Inequality

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The welfare state and inequality: were the UK reforms of the 1940s a success?

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Introduction

The period immediately after World War II is widely seen as the beginning of the 'golden age' of the welfare state in western Europe (Wincott, 2013), not least in the UK where the Beveridge Report of 1942 is seen as a landmark. At the time, the results of the reforms of the 1940s were hailed as a great triumph, with the *Manchester Guardian* proclaiming 'the ending of poverty' and *The Times* celebrating 'the virtual abolition of the sheerest want'. From its inception in 1948, the National Health Service was enormously popular and often perceived as synonymous with the welfare state (Lowe, 1993). This euphoria was, however, short-lived. By the 1960s, poverty had been re-discovered (Abel-Smith and Townsend, 1965) and by the 1970s serious concern was being expressed about continuing disparities across social classes in health outcomes (Department of Health and Social Security, 1980).

Of course, the 1940s is better seen as the completion of the welfare state rather than its beginning, which dates back at least to the introduction of state old-age pensions and national insurance under the 1906–11 Liberal Government (Thane, 1982). The inter-war period saw a considerable expansion of government social welfare spending, from 4.7% of GDP in 1913 to 10.5% of GDP in 1937 (Middleton, 1996). From 1922 to 1938, an average of 22.1% of the population received a benefit payment at some point during the year (Boyer, 2018). By the late 1930s, 'absolute poverty' among working households in urban areas of the UK had virtually disappeared in the context of growth in wages and reductions in fertility since the start of the century (Gazeley and Newell, 2012). Nevertheless, resort to relief under the Poor Law was still very considerable and there were serious shortcomings in the provision of health services (Harris, 2004).

The years around the end of World War II certainly did see major reforms to the welfare state in the 'Beveridge era'. These include the National Assistance Act (of 1946), the National Insurance Act (of 1948), the Education Act (of 1944) and the National Health Service (of 1948). The implication was a large increase in government social expenditure and in taxation compared with pre-war days. The objective, according to Beveridge, was freedom from want, disease and ignorance. Even though the immediate objective was not to achieve specific decreases in the inequality of income, health and educational opportunity, clearly it was expected that these inequalities would be significantly reduced.

This commentary describes the reforms, sets out what is known about changes in inequality between the pre- and post-war periods and the impact of the reforms, and then seeks to evaluate the design of the Beveridge Report and the consequences of its less than full implementation. As is well known, it failed to meet expectations that it would abolish 'poverty' and in this commentary I seek to explain why this was the case and why the extent of redistribution and reduction in inequality after World War II was ultimately quite modest.

The welfare reforms of the 1940s

This section describes the reforms on which this commentary is focused, with a view to comparing the policy framework before and after. In total, the reforms represent a substantial body of legislation but there was continuity with, as well as change from, the inter-war arrangements. Indeed, in some respects, the designs adopted in the 1940s were shaped or even constrained by the historical legacy.

[1] I thank Ian Gazeley and Andrew Newell for helpful advice.

The 1944 Education Act introduced a tripartite system of free secondary education for all, with students placed in grammar, secondary modern or technical schools after an 11-plus examination taken by all children at the end of primary school. The school-leaving age was raised from 14 to 15, with effect from 1947. Previously, although elementary education was free, most adolescents left school without secondary education (only 19.6% of children aged 14–16 were in school in 1938) and many of the places (53% in 1938) at selective secondary schools were paid for by parents (Floud, 1954).

The implication was a considerable expansion of the education system and a significant improvement in educational attainment. Public expenditure on education rose from 2.1% of GDP in 1938 to 3.2% in 1951 (Middleton, 1996) while the gross enrolment rate for those aged 5–24 increased from 45.2% in 1938 to 56.1% in 1950 and 65.6% in 1955.[2] Of the cohort born in 1920–29, 57.0% (69.8%) of males (females) had no qualifications but for the cohort of 1940–49 this had fallen to 35.9% (46.2%), while the proportions whose highest qualification was an O level (or equivalent) had approximately doubled between these two cohorts (Smith, 2000).

The National Health Service (NHS), created in 1948, provided health care that was free at the point of use for all citizens, funded mainly by general taxation (88% initially) but also by National Insurance Contributions (12%). Hospitals were nationalised and services by GPs were paid for by the state. Social care was not covered by the NHS; it remained the responsibility of local authorities and was means tested. Capital expenditure was less than 5% of NHS expenditure and that on hospitals was at about one-third of the pre-war level and less than half of what was required to make good depreciation of a capital stock, at least half of which was at least 50 years old (Abel-Smith and Titmuss, 1956). Public expenditure on health services rose from 1.6% of GDP in 1938 to 3.4% in 1951 (Middleton, 1996). Initial estimates of the cost of the NHS were much too low. Expenditure in 1949–50 was about 2.5 times what had been projected in 1946 (Cutler, 2000).

