

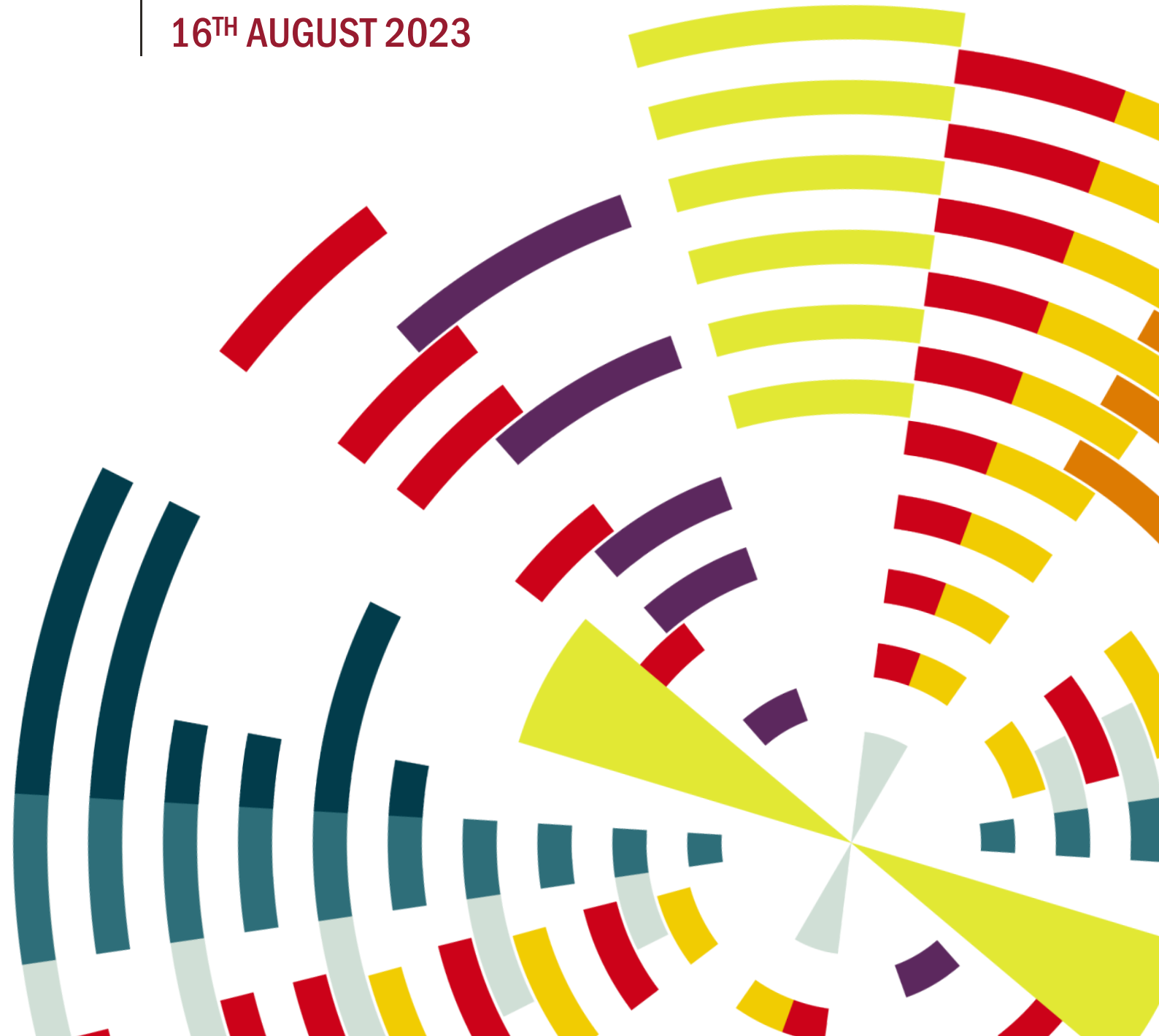
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LOW INCOME HOUSEHOLDS AND AFFORDING CONNECTIVITY

Report for BT Group

16TH AUGUST 2023



Overview

Social tariffs are discounted broadband or mobile packages to support access to connectivity for more financially vulnerable households, typically available to individuals in receipt of a means-tested Government benefit. Recent research published by Ofcom¹ indicated that take-up of such social tariffs, although increasing, is low, with only around 220,000 households in the UK taking up such tariffs.

