

Well-being measurement and fairness

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Outline

- Subjective well-being
- Opportunities
- Equivalence approach
- Examples

Well-being measurement: for what purpose?

- Health evaluation
 - Physical and mental well-being
- Living standards
 - Economic affluence
- Social welfare/justice evaluation
 - Advantage
- *The measure of well-being is not a given that serves as an input to social evaluation, it is part of it: different principles of justice require different measures*

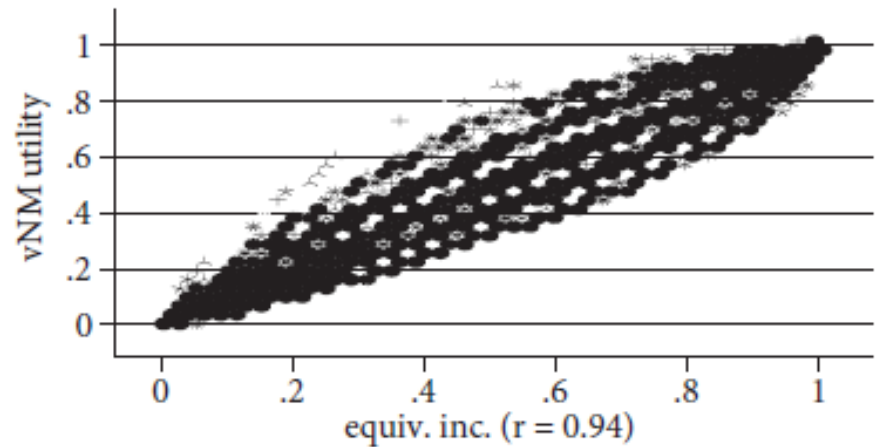
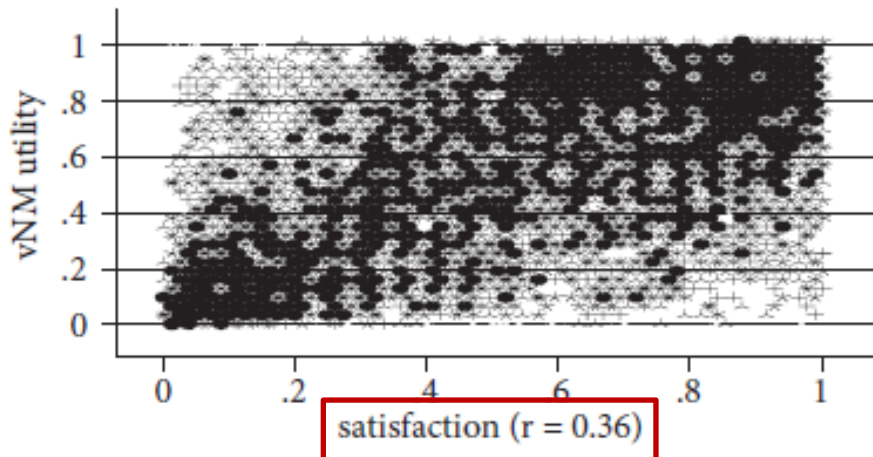
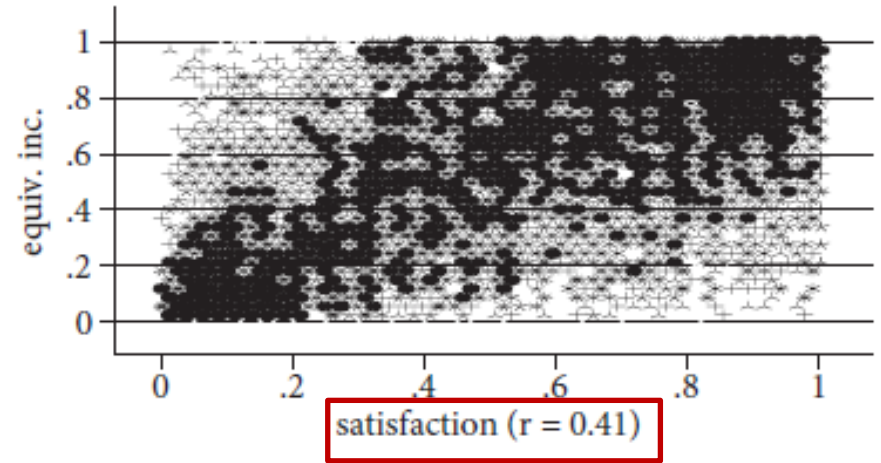
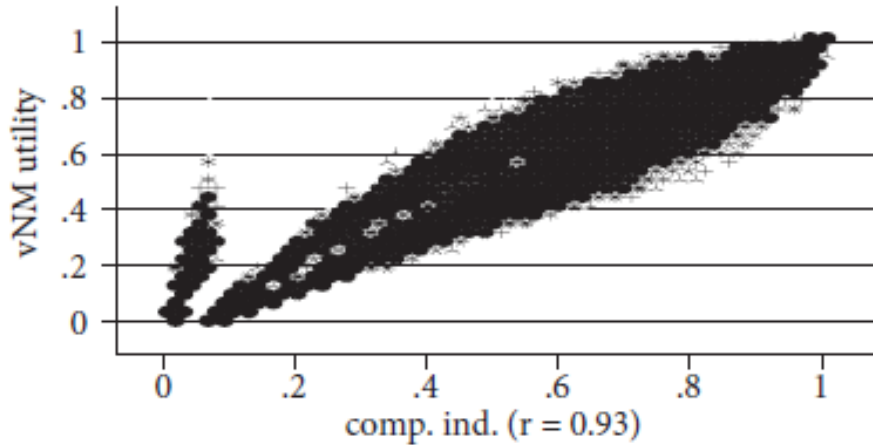
Subjective well-being

