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"Measuring wellbeing in Scotland – the Oxfam Humankind Index"

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Introduction

This paper describes recent work by the Fraser of Allander Institute (FAI) which constructs an index of wellbeing in Scotland. The issue of wellbeing has been extensively discussed in the economics literature on happiness, and wellbeing indices have been assembled for other counries. However, this is the first attempt to measure wellbeing in Scotland. The overall aim of the research is to identify in detail what people in Scotland believe affects their wellbeing and to construct an overall measure.

The Scottish results are clearly interesting in that they identify the priorities that people in Scotland have in terms of wellbeing or happiness. A key finding is the relatively limited role that economic variables appear to contribute to wellbeing, Having secure work and suitable work and having enough money to pay the bills both ranked as joint fifth in the list of elements affecting wellbeing, reinforcing arguments made in the 2009 Sarkozy report¹, the broad thrust of which was that government policy should focus less on creating economic growth and more on those areas which people identify as increasing wellbeing.

A wellbeing index itself is clearly also a useful policy tool – for example, it allows us to assess how the government is performing in succesfully addressing issues which people in Scotland have identified as increasing wellbeing. A good example of this is when we compare health and safety. The index shows that while both being in good health and feeling safe in the local community contribute significantly to wellbeing, the performance on health far exceeds the performance on safety.

Research on happiness

While the FAI study is the first attempt to examine wellbeing in Scotland, it was informed by previous work onwellbeing. Wellbeing (also called happiness) research dates from Easterlin's seminal (1974) work², and we briefly review this below.

Economic variables

The first, and still contentious, finding in this area is the socalled "Easterlin paradox", which is that the average

Easterlin's original explanation for this result (that happiness did not increase as people became better off) related to inequality - he argued that an income increase for an individual may not raise his or her wellbeing if a relevant comparison group also sees its income increase at the same time. This suggests that inequality, in the sense of having things that others have, should affect wellbeing. Interestingly, the results provided showed little evidence of this in Scotland. Inequality did not rank as one of the elements affecting wellbeing detailed in Table 2 below, because it did not figure as a major response in the underlying data. For example, the extensive data gathering exercise to which over 1,200 people responded assessed the importance of inequality by asking whether wellbeing was affected by being able to keep up with the latest trends. Over 70% felt that this had no effect whatsoever and very few of the remainder felt that this was important. "Keeping up with the Jones's" is not a major preoccupation for people in Scotland.

One key measure identified in the happiness literature is unemployment and the evidence on this shows that becoming unemployed reduces individual wellbeing more than any other factor. This did emerge as an important factor in Scotland, although having satisfying work was ranked as only the third most important element, behind housing, health and the quality of the local area.

Health and education

Studies consistently show a strong relationship between wellbeing and both health and education. The FAI study clearly illustrates the importance of health, which people assessed as the second most important influence on wellbeing. However, education ranks lower than one might have expected, given previous findings. For example, Frey and Stutzer review several studies that demonstrate that "people with higher education indicate significantly higher wellbeing", and Blanchflower and Oswald also show that the number of years of education positively affects a person's level of happiness. Despite this, people in Scotland ranked the variable measuring education as only sixth, well behind other variables such as housing, safety, having a clean and healthy environment and having satisfying work.

Other factors

Wellbeing has also been shown to be affected by personal circumstances and by the type of community in which people live. For example, living in an unsafe or deprived environment reduces wellbeing, and this does come out strongly in the Scottish results – feeling safe was ranked as

the fourth most important influence on wellbeing. Other studies have shown that the amount of time spent socialising with family and friends positively affects how happy we feel and it is therefore interesting to note that this did also appear to be significant in Scotland, ranking as the third most important influence on wellbeing.

The Oxfam Humankind Index

This research guided our study for Scotland, sponsored by Oxfam Scotland and undertaken jointly by the FAI and the New Economics Foundation (NEF). The research aimed to

Table 1: Wellbeing factors and weightings

construct an index of wellbeing for Scotland (termed by Oxfam Scotland the "Humankind Index"). The NEF's role was to identify which factors people in Scotland felt affected their wellbeing and to create weights for these, while the FAI then used this information to create the Scottish index. The NEF collected information on the factors affecting wellbeing through an extensive consulation process with people in Scotland. Information on what affected wellbeing was gathered from a total of 1,500 people through various means, including focus groups, community workshops and questionnaires. Table 1 shows both the factors themselves