BT Group commissioned Frontier Economics to use Government data sets to analyse the household income level, and therefore affordability of connectivity, for individuals eligible for their broadband social tariff.

BT Group wanted to explore the possibility that for, some of those eligible, household income is in fact too low to even be able to afford a social tariff. As Enders Analysis concluded in a recent report "...affordability issues are narrower but deeper than current social tariffs [discounted connectivity offers] can address".² Enders report that their analysis of a variety of data sources suggests that "the number of households suffering (and at risk of suffering) digital exclusion for cost reasons is in the low single digits, around 1-4%".

To examine this, Frontier Economics used the Government's Family Resources Survey and Government data on the number of claimants for the benefits that create eligibility for BT's social tariff, "Home Essentials".

Key findings

- One million (11%) of eligible individuals live in low income households that cannot afford any connectivity, even lower priced social tariffs. Most in this position (73%) are working age but not in work and receive all of their income from Government sources. Few of this group have dependent children, still fewer are pensioners³.
- Two million (21%) live in households with higher income which may mean that the household does not need discounted social tariffs and elects to use other connectivity options.

¹ See [Affordability of communications services - Ofcom](#)

² See [Social tariffs: On the edge of reason | Enders Analysis](#) 21 July 2023

³ Only 122,000 (12%) of the one million eligible households with low income have dependent children while 70,000 (6%) of eligible individuals are pensioners

The role of affordability in take up

The analysis within this paper identifies two potential reasons for low take-up that have so far been overlooked by policy makers, campaigners and commentators.

First, some eligible households may have insufficient income to afford even the lower cost social tariffs⁴. Second, some eligible individuals may live in households with higher income which means that the household does not need the social tariff and elect to use other connectivity options. In identifying these groups among the eligible population, this paper also describes the characteristics of individuals and households typically eligible for the social tariffs in terms of work, support on Government benefits, age and family structure.

Measuring connectivity affordability

In order to assess the affordability of connectivity, the analysis here is focused on household⁵ rather than individual income, for two reasons. First, a large part of connectivity cost (landline and internet) will be paid once for each household rather than per individual, which means that affordability at the household level is important. Second, resources are typically pooled within a household and household income better reflects an individual's living standards than their individual income. This allows both for individuals with little income who may live in more affluent households (such as young single adults living with their parents) and for individuals with higher income who live in effectively poorer households (such as parents with dependent children).

Eligibility for the BT Social Tariff – Home Essentials⁶ - is based on receipt of certain means-tested benefits covering Universal Credit (UC) (or the legacy benefits that this replaces⁷) for working age individuals or receipt of the Guaranteed Pension Credit for pensioners. This paper uses the eligibility for BT's social tariff as a basis for the analyses. Social tariffs from other operators have some variation in their eligibility: some only accept UC, while others accept UC and a range of other benefits similar to BT's offer⁸. The patterns among the UC only group, which Ofcom uses to report uptake, are reported in footnote 21.

While Government statistics can provide the total numbers of benefit recipients and the numbers of individuals potentially eligible for the Social Tariff, additional data is required to

⁴ According to Ofcom, "Social tariffs are cheaper broadband and phone packages for people claiming Universal Credit, Pension Credit and some other benefits. Some providers call them 'essential' or 'basic' broadband". Ofcom also reports that current prices range from £10 to £20 a month. See [Social tariffs: Cheaper broadband and phone packages - Ofcom](#).

⁵ Household income includes the income of all individuals living at a particular address. This may include several "benefit units" (defined as an individual, their spouse/civil partner/cohabiting partner and any dependent children living in the same property) and contain a mix of individuals who are eligible for benefits and individuals who are not eligible..

⁶ See [BT Home Essentials Broadband | Universal Credit Broadband](#).