1. Hedonic: emotions, feelings
 2. Evaluative: satisfaction, eudaimonia
- Hedonic:
 - Good measure of advantage for hedonism (a perfectionist approach)
 - A relevant component of advantage for other approaches
 - A proxy of broader advantage?

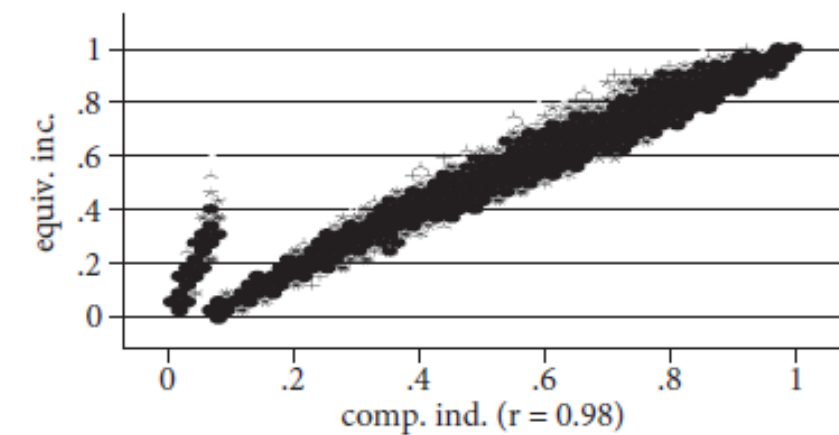
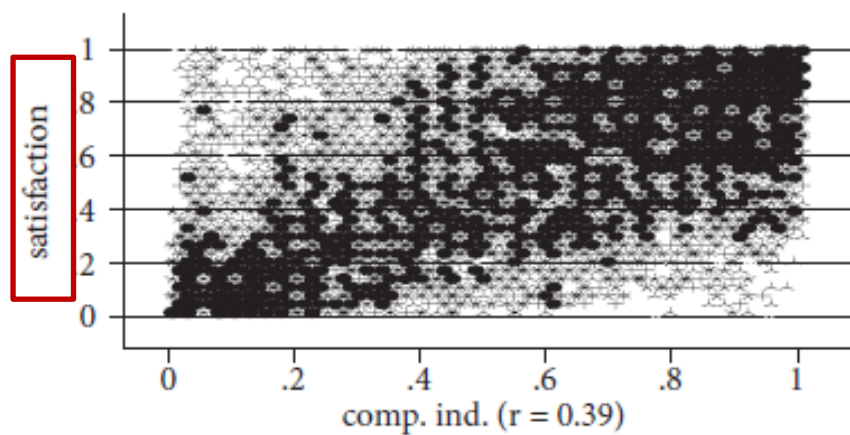
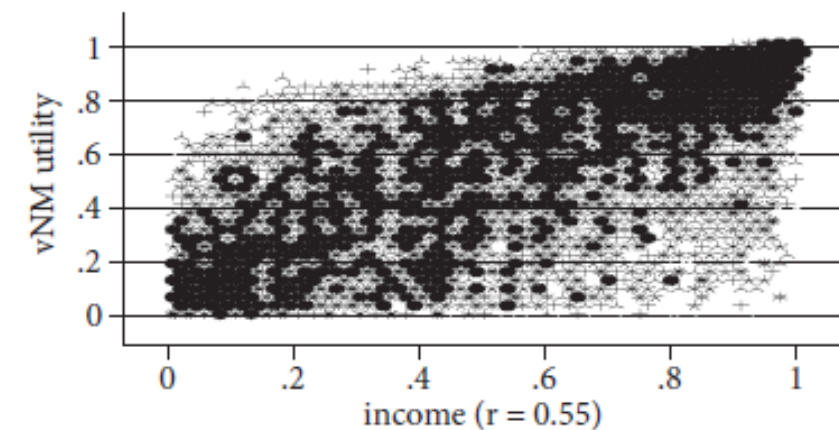
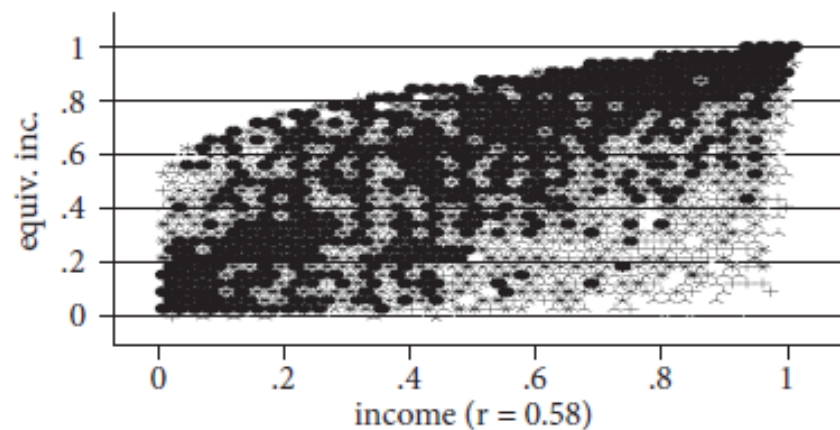
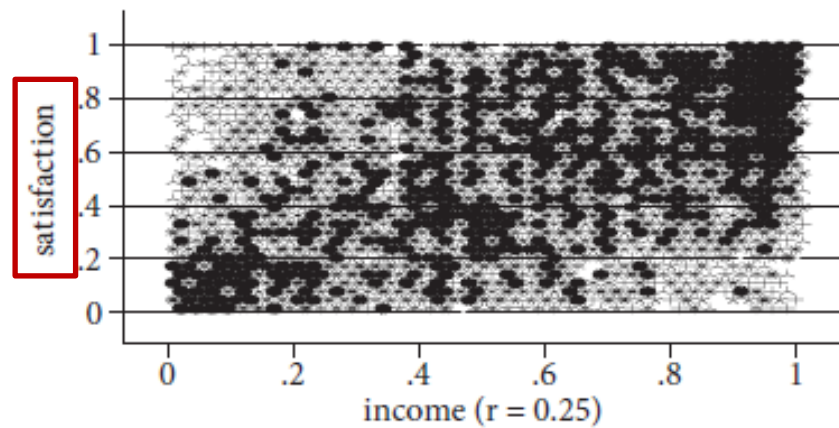
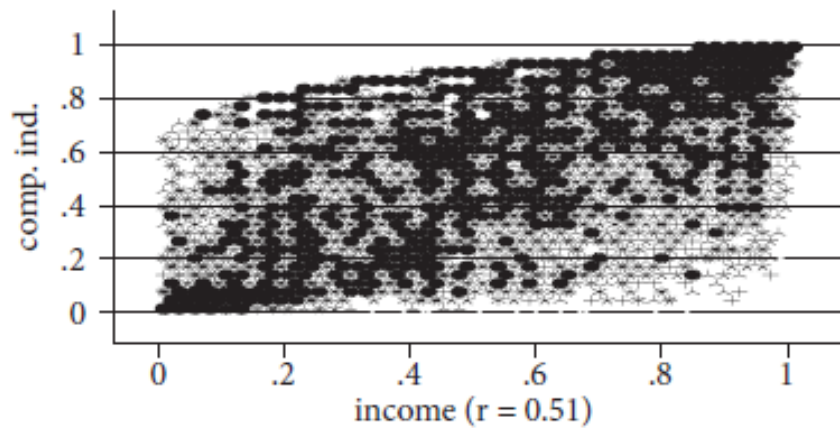
Subjective well-being