In 1938, 63% of men and 30% of women had national health insurance in a scheme started in 1911, which covered workers with earnings below £250 per year but not their dependants. This was based on weekly flat rate contributions of 6 pence from the worker, 4 pence from the employer and 2 pence from the state. It paid sickness benefit of 15 shillings per week for 26 weeks and for access to a GP. The scheme was administered through approved societies, some of which funded a range of other medical services; however, only about 9% of workers with national insurance had any help with hospital costs (Harris, 2004). About five million households had private medical insurance (Digby and Bosanquet, 1988). Voluntary hospitals (1/3 beds), which charged fees or provided care funded by charity, co-existed with municipal hospitals (2/3 beds) funded by local authorities, which were especially important for the treatment of elderly patients. There was a very uneven provision of hospital services across regions, with London much better served than anywhere else (Powell, 1992). Provision of health services had expanded considerably compared with the early 20th century, but access to them was still quite unequal before World War II.

The 1946 National Insurance Act was the principal way by which the Beveridge Report was (incompletely) implemented. It was intended to provide a system of social insurance based on flat-rate benefits and contributions, which provided universal contingency benefits, including notably for unemployment, sickness and retirement, and was supplemented by family allowances. It was an upgraded version of the inter-war scheme with coverage of the whole population rather than about two-thirds of workers. The standard rate of social insurance benefit for a married couple was £2.10 per week, which compared with the 1938 level (of 1948 prices) of £1.84 and £2.48 for pension and unemployment benefit, respectively. There was no waiting period to build up contributions before a full pension was paid at retirement age. The estimates reported in Table 1 show that real total transfer payments under these categories were similar in 1937 and 1948–49 but, notably, payments of unemployment benefits were much lower and pension payments much higher in the latter year.

[2] Estimates of primary, secondary and tertiary gross enrolment are taken from database underlying Prados de la Escosura (2015).

Table 1. Social security transfer payments (£ million, in 1948 prices)

	1937	1948–49
Pensions	174.1	268.7
Unemployment	171.5	20.2
Public assistance	80.4	64.0
Sickness benefits	74.9	66.3
Family allowances		59.4
Milk and food transfers		35.5
Total	500.9	514.1

Note: Estimates for 1937 at current prices converted into 1948 prices using the Consumer Price Index from Thomas and Dimsdale (2017, Table A47, column D). Not including war pensions.

Source: Barna (1945); Cartter (1955).

The 1948 National Assistance Act provided the means-tested safety net that was intended to ensure that all citizens attained an acceptable minimum level of income regardless of their contribution history or the need to pay high rents. The standard rate was set at £2.00 plus rent per week. Given average rents of £0.55, this implied that a couple whose sole source of income was a social insurance benefit would need a top up from National Assistance to reach the acceptable minimum. There were 1.01 million weekly National Assistance payments in December 1948, which had risen to 2.64 million by November 1968 (Atkinson, 1969).[3] Evidently, the social security reforms of the 1940s did not achieve the end of means testing. Nevertheless, at the time this was not seen as a problem by the government, as means testing would be done on a personal not household basis and similar arrangements introduced for supplementary pension payments during the war had seemed to work well (Deacon, 1982).

The National Assistance Act proclaimed that 'the existing Poor Law shall cease to have effect'. National Assistance replaced Public Assistance, which since the 1929 Local Government Act had, in effect, been a remodelled Poor Law to provide for those who could prove need. This had been an important part of the 1930s social security system when, in every year, at least 5.2% of the population had recourse to it, many of whom were in receipt of (inadequate) national insurance benefits. By then, however, only about 13% were relieved inside the workhouse (Boyer, 2018). The scale of assistance was determined locally but the guideline maximum for a couple was £1.55 in 1948, significantly below the new National Assistance rate. Assistance for the unemployed in the 1930s was subject to a household means test, which was greatly resented and triggered vehement protests (Ward, 2013).

Altogether, these reforms entailed a substantial increase in government outlays on social security, education and health, which rose from 8.6% of GDP in 1937 to 11.5% in 1951 (Middleton, 1996). Clearly, changes to the tax system, some of which were consequential on the expansion of the welfare state, also need to be taken into account when considering the changing impact of government redistribution on income inequality. Table 2 reports a substantial increase in taxes/GDP from 21.6% in 1937 to 35.6% in 1948. The relative importance of direct taxes relative to indirect taxes rose between these two years. Cartter (1955) estimated that if 1937 tax rates had still applied in 1948–49, the tax yield would have been only 44% of the yield with those of 1948–49.

[3] National Assistance was renamed Supplementary Benefit in 1966.

Table 2. Taxes/GDP (%)

	1937	1948
Tax on expenditure	11.6	17.2
Taxes on income	6.2	13.7
Taxes on capital	1.8	1.8
National Insurance Contributions	2.0	2.9
Total	21.6	35.6

Source: Middleton (1996).

Table 3. Taxes, cash transfers and subsidies (percentage of original income)

1937				1948–49			
Income	Taxes	Transfers	Subsidies	Income	Taxes	Transfers	Subsidies
<£125	16.8	16.1	1.3	<£135	24.5	26.2	5.6
£125–£250	18.1	4.9	1.4	£135–£250	25.8	13.0	5.9
£250–£500	20.0	2.1	0.03	£250–£500	27.5	4.9	5.1
£500–£800	26.3	1.5		£500–£800	32.7	1.5	3.2
£800–£1,000	30.1			£800–£1,000	37.7	1.2	2.6
£1,000–£2,000	33.8			£1,000–£2,000	41.6	0.7	1.2
£2,000–£3,000	37.9			£2,000–£3,000	55.7	0.4	0.9
£3,000–£5,000	43.1			£3,000–£5,000	62.9	0.2	0.9
£5,000–£10,000	51.6			£5,000–£10,000	79.9	0.1	0.4
£10,000–£20,000	62.3			£10,000–£20,000	90.6	0.04	0.2
>£20,000	79.8			>£20,000	106.6	0.01	0.1

Note: Taxes include both direct and indirect taxes. Taxes in 1948–49 include the one-off 'special contribution', which was in effect a capital levy.

