



Inequality and Happiness

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

Rome, April 2-3, 2007

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?

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  level of happiness experienced by individual i

h  production function for happiness

g  function yielding judgement on inequality

$f_i(x)$  income distribution perceived by individual i

v_i  vector of personal values for individual i

\bar{v}  vector of average values in reference community

q_i  vector of controls for individual i

Data and method

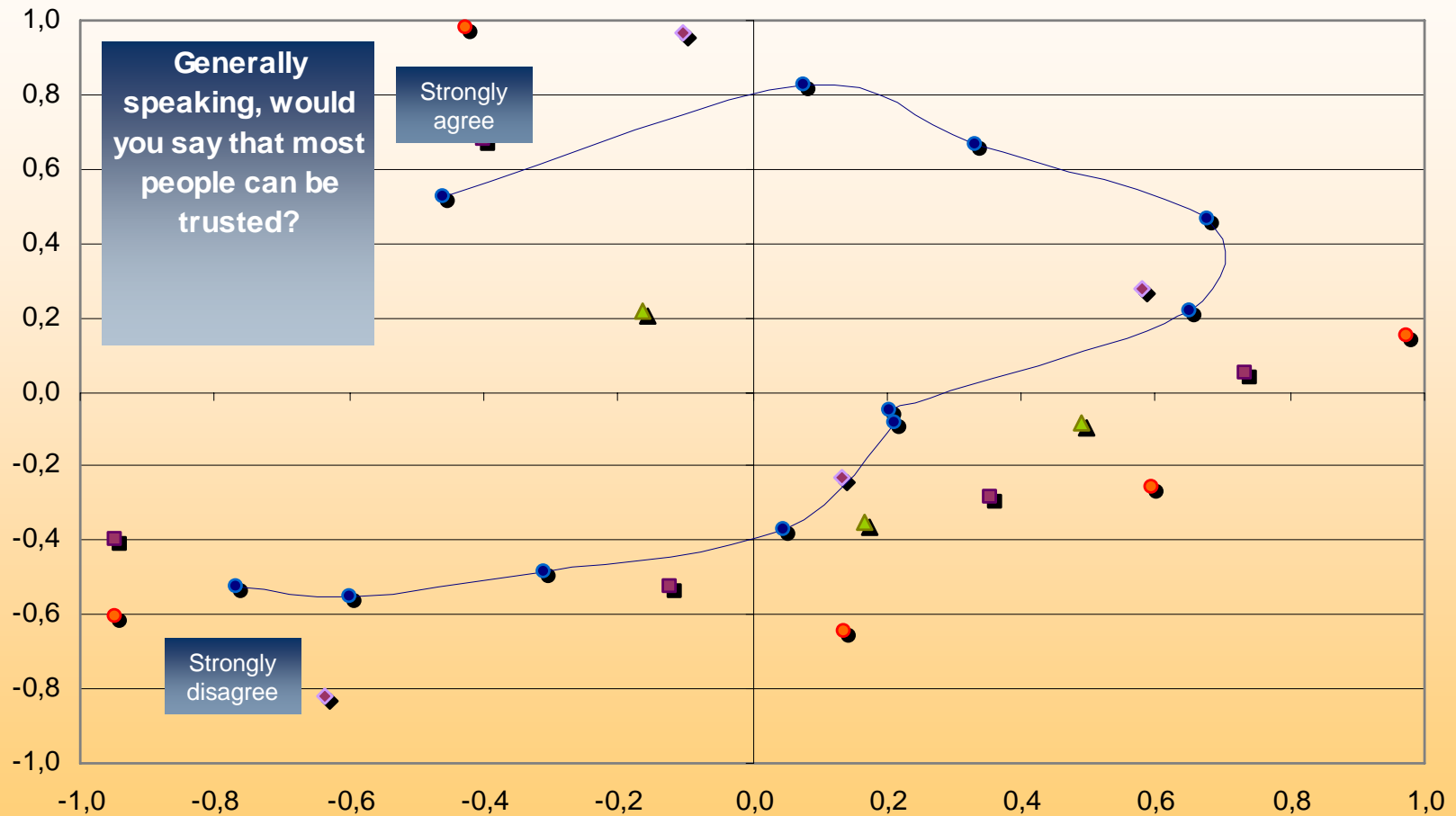
- **Data** from the European Social Survey, Round 2 (2004):
 - (a) income (equivalent): own household, median and standardized interquartile range at the regional level, median at the national level;
 - (b) values: eighteen questions.
- **Method**:
 - (a) multiple correspondence analysis (MCA) of value-related 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

