Who Has the Lowest Levels of Well-Being?

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In the MEQIN survey, we included questions that were intended to measure the equivalent income of Belgians (hence, our choice of the acronym MEQIN that stands for "Measuring Equivalent Incomes"). In order to do this, we need to measure the willingness to pay for various non-material aspects of life. The questions regarding the willingness to pay for these aspects are difficult for respondents and were therefore formulated carefully. In this chapter, we will explain this question more specifically with regard to the willingness to pay for perfect health. Even after careful formulation, this remains a difficult task for the respondents and is also a more experimental exercise from a scientific point of view than the results presented in the previous chapters.

Chapter 4 has already described the difference between income and consumption (measured by expenditure). Income reflects how much material welfare *can* be acquired. Consumption, on the other hand, is a measure of actual material welfare at a given time. With a view to measuring well-being at a given time, we regard consumption as more informative. In this chapter, we use a measure of material welfare that we call *personal consumption.* In order to calculate this measure, we use detailed questions about private consumption (discussed in Chaps. 10 and 15) as the starting point. As this private consumption can vary greatly between the various family members, this also allows us to take the unequal distribution of material welfare within the family into account. In Chap. 15, however, we saw that in families with more than one person, some of the goods are consumed simultaneously by more than one family member: they might travel together or go to a restaurant together, for example. Other examples include heating, water and electricity. The housing itself consumed the bulk of these public consumer goods. We did not include this in the personal consumption, because we wanted to ascertain the importance that people attach to decent housing and also to non-material aspects of the housing—such as the living environment and relationships with neighbours—in

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relation to material consumption. For the other goods which are consumed jointly, we assumed an equal distribution of the effective consumption within the family.[1]

From this personal consumption, we then deduct the willingness to pay for the non-material aspects of life in order to calculate equivalent incomes. In this chapter, we are therefore not strictly speaking calculating equivalent incomes but equivalent personal consumption. However, because it reads more easily and in order to remain consistent with the standard terminology in the literature, we continue to refer to equivalent incomes. We start with health as a non-material aspect of life and then add housing, ending the chapter by examining the willingness to pay for an ideal job.[2]

How Do We Measure Willingness to Pay?

We will first examine the aspect of health. Here, we explain the survey procedure in broad terms without going into too much detail. The procedure consists of three steps. In the first step, we showed the respondents a visual summary of their own answers for personal consumption and for the five health dimensions that we discussed in Chap. 6. In the second step, we asked the respondents if they would find a new imaginary situation with the same personal consumption and perfect health a better situation over the next 12 months. We presented this new imaginary situation in the same visual way as their own situation in the first step. Since, by definition, no respondent can have better than perfect health, the logical answer to this question is positive. Finally, in the third step, we asked about the monthly personal consumption that, together with perfect health, would lead to a situation that the respondent considers as good as his or her actual situation. This question was as follows:

> "In this new imaginary situation, you would have perfect health for the next 12 months. To be equivalent to your current situation, you will need to reduce your monthly consumption. How much would you reduce your monthly consumption by over the next 12 months in order to consider your new situation with perfect health to be equivalent to your current situation?"

Of course, it is perfectly possible to answer this question by saying that you are unwilling to sacrifice any consumption. People will do so if they are already completely satisfied with their current health or if they feel that their consumption is already so low that it couldn't possibly be reduced any further. However, some

[1]This is undoubtedly a heroic assumption. However, with no prior information about the preferences of individual family members with respect to these goods and the extent to which the goods are effectively consumed together, there is no other obvious option. Given that the main component of public consumption (housing) does not form part of personal consumption, the impact of this simplifying assumption may not be particularly great anyway.

[2]As the questions about quality of housing and living environment were only asked to the reference persons, the data in this chapter are based on answers from the reference persons alone.

people refused to answer this question because they found it too difficult (even after an additional explanation). These "protest responses" (about a hundred) were removed for this analysis.

The distribution of the other answers is shown in Fig. 24.1. The height of the bars indicates the relative number of people who specified the values on the horizontal axis. Around half have a willingness to pay for perfect health that is equal to zero. On the other hand, 4.3% of the respondents are willing to pay more than 400 euros per month. The average willingness to pay is 85 euros per month. If we look only at those who responded positively, the average is 169 euros per month.

Since we measure health on a scale from 0 to 100 and also know for each of our respondents how much their actual state of health differs from perfect health, we can then convert these amounts into a willingness to pay for a single unit on the health scale: this yields 9 euros per unit for the respondents who stated a positive willingness to pay. Someone who had difficulty lifting or carrying his groceries, but can now do so, has progressed two points on the health scale: on average, people are therefore willing to sacrifice 18 euros per month (or 216 euros per year) for this. In order to be free of a chronic condition that restricts them in their daily lives (thus progressing 20 points on the scale), people are willing to sacrifice an average of 180 euros per month (2160 euros per year). We are certainly not talking about small amounts here.[3]

Some of the phenomena discussed in the previous chapter are illustrated in Fig. 24.2. For the construction of the left-hand panel, all the respondents were ranked by health from low to high and then divided into ten equal groups (deciles). The figure shows the average willingness to pay per decile. It appears that the willingness to pay increases significantly as people get sicker, i.e. when the distance between their current state of health and perfect health increases. In the right-hand panel, we do the same for personal consumption. When people reach a higher level of personal consumption, they are also willing to sacrifice more for better health. As described in the previous chapter, this can easily be explained by the fact that people with a higher level of personal consumption are in a better position to afford the same loss of consumption.