Source: Barna (1937); Cartter (1955).

Table 3 shows that, both pre- and post-war, there was a progressive tax system in that average total tax rates rose with income. The tax burden was higher at all income levels in 1948–49 but more so at relatively high real incomes.[4] A noticeable difference in 1948–49 was the much greater importance of subsidies for the lowest income groups, which mainly reflects a large outlay by government (£391 million) on subsidies to food prices, a policy that had been instigated during wartime. Conversely, in 1948–49, universal benefits under the expanded national insurance scheme with family allowances meant that, unlike in 1937, some cash transfers were received by the relatively well-off.

Changes in inequality

This section considers changes in inequality in education, health and income between the inter-war period and the early post-war years, in the context of the welfare reforms detailed above, and evidence on the impact that they may have had.

Education

In the context of the UK in the mid-20th century, the concept of inequality in education has been framed in terms of the relative chances of children from different social backgrounds attending a selective secondary school. In the aftermath of the 1944 Education Act, informed commentators, such as Glass (1954), expected that it would significantly increase the proportion of working-class children in state grammar schools, because fees had been abolished and entry was only through the competitive 11-plus examination. This was important for social mobility as grammar school was essentially the only route to formal educational qualifications at ages 16 and 18. In other words, the hope was that class inequalities in education and life chances would be reduced.

In fact, as is reflected in Table 4, the outcome was rather different. The odds of a son of a father of Class 1 (2) relative to a son of a father of class 7 (6) being in a selective school were 74/23 (62/21) for the 1940–49 cohort compared to 77/23 (70/25) for the 1920–29 cohort. For all social classes, including the poorest, the percentage getting a place in a grammar school was no higher for the later cohort, as the supply of places did not expand sufficiently to cope with larger numbers of children. Using these data, Heath and Clifford (1990) concluded that there was no evidence that the 1944 Education Act changed the terms on which children from different social classes competed for secondary school places. Home background seems to have had strong and persistent effects, to which the new arrangements for admission to selective schools were not an effective antidote.

A formal difference-in-differences analysis based on the British Household Panel Survey confirms that the education reform did not improve the relative chances that children from poorer home backgrounds would attend a selective school (Hart, Moro and Roberts, 2017). The same study did, however, find that after the reform the relative chances of lower-class boys leaving with exam qualifications rose because, once in the grammar school, more of them stayed on to 16. Those who failed the 11-plus, which included the vast majority of working-class children, went to secondary modern schools, which provided low-quality education that had minimal positive effect on subsequent performance in the labour market (Clark, 2022).[5]

[4] The Consumer Price Index was 84% higher in 1948–49.

[5] Clark (2022) found that there was no statistically significant effect on earnings from increasing the school-leaving age to 15 for these pupils in 1947.

Table 4. Percentage of males in each birth cohort attending selective secondary schools

Father's class	1910–19	1920–29	1930–39	1940–49
1	69	77	86	74
2	57	70	77	62
3	34	54	51	47
4	35	41	49	41
5	22	34	38	33
6	19	25	30	21
7	15	23	27	23
All	26	35	40	35

Note: Class 1 is higher-grade salaried, class 2 is lower-grade salaried, class 3 is routine non-manual, class 4 is petty bourgeoisie, class 5 is foremen and technicians, class 6 is skilled manual, and class 7 is semi-skilled and unskilled manual.

Source: Heath and Clifford (1990), based on 1972 Nuffield College Survey.

Health

Measuring inequality in health is not entirely straightforward. The most quoted summary statistic used to be the ratio of mortality in the top and bottom social classes, but this takes no account of the (much larger) intermediate classes and is potentially biased when the relative sizes of these two classes changes over time, as happened in the UK during the 20th century. These problems can be avoided by measuring the slope index of inequality (SII), which is based on the estimated relation between class death rates and the mid-point of each class's range in the cumulative proportionate ranking of the population from the lowest to the highest class. Normalizing this by dividing by the mean death rate gives the relative index of inequality (RII), which meets the minimal requirements of an appropriate measure.[6]

The traditional inequality measure – standardised mortality rate (SMR) in class V/SMR in class I – is reported in Table 5. It shows a considerable increase from 1930–32 to 1959–63. As noted above, this could be misleading; however, increased health inequality by social class over this period is also signalled by both SII and RII and, in both cases, inequality had risen further by 1970–72. After a careful review of the evidence, Pamuk (1985) concluded that the increase in relative social class mortality differentials was genuine rather than a statistical artefact. So, although its founders expected the opposite, after the establishment of the NHS, health inequalities increased rather than declined.

