



Analysing the effects of the proposed welfare reforms on London

October 2025

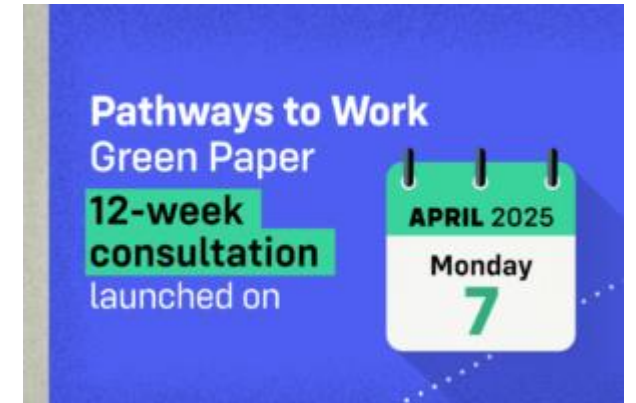
City Intelligence Unit and the wider GLA

- Social Policy Analysis (SPA) team exists within a wider City Intelligence Unit (CIU) within the Greater London Authority (GLA).
- 3 teams – GLA Economics (GLAE), City Modelling, and Strategy & Social Research.
- A lot of cross working and joint CIU products.
- Tax-benefit modelling is a new discipline we are hoping to do more of, with support from GLAE.



Background

- Spring Statement on 26 March 2025 announced a consultation on reforming health and disability benefits and employment support, as part of a larger package of policy reforms.
- Consultation deadline of 30 June 2025.
- Though the government produced its own Equality Analysis and Impact Assessment, the GLA wanted to understand the potential effects on London and Londoners, which were not included in their analysis.
- So, we used UKMOD to help us with this (our first time).



Starting out

- The GLA are members of the Premium User Group (PUG), which was vital for our first foray in this area.
- The advice we received, often at short notice, enabled us to create robust baseline and reform scenarios.
- The advice we received also explained the caveats and this enabled us to present our findings to senior leaders at the GLA in a considered manner.

UKMOD



1. *Journal of Management Studies*, 1990, 27, 1, 1-13.