Figure 24.2 naturally conceals major differences in individual willingness to pay. People with the same health and the same income can nevertheless attach very different importance to better health. It is precisely the intention of this technique to ensure that these differences in opinion about what constitutes a good life are reflected in the measure of individual well-being. In this context, it is interesting to note that the personality characteristics, as shown in Chap. 22 to affect individual life satisfaction, have a smaller impact on the willingness to pay.

In the MEQIN survey, we also applied the same procedure to establish willingness to pay for other aspects of life such as housing and ideal job characteristics. We found that the average willingness to pay for trouble-free housing is 47 euros a

[3]Moreover, we only asked about the willingness to pay for a better quality of health, not about the willingness to pay to live one year longer. Other studies (e.g. by Ryen and Svensson 2015) show that this latter willingness to pay is much higher.

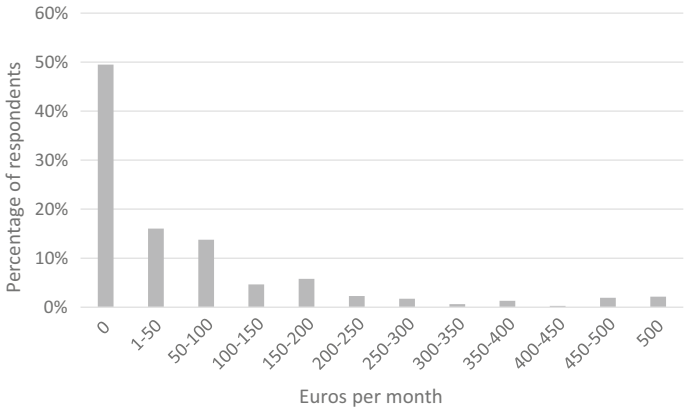

Fig. 24.1 Distribution of the willingness to pay for perfect health

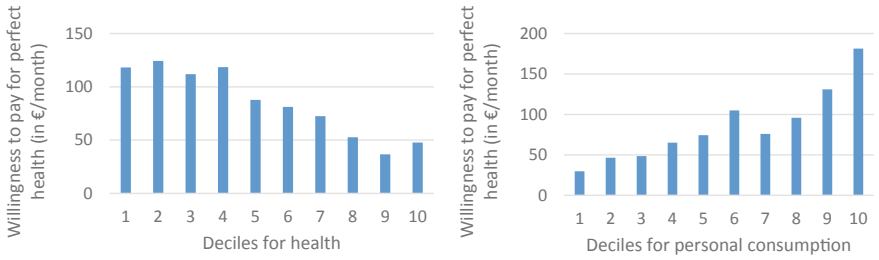

Fig. 24.2 Willingness to pay for perfect health, per decile for current health status (left) and personal consumption (right)

month, lower than the figure for perfect health. This finding could mean two things: either that Belgians are already in high-quality housing or that they care less about their housing than their health. Both explanations are plausible. The first explanation is in line with what we found in previous chapters. After all, in Chap. 11, we saw that Belgian housing is of decent average quality and in Chap. 22 that this is indeed reflected in (average) high levels of satisfaction with housing quality. Figure 24.3 once again shows that willingness to pay decreases as housing quality improves and increases in line with personal consumption, as for health as shown in Fig. 24.2.

We also asked these people how much personal consumption they would be willing to sacrifice in exchange for perfect health and trouble-free housing. The average willingness to pay was about 102 euros. Although this value is higher than the willingness to pay for health alone (i.e. 85 euros), we find that the willingness to pay for the additional improvement in housing is lower than what these people were

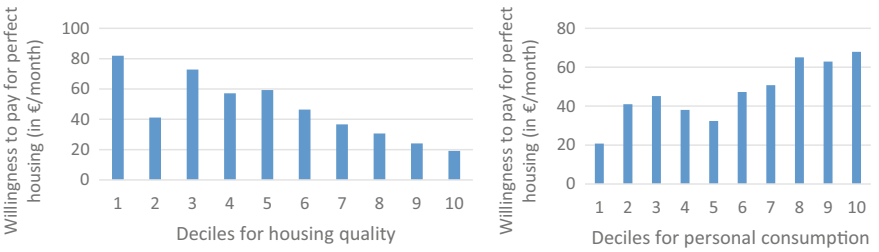

Fig. 24.3 Willingness to pay for trouble-free housing, per decile for housing (left) and personal consumption (right)

already willing to pay for health plus what they are willing to pay for housing alone. This finding is also logical: if the respondents have already reduced their personal consumption for one aspect (health), they have less scope to reduce their consumption still further for other aspects.