⁷ These legacy benefits include Working Tax Credit, Child Credit, Income Support, Jobseekers Allowance or Employment and Support Allowance..

⁸ See [Discounted 'social tariffs' for those on certain benefits \(moneysavingexpert.com\)](#).

understand the characteristics of these individuals and the extent to which they live in households which cannot afford connectivity. Such information can be obtained from the Family Resources Survey (FRS)⁹, a Government-funded continuous household survey collecting information on all sources of income, work and family structure for a representative sample of around 20,000 private households in the United Kingdom. Data on household income and individuals characteristics from the 2021/2022 FRS was analysed for individuals identified as eligible for the Social Tariff, based on their reported receipt of UC (or the legacy benefits) or Pension Credit.

In order to address an issue of underreporting of benefit receipt in the FRS¹⁰ and the fact that declining numbers of individuals are receiving the legacy benefits, the numbers of eligible individuals from the FRS data were not only weighted by the survey gross weights but also adjusted to match the most recently available Government statistics on the actual number of claimants for each benefit that gives eligibility¹¹ from August 2022.¹²

In addition, the FRS does not distinguish receipt of the Guaranteed Pension Credit from the Savings Pension Credit¹³ so the eligible number in the FRS was adjusted to match the most recent Government statistic for those in receipt of the Guaranteed element.¹⁴ This effectively meant that profiles of individual characteristics and household income from the FRS data was applied to the Government numbers of benefit recipients for 2022.

To consider the extent to which households can “afford” connectivity, the analysis draws on the Minimum Income Standard (MIS) measures produced by the Centre for Research in Social Policy at Loughborough University. The MIS measures are budgets for different household types, based on what members of the public think are needed for a minimum acceptable standard of living in the UK and information on minimum costs for meeting those needs. The MIS does not claim to be a “poverty” threshold, but rather is a measure of a decent standard of living and covers a broad range of items which extend beyond what might be considered absolute essentials.¹⁵ Given this broad range, the parameters for each household type from the MIS budgets¹⁶ were used to estimate two income thresholds for each household in the

⁹ Department for Work & Pensions (DWP), released 23 March 2023, GOV.UK website, statistical release, [Family Resources Survey: financial year 2021 to 2022](#).

¹⁰ Documented for UC by the Department for Work and Pensions in <https://ukdataservice.ac.uk/app/uploads/usingdata2022-10-04.pdf>

¹¹ Specifically, the number of recipients of Universal Credit was multiplied by 1.8, recipients of Working Tax Credit and/or Child Tax Credit by 1.05, recipients of Income Support by 0.69, recipients of Jobseekers Allowance by 0.79, and recipients of Employment and Support Allowance by 1.22.

¹² Government statistics are from <https://www.gov.uk/government/statistics/dwp-benefits-statistics-february-2023/dwp-benefits-statistics-february-2023>.

¹³ Around 15% of all Pension Credit recipients receive only the Savings element.

¹⁴ Specifically, the number of Pension Credit recipients was multiplied by 1.17.

¹⁵ See <https://www.lboro.ac.uk/research/crsp/minimum-income-standard/> for further details.

¹⁶ Derived from the Excel calculator available at <https://www.lboro.ac.uk/research/crsp/usingmisdata/>.

FRS data, with one considerably less generous and focused on the minimum that a household must spend on the bare essentials:

- A **restricted MIS** with a budget for just six MIS items including: in-home food¹⁷, rent, water rates, fuel (that is, household energy costs), household goods and household services (excluding connectivity), plus the cost of a TV licence per household. The case could be made that these are the most essential items in the basket of goods and services. This budget was used to explore how many households need to spend all of their income on just these items.
- The **standard MIS** also includes budget for eat-out and takeaway food, alcohol, clothing, council tax¹⁸, household insurance, other housing costs, connectivity¹⁹, childcare, personal goods and services, motoring, bus and coach travel, other travel costs, and leisure goods and services (including holidays).

