Bleses and Seeleib-Kaiser, 2004; Fleckenstein, 2008; Seeleib-Kaiser, 2016). In terms of total generosity, the UK is about where it was in 1980-1985, though this is due to lower unemployment and higher pension generosity. In the next section, we discuss welfare state outcomes by analysing poverty and inequality developments.

Outcome (Poverty and Inequality)

Figure 5 displays poverty levels (50% and 60% of median disposable household income, G1) and market poverty rate reduction (60%) via taxes and transfers (G2). Sweden experienced quite low poverty until the early mid-1990s, followed by a stark increase in poverty in the second half of the decade. Poverty rates rose even more in the early 2000s, such that by 2019 both 50% and 60% poverty rates are at least double what they were in the 1970s and early 1980s. Germany's poverty rates climb somewhat in the early 1980s and again in the late 1990s. In 2019, poverty rates based on the 50% and 60% median income thresholds are higher in all three countries than in the benchmark case (UK1980-85). UK poverty over the period rises considerably from the late 1970s, peaks in the late 1980s and reverses course up to the GFC. Despite reversing course in the 1990s and 2000s, poverty in the UK is higher in the late 2010s than in the 1970s.

[Insert figure 5 around here]

G2 displays that a lot of the increase in 60% poverty rates in the UK (80s) and Sweden (90s and to a lesser extent in the mid-2000s) was indeed a function of reduced redistribution through taxes and transfers. The first increase in poverty in Sweden occurs following cuts in unemployment-related social spending and outputs (programme generosity) at the time of the major banking crisis and the end of solidaristic wage bargaining in the 90s (cf. Pontusson and Swenson, 1996). We see a strong decline in fiscal redistribution (G2), demonstrating how fiscal consolidation in times of economic crisis can lead to

rising poverty and inequality (cf. Agnello and Sousa, 2014; McManus et al., 2021; Sowula and Seeleib-Kaiser, 2023). The sharper increases in poverty after 2005 (G1) can partly be attributed to moderate retrenchment (see Figure 4, G1-3) and lower redistribution coupled with growing market income inequalities (see also: Salverda, 2021). Moreover, the nature of the second spike is different in that while relative poverty increased, absolute poverty declined (cf. Barth et al., 2021). Although the fiscal system had become significantly more redistributive in Germany during the early 1990s, poverty increased significantly. Subsequently, the redistributive effort reversed course in the wake of the *Hartz* and *Riester reforms* of the early 2000s (cf. Bleses and Seeleib-Kaiser, 2004; Fleckenstein, 2008; Seeleib-Kaiser, 2016).

[Insert figure 6 around here]

Figure 6 displays inequality trends using a post-fisc Gini coefficient (G1) and reduction in market inequality through taxes and transfers (G2). Differences in inequality between Sweden and Germany are the largest at the beginning of the 1980s (G1). Afterwards, German and Swedish inequality levels converged considerably upward to the UK80-85 benchmark level, however, not to actual UK levels (other than for poverty). The GFC raised Swedish inequality to the level of the early Thatcher government, whereas inequality in Germany had already reached UK80-85 levels before the GFC. Of course, UK inequality did rise rapidly through the 1980s, where it stayed until the GFC. The GFC lowered the UK Gini, but it has shot back up after 2016. The trends in the role of taxes and transfers (G2) in reducing Gini coefficients in Germany and Sweden resemble the patterns observed for poverty reduction (i.e., Figure 5, G2). As for poverty, in 2019, the UK reached its 1980-85 level regarding the reduction of market inequality through taxes and transfers.

Discussion and Conclusion

This paper contributes to the research aiming to clarify issues associated with the *dependent variable problem* in comparative welfare state research (Clasen & Siegel, 2007a) through multidimensional contextualisations. It is important to note that such contextualisations do not seek to identify causal variables or explain welfare state change or continuity. Instead, they serve as a complement to studies aiming for causal explanations. In explanatory studies, the choice of dependent variable should be guided by theoretical considerations and conceptualisations (Green-Pedersen, 2004, 2007; Pierson, 2001a) and a multidimensional approach might not be expedient and introduce too much complexity. However, for studies aiming at a nuanced portrayal of welfare states and welfare state changes, situating existing results and pointing to possible pathways for future causal analyses, a multidimensional perspective has clear advantages over unidimensional perspectives as we illustrate in the following lines.