Sub-domain	Weighting	Order
Affordable, decent and safe home	11	=1
Physical and mental health	11	=1
Living in a neighbourhood where you can enjoy going outside and having a clean	9	2
and healthy environment		
Having satisfying work to do (whether paid or unpaid)	7	=3
Having good relationships with family and friends	7	=3
Feeling that you and those you care about are safe	6	=4
Access to green and wild spaces; community spaces and play areas	6	=4
Secure work and suitable work	5	=5
Having enough money to pay the bills and buy what you need	5	=5
Having a secure source of money	5	=5
Access to arts, hobbies and leisure activities	5	=5
Having the facilities you need locally	4	=6
Getting enough skills and education to live a good life	4	=6
Being part of a community	4	=6
Having good transport to get to where you need to go	4	=6
Being able to access high-quality services	3	=7
Human rights, freedom from discrimination, acceptance and respect	2	=8
Feeling good	2	=8

and the weighting for each. This is in many ways the principal result of the research– it details, for the first time in Scotland, a set of variables which those who took part indicated made them happy. It indicates, for example, that housing and health are the most important factors and that both are valued more than other elements such as having satisfying work. As discussed, the results also indicate that monetary factors are not people's top priority, but that having a sufficient and secure income is more important than having a large income. Most people in Scotland appear to value 'ordinary' things, such as good housing, good health, having good relationships with family and friends, a pleasant (and safe) environment and good local services. As discussed above, relative income (i.e., keeping up with others) did not rank as a significant factor.

We next outline several variants of the Happiness Index, all of which were constructed by matching the variables shown in Table 1 to measures of these variables for Scotland³. We firstly detail the most recent index (for 2009-10) and then examine recent change in the index between 2007-08 and 2009-10). We finally (for 2009-10) compare the index for Scotland as a whole with an index for deprived communities in Scotland, and identify areas where deprived communities are in deficit when compared with the whole of Scotland.

The Index of Happiness for Scotland - 2009-10

Table 2⁴ below shows the Index in 2009-10. The overall score (5,492) is not significant in itself - we could easily rescale it to 5.492 or 100 or any other number. Its principal use, whatever number is employed, is to examine how different variables create wellbeing, both over time and between different communities. For example, Table 3 below shows the relative contribution of each variable to overall happiness. The relative weight of each results both from its weight as reported by the NEF and the level of that variable for Scotland. For example, a variable like health which has both a high weight (11) and a high score (93%) will make a significant contribution to overall wellbeing, and health is calculated to contribute 18% to overall wellbeing.

One important finding in Table 3 is the relatively low contribution of economic variables (Work, Work Satisfaction, Having Enough Money and Financial Security). This

Table 2: 2009-10 Happiness Index for Scotland

Sub domain (by order of contribution)	Weight	Measure	Score
Housing	11	54.1	578
Health	11	93.0	993
Neighbourhood/Environment	9	59.0	516
Work Satisfaction	7	70.8	496
Good relationships	7	13.2	90
Safety	6	20.0	117
Green Spaces	6	43.5	253
Secure/Suitable Work	6	91.6	534
Having enough money	6	49.0	285
Financial Security	5	-10.2	-50
Culture/Hobbies	5	61.0	296
Local Facilities	4	45.0	175
Skills and Education	4	26.0	101
Community Spirit	4	72.0	280
Good Transport	4	75.0	291
Good services	3	64.9	189
Tolerance	3	66.0	192
Feeling Good	2	81.0	157
Total			5,492

Table 3: 2009-10 Happiness Index for Scotland (% contribution by variable)

Sub domain	% Contribution
Health	18
Housing	11
Secure/Suitable Work	10
Neighbourhood/Environment	9
Work Satisfaction	9
Green Spaces	5
Having enough money	5
Culture/Hobbies	5
Community Spirit	5
Good Transport	5
Local facilities	3
Good Services	3
Tolerance	3
Feeling Good	3
Good relationships	2
Safety	2
Skills and Education	2
Financial Security	-1
Total	100

primarily reflects the overall weight given to these by the NEF, which in turn reflects the importance attributed to them by individuals who provided information on wellbeing - these three variables contribute about 22% of the total weight value and 23% of the total Index score. As noted earlier, this does seem to present some support for the Sarkozy report arguments on the relative importance of economic factors to overall wellbeing.

One important finding in Table 3 is the relatively low contribution of economic variables (Work, Work Satisfaction, Having Enough Money and Financial Security). This primarily reflects the overall weight given to these by the NEF, which in turn reflects the importance attributed to them by individuals who provided information on wellbeing - these three variables contribute about 22% of the total weight value and 23% of the total Index score. As noted earlier, this does seem to present some support for the Sarkozy report arguments on the relative importance of economic factors to overall wellbeing.