These two income thresholds identify three groups of households:

- a) Households with income below the restricted MIS. These households could be argued to be unable to afford any additional items beyond the listed essential items. Hence, they would not be able to afford connectivity even offered at a very low cost by BT or any Social Tariff provider.
- b) Households with income between the restricted level and the standard level. These households, with income greater than for the bare essentials, could be argued to face choices about which remaining items from the MIS basket to purchase. They might purchase connectivity in preference to other items without any Social Tariff; only purchase connectivity if offered at a lower Social Tariff cost; or choose not to purchase connectivity even with the Social Tariff option.
- c) Households with income above the standard MIS. According to the MIS criteria, these households can afford connectivity without any Social Tariff. These may be cases where the individual in receipt of benefits is in a different benefit unit from other higher income members of the household (such as adult children living with parents), or cases where income is reasonably high but the individual qualifies for a small amount of benefit which, nevertheless, would passport them onto the Social Tariff. Given the resources to purchase alternative (possibly better) packages of connectivity, these households may not take up the options available for the Social Tariff.

Understanding the household position with respect to these three income groups can help explain why some households with eligible individuals take up the Social Tariff while others

¹⁷ This removes 20% of the total food cost for eat-out and takeaway which is the average proportion for single individuals.

¹⁸ Council tax is excluded from the restricted MIS because households with low incomes should receive a full reduction.

¹⁹ Weekly connectivity costs for each household in the MIS are a fixed £5.41 for landline and internet for the household and £2.30 for mobile connection for each adult and child aged 11 and older.

do not, including the proportion of individuals who may not be able to afford any connectivity even at the lowest costs.

Household income for individuals eligible for a Social Tariff

Just under nine million (8.8 million) working age individuals are eligible for the BT Social Tariff²⁰, estimated to be living in just under eight million different households (because 22% live in households with more than one eligible working age individual).

Of this nine million, the FRS data indicates that one million (11%) live in households with income below the restricted MIS level, six million (68%) live in households with income between the minimum and standard MIS levels, and two million (21%) live in households with income above the standard MIS level.²¹

This suggests that one in ten (one million) working age individuals eligible for social tariffs may not take up the tariff because they live in households that cannot afford any connectivity – even lower at priced social tariffs – because they have no remaining income after paying for such basics as rent, water, food and energy.

On the other hand, a further two in ten (two million) working age eligible individuals may not take up the tariff because their household income is sufficiently high to mean that they do not need it or may prefer other connectivity options.

Between these two extremes, eligible individuals can afford to take up the Social Tariff and can benefit from it by being able to access connectivity and/or being able to afford other additional items in the MIS basket than they would otherwise have done so.

Just over one million (1.2 million) pensioners are also eligible for the Social Tariff²², with almost all (99.6%) estimated to be living in households with no other eligible pensioner (although 39% live in couples or in households with other individuals who are ineligible).²³

Of this 1.2 million, the FRS data indicates that 70,000 (6%) live in households with income below the restricted MIS level, 620,000 (53%) live in households with income between the

²⁰ Government statistics for August 2022 indicated that there were 5.7 million Universal Credit claimants, 1.4 million Working Tax Credit or Child Tax Credit claimants, 0.2 million Income Support claimants, 89,000 JSA claimants and 1.7 million ESA claimants. The total of 9 million eligible working age individuals is slightly higher than the 8.8 million eligible working age individuals in the FRS because some individuals claim more than one qualifying benefit.

²¹ If receipt of Universal Credit were the only eligibility criteria, 5.7 million working age individuals would be eligible for the Social Tariff, estimated to be living in 5.2 million different households (with 15% living in households with more than one eligible working age individual). Of this 5.7 million, the FRS data indicates that 0.8 million (14%) would live in households with income below the restricted MIS level, 3.9 million (68%) would live in households with income between the minimum and standard MIS levels, and 1.0 million (18%) would live in households with income above the standard MIS level.

²² Government statistics for August 2022 indicated that there are 1.2 million claimants for the Guaranteed Pension Credit.