We applied a multidimensional perspective to the question of whether Sweden and Germany can still be considered prototypical for the social democratic and conservative welfare regimes (cf. Ferragina and Seeleib-Kaiser, 2011). This was done by comparing developments in Germany and Sweden to the UK over time and a *liberal benchmark*, the UK1980-85. While it was possible to rely on commonly used data for social spending (OECD expenditure data) and output (generosity data: CWEP) to gauge long-run changes, for the outcome dimension (poverty and inequality data), we have had to “splice together”

several different time series of comparative poverty and income inequality series (see appendix for details).

Based on gross social spending in 1980 to 2019, we could conclude long-term stability for Sweden, interrupted by a turbulent decade between 1990 and 2000 in which family and unemployment spending first rose sharply and then strongly declined. After all, despite strong cuts in the budget during the 90s, total and programme-specific spending levels in 2019 are similar to those of the 'glorious' 1980s. Germany even increased total spending over time, at the end converging to Swedish spending levels. Both countries' spending levels are higher in 2019 than the liberal benchmark in the early 80s and higher than the UK throughout the whole period, implying the absence of liberalisation on the social spending dimension. However, such an interpretation would be highly misleading once we consider net spending and economic and socio-demographic parameters (e.g., higher unemployment or population ageing); such an approach indeed indicates strong retrenchment in labour market expenditures in Sweden in the 90s (and to a lesser extent the mid-2000s). Although Sweden experienced considerably higher unemployment in the second half of the 2010s compared to the 1980s, its spending is approximately the same, indicating a strong decline in spending per recipient. Moreover, when considering the decreasing number of children coupled with a rapidly ageing population in Germany, a shift in policy priorities becomes obvious, which has been characterised by Bleses and Seeleib-Kaiser (2004) as the dual transformation of the German welfare state.

Looking at the output dimension, we can identify relative stability for the UK and Germany, but we see a strong decline in generosity in Sweden across all programmes, especially for pensions and unemployment benefits. In 2019, Swedish unemployment generosity matches the liberal UK80-85 benchmark. Although overall generosity in Sweden is still higher than in Germany and the UK, Sweden experienced considerable retrenchment in the 1990s and the mid-2000s, as depicted by the total generosity indicator. However, the generosity index cannot show the core changes that took place in the German welfare state due to the construction of the CWEP database. The *Riester* and *Hartz* reforms resulted in giving up the goal of preserving the income status for pensioners, the long-term unemployed and those unemployed who do not qualify for unemployment insurance benefits (cf. Bleses and Seeleib-Kaiser, 2004; Fleckenstein, 2008; Seeleib-Kaiser, 2016).

Germany and Sweden experienced sharp and continuous increases in poverty and inequality, with most indicators exceeding or converging to the values of our liberal benchmark (UK 1980-85). Although it is true that the UK nowadays performs significantly worse on inequality (GINI) and slightly worse on poverty than Germany and Sweden, the relative yardstick could be the wrong measurement. After all, if Germany's and Sweden's outcome performance matches the outcome of what was considered a truly liberal social policy approach 40 years ago, it is reasonable to argue that based on this dimension more recent policies in Germany and Sweden can be considered as a liberalisation of social policy.

A juxtaposition of the results of the social spending (expenditure), output (generosity), and outcome dimensions (poverty and inequality) demonstrates the benefits of our multidimensional approach. While it is possible to depict significant changes in the Swedish welfare state by relying on the social spending and output dimension, this was not possible for the German welfare state. Instead, an analysis of the

outcome dimension of increasing inequality and poverty was necessary to capture the *policy drift* in Germany, despite relatively stable spending and generosity until the first half of the 2000s. To a lesser extent, we have also seen indications of such a trend in Sweden since the mid-2000s (although coupled with more visible retrenchment in traditional social insurance programmes).