That said, the NHS health care system seems to have achieved a high degree of horizontal equity, i.e., equal access for equal need, which is unlikely to have been achieved in the inter-war period. The earliest evidence relates to the 1970s and 1980s and shows a very slight degree of pro-poor (whether measured in terms of social class or of income) bias in expenditure standardised for need in terms of utilisation of GPs and hospital treatment (Propper and Upward, 1992). More detailed and more recent evidence suggests that there is a slight pro-rich bias in utilisation of preventive health services and perhaps in the quality rather than the quantity of health care (Cookson et al., 2016). It is true that the legacy of a distinctly uneven regional distribution of hospital services was very slow to change prior to the 1970s (Gorsky and Millward, 2018) but it seems highly unlikely that the establishment of the NHS contributed significantly to the increased health inequalities reported in Table 5.

[6] Wagstaff, Paci and van Doorslaer (1991) review the pros and cons of different measures of health inequalities.

The reasons for increased health inequalities are more likely to be found in other inputs to health outcomes such as income and life-style choices. The most obvious of these is the development of a large difference in the proportion of smokers over time. Whereas in the 1950s about half of both class I and class V smoked, by 1971 the proportions were 36% and 54%, respectively, and by 1994, 14% and 37%, respectively (Wald and Nicolaides-Bouman, 1991; Fitzpatrick and Chandola, 2000). In the mid-1990s, when in total the mortality rate ratio was 2.5 for men in class V relative to class I, the smoking-related mortality rate among men aged 35–69 in class V was 5.6 times that in class I compared to a ratio of 1.7 for non-smoking-related deaths (Jha et al., 2006). This suggests that after the 1950s differences in smoking behaviour contributed substantially to rising health inequality across social classes.

Table 5. Social class index of inequality in adult male mortality

	Ratio of SMR: class V/class I	SII	RII
1921–23	1.52	−274.5	−29.8
1930–32	1.23	−181.0	−21.4
1949–53	1.37	−190.8	−28.2
1959–63	1.91	−287.9	−49.9
1970–72	1.78	−318.5	−56.4

Note: SMR is the standardised mortality rate, Class V is unskilled, and class I is professional and higher managerial, as defined by the Registrar General. The SII is a measure of the absolute advantage in terms of the average decline in the SMR per 100,000 of moving from the lowest to the highest social class. The RII is SII/mean SMR and is a measure of the proportionate decline in the SMR.

Source: Pamuk (1985); Shaw et al. (1999).

Income

Based on Inland Revenue statistics, it seems likely that there was a significant reduction in the inequality of original (i.e., pre-tax and benefit) income between 1937 and 1949. There are plausible reasons why this may have occurred, including a rise in the share of wages in national income from 61.8% to 66.0% (Feinstein, 1972), a large fall in the unemployment rate from 10.1% to 1.6% (Boyer and Hatton, 2002), and a reduction in wage dispersion (Routh, 1980).[7] Nevertheless, the data are such that there are doubts about the true magnitude of the change.

Taking the data at face value, the big issue is the lack of detailed data on households below the income tax exemption limit including on the number of individuals per tax unit. Glennerster (2006) re-worked the data in the original studies by Barna (1945) and Cartter (1955) to derive the estimates of equivalised incomes shown in Table 6. He found a large decrease in the Gini coefficient for original income in 1949 compared with 1937, from 37% to 26%, but noted that this was quite possibly an overestimate of the change. Analysis of the data presented in Stark (1972) suggests that this may well be the case but still suggests the possibility of a reduction from 36% in 1937 to 27% in 1949.[8]

The much lower inequality of original income in 1949 basically reflects a reduction in the share of top incomes. A new analysis of Inland Revenue sources including unpublished estimates for 1911 (Scott and Walker, 2020) reveals both a substantial fall in the share of the top 1% (5%) in pre-tax income over time from 30.2% (45.0%) in 1911 to 16.9% (31.7%) in 1937 and 11.4% (23.4%) in 1949.

[7] The ratio between male wages in upper professional/unskilled, which is a rough measure of the 90/10 percentiles ratio, fell from 4.9 in 1935–36 to 3.5 in 1955–56.

[8] These are tentative estimates made by my colleague Andrew Newell that assume two people per tax unit in the lowest 1937 category.

This was accompanied by a big decline in the share of 'unearned' (i.e. rent, interest and dividends) incomes from 74% of top 1% income in 1911 to 40% in 1937 and 28% in 1949. Estimates by Brittain (1960) show that if the top 2% of personal incomes are excluded, then the Gini coefficient for the remaining 98% was unchanged between 1937, 1949 and 1955. The evidence from household surveys that do not include top income recipients suggests only a small decrease of 1–2 percentage points in the Gini coefficient between 1937–38 and 1953–54 (Gazeley et al., 2017a).

The lower income share accruing to the very top of the distribution (and thus the apparent decline in pre-tax income inequality) may, at least to some extent, reflect tax avoidance and tax evasion, as was famously claimed by Titmuss (1962). This would hardly be surprising in an era of very high marginal income tax rates, which meant a much higher tax burden for top incomes in 1949 than in 1937 (see Table 3), and at a time when capital gains were not taxed. Brittain (1960) noted that a much smaller percentage of pre-tax company profits were distributed to persons (71% in 1938 but only 29% in 1949) and he also thought there was clear evidence of erosion of the income tax base.