²³ Pension Credit is assessed on joint income for couples which means that couples have one claimant and one eligible individual. Multiple eligible individuals in the same household will reflect two independent eligible individuals living at the same address (for example, pensioner siblings).

minimum and standard MIS levels, and 480,000 (41%) live in households with income above the standard MIS level.

Compared to working age individuals, this suggests that a smaller proportion of eligible pensioners do not take up the Social Tariff due to lack of any affordability, but a larger proportion (around four in ten) may not because they have higher incomes and may not need to use the tariff or prefer other connectivity options. Around half of eligible pensioners may be able to afford to use and likely to benefit from the Social Tariff.

The differences between household income and the restricted MIS level are presented in figures 1 and 2. These reflect the amount of income available to purchase connectivity after “essentials” for each household. A negative number indicates a shortfall in income below the restricted MIS level.

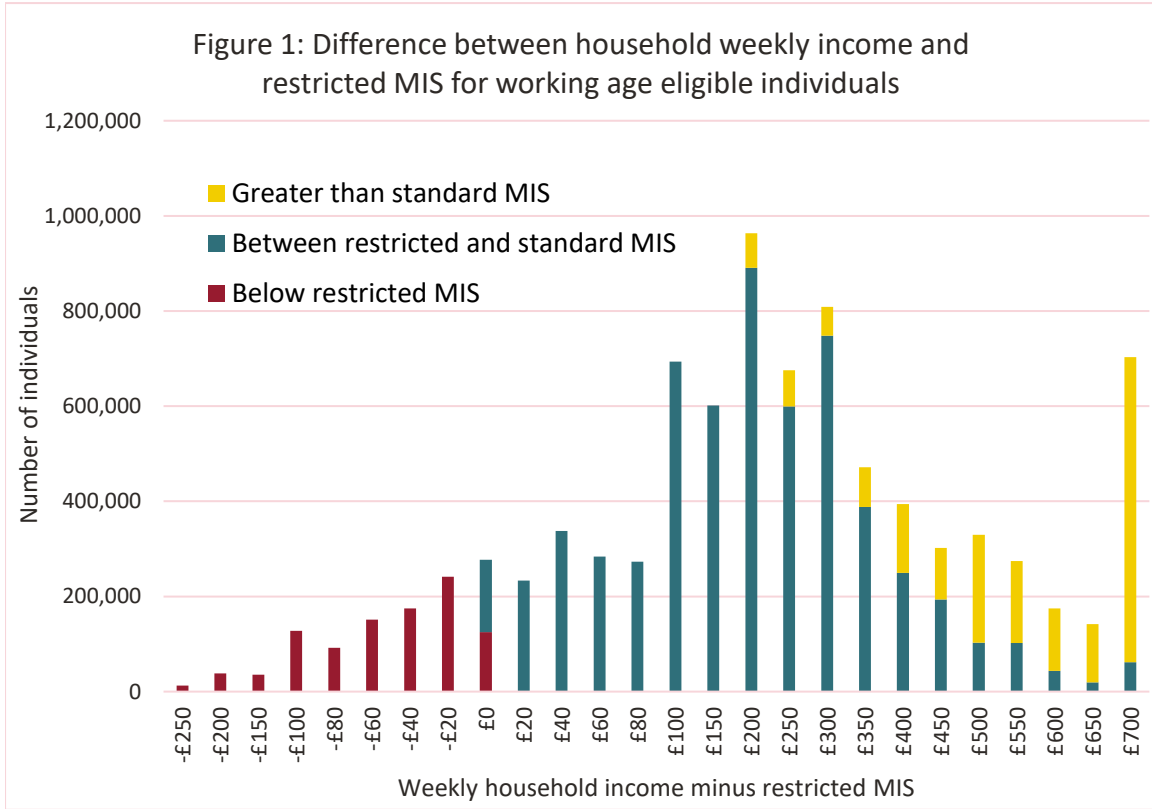
Figure 1 shows that, for working age eligible individuals living in households with income below the restricted MIS, most (87%) are in households with a shortfall of more than £10 each week, while many (63%) are in households with a weekly shortfall in excess of £30. This suggests that income falls a long way short of being able to afford connectivity for most of these individuals.