Overall, the results of our multidimensional contextualisation leave us with important research inquiries and questions for the future. First, it demonstrates the necessity to incorporate social protection generosity indicators for *outsiders* (cf. Bonoli, 2005; Emmenegger et al. 2012) who do not align with the normative assumptions of the welfare state design into comparative welfare state datasets. Second, we should reassess the usefulness of the welfare regime approach or at least discuss whether Germany and Sweden are still appropriate to represent the conservative and social democratic welfare regime (see also: Seeleib-Kaiser and Sowula, 2020). Lastly, the most important question for policymakers and scholars is what innovative policy solutions can alleviate historically high rates of poverty and inequality across welfare states. Our study, similar to other previous research, suggests that only focusing on traditional income programmes might be inappropriate (see also: Marx and Rie, 2014). Instead, it might be time for a new social contract (cf. Cantillon, 2022).

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Appendix: Construction of integrated historical indices of poverty and inequality

A serious limitation of poverty and income inequality measures is that no single source provides a series extending over the entire period we are interested in studying. Even the best available income-based indicators provide only 1-3 data points per country per decade for decades far back. We address this by combining poverty and inequality measures from three renowned data sets: EU-SILC⁷, OECD Income Distribution Data (IDD, OECD), and Luxembourg Income Studies (LIS). We harmonised the methodology where possible (accessing LIS and EU-SILC/ECHP microdata, e.g., using the same equivalence scale) and combined the indicators. Combining LIS, IDD and EU-SILC indicators is justified as LIS, EU-SILC, and IDD are methodologically similar and relatively consistent regarding the variation and position of countries. However, the absolute values between those datasets still differ (cf. Maquet and Stanton, 2012; Nolan and Marx, 2009). Accordingly, when using the integrated index, researchers must be cautious with claims that in year *x* for country *y*, poverty is exactly *z*, as the *real* value could lie slightly above or below. However, due to the consistency in positioning and variation across the datasets, it is possible to compare countries' performance over time. Since it is not possible to access IDD microdata, this limits analytical options.⁸ Nevertheless, our approach enables the analyses of several key indicators mentioned in the poverty and inequality literature for extended periods of time: relative poverty rates (50% and 60% of the median) and a Gini index to display differences in depth of poverty and “benchmark country performance” (Förster & D’Ercole, 2012, p. 34), and comparing market poverty and inequality (before taxes and transfers) with net poverty and inequality (after taxes and transfers) to show redistribution effects of the welfare state.⁹ Moreover, it has the advantage of filtering out outliers in single datasets (e.g., caused by the break of a series) and pointing out common trends across datasets. A detailed description of how the historical integrated indices were calculated is presented on the next page.

⁷ For the years before the launch of EU-SILC we relied on data from the European Community Household Panel (ECHP).

⁸ Our approach does not allow investigating common measurements for the depth of poverty (e.g., income gap ratio, CUPI, cf. Atkinson, 1987; Sallila et al., 2006) or absolute poverty rates (cf. Maquet and Stanton, 2012; Nolan and Marx, 2009; Burkhauser, 2012), although having analytical advantages (e.g. Barth et al., 2021; Salverda, 2021; Scruggs and Allan, 2006a). This is also true for more sophisticated inequality analyses (e.g., decomposing the GINI index, cf. Barth et al., 2021).

⁹ The redistribution effects of the welfare state are not fully captured by studying the reduction of market poverty and inequality through taxes and transfers, but it is not possible to consider in-kind or non-cash benefits due to data availability (Burkhauser, 2012). Moreover, this also ignores effects of the welfare state (e.g., behavioural) on both the pre- and post-system (Förster & D’Ercole, 2012, see also: Bergh, 2005).

Calculation strategy for single data points

The following calculation steps were undertaken to calculate the integrated indices. The construction design aims to give equal weight to the three datasets and use all available data.

I. Linear interpolation within single indicators A, B, C from different data sources:

- Estimation of missing data points in the single indicators A, B, and C by relying on linear interpolation: for given two given nearest data points $(x_0, y_0); (x_1, y_1)$, we calculated any in-between data point (x, y) with:

$$y = y_0 \left(1 - \frac{x-x_0}{x_1-x_0}\right) + y_1 \left(\frac{x-x_0}{x_1-x_0}\right)$$