Table 6 also reports estimates of the Gini coefficient for final income after all taxes and benefits. This was 14% in 1919 compared with 28% in 1937. The total impact of redistribution on the Gini coefficient amounted to 12 percentage points in 1949 up from 9 percentage points in 1937. Two of the extra three points come from benefits. Cartter (1955) estimated that net redistribution was 13.1% of national income in 1948–49 compared to 8.8% in 1937, and that in each year the net gainers represented 85%–90% of the population. At face value, these estimates suggest that most of the reduction in income inequality between the late 1930s and the late 1940s came from changes in the distribution of original income rather than from changes in the benefits and tax systems (Glennerster, 2006). This inference may be mistaken, however, if, as seems likely, the pre-tax incomes data are significantly distorted by tax avoidance and evasion.

Table 6. Gini coefficients of inequality in incomes before and after taxes and benefits, 1937–2018 (%)

	Original market income	Gross income (including cash benefits)	Disposable income (after direct taxes)	Income after all taxes	Final income (including benefits in kind)
1937	37	33	29	29	28
1949	26	21	16	16	14
1979	44	30	27	29	23
1987	51	36	33	36	30
1997–98	53	37	34	38	31
2004–05	51	36	32	36	29
2009–10	49	36	33	36	28
2017–18	46	36	33	36	28

Note: These values are not strictly comparable through time. In 1937 and 1949, the values are lower-bound estimates.

Source: Glennerster (2006), Office for National Statistics (2019) and unpublished data for 2009–10 supplied by Dominic Webber (Office for National Statistics).

A striking feature of Table 6 is the much greater difference between the Gini coefficients for original and final income towards the end of the 20th century, which by then typically amounts to a little over 20 percentage points. Then, redistribution was entirely through benefits not taxes, with cash benefits playing a much larger role than in the early post-war period. For example, in 1997–98, cash benefits reduced the Gini by 16 percentage points, over three times their impact in 1949. This reflects the fact that 11.5% of GDP spent by the government on education, health and social security in 1951 was much lower than the 20.5% of GDP in 1997.

Poverty

Optimism that poverty had been virtually eliminated stemmed from Rowntree's third survey of York. This found that 4.8% of working-class households (implying about 2.8% of all households) were in poverty in 1950 compared to 31.1% in 1936 (Rowntree and Lavers, 1951). Moreover, the large reduction in working-class poverty was estimated to be largely due to the post-war reforms to the welfare state, without which 24.7% would have been below the poverty line. In this context, 'poverty' was measured in terms of Rowntree's 'human needs' concept.

Later analysis of the surviving records from Rowntree's survey has found that the results published in 1951 were unreliable. Hatton and Bailey (2000) calculated that the true figure on Rowntree's own criterion was 11.8% of working-class households or 7.1% of all households in poverty. Earlier, Atkinson et al. (1981) came to a similar conclusion, finding that 14.4% of working-class households were below the National Assistance level of income (an alternative poverty line).

This makes it unsurprising that subsequently, when results from the Family Expenditure Surveys (FES) were analysed, poverty was 're-discovered' (Abel-Smith and Townsend, 1965). Indeed, a re-analysis of the 1953–54 FES found that 7.1% of all households were below the National Assistance level of income, 9.8% were below 140% of National Assistance income and 13.2% were below 60% of median equivalised income (Gazeley et al., 2017b). No comparable estimate has been made for the inter-war period but, extrapolating from the post-war period, a guesstimate is that about 16% of the population may have been below 60% of median income in 1937.[9]

Contrary to Rowntree's original findings, clearly a significant amount of poverty was still present in the early years after World War II. Hatton and Bailey (2000) also found that Rowntree had overstated the impact of welfare state reform on poverty. Their findings are set out in Table 7. They estimate that if the 1936 social security system had still been in place in 1950, the percentage of working-class households in poverty would have risen to 15.5%, and that if food subsidies had also been taken away, then 21.2% would have fallen below the poverty line. Thus, even if food subsidies are included, the total impact of welfare reform on working-class poverty was 9.4 percentage points rather than the 20.1 percentage points claimed by Rowntree and Lavers (1951).

Hatton and Bailey (1998) carried out a similar analysis of the New Survey of London Life and Labour, 1929–31. If Rowntree's 1936 poverty line was used, they found that 22.2% of working-class households were in poverty. Without the social security system of the time, this would have risen to 25.6%, and with the system of 1950 it would have fallen to 16.1% (Table 7). As they remark, 'the effects of changes in the social security system between 1930 and 1950 were neither trivial nor were they overwhelming' (Hatton and Bailey, 1998, p. 596).

[9] For the period 1961–2015, McKnight, Duque and Rucci (2017) estimated this measure of poverty = −0.0496 + 0.7261 Gini. If the Gini in 1937 = 0.29 (see Table 6), then this equation would predict poverty = 16.1%. The equation would also predict an after tax and cash benefits Gini = 0.25 for 1953–54, which casts further doubt on the suspiciously low estimate of 0.16 reported in Table 6.

Table 7. Estimates of household poverty rates (%)

1950, working class households, York	
Actual, 1936 Rowntree poverty line	11.8
With 1936 social security	15.5
Without food subsidies	17.5
With 1936 social security and without food subsidies	21.2
1929–31, working class households, London	
Actual, Rowntree 1936 poverty line	22.2
Without 1930 social security	25.6
With 1950 social security	16.1
1953–54, all households, UK	
Actual, National Assistance poverty line	7.1

Note: The 1936 Rowntree poverty line is 'human needs' variant in prices of each year.