Many (80%) of those in the middle band of who can afford the most basic but not all of the items in the MIS basket have weekly surpluses of over £90 above the restricted MIS, indicating that a Social Tariff of around £4.65 a week could be affordable for many in this group, although it would mean choosing this over other items in the MIS basket.

Figure 2 shows that, for eligible pensioners living in households with income below the restricted MIS, three-quarters (75%) are in households with a shortfall of more than £10 each week, while just under a half (42%) are in households with a weekly shortfall in excess of £30. This again suggests that income falls a long way short of being able to afford connectivity for most of these individuals.

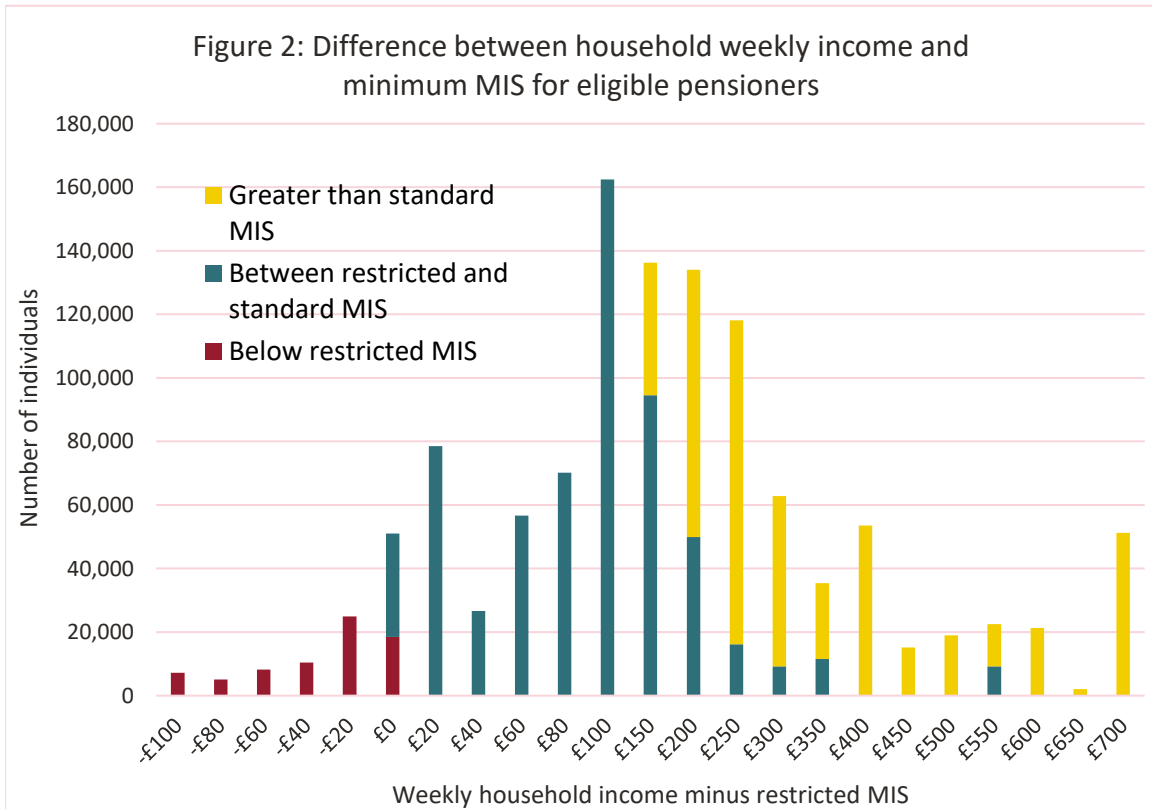
In addition, a substantial proportion of the middle band who can afford the most basic but not all of the items in the MIS basket have weekly surpluses not much in excess of the restricted MIS (43% are below £90 a week²⁴), suggesting that harder choices may be needed than for working age individuals in the corresponding group to make use of a Social Tariff for connectivity.