II. Combination of single interpolated indicators A, B, C into integrated indicator D

- **Case 1:** Data available for year x in indicators A, B, C
 - Calculate and use the mean of year x in A, B, C to create value for indicator D:
$$y_{x,D} = \frac{y_{x,A} + y_{x,B} + y_{x,C}}{3}$$
- Calculation of **trend data points** to expand single indicators (cases 2a-2d):
 - **Case 2a:** Data available for year x for the indicators A and B but not in C; Data available for at least one other year for the indicators A, B, C
 - Calculate the pairwise mean differences for all available interpolated data points for the same years between the indicators A and C, B and C:
 - Suppose there is data for the same m years in the indicators A and C, then calculate: $\overline{AC} := \frac{(y_{1,A}-y_{1,C})+\dots+(y_{m,A}-y_{m,C})}{m}$
 - Similarly, calculate: \overline{BC}
 - Then to calculate any value $y_{n,C}$ for a missing point in year n in indicator C use:
$$y_{n,C} = \frac{(y_{n,A}-y_{\overline{AC}})+(y_{n,B}-y_{\overline{BC}})}{2}$$
 - Calculate and use the mean of year n in A, B, C to create value for D
 - **Case 2b:** Data available for year x in indicator A but not in B and C; Data available for at least one other year for the indicators A, B, C
 - Calculate the pairwise mean differences for all available data points between the indicators A and C and B and C (see case 2a): $\overline{AC}; \overline{AB}$
 - Then to calculate any value $y_{n,C}$ or $y_{n,B}$ for a missing data in year n in indicators C and B, respectively:
$$y_{n,C} = (y_{n,A} - y_{\overline{AC}}); y_{n,B} = (y_{n,A} - y_{\overline{AB}})$$
 - Calculate and use the mean of year n in A, B, C to create value for D
 - **Case 2c:** Data available for year x_i for indicators A and B but not C; Data available for at least one other year x_j for A and B but not C; Data available for at least one other year x_k for B and C but not A
 - Calculate \overline{BC} (see case 2a)
 - Then to calculate any value $y_{n,C}$ for a missing point in year n in indicator C:
$$y_{n,C} = \frac{(y_{n,A}-y_{\overline{AB}}-y_{\overline{BC}})+(y_{n,B}-y_{\overline{BC}})}{2}$$
 - Calculate and use the mean of year n in A, B, C to create value for D
 - **Case 2d:** Data available for year x_i for indicator A but not B and C; Data available for at least one other year x_j for A and B but not C; Data available for at least one other year x_k for B and C but not A
 - Calculate $\overline{AB}; \overline{BC}$
 - Then to calculate any value $y_{n,B}$ for a missing point in year n in indicator B:
$$y_{n,B} = (y_{n,A} - y_{\overline{AB}})$$
 - Then to calculate any value $y_{n,C}$ for a missing point in year n in indicator C:
$$y_{n,C} = (y_{n,A} - y_{\overline{AB}} - y_{\overline{BC}})$$
 - Calculate and use the mean of year n in A, B, C to create value for D

Additional References for Appendix (not already included in the main text reference list)

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Figure legends

Figure 1. Social expenditure, 1980-2019. Data: OECD (2023c).

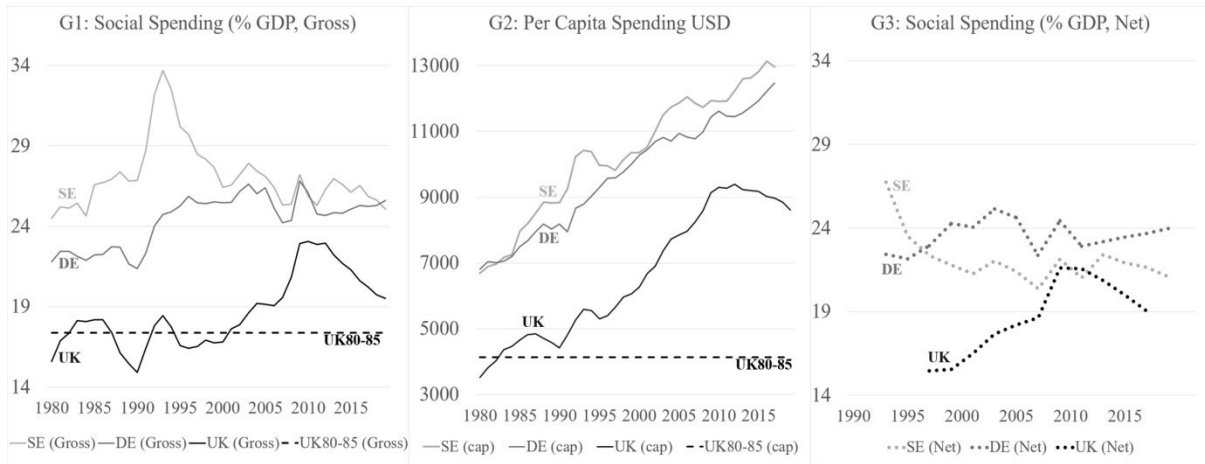


Figure 2. Expenditure in various spending programmes (in % of GDP), 1980-2019. Data: OECD (2023c).