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Fiscal Overview	Poverty (fixed)	Poverty (floating)	Inequality	Mean HH Income (equ)	Income Shares	Gainers/Losers	Cut Outs	Indirect Taxes	Tax Incentives	Metadata
Market incomes and fiscal overview										
£ million per year, current prices										
	UK_2025 Amounts (base)	UK_2025_noTwoChildand Amounts	Difference to base	Recipients/payers UK_2025 (base)	Recipients/payers UK_2025_noTwoChildand	Difference to base				
Total market incomes	305,295.72	305,295.72	0.00	5,986,637	5,986,637	0				
... employment and self-employment income	262,464.37	262,464.37	0.00	4,534,830	4,534,830	0				
... other sources of market income	42,831.35	42,831.35	0.00	5,057,669	5,057,669	0				
Government revenue through direct taxes and national insurance contributions	126,227.21	126,227.21	0.00	5,610,590	5,610,590	0				
... direct taxes	84,563.63	84,563.63	0.00	5,468,918	5,468,918	0				
..... personal income tax (simulated)	77,090.28	77,090.28	0.00	4,770,832	4,770,832	0				
..... devolved taxes in Scotland	0.00	0.00	0.00	0	0	0				
..... devolved taxes in Wales	0.00	0.00	0.00	0	0	0				
..... non-devolved taxes	77,090.28	77,090.28	0.00	4,770,832	4,770,832	0				
..... non-saving non-dividend taxes	67,417.14	67,417.14	0.00	4,723,038	4,723,038	0				
..... saving income taxes	9,117.79	9,117.79	0.00	811,658	811,658	0				
..... dividend income taxes	555.35	555.35	0.00	23,869	23,869	0				
..... council tax (non-simulated)	7,473.36	7,473.36	0.00	3,562,493	3,562,493	0				
... all national insurance contributions (simulated)	41,663.58	41,663.58	0.00	4,321,830	4,321,830	0				
..... national insurance contributions (personal)	10,227.90	10,227.90	0.00	4,000,871	4,000,871	0				
..... employee national insurance contributions	9,331.33	9,331.33	0.00	3,520,739	3,520,739	0				
..... self-employed national insurance contributions	896.56	896.56	0.00	537,829	537,829	0				
..... other national insurance contributions	0.00	0.00	0.00	0	0	0				
..... national insurance contributions (employer)	31,435.68	31,435.68	0.00	3,808,346	3,808,346	0				
Credited national insurance contributions	0.00	0.00	0.00	0	0	0				
Government revenue through indirect taxes	0.00	0.00	0.00	0	0	0				
... all ad valorem excise	0.00	0.00	0.00	0	0	0				
... all specific excise	0.00	0.00	0.00	0	0	0				
... all value added tax	0.00	0.00	0.00	0	0	0				
Government expenditure on benefits and tax credits	35,041.46	35,757.24	715.79	2,976,315	2,976,315	0				
... means-tested non-pension benefits (simulated)	17,131.36	17,847.15	715.78	1,875,792	1,875,792	0				
..... universal credit	12,570.43	12,971.42	400.99	1,005,983	1,008,896	2,913				
..... (-) benefit cap (reducing universal credit)	315.05	0.00	-315.05	56,898	0	-56,898				
..... income-based jobseeker's allowance	0.00	0.00	0.00	0	0	0				
..... income support not simulated elsewhere	0.00	0.00	0.00	0	0	0				
..... income-related employment and support allowance	0.00	0.00	0.00	0	0	0				
..... pension credit	903.01	903.01	0.00	173,137	173,137	0				
..... winter fuel allowance	42.62	42.62	0.00	203,924	203,924	0				
..... council tax benefit/reduction	793.11	792.85	-0.26	629,857	629,363	-494				
..... housing benefit	1,002.05	1,002.05	0.00	132,073	132,073	0				
..... (-) Benefit cap (reducing housing benefit)	0.00	0.00	0.00	0	0	0				
..... workson tax credit	0.00	0.00	0.00	0	0	0				

Image is illustrative only – not real data

Moving beyond the limitations of population-level analysis

- Within the package of benefit reforms, the component that we were primarily interested in – changes to the rate and eligibility of disability benefits – was targeted at a relatively small subset of London's population.
- We realised that in our initial population-level analysis, the impact of these targeted reforms was partially masked by:
 1. The more widespread upward effect on incomes resulting from the uprating of the Universal Credit (UC) Standard Allowance (far more people receive UC than disability benefits) and;
 2. The fact that the package of benefit reforms would not result in any substantive change in income for the large majority of Londoners.
- Thus, to obtain a better understanding of the impact of the disability benefit reforms on those targeted by these reforms, we needed to conduct a more targeted form of analysis.

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..... housing benefit	1,002.05	1,002.05	0.00	132,073	132,073	0				
..... (-) Benefit cap (reducing housing benefit)	0.00	0.00	0.00	0	0	0				
..... working tax credit	0.00	0.00	0.00	0	0	0				

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Jumping into the microdata

- Running the models in UKMOD produces respondent-level data outputs as .txt files. In terms of structure, these data outputs look the same as Households Below Average Income (HBAI) or Family Resources Survey (FRS) datasets (think SERNUM, BENUNIT etc.), yet they also include a suite of modelled variables unique to UKMOD.
- We conducted analysis of these modelled variables using Stata, through reference to the UKMOD variable spine and with no small degree of support from Justin.
- In the first instance, we sought to replicate with exact precision the outputs of the Statistics Presenter. Once we achieved this, we then moved onto adapting the process to allow for targeted analysis of those in receipt of the relevant disability benefits.