Another key point is the importance of "local" measures, particularly those relating to people's immediate neighbourhood. The majority of the variables that respondents believed contributed to wellbeing relate to local issues⁵. These local issues contributed 35% of the total weights generated by the NEF and 33% of the total Index score. However, while there are high scores for several neighbourhood variables (such as living in a neighbourhood where you can enjoy going outside/clean environment, where 59% of people appeared satisfied) other local variables score much lower. For example, only 45% of respondents felt that their area had good amenities and there were low scores on access to the natural environment and, particularly, on safety. Feeling safe ranks as accounted for 6% of the NEF weights, but for only 2.1% of the overall Index score⁶.

Changes from 2007-08

Table 4 details the Index in 2007-087.

The first point to note is that happiness increased between 2007-08 and 2009-10, albeit by a relatively minor 1.2%. In the broad terms which we are considering the issue here, where wellbeing is measured across the whole range of areas that people value, Scotland does appear to have become marginally happier. As we shall see, positive changes mainly resulted from change in non-economic variables, while those measuring economic change deteriorated.

Table 4: 2007-08 Happiness Index for Scotland

Table 4 details the index in 2007-08. In total, the index increased by 64 points between 2007-08 and 2009-10. However, this overall change includes both positive increases (which increased wellbeing) and negative changes (which reduced it). Positive change (which increased the Index by 136 points) obviously exceeded negative change (which caused the Index to fall by 72 points).

We look firstly at those variables which fell over the period and which therefore decreased happiness. Table 5 above shows, for variables which fell between 2007-08 and 2009-10, the proportionate contribution of each to the total reduction (72 points). There was a very small deterioration in Housing -data taken from Scottish Housing Statistics shows that satisfaction with housing fell from 54.132% to 54.126%, so there was effectively no change in this measure. Otherwise, what emerges very clearly from Table 5 is that almost all (93%) of the reduction in happiness arose from deteriorations in economic variables. This result plainly reflects changes in economic situation in Scotland over the period, and the fact that the Index picks this up so clearly strengthens the argument that it reflects actual changes in issues that affect what people feel influence their happiness⁸.

The actual change in both the number in work and the number finding it more difficult to manage financially, reflected in Table 5, almost certainly reflect an actual deterioration in the economy. However, the largest negative effect comes from a reduction in financial security, which contributed 43% of the total. This is measured as the

Sub domain	Weight	Measure	Score
Housing	11	54.1	578
Health	11	88.0	940
Neighbourhood/Environment	9	58.0	507
Work Satisfaction	7	70.8	496
Good relationships	7	13.2	90
Safety	6	19.0	111
Green Spaces	6	41.5	242
Secure/Suitable Work	6	94.8	552
Having enough money	6	52.0	303
Financial Security	5	-3.9	-19
Culture/Hobbies	5	62.0	301
Local Facilities	4	43.0	167
Skills and Education	4	24.0	93
Community Spirit	4	66.0	256
Good Transport	4	72.8	283
Good services	3	61.8	180
Tolerance	3	66.0	192
Feeling Good	2	81.0	157
Total			5,428

Negative Changes (2007-08 - 2009-10)	% Contribution
Housing	0.1
Health	
Neighbourhood/Environment	
Work Satisfaction	
Good relationships	
Safety	
Green Spaces	
Secure/Suitable Work	26
Having enough money	24
Financial Security	43
Culture/Hobbies	7
Local Facilities	
Skills and Education	
Community Spirit	
Good Transport	
Good services	
Tolerance	
Feeling Good	
Total	100

Table 6: Happiness Index for Scotland

Positive Changes (2007-08 - 2009-10)	% Contribution
Housing	
Health	39
Neighbourhood/Environment	6
Work Satisfaction	
Good relationships	
Safety	4
Green Spaces	9
Secure/Suitable Work	
Having enough money	
Financial Security	
Culture/Hobbies	
Local Facilities	6
Skills and Education	6
Community Spirit	17
Good Transport	6
Good services	7
Tolerance	
Feeling Good	
Total	100

increase in the probability of becoming unemployed. Our reading of why this contributes so much to all negative change is that it is likely to reflect headline news about rising unemployment which has contributed to an increased fear of unemployment, even among those who remain in work.