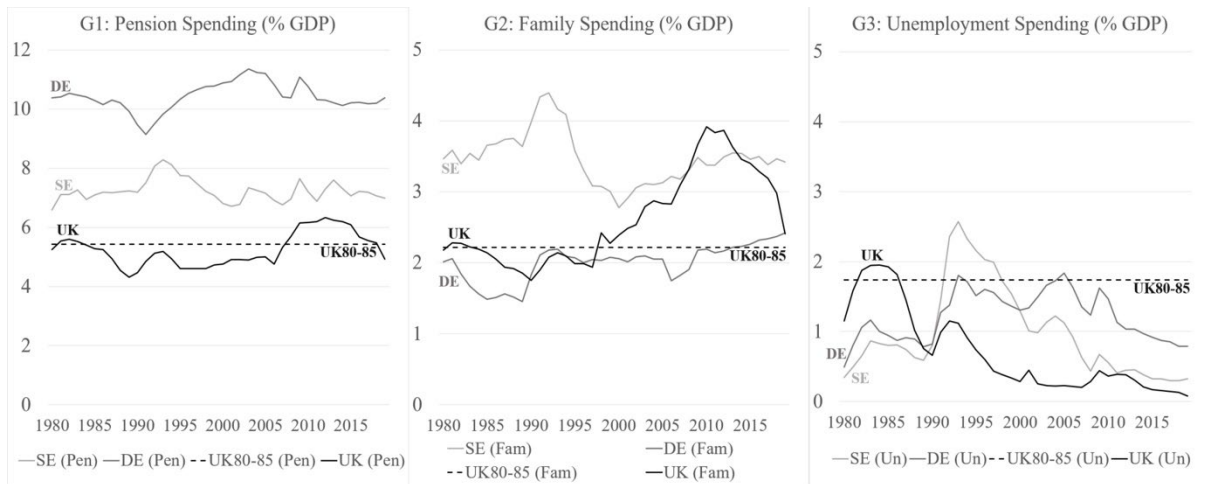


Figure 3. Total generosity, 1972-2018. Data: CWEP.

