Inequality and Happiness

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Unequal results

Theoretical work, field experiments and survey-based studies show that inequality impacts on happiness…

• …through relative position concerns: benchmarking and expectations, competitive consumption, envy and guilt;

• …through interpretation mechanisms: luck or effort, poverty traps or social mobility?

However, results are conflicting and often appear to be domain-specific (country, class etc).
Unequal opinions

• **Happiness**: to a certain extent, in the eye of the beholder. Blanket estimates not enough: Ann and Bob may react differently to the same event.

• **Variability of effects** exerted on happiness by determinant \( x \) increases with heterogeneity of feelings with respect to \( x \) (health vs football).

• **Inequality**: typical wedge issue, calls for observation of heterogeneous attitudes. But how?

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*Is happiness measurable, and what do those measures mean for policy?* Rome, April 2-3, 2007
Equal to the task

We want to model the effect of inequality on happiness as mediated by heterogeneous judgements...

(a) ...based on personal beliefs, values and inclinations;

(b) ...incorporating both positional and interpretational concerns.
The model
A simple model of inequality, values and happiness

\[ H_i = h(g(f_i(x),|v_i - \bar{v}|),q_i) \]

- \( H_i \) \( \rightarrow \) level of happiness experienced by individual \( i \)
- \( h \) \( \rightarrow \) production function for happiness
- \( g \) \( \rightarrow \) function yielding judgement on inequality
- \( f_i(x) \) \( \rightarrow \) income distribution perceived by individual \( i \)
- \( v_i \) \( \rightarrow \) vector of personal values for individual \( i \)
- \( \bar{v} \) \( \rightarrow \) vector of average values in reference community
- \( q_i \) \( \rightarrow \) vector of controls for individual \( i \)

Data and method

• **Data** from the European Social Survey, Round 2 (2004):
  (a) **income (equivalent)**: own household, median and standardized interquartile range at the regional level, median at the national level;
  (b) **values**: eighteen questions.

• **Method**:
  (a) multiple correspondence analysis (MCA) of value-related items in order to extract a few synthetic indicators;
  (b) clustering of individuals based on value metric;
  (c) interaction between clusters and income variables in ordered logit regression.

Values: elements

Six thematic groups (three variables each):

- **trust**: generalized, domain-specific;
- **solidarity**: public, private;
- **compliance with the law**: aversion to frauds;
- **civic engagement**: voting, political activity;
- **gender roles and family**: traditional or modern;
- **attitude toward minorities**: immigrants, gays.

Is happiness measurable, and what do those measures mean for policy?

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Is happiness measurable, and what do those measures mean for policy?

MCA: some results

When jobs are scarce, men should have more right to a job than women

Strongly disagree

Strongly agree
Is happiness measurable, and what do those measures mean for policy?

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MCA: some results

How wrong: someone selling something second-hand and concealing some or all of its faults?

Not at all wrong

Seriously wrong

MCA: some results

Society would be better off if everyone just looked after themselves

Strongly disagree

Strongly agree

-1,0 -0,8 -0,6 -0,4 -0,2 0,0 0,2 0,4 0,6 0,8 1,0

-1,0 -0,8 -0,6 -0,4 -0,2 0,0 0,2 0,4 0,6 0,8 1,0
Inequality and happiness

MCA: some results

MCA: comment

Two factors (80 per cent of total variance explained):

• **moderation**: measures **tendency to express mild opinions** rather than extreme ones;

• **inclusiveness**: measures degree of **support for social inclusion**, i.e. same rights and opportunities for everyone regardless of background and circumstances. There is also an element of consistent **subscription to a shared set of rules (social cohesion)**.

**Is happiness measurable, and what do those measures mean for policy?**  
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Cluster analysis

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Estimation

• Ordered logit with the degree of happiness on the LHS and income indicators interacted with value clusters on the RHS.

• Usual controls are included (health, marital status, social activity, religion, feelings of safety, locality of residence etc) and have expected sign.