Table 6 shows positive changes between 2007-08 and 2009-10 – these variables increased over the period and so increased wellbeing. The most important change is clearly

due to better health, which contributed almost 40% (39.3%) of all positive changes - this results from the high weight on health in the NEF scaling, and the increase in those reporting "Very Good/Good" Health between the two periods. The other major change is in "Community Spirit", which contributed 17% of the total increase, due to an increase in the proportion of respondents who felt that their neighbourhood possessed a "Sense of community/friendly

Table 7 – Happiness Index for Deprived Communities (2009-10)

Element	Weights	Measure	Score
Housing	11	50.2	537
Health	11	87.0	929
Neighbourhood/Environment	9	45.0	393
Work Satisfaction	7	70.8	496
Good relationships	7	13.2	90
Safety	6	9.0	52
Green Spaces	6	32.5	189
Secure/Suitable Work	6	89.9	524
Having enough money	6	32.0	186
Financial Security	5	-5.8	-28
Culture/Hobbies	5	50.5	245
Local Facilities	4	41.0	159
Skills and Education	4	18.5	72
Community Spirit	4	58.0	225
Good Transport	4	80.4	312
Good services	3	67.5	197
Tolerance	3	66.0	192
Feeling Good	2	78.5	152
Total			4,923

Table 8: Happiness Index for Scotland (2009-10)

All Scotland v Deprived communities (Scotland above Deprived)	% Contribution
Housing	7
Health	10
Neighbourhood/Environment	20
Work Satisfaction	
Good relationships	
Safety	10
Green Spaces	10
Secure/Suitable Work	2
Having enough money	16
Financial Security	
Culture/Hobbies	8
Local Facilities	3
Skills and Education	5
Community Spirit	9
Good Transport	
Good services	
Tolerance	
Feeling Good	1
Total	100

people" people between 2007-08 and 2009-10⁹. We have no explanation why this occurred, and the increase over such a short period does seem large.

Otherwise, most of the increases appear to be due to a better provision of public services - if we include health, then we estimate that over 70% of increased happiness is attributable to improved public services (Health/Safety/Green Spaces/Skills/Education/ Transport/Services). There was a small improvement in the score for safety, due to a 1% increase in those reporting feeling safe between 2007-08 and 2009-10.

Comparisons with deprived communities

Table 7 above shows the wellbeing index for deprived communities, as defined by the Scottish Index of Multiple Deprivation. Note that it is assumed that all variables are

FRASER ECONOMIC COMMENTARY

given the same weight in both deprived communities variables and in Scotland as a whole - the difference in wellbeing is due only to differences in the size of the measures between deprived communities and the national picture.

The first point to note is that deprived communities score significantly below the score for Scotland – on the figures in Table 7, Scotland as a whole is 12% more prosperous than deprived areas. We now examine in more detail the reasons behind this disparity.

Table 8 shows areas where deprived areas are in deficit compared to Scotland. What is immediately clear is that deprived communities score lower across a wide range of measures – there appears to be no single reason, or even set of reasons, that contribute to their overall lower level of wellbeing. Deprived communities come off worse on twelve of the fifteen variables where we were able to measures differences between the two communities.

As discussed above, the major influences on happiness across all communities, as identified by the NEF, relate to more immediate local issues such being able to enjoy going outside, living in a healthy environment, the availability of green spaces and local amenities. Together, these contributed more than one-third of the total weight, and it is therefore no great surprise that the main differences between deprived communities and Scotland as a whole occur with respect to neighbourhood variables. The major disparities are in terms of whether people are able to enjoy going outside/having a clean and healthy environment, access to green spaces/play areas and safety, which together account for just over 40% of the difference between deprived communities and all Scotland. People living in deprived communities are also less likely to feel they are part of a community, and overall the majority of the deficit thus arises from differences in the quality of life in the local area. As noted above, the indices also pick up on differences in health, which accounts for 10% of the difference in scores. The other key difference is that deprived communities are more likely to struggle financially, which accounted for 16% of the total deficit compared to Scotland.

Deprived communities do outscore Scotland on a relatively limited number of measures, and Table 9 details the areas where deprived communities appear to do better. However, the results in Table 9 require some interpretation.

The most important measure is better financial security. Table 9 shows that wellbeing in deprived communities increased due to better financial security, which accounted for more than 40% of their higher position relative to all of Scotland. However, this arises because Scotland as a whole suffered more than deprived communities from increased unemployment in 2009-10 and, given an already high level of unemployment in deprived areas, this simply means that Scotland came closer to the position that these areas already occupied. While deprived communities do therefore come off better, this is only because the situation has improved relatively – as detailed above, Scotland as a whole has seen a very substantial fall in financial security in the last few years

Table 9: Happiness Index for Scotland (2009-10)

Positive Changes (2007-08 - 2009-10)	% Contribution
Housing Health	
Neighbourhood/Environment	
Work Satisfaction	
Good relationships	
Safety	
Green Spaces	
Secure/Suitable Work	
Having enough money	
Financial Security	43
Culture/Hobbies	
Local Facilities	
Skills and Education	
Community Spirit	
Good Transport	42
Good services	15
Tolerance	
Feeling Good	
Total	100

The other key difference (Transport) also requires interpretation. The measure used here was satisfaction with Public Transport –given that access to cars is almost certainly higher across Scotland as a whole, higher satisfaction with public transport may just reflect greater use, and those living in deprived areas may simply be more likely to express an opinion.