²⁴ In figures 1 and 2, the household income amounts are rounded the nearest £20 (or £50 for amounts above £100) so that the £80 bar captures all households with income between £70 and £90. Hence, the total of the bars below and including the £80 bar capture all households with less than £90 per week.



Source: Frontier calculations from FRS 2021/22

Note: 11% of eligible individuals live in households with income below the restricted MIS, 68% live in households with income between the restricted and standard MIS and 21% live in households with income greater than the standard MIS.



Source: Frontier calculations from FRS 2021/22

Note: 6% of eligible individuals live in households with income below the restricted MIS, 53% live in households with income between the restricted and standard MIS and 41% live in households with income greater than the standard MIS.

Profiles of eligible individuals

The profiles of eligible individuals in the three household income groups are presented in tables 1 and 2. It should be noted that, in table 1, the proportion of income from Government refers to the eligible individual's income, while the household income group refers to total income for everyone living in the household.

For eligible individuals in households with income below the restricted MIS, just under three quarters (73%) are working age, not in work and receiving all income from Government sources (table 1). This proportion is lower for those in the middle income group (44%) and even lower for those living in households with income above the standard MIS (35%). Only 12% of eligible individuals in households with income below the restricted MIS are in work, compared to around a third (32% and 35%) for the middle and higher income groups.

Pensioners constitute only 6% of those in households with income below the restricted MIS, but make up higher proportions for those in the middle income group (10%) and for those living in households with income above the standard MIS (21%). Unsurprisingly, very few eligible pensioners are in work and almost all receive at least half of their income from Government.

Both working age eligible individuals and eligible pensioners in all three household income groups are reasonably evenly distributed across the age profile (table 2). There is a slightly greater tendency for working age eligible individuals in the lowest household income group than in the higher two income groups to be under age 22 or over age 50 and for eligible pensioners in the lowest income group to be over age 80, but these differences are small.

Table 1 Work and dependence on Government income for eligible individuals

Individual work and individual dependence on income from Government	Household income below restricted MIS		Household income minimum to standard MIS		Household income above standard MIS	
	Number of individuals (1,000s)	%	Number of individuals (1,000s)	%	Number of individuals (1,000s)	%
Working age						
No work, <50% income from Govt.*	11	1%	26	0.4%	34	1%
No work, 50%+ (not all) income from Govt.*	48	4%	936	14%	181	8%
No work, all income from Govt.	787	73%	2,872	44%	810	35%
Work, <50% income from Govt.	76	7%	1,135	17%	644	28%
Work, 50%+ (not all) income from Govt.	36	3%	932	14%	162	7%
Work, all income from Govt.**	26	2%	61	1%	9	0.4%
Missing	16	2%	12	0.2%	0	0%
Pensioners						
No work, <50% income from Govt.	2	0.2%	2	0.03%	9	0.4%
No work, 50%+ (not all) income from Govt.	46	4%	372	6%	205	9%
No work, all income from Govt.	26	2%	242	4%	265	11%
Work, <50% income from Govt.	0	0%	0	0%	1	0.1%
Work, 50%+ (not all) income from Govt.	0	0%	1	0.02%	1	0.1%
All	1,074	100%	6,592	100%	2,321	100%

Source: Frontier calculations from FRS 2021/22

Note: * Some individuals not in work with non-Government income have income from investments and other non-earnings sources ** Some individuals are in work with all income from Government because they report zero or negative earnings (typically self-employed). Columns may not sum exactly to the total in the bottom row due to rounding.

Table 2 Age profile for eligible individuals

Individual Age	Household income below restricted MIS		Household income minimum to standard MIS		Household income above standard MIS	
	Number of individuals (1,000s)	%	Number of individuals (1,000s)	%	Number of individuals (1,000s)	%
Working age						
Under 22	147	14%	280	4%	87	4%
22-29	124	12%	1,043	16%	330	14%
30-39	138	13%	1,705	26%	333	14%
40-49	184	18%	1,325	20%	512	22%
50-59	245	23%	1,096	17%	387	17%
60 plus	161	15%	525	8%	190	8%
Pensioners						
60 – 69	6	0.5%	71	1%	94	4%
70 – 79	39	4%	331	5%	261	11%
80 plus	30	3%	216	3%	125	5%
All	1,074	100%	6,592	100%	2,321	100%

Source: Frontier calculations from FRS 2021/22

Note: Columns may not sum exactly to the total in the bottom row due to rounding.