Finally, we also asked the people who were employed at the time of the survey how much they would be willing to pay for what they considered an ideal job.[4] We can see that 41% of workers would be willing to give up part of their personal consumption in exchange for an ideal job. The average is 57 euros per month. These are surprisingly large sums: an improvement in job quality certainly seems desirable for a substantial proportion of the population. Even though the correlation is less pronounced than for the other aspects, we note once again in Fig. 24.4 that willingness to pay largely decreases as the current job draws closer to the ideal and increases in line with personal consumption.

Equivalent Incomes for Health and Housing

The amounts for willingness to pay for non-material aspects of life can now be used to calculate equivalent incomes, the measure of individual well-being that we introduced in the previous chapter. This is the value of the personal consumption that remains after we have deducted the willingness to pay for the non-material aspects of life.

We ranked the respondents according to their equivalent income and divided them into ten equal groups (deciles). In Table 24.1, we examine the characteristics of the people belonging to the lowest decile, i.e. the group of people with the lowest levels of well-being. For this table, we calculate two equivalent incomes (shown in the second and third columns). We first deduct only the willingness to pay for perfect health, then the willingness to pay for both perfect health *and* trouble-free housing. For the purposes of comparison, the characteristics of the people in the

[4]In Chap. 9, we explained how we measured the characteristics of this ideal job.

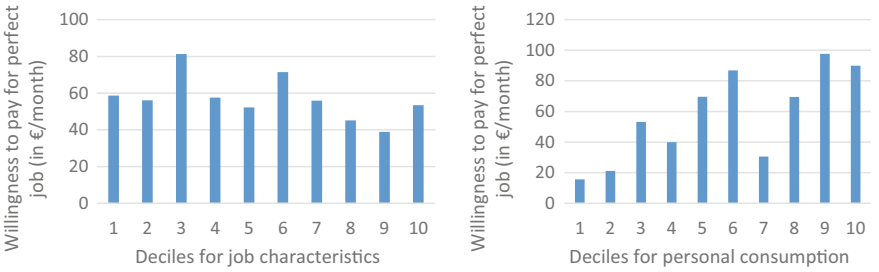

Fig. 24.4 Willingness to pay for a perfect job, per decile for job quality (left) and personal consumption (right)

lowest decile for personal consumption (in the first column) and life satisfaction (in the fourth column) are also shown.

We start by comparing the first two columns, i.e. only looking at personal consumption as a measure of well-being and then deducting the loss of well-being caused by health problems. We note that the people with the lowest levels of well-being in accordance with equivalent income have a higher personal consumption but also a lower health index than when we examine personal consumption alone. This is logical: sick people and people with a high willingness to pay for their health have a lower equivalent income and thus a greater chance of ending up in the lowest decile. We can also see that fewer migrants belong to the group with the lowest levels of well-being. This finding is in line with what we saw for migrants from Eastern European countries in Chaps. 6 and 7: these groups have better health.

In the third column, we deduct the loss of well-being caused by health problems and low housing quality. The difference between the second and third columns is minor and could be expected as a result of the low additional willingness to pay for housing. Nonetheless, we find fewer pensioners among the lowest decile when we introduce housing to the measure of well-being. In this finding, too, there is an echo of previous results from Chap. 19.

If we now look at the last column, showing the characteristics of people with low levels of life satisfaction, we see a different story. As we saw in previous chapters, life satisfaction is not just determined by the circumstances of the respondents but also by their expectations and aspirations. This is also evident in these results. After all, we can see that people with low levels of life satisfaction are richer, less healthy, less often in a relationship and often highly educated. These findings are consistent with what we could expect on the basis of Chaps. 21 and 22. In Chap. 21, we noted the major importance of health, relationships and income as determinants of life satisfaction. At the same time, we already observed in Chap. 22 that highly educated and richer respondents have higher expectations and aspirations. We also indicated that a significant number of relatively wealthy people specified low levels of life satisfaction.

Table 24.1 Who are the 10% of Belgians with the lowest levels of well-being?

	The 10% of Belgians with the lowest levels of well-being according to …			
	Personal consumption	Equivalent income (health)	Equivalent income (health and housing)	Life satisfaction
Personal consumption	240.37 euros	329.80 euros	345.92 euros	714.12 euros
Health	68.41	64.17	64.20	52.00
Housing	79.77	79.90	79.65	75.99
Female	62%	57%	57%	48%
In a relationship	59%	58%	61%	42%
Migrant	25%	20%	19%	17%
Highly educated	14%	16%	18%	18%
Unemployed	19%	16%	16%	12%
Pensioners	33%	34%	31%	26%

Table 24.1 illustrates the relevance of the individual measure of well-being that is chosen when devising social policy. In order to elaborate such a policy, it is necessary to identify the people with the lowest levels of well-being so that they can be prioritised. The choice of the individual measure of well-being is therefore not merely an academic exercise. A one-sided focus on material aspects such as personal consumption will lead to the relative neglect of people who are struggling with the non-material aspects of life. A unilateral focus on life satisfaction, on the other hand, will (unduly) favour subjective factors: the people who are least satisfied are not the ones in the worst circumstances. Even though its implementation requires further refinement, a measure such as equivalent income is a promising new approach when it comes to identifying the people who are worst off in our society.