Isolating the effects on the targeted group

The process of conducting our targeted analysis can be broken down into several sequential stages:

1. We combine baseline and reform microdata outputs into a single composite dataset, adding a suffix to each variable name to distinguish between the two.
2. We identify the IDs of each household in receipt of each benefit in the baseline scenario, creating separate flags for each benefit, and an additional flag for those households that receive both types of disability benefits.
3. For each household, we calculate the differential in each disability benefit between the baseline and reform scenarios.
4. We generate the variables that we want to report on, namely, weekly equivalised household income and before housing costs (BHC) and after housing costs (AHC) poverty rates.
5. We then obtain simple descriptives on these reporting variables for our targeted groups.

```
* Preprocessing for creating categorical indicator for treated LCWRA recipient households
*=====
* Store values of LCWRA in locals
qui levelsof i_bsauc_amtdisadul_dif, local(lcwra_dif_levs)
local nontreated 0
local lcwra_dif_levs: list lcwra_dif_levs- nontreated
local countr = 1
foreach i of local lcwra_dif_levs {
    local lcwra_dif `countr' = `i'
    di `lcwra_dif `countr'
    local ++countr
}
* Drop bugged treatment cases
gen bugged = cond(i_bsauc_amtdisadul_dif==float(`lcwra_dif_1')|i_bsauc_amtdisadul_dif==float(`lcwra_dif_4'),1,0)
bysort idhh dpd: egen max = max(bugged)
replace bugged = max
drop max
count if bugged == 1
local n_bugged1 = `r(N)'
drop if bugged == 1
* Generate indicator (at person level)
gen lcwra_treat_type = 0
replace lcwra_treat_type = 1 if i_bsauc_amtdisadul_dif==float(`lcwra_dif_3')
replace lcwra_treat_type = 2 if i_bsauc_amtdisadul_dif==float(`lcwra_dif_2')

* Individuals in households that include a disabled person receiving LCWRA
*=====
* Sample
qui su dwt if lcwra_treat_type_hh!=0
di as text "Individuals in households that include a disabled person receiving LCWRA: N = " as result `r(N)'
mat `s' `geo'[5,1] = `r(N)'
* Poverty
qui su inpo_v_bhc if lcwra_treat_type_hh!=0 [aw=dwt]
di as text "BHC `geo' poverty rate for individuals in households that include a disabled person receiving LCWRA = " as result `r(mean)'
mat `s' `geo'[5,2] = `r(mean)'
qui su inpo_v_ahc if lcwra_treat_type_hh!=0 [aw=dwt]
di as text "AHC `geo' poverty rate for individuals in households that include a disabled person receiving LCWRA = " as result `r(mean)'
mat `s' `geo'[5,3] = `r(mean)'
* Mean HH income
qui su hh_dispy_bhc_eq if lcwra_treat_type_hh!=0 [aw=dwt]
di as text "BHC `geo' mean HH income for individuals in households that include a disabled person receiving LCWRA = " as result `r(mean)'
mat `s' `geo'[5,4] = `r(mean)'
qui su hh_dispy_ahc_eq if lcwra_treat_type_hh!=0 [aw=dwt]
di as text "AHC `geo' mean HH income for individuals in households that include a disabled person receiving LCWRA = " as result `r(mean)'
mat `s' `geo'[5,5] = `r(mean)'
```

Results

- Overall, the outputs of our targeted analysis present a quite different picture of the impacts of the disability benefit reforms.
- Whereas our initial population-level analysis indicated that the disability benefit reforms would have an effectively negligible impact on poverty and mean income in London, our targeted analysis showed a 1-point increase in London's BHC poverty rate among households that include a disabled person, equivalent to a £3.13 decrease in mean BHC weekly income.
- Digging deeper into specific subgroups within our targeted population we arrived at some even more striking findings:
 - For individuals in households that include a disabled person receiving Limited Capability for Work and Work-Related Activity (LCWRA) i.e. the UC health component, the model projected a **3.9-point increase in London's BHC poverty rate and £13.85 decrease in mean BHC weekly income.**
 - For individuals in households that include a disabled person who under the reforms will receive the LCWRA reduced rate, the model projected a **14.8-point increase in London's BHC poverty rate and £51.00 decrease in mean BHC weekly income.**
- Admittedly, we did run into some issues concerning our results for the Personal Independence Payment (PIP)-recipients subgroup in London – the HBAI sample of PIP recipient households in London is too small to permit robust targeted analysis. At the UK-level, however, the sample was sufficiently large. For individuals in households that include a disabled person who will lose eligibility for PIP, the model projected a **17.8-point increase in the UK's BHC poverty rate and a £85.34 decrease in mean BHC weekly income.**