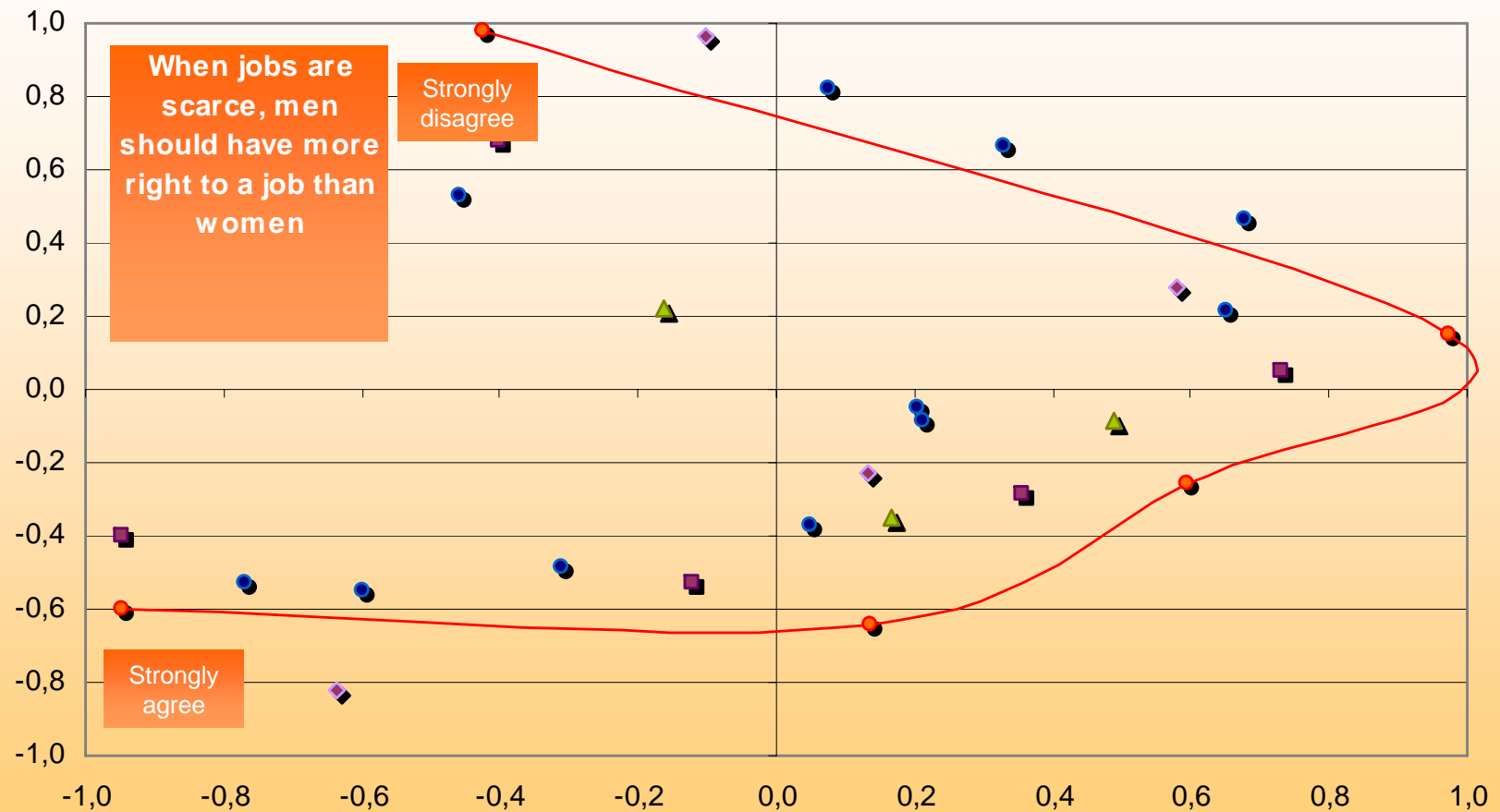
Six thematic groups (three variables each):

- **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.