Source: Gazeley et al. (2017b); Hatton and Bailey (1998, 2000).

The Beveridge Report

The objective of the Beveridge Report (Beveridge, 1942) was to propose a way to guarantee 'freedom from want' (i.e. to provide economic security) through 'social insurance'.[10] This is described as 'first and foremost, a plan of insurance – of giving in return for contributions benefits up to subsistence level, as of right and without means test' (Beveridge, 1942, p. 7). If required, National Assistance subject to a uniform means test would be a safety net for a limited number of cases that the scheme did not cover. The framework was built on a number of 'fundamental principles', which included a flat rate of subsistence benefit, a flat rate of contribution, and adequacy of benefit.

The chief means of providing income support was to be universal contingency benefits with the main categories being old-age pensions, sickness benefit and unemployment benefit. These would be financed by a combination of National Insurance Contributions (69%) and general taxation (31%). The level of benefit for a married couple (single person) would be £2.00 (£1.20) per week if prices were 25% above the 1938 level. In addition, children's allowances would be paid at the rate of £0.40 per week, financed entirely out of tax revenues. Full retirement pensions would only come on stream in 1965 at a rate of £2.00 for a married couple after a transition period to allow contributions to have been made and National Assistance would provide income support in the interim. For those already in the existing contributory pension scheme, or after 10 years of contributions to the new scheme, a pension of £1.25 per week would be paid initially, rising to the full rate in 1965. Overall, including the NHS as well as these various transfer payments, contributions and taxation would each pay for about half of the total cost.

Impractical blueprint

Although the Beveridge Report was widely welcomed at the time, subsequent assessments of its proposals have been quite critical for several reasons, including the fundamental point that it could not have delivered on its central promise (Glennerster and Evans, 1994; Lowe, 1994). A major difficulty was the very large variation in rent across the country; the Report noted average rents of 16 shillings in London but 4 shillings and 7 pence for agricultural households (Beveridge,

[10] The Report also proposed the establishment of a national health service funded very largely out of general taxation, but the analysis of this section of the paper only deals with the income-support aspects.

1942, p. 78) and then settled for a standard 10 shillings as a component of its subsistence benefit. This meant that, on the one hand, some households would require means-tested National Assistance but, on the other hand, expenditure on social security would have been 18% higher if 16 shillings rather than 10 shillings was allocated for rent to ensure adequacy of benefit for all. In turn, this would have implied higher National Insurance Contributions of 4 shillings and 11 pence (4 shillings and 1 pence) rather than 4 shillings and 3 pence (3 shillings and 6 pence) per male (female) employee, which may have been an excessive burden on the lowest-paid workers.[11] Raising benefits to the point where the highest rents were covered would also have resulted in a significant increase in the replacement rate for the unemployed – from 0.69 to 0.82 for the lowest decile of manual workers – and undermined work incentives, which worried Beveridge (Beveridge, 1942, p. 154).[12]

Another key issue was the proposed level of benefits, which was well below the poverty line adopted by Rowntree (1937) in his 1936 survey of York (Table 8) and whose 'adequacy' was therefore questionable. Raising benefits to the level required to achieve Rowntree's poverty line would have increased expenditure by perhaps 50%, assuming a standard rent component, and by 65% if means testing to cover high rents was to be avoided.[13] This would have seriously exacerbated the problem of the replacement rate, which would have been well over 1.00 in both cases. Moving to Rowntree's poverty line was not really compatible with Beveridge's belief that addressing poverty had been made amenable to his scheme by the relatively high level of wages.

The final reason why the Beveridge Report was a misleading prospectus was in its treatment of its long-term costs, which looked forward to 1965. These were projected on the basis of a constant level of benefits and thus presumably on a constant poverty line. Yet it is quite clearly stated that estimates of what is required for reasonable human subsistence change with time and generally increase (Beveridge, 1942, p. 14). Indeed, the Beveridge proposals were well above the level of Rowntree's 1899 ('physical efficiency') poverty line (Table 8). If, however, the real value of an adequate benefit rose over time, then it would require considerably more future government expenditure than was projected.

Table 8. Poverty lines, married couple (£, in 1948 prices)

Beveridge	£2.39 (including £0.55 rent)
Rowntree physical efficiency	£1.45 + rent
Rowntree human needs	£2.62 + rent
Rowntree and Lavers	£2.67 + rent
National Assistance	£2.00 + rent

Note: Conversion into 1948 prices based on Feinstein (1972) not the official cost-of-living index.

Source: Dilnot, Kay and Morris (1984), except for Rowntree physical efficiency, which is derived using Gazeley (2003).

Incomplete implementation

To a considerable extent, the social security reforms of the 1940s embodied Beveridge's proposals. Everyone was brought into the National Insurance scheme, universal benefits for the contingencies identified were provided, and the National Assistance safety net was established. However, the implementation of the post-war social security reforms differed in some important respects from the proposals of the Beveridge Report. On the one hand, in one key respect, namely, the immediate entitlement to a full pension without any transition period, the legislation

11 On the assumption that the proportions of finance for the scheme from various sources stayed the same; Beveridge was clearly nervous of imposing higher flat-rate contributions (Beveridge, 1942, pp. 113–15).