Profiles of eligible households

Table 3 considers the family structure for households containing an eligible individual, moving from examining numbers and proportions of individuals to numbers and proportions of households. The number of households for eligible working age individuals (in table 3) is smaller than the number of eligible individuals (in tables 1 and 2) because 22% of these individuals live in households with at least one other eligible working age individual. The numbers of individuals and households for pensioners are very similar (tables 1 and 2 compared to table 3) because almost all eligible pensioners live in households with only one eligible individual (themselves).

Table 3 Family structure for households with an eligible individual

Household structure	Household income below restricted MIS		Household income minimum to standard MIS		Household income above standard MIS	
	Number of households (1,000s)	%	Number of households (1,000s)	%	Number of households (1,000s)	%
Working age						
Single, no children	601	60%	929	17%	206	11%
Single, one child	30	3%	497	9%	109	6%
Single, more than one child	34	3%	977	17%	61	3%
Couple, no children	114	11%	306	5%	95	5%
Couple, one child	12	1%	240	4%	58	3%
Couple, more than one child	32	3%	1,005	18%	95	5%
Others in household, single, no children	65	7%	576	10%	321	17%
Others in household, other	34	3%	552	10%	503	27%
Pensioners						
Single, no children	62	6%	388	7%	264	14%
Couple, no children	3	0.3%	96	2%	61	3%
Couple, one child	0	0%	0	0%	1	0.1%
Others in household, single, no children	8	1%	29	1%	70	4%
Others in household, other	0	0%	9	0.2%	22	1%
All	994	100%	5,605	100%	1,865	100%

Source: Frontier calculations from FRS 2021/22

Note: Columns may not sum exactly to the total in the bottom row due to rounding. 122,000 households with income below the restricted MIS (12%) contained children. 3,087,000 households with income between the restricted MIS and standard MIS (55%) contained children. 662,000 households with income above the standard MIS (36%) contained children.

Households with income below the restricted MIS – and therefore unlikely to be able to afford any connectivity – are predominantly single individuals without children.

Just under three quarters of the households in the lowest income group are single individuals without children, including 60% who are working age individuals living alone, 7% who are working age single individuals living with others in the household, 6% who are pensioners living alone and 1% who are single pensioners living with others in the household. The other major element in the lowest income group are couples without children who constitute 11% of the lowest income group. The low proportion of households with children in this group may reflect the relative generosity of Government benefits from families with children.

However, the middle income group – containing households who may be able to afford connectivity by trading off other items in the MIS basket – includes a mix of household types suggesting that some households without children receive relatively more income, possibly because they are receiving lower levels of benefits due to having other income sources.

Just under half (49%) of households with income above the standard MIS – and therefore deemed able to afford connectivity without any Social Tariff – contain eligible individuals who are living with other household members who not part of their benefit unit (that is, are not partners or dependent children). The income received by these other household members is not included in the individuals' benefit assessment and can explain why some individuals receiving means-tested benefits live in more affluent households. Most of these (44% of households in the high income group) are working age individuals (who could be living with more affluent parents, other relatives or in multiple occupancy dwellings), while a small number (5% of households in the high income group) are pensioners (who could be living with more affluent adult children).

The remaining half (51%) of households with income above the standard MIS are one family households. The eligible individuals in these more affluent households may be receiving only small amounts of benefits given the higher level of household income considered in the benefit assessment. Most of these (34% of households in the high income group) are working age individuals, but a substantial number (17% of households in the high income group) are pensioners.²⁵

²⁵ 14% of the highest income group are households with a single pensioner living alone. This may reflect that the FRS data does not allow those receiving the Guaranteed Pension Credit to be distinguished from those receiving only the Savings Pension Credit (15% of all Pensions Credit recipients) and not all pensioners in the group are truly eligible for the Social Tariff.

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