1. Hedonic: emotions, feelings
 2. Evaluative: satisfaction, eudaimonia
- Evaluative:
 - Not comparable when people use the scales differently
 - A source of information about values and preferences?
 - A good proxy for a broad measure of advantage?
The “paradox of happiness”

Subjective well-being and income as outliers



Source: Decancq and Neumann, Oxford Hdbk of WB and Public Policy



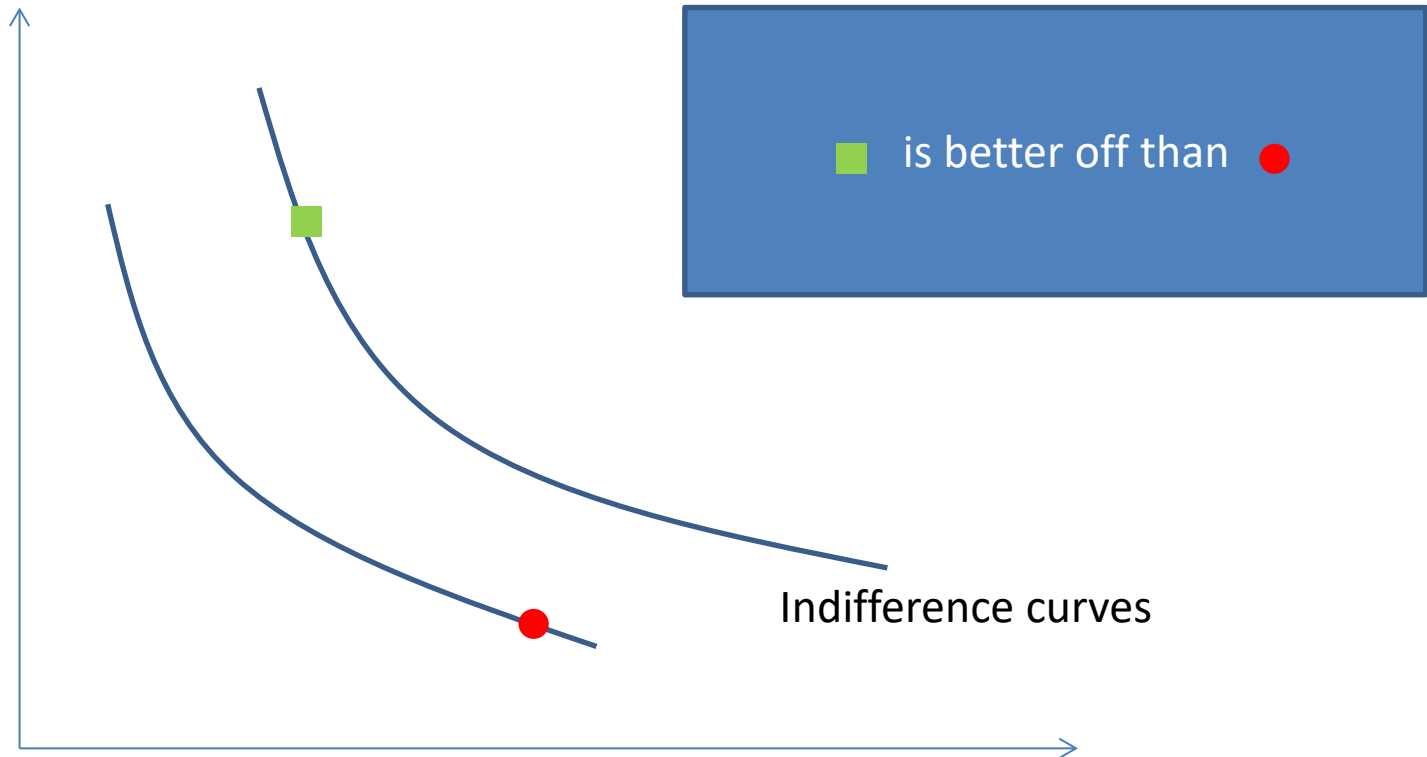
Opportunities

- Post-Rawlsian philosophy: personal responsibility, opportunities, capabilities
- Theoretical schools:
 - Utilitarian vs libertarian over the consequences of responsibility
 - Responsibility sphere: control vs preferences
- Empirical schools:
 - Disparity among circumstance groups (=inequality in average outcomes)
 - Hypothetical outcome (replace responsibility variable with reference value)
 - Multidimensional poverty