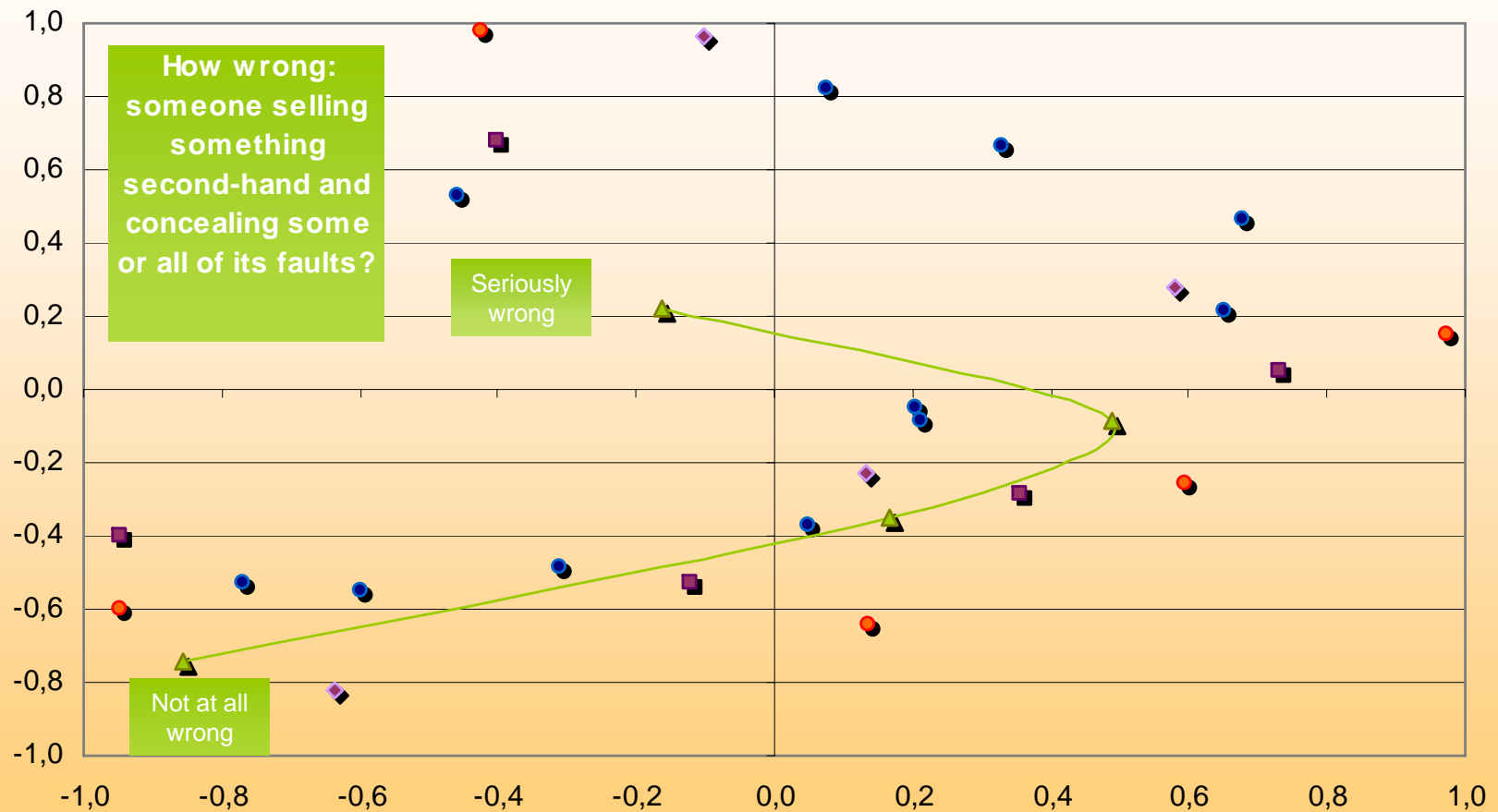
MCA: some results



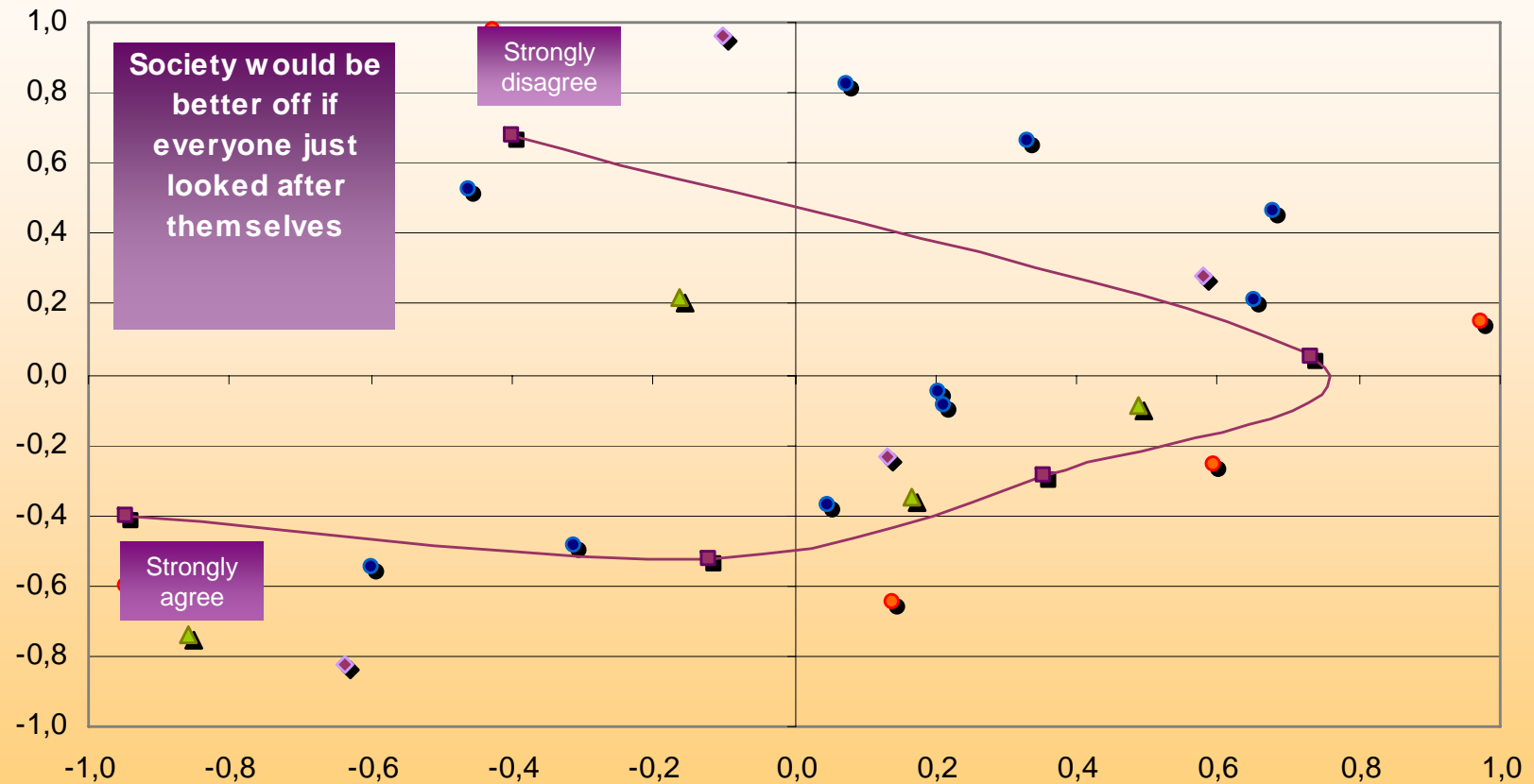
MCA: some results



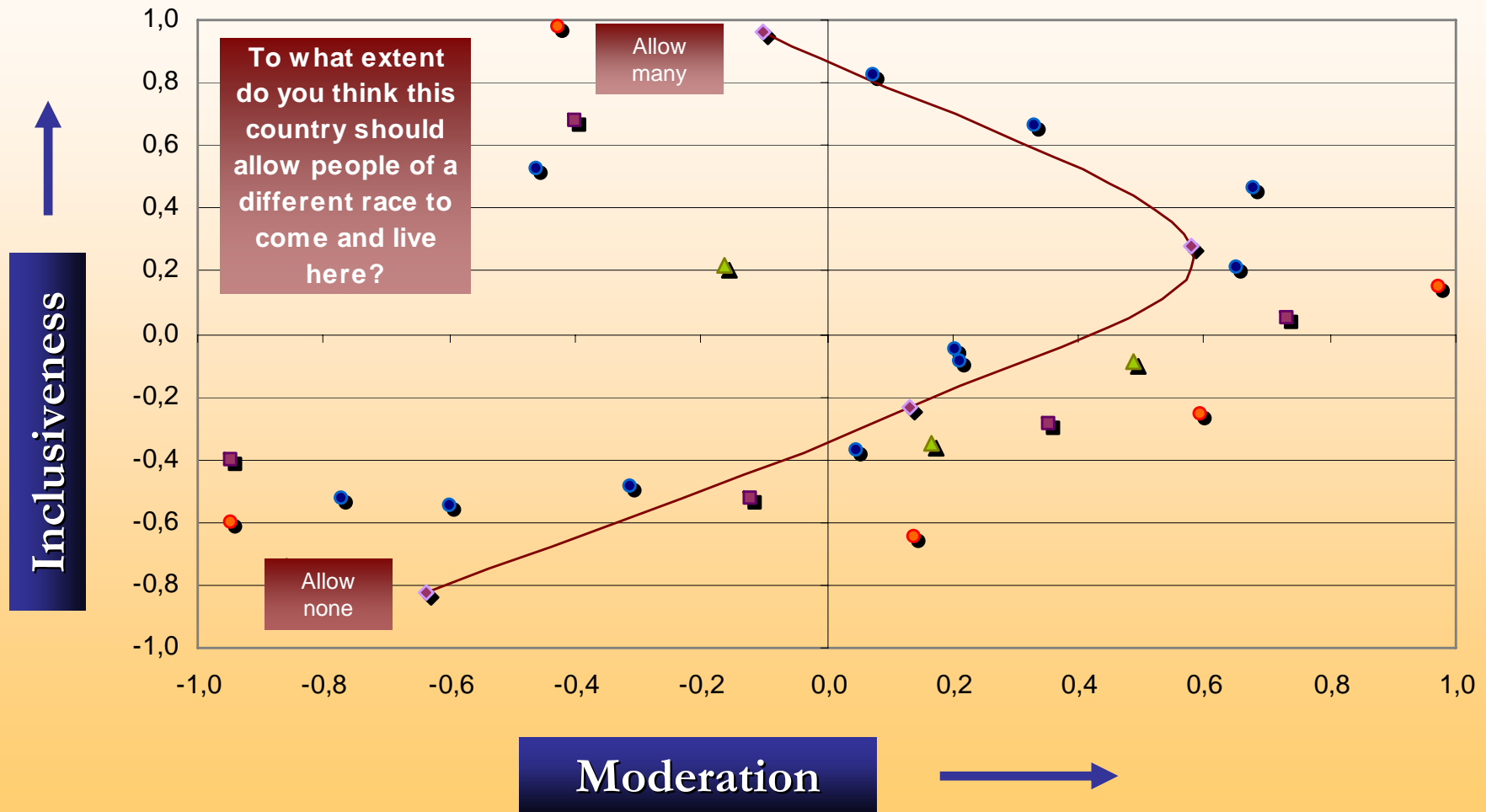
MCA: some results



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MCA: some results

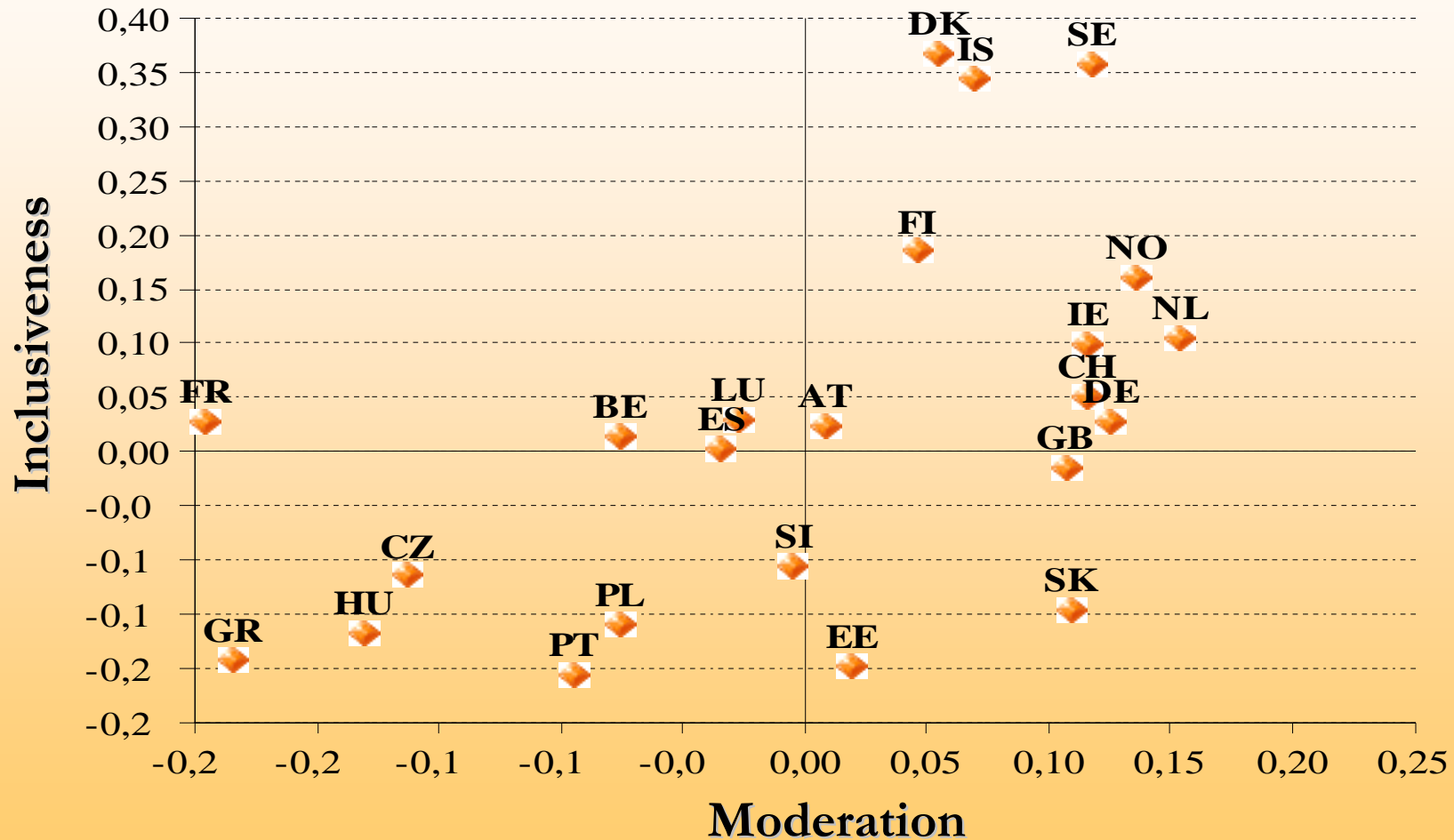