12 Based on earnings of £2.88 (£2.30 in 1938 × 1.25) (Royal Commission on the Distribution of Income and Wealth, 1975) and benefits of £2.38 rather than £2.00.

13 The ratio of Beveridge's recommendations to Rowntree's poverty line varies by household type. This calculation takes 0.8 to be a reasonable average (cf. Gazeley, 2003, Table 5.11).

was more generous. On the other hand, the level of insurance benefits was lower. For example, using the estimates of price changes since 1938 estimated by Feinstein (1972), the benefit level for a married couple should have been £2.39 (including rent) rather than £2.10 (i.e. almost 14% higher; see Table 8), although on the basis of the official cost-of-living index it was about right (Dilnot et al., 1984). When the National Assistance scale was decided in 1948, it was set at £2.00 + rent, which on Beveridge's standard figure would have added another £0.55 at that time. This seems to confirm that the National Insurance benefit level was 'inadequate'.[14]

Over the following 20 years, the social security system moved away from Beveridge's design in several important ways. Most obviously, expenditure far exceeded Beveridge's projections (see Table 9). In practice, insurance and National Assistance benefits were more or less indexed to wages, with the implication that their real value in 1948 had risen by about two-thirds by 1965.

Table 9. Social security expenditure: Beveridge's estimates, actual and counterfactual outlays (£ million, 1948–49 prices)

	Beveridge	Actual	Constant real benefits	Constant real benefits + actual demography
1948–49				
Pensions	142	176.6		
Unemployment	124	15.2		
Disability	81	43.4		
Other insurance	67	45.7		
National Assistance	53	34.0		
Children's allowances	127	65.0		
Total	594	379.9		
1965–66				
Pensions	339	658.8	392.6	379.3
Unemployment	121	26.2	15.6	15.6
Disability	97	132.2	78.8	78.8
Other insurance	69	138.0	82.2	82.2
National Assistance	36	133.9	79.8	79.8
Children's allowances	115	80.7	80.7	130.1
Total	777	1,169.8	729.7	765.8

Note: Constant benefits based on 1948 = 59.6% of 1965 except for children's allowances, and actual demography age structure is 0–14 = 12.9 million (8.0 million in Beveridge, 1942) and males ≥ 65 + females ≥ 60 = 8.4 million (8.7 million in Beveridge, 1942).

Source: Dilnot et al. (1984) and own calculations.

[14] It was widely known that the official cost-of-living index was unreliable but the extent of its underestimate of wartime inflation was perhaps less clear; see the discussion in Deacon (1982).

The overshoot in spending was almost entirely due to this, as is revealed by the calculations in the third and fourth columns of Table 9. Beveridge principles were discarded with the introduction of graduated contributions in 1961 and earnings-related benefit supplements in 1966. Means-tested National Assistance benefits remained above the National Insurance level and the numbers receiving them roughly doubled between 1948 and 1965 from 1.011 million to 2.012 million (Lowe, 1993).

Back to Beveridge?

Clearly, the 1940s welfare reforms did not achieve Beveridge's stated objective of adequate benefits for all without a means test. Means testing did not wither away, a significant fraction of working-class households remained below Rowntree's poverty line, and 7.1% of all households were below the National Assistance level of income in 1953–54 (see Table 7). That said, the reforms did make an important difference. Beckerman and Clark (1982) estimated that the social security system removed 84.3% of the pre-benefit poverty gap in 1961–63. Working-class poverty in York was reduced by 9.4 percentage points in 1950 and, if the 1950 benefits system had been in place in 1930, it would have reduced working-class poverty in London by 6.1 percentage points (see Table 7). It should be noted, however, that this was by no means down to National Insurance benefits only, as food subsidies and National Assistance were important contributors to poverty reduction (Hatton and Bailey, 1998, 2000).

By the 1960s, it had become obvious to many observers that the social security system was falling some way short of Beveridge's objective of ensuring that everybody reached an adequate level of income if that was defined by the National Assistance (Supplementary Benefit) scale. The desirability of 'Back to Beveridge' reforms was investigated, notably by Atkinson (1969). He estimated that between 4% and 9% of the population were below this poverty line. The reasons included that National Insurance benefits and Family Allowances were below the required level, that many people eligible for Supplementary Benefit (especially pensioners) did not apply for it, and that earnings of some low-paid workers were too low to support children at Supplementary Benefit level.

Table 10. A 1969–70 'Back to Beveridge' policy (£ million)

Gross cost	
Raise pensions to Supplementary Benefit level (IAR)	725
Raise other National Insurance benefits to Supplementary Benefit level (IAR)	175
Raise family allowances to Supplementary Benefit level	295
Offsets	
Reduced Supplementary Benefits	285
Increased Income Tax revenue	155
Net cost	**755**

Note: IAR means including average rent.

Source: Atkinson (1969).

Atkinson (1969) costed what he described as a 'Back to Beveridge' set of policy proposals framed in terms of taking the Supplementary Benefit scale as a 'national minimum', or 'adequacy of benefit' in Beveridge's terminology, as reported in Table 10.[15] The total cost of £755 million was about 1.7% of GDP, which he regarded as 'high'. The problem was that a good deal of the additional expenditure on Beveridge-type benefits went to the 'non-poor'. He argued in favour of what were called 'piecemeal reforms', which could fulfil the same aims at lower cost. These would include a more generous child benefit offset by abolishing child tax allowances, an income

[15] Means testing would still have been needed to deal with above average rents.

supplement for pensioners to bring them to Supplementary Benefit as of right, but offset by taxing their non-pension income, and introducing a minimum wage at £12.50 per week. He estimated the cost of this at between £325 and £500 million, depending on the precise specification.