• Results in the following robust to various distance metrics and various scopes for calculating inequality, living standard etc.
### Inequality and happiness: results (I)

Dependent variable: “How happy are you?” (0-10)

<table>
<thead>
<tr>
<th>Equivalent income</th>
<th>Estimate</th>
<th>Std Error</th>
<th>Pr &gt; ChiSq</th>
</tr>
</thead>
<tbody>
<tr>
<td>Log own</td>
<td>0.2471</td>
<td>0.0467</td>
<td>0.0000</td>
</tr>
<tr>
<td>* Cluster 2 (More Moderation)</td>
<td>-0.1241</td>
<td>0.0296</td>
<td>0.0000</td>
</tr>
<tr>
<td>* Cluster 3 (Less M. and I.)</td>
<td>-0.1089</td>
<td>0.0594</td>
<td>0.0670</td>
</tr>
<tr>
<td>* Cluster 4 (More Inclusiveness)</td>
<td>-0.2015</td>
<td>0.0510</td>
<td>0.0000</td>
</tr>
<tr>
<td>Std interquartile range, regional</td>
<td>0.4845</td>
<td>0.2338</td>
<td>0.0380</td>
</tr>
<tr>
<td>* Cluster 2 (More Moderation)</td>
<td>-0.7012</td>
<td>0.2748</td>
<td>0.0110</td>
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<tr>
<td>* Cluster 3 (Less M. and I.)</td>
<td>0.0369</td>
<td>0.3199</td>
<td>0.9080</td>
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<tr>
<td>* Cluster 4 (More Inclusiveness)</td>
<td>-0.5805</td>
<td>0.1954</td>
<td>0.0030</td>
</tr>
</tbody>
</table>

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Is happiness measurable, and what do those measures mean for policy?
### Inequality and happiness: results (II)

<table>
<thead>
<tr>
<th>Equivalent income</th>
<th>Estimate</th>
<th>Std Error</th>
<th>Pr &gt; ChiSq</th>
</tr>
</thead>
<tbody>
<tr>
<td>Log median, national</td>
<td>0.1343</td>
<td>0.3328</td>
<td>0.6870</td>
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<tr>
<td>* Cluster 2 (More Moderation)</td>
<td>0.2178</td>
<td>0.3961</td>
<td>0.5820</td>
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<tr>
<td>* Cluster 3 (Less M. and I.)</td>
<td>0.1142</td>
<td>0.3358</td>
<td>0.7340</td>
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<tr>
<td>* Cluster 4 (More Inclusiveness)</td>
<td>-0.1107</td>
<td>0.3261</td>
<td>0.7340</td>
</tr>
<tr>
<td>Log median, regional</td>
<td>0.1619</td>
<td>0.2505</td>
<td>0.5180</td>
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<tr>
<td>* Cluster 2 (More Moderation)</td>
<td>-0.2567</td>
<td>0.3347</td>
<td>0.4430</td>
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<tr>
<td>* Cluster 3 (Less M. and I.)</td>
<td>0.0117</td>
<td>0.3404</td>
<td>0.9730</td>
</tr>
<tr>
<td>* Cluster 4 (More Inclusiveness)</td>
<td>-0.0015</td>
<td>0.2931</td>
<td>0.9960</td>
</tr>
</tbody>
</table>

Marginal effects of clusters: baseline = Cluster 1 (Less Moderation)

| * Cluster 2 (More Moderation)             | 2.0358   | 0.6932    | 0.0030     |
| * Cluster 3 (Less M. and I.)             | -0.6332  | 0.5984    | 0.2900     |
| * Cluster 4 (More Inclusiveness)          | 3.6944   | 0.8016    | 0.0000     |

**Is happiness measurable, and what do those measures mean for policy?**

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Inequality and happiness: comment

- **Moderation** in excess of the reference community mean yields dislike for inequality. Possible interpretation: *aversion to social tension and unrest*.

- **Inclusiveness** in excess of the reference community mean yields dislike for inequality. Possible interpretation: *aversion to perceived unfairness*.

- Deviations from the mean in both moderation and inclusiveness are positively related to happiness.
Concluding remarks

• When studying the impact on happiness of such a politically and emotionally charged wedge issue as inequality, it is very important that heterogeneity is taken into account.

• We regress happiness measures on the interaction of personal values and perceived inequality so as to understand whether different outlooks on life generate different reactions to a given income distribution.

• We find that values matter: in particular, those who are more moderate in opinion and more supportive of social inclusion than their fellow citizens tend to dislike inequality.