MCA: comment

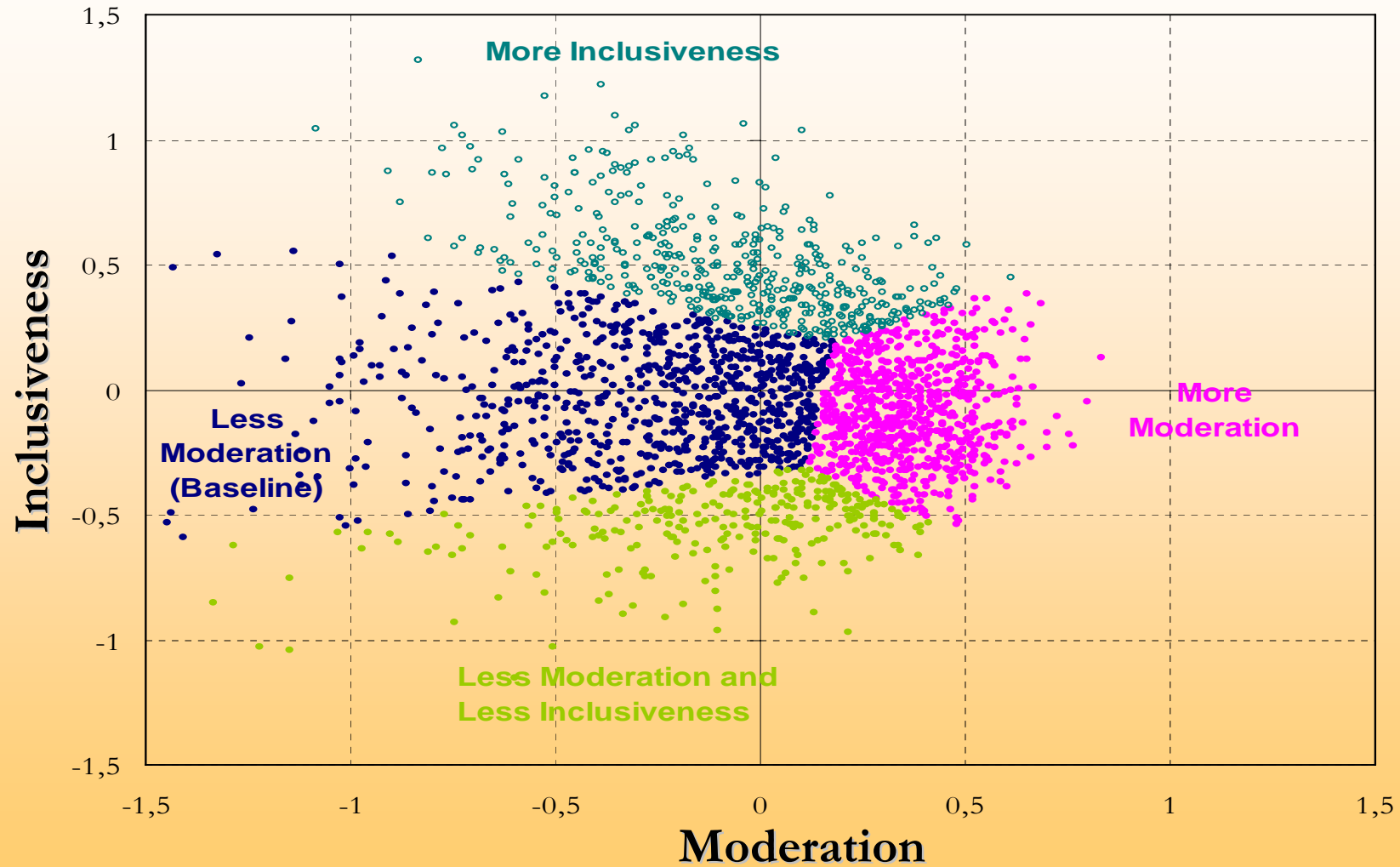
Two factors (80 per cent of total variance explained):

- **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)**.

Country means for factor scores



Cluster analysis



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)

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

Inequality and happiness: results (II)

	Estimate	Std Error	Pr > ChiSq
Equivalent income			
Log median, national	0.1343	0.3328	0.6870
* <i>Cluster 2 (More Moderation)</i>	0.2178	0.3961	0.5820
* <i>Cluster 3 (Less M. and I.)</i>	0.1142	0.3358	0.7340
* <i>Cluster 4 (More Inclusiveness)</i>	-0.1107	0.3261	0.7340
Log median, regional	0.1619	0.2505	0.5180
* <i>Cluster 2 (More Moderation)</i>	-0.2567	0.3347	0.4430
* <i>Cluster 3 (Less M. and I.)</i>	0.0117	0.3404	0.9730
* <i>Cluster 4 (More Inclusiveness)</i>	-0.0015	0.2931	0.9960
Marginal effects of clusters: baseline = Cluster 1 (Less Moderation)			
* <i>Cluster 2 (More Moderation)</i>	2.0358	0.6932	0.0030
* <i>Cluster 3 (Less M. and I.)</i>	-0.6332	0.5984	0.2900
* <i>Cluster 4 (More Inclusiveness)</i>	3.6944	0.8016	0.0000

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.