Summary and conclusions

Wellbeing indices, such as the Oxfam Humankind Index, measure prosperity in general terms. They attempt to go beyond measuring wealth by the amount of goods and services that people are able to privately consume and assess this instead in terms of a wider range of measures which combine to determine people's overall wellbeing. If we accept that policy should focus on wellbeing, we clearly need some means by which we can track how well this is being achieved, and the work undertaken for Oxfam Scotland represents the first attempt to do so for Scotland. One interesting result of the exercise is that overall measured wellbeing in Scotland increased despite the onset of recession in 2008. This does seem to help support the case that we should focus less on increasing economic growth as a means increasing wellbeing and concentrate instead on a wider set of objectives.

FRASER ECONOMIC COMMENTARY

The results shown here also have implications for the conduct of policy, particularly economic policy in Scotland. Firstly, the weights themselves given in Table 1 help to identify policy priorities. They provide a "roadmap" which allows government to identify policy areas which people in Scotland have identified as contributing to their overall welfare. The weights also implicitly identify trade-offs between different areas of policy. This is clearly useful when resources are constrained and choices have to be made between areas.

By measuring the extent to which priorities are being satisfied, the results can also be used to assess performance. The best example of this is again seen when we compare health with safety. Both of these have high weights, ranking 1st and 4th respectively in the expressed wellbeing of the Scottish people. But while most people appear satisfied with health - 93% of people reported that there health was good or very good - satisfaction with safety is much lower, with only around 20% of people reporting that they felt safe in their local area. Furthermore, the index also allows us to track how well priorities are being satisfied over time. For example, in comparing the index for the two time periods, we found a significant increase in those reporting good health but only a small increase in the number reporting that they felt safe in their local area, suggesting that more resources should be devoted to improving safety.

In terms of social justice, the index for deprived communities allows us to assess the size of the deficit in these communities and to assess which policy areas need to be addressed if we are to close the gap between them and Scotland as a whole. Unfortunately, the results show that they lag behind the rest of Scotland across a wide range of factors, and the results here may do no more than simply indicate the size of the task.

In summary, the index shows that we can both measure wellbeing and the extent to which we are making progress towards doing those things that improve people's wellbeing. Finally, the index also provides interesting evidence on what matters to people in Scotland. There was little evidence that keeping up with others was a major concern and the results show instead that people in Scotland tended to value 'ordinary' things, such as good housing, good health, having close relationships and living in a nice area. From a policy perspective, it is notable that many of things that people value are (in the UK at least) public goods, including health, education, safety, transport and access to culture.

Endnotes

¹ 'Report by the Commission on the Measurement of Economic Performance and Social Progress', Paris, 2009.

² 'Does Economic Growth Improve the Human Lot? Some Empirical Evidence' by R.A. Easterlin in P.A. David and M.W.Reder (eds.),

Nations and Households in Economic Growth: Essays in Honour of Moses Abramowitz, Academic Press, New York and London (1974).

³The overall approach and a detailed discussion of the measures used to construct the index, is available in "Oxfam Humankind Index. The new Measure of Scotland's prosperity", published by Oxfam Scotland and available at http://policypractice.oxfam.org.uk/our-work/poverty-in-the-uk/humankind-index.

This also discusses the extent to which it was possible, on the basis of published statistics, to obtain valid measures that corresponded to the elements identified as creating wellbeing.

⁴Note that we have renamed the variables in order to make the tables more legible.

⁵Neighbourhood/environment, /feeling safe/ green spaces, wild spaces /social /play areas/local facilities/ community spirit/good transport/good services.

⁶Only 20% of respondents across Scotland as a whole reported felt that they lived in a safe environment. (See Scottish Household Statistics, 2009-10, Table 3.4)

⁷Note that some measures (Work Satisfaction, Good Relationships, Tolerance, and Feeling Good) have not changed over the two periods since these were only available for 2009-10.

⁸The only other change was a small decrease in the number participating in sports and hobbies.

⁹Both measures are reported in Scottish Household Statistics.

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