Social insurance

Beveridge stressed repeatedly that 'social insurance' was the core of his scheme and this informed the Beveridge principles of flat-rate benefits and contributions. He emphasised that his proposal delivered benefits in return for contributions. Compulsory National Insurance was justified as a way of pooling risks and, in effect, addressing adverse selection problems that implied market failure.

More generally, the concept of social insurance might be thought of as a mechanism that protects the individual against economic risks against which private insurance is infeasible, such as inflation or unemployment or loss from unforeseen events such as the COVID-19 pandemic. A social insurance scheme differs from actuarial insurance where the premia cover expected loss plus a normal profit for the insurer (Barr, 2012) and entail benefits based on current need rather than past contributions. The terminology adopted by Beveridge was quite misleading – his proposals did not provide social insurance. For example, with Beveridge-style pensions, the elderly would have suffered severely from the unanticipated inflation of the 1970s against which they were much better protected by the de facto pay-as-you-go (PAYG) scheme, where pension benefits were increased as prices rose.

Once it is explicitly recognised that a comprehensive social insurance scheme is not actuarily based, then it can readily be designed to redistribute income from rich to poor. Beveridge's scheme was quite limited in its redistributive component because it was constructed to deviate as little as possible from actuarial insurance. The prime example of this can be seen in the proposal of a lengthy transition period to qualify for a full retirement pension. Flat-rate contributions also worked against redistribution partly because they were a regressive tax but also because they limited the scope to pay generous benefits. This was recognised at the time by economists in the Treasury, notably Keynes and Meade, both of whom would have preferred a wage-related social security tax. In the end, Keynes accepted the flat-rate contribution as expedient given the precedent of the inter-war National Insurance scheme, but for Beveridge it was a matter of principle (Glennerster and Evans, 1994).

The social security system developed in the light of the Beveridge Report relied heavily on contingency benefits as opposed to means-tested benefits (see Table 9). This would have reduced adverse incentive effects from high effective marginal tax rates but, at the same time, implied that a high proportion of expenditure on benefits went to the non-poor or was in excess of what was required to reach the poverty line. Beckerman and Clark (1982) estimated that only 27% of spending in 1961–63 contributed to reducing the poverty gap while for family allowances only 9.6% of spending went to the pre-benefit poor. In the end, this meant that achieving adequacy of National Insurance benefits was too expensive. The Meade Report (Meade et al., 1978) confirmed this when they concluded that returning to Beveridge principles would require an increase of £2.0 to £3.6 billion (1.5%–2.7% of GDP).[16]

The Beveridge Report believed that its principal objective of making sure that everyone received at least an acceptable national minimum level of income could be realised by facilitating a redistribution of workers' incomes over the life cycle and between good times and bad times, and did not require redistribution from profits and rents to wage earners (Beveridge, 1942, pp. 165–67). Its redistributive ambition was distinctly limited.

[16] The Meade Report effectively endorsed and updated Atkinson (1969) but also emphasised a requirement to introduce new contingency benefits (e.g. a home responsibility payment) to fill gaps in the Beveridge scheme.

Conclusions

The 1940s saw major changes to the welfare state in the UK. Within only a few years, the Education Act (of 1944), the National Insurance Act (of 1946), the National Assistance Act (of 1948) and the National Health Service (of 1948) were put into effect. For many people, the Beveridge Report (1942), which foreshadowed most of these reforms, has iconic status.

The implications for inequality were mixed and are not entirely clear. For educational opportunity, there appears to have been no significant effect from the introduction of the tripartite system of free secondary education for all, judged by the chances of going to a selective grammar school for children from different social classes. For health care, as best it can be measured, the NHS does seem to have delivered something close to 'equal access for equal need', which the inter-war health system surely didn't. However, this did not prevent a quite substantial increase in health inequalities across social classes in the post-war decades. Measured by the Gini coefficient and based on tax returns, income inequality was lower after World War II, but the underlying data leave a good deal to be desired. At face value, the evidence suggests that policy changes played a supporting role in this reduction but that they were much less important than declines in the share of top pre-tax incomes. It seems that the poverty headcount was lower in the 1950s than in the 1930s and this was partly due to reform of the welfare state, but poverty had not been abolished.

The Beveridge Report proposed a new system of social insurance that would provide an adequacy of benefit with a national minimum level of income for everybody and an end to means testing. The implementation of social security reforms in the 1940s did not achieve either of these objectives. That said, the post-Beveridge system was more effective than that its predecessor in alleviating poverty. However, the redistribution of income that it entailed was quite modest, as was intended by its author.

Overall, were these reforms to the welfare state 'a success'? Of course, opinions on this will differ, especially because any verdict requires value judgements. Those who would hope to see a Labour government deliver a big redistribution of income would be disappointed. It seems unlikely that any economist starting from scratch would seek to construct a social security system designed like that of the late-1940s UK. But, as a poor person, would you choose to live with the welfare state of the 1950s rather than that of the 1930s? The answer is surely yes.

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