London-level impacts

	Change between Reform and Baseline				
	<i>N-unweighted</i>	<i>BHC poverty</i>	<i>AHC poverty</i>	<i>BHC mean income</i>	<i>AHC mean income</i>
All individuals	11,212	0.2pp	-0.1pp	£0.00	-£0.01
Individuals in households that include a disabled person	1,860	1.0pp	0.2pp	-£3.13	-£3.17
Individuals in households that include a disabled person currently receiving PIP	483	2.7pp	4.1pp	-£9.95	-£10.01
Individuals in households that include a disabled person who will lose eligibility for PIP	3	0.0pp	100.0pp	-£105.12	-£115.04
Individuals in households that include a disabled person receiving LCWRA	841	3.8pp	1.7pp	-£13.84	-£13.73
Individuals in households that include a disabled person who will receive the LCWRA frozen rate	667	0.9pp	1.1pp	-£2.76	-£2.84
Individuals in households that include a disabled person who will receive the LCWRA reduced rate	190	14.8pp	3.4pp	-£51.01	-£50.09
Individuals in households that include disabled persons who will receive the LCWRA frozen rate and LCWRA reduced rate respectively	16	29.3pp	0.0pp	-£35.21	-£32.35
Individuals in households that include a disabled person currently PIP and/or LCWRA	984	3.2pp	1.5pp	-£11.60	-£11.52

UK-level impacts

	Change between Reform and Baseline				
	<i>N-unweighted</i>	<i>BHC poverty</i>	<i>AHC poverty</i>	<i>BHC mean income</i>	<i>AHC mean income</i>
All individuals	131,390	0.0pp	0.0pp	-£0.28	-£0.31
Individuals in households that include a disabled person	32,898	0.5pp	0.4pp	-£2.35	-£2.47
Individuals in households that include a disabled person currently receiving PIP	9,078	1.2pp	1.8pp	-£8.36	-£8.51
Individuals in households that include a disabled person who will lose eligibility for PIP	134	17.8pp	13.6pp	-£85.34	-£87.21
Individuals in households that include a disabled person receiving LCWRA	11,090	2.5pp	2.4pp	-£11.70	-£11.92
Individuals in households that include a disabled person who will receive the LCWRA frozen rate	8,969	0.8pp	0.7pp	-£3.87	-£3.92
Individuals in households that include a disabled person who will receive the LCWRA reduced rate	2,373	9.0pp	8.8pp	-£42.73	-£43.22
Individuals in households that include disabled persons who will receive the LCWRA frozen rate and LCWRA reduced rate respectively	252	5.1pp	5.5pp	-£34.99	-£32.70
Individuals in households that include a disabled person currently PIP and/or LCWRA	14,259	2.0pp	1.9pp	-£9.23	-£9.42

Summary

- Overall, our targeted analysis of the disability benefit reforms shows that these proposed policy changes would have a substantive, negative impact on those affected.
- More generally, the procedure we have described can be adapted to conduct targeted analysis of any given group. In a subsequent analysis we recently finished on potential reform to the UC two-child limit, we were able to adapt this procedure to analyse the impact of these modelled reforms on UC recipient households with 3 or more children.
- Our development of this procedure for targeted analysis of UKMOD model outputs can hopefully serve as an example use case for extending the parameters of UKMOD to allow for bespoke post-model analysis of targeted groups. We would be happy to share our code, or speak with anyone interested in conducting this type of analysis on UKMOD outputs.



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