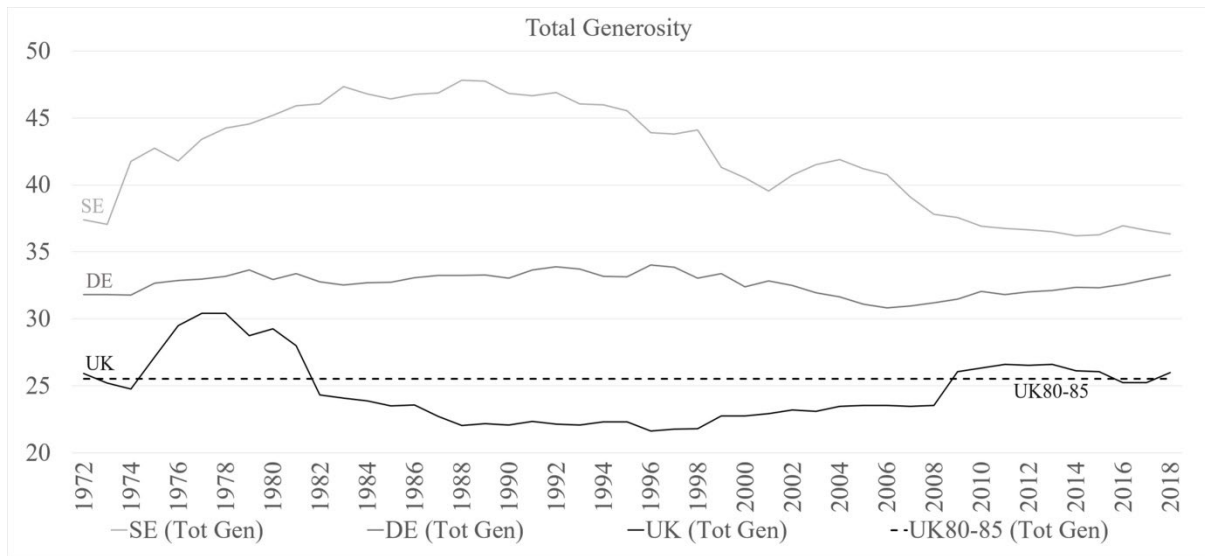


Figure 4. Generosity scores by programme. Data: CWEP.

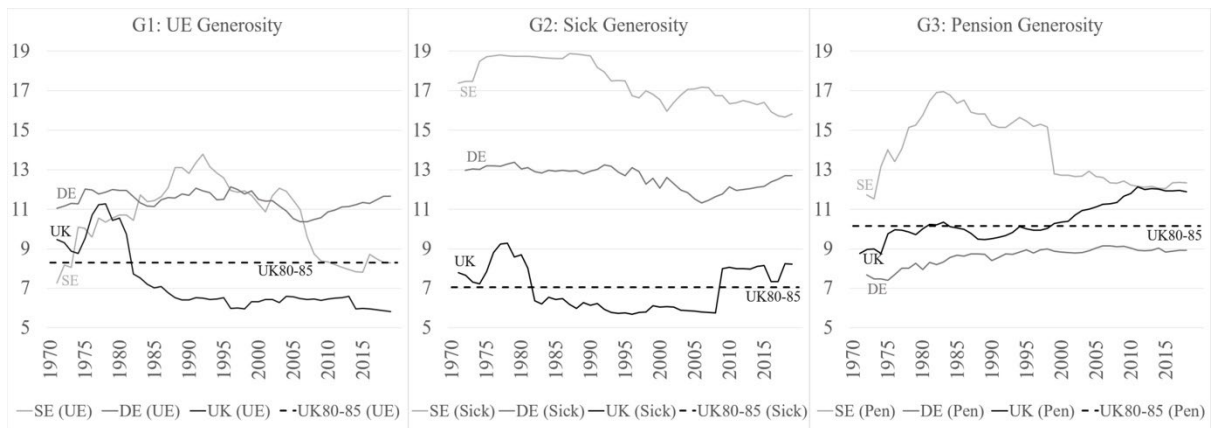


Figure 5. Poverty levels and market poverty reduction through taxes and transfers. Data: Integrated historical indices. See the appendix for more details.

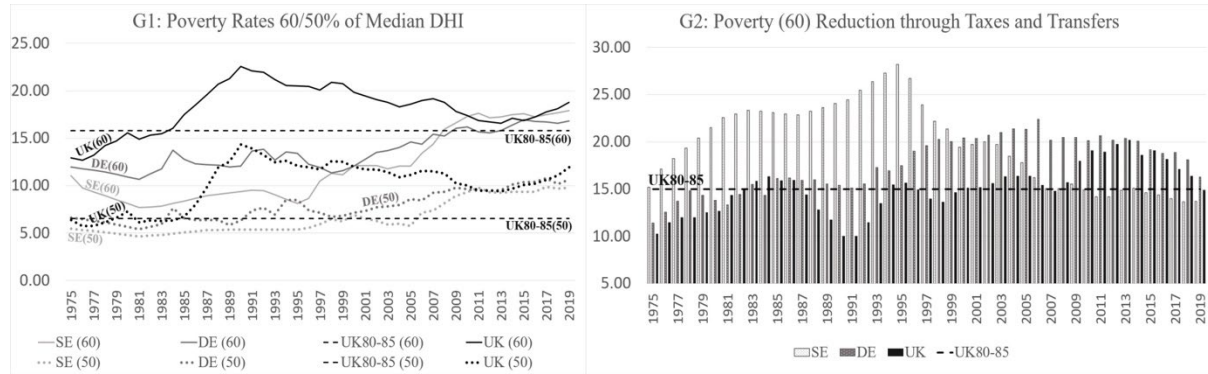


Figure 6. GINI and reduction of market GINI through taxes and transfers. Data: Integrated historical indices. See the appendix for more details.