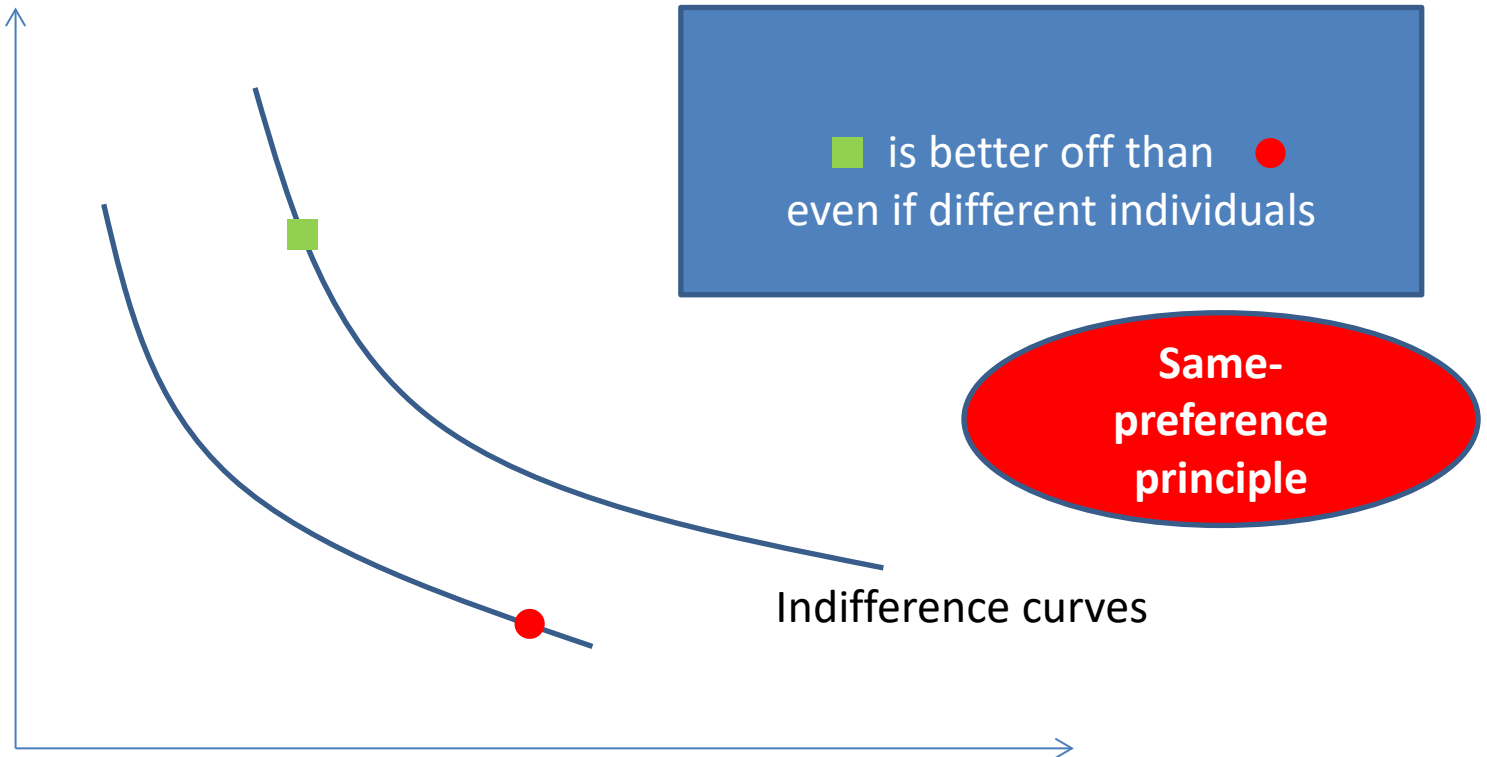
Responsibility is suspect but necessary

- The free will problem: social science based on metaphysics?
 - The disparity approach gives lower bounds
 - The hypothetical-outcome approach assumes responsibility for specific variables
- False positives: it is tough to be an undeserving poor
- But responsibility follows from freedom, respect for values & preferences
 - Replace the undeserving poor by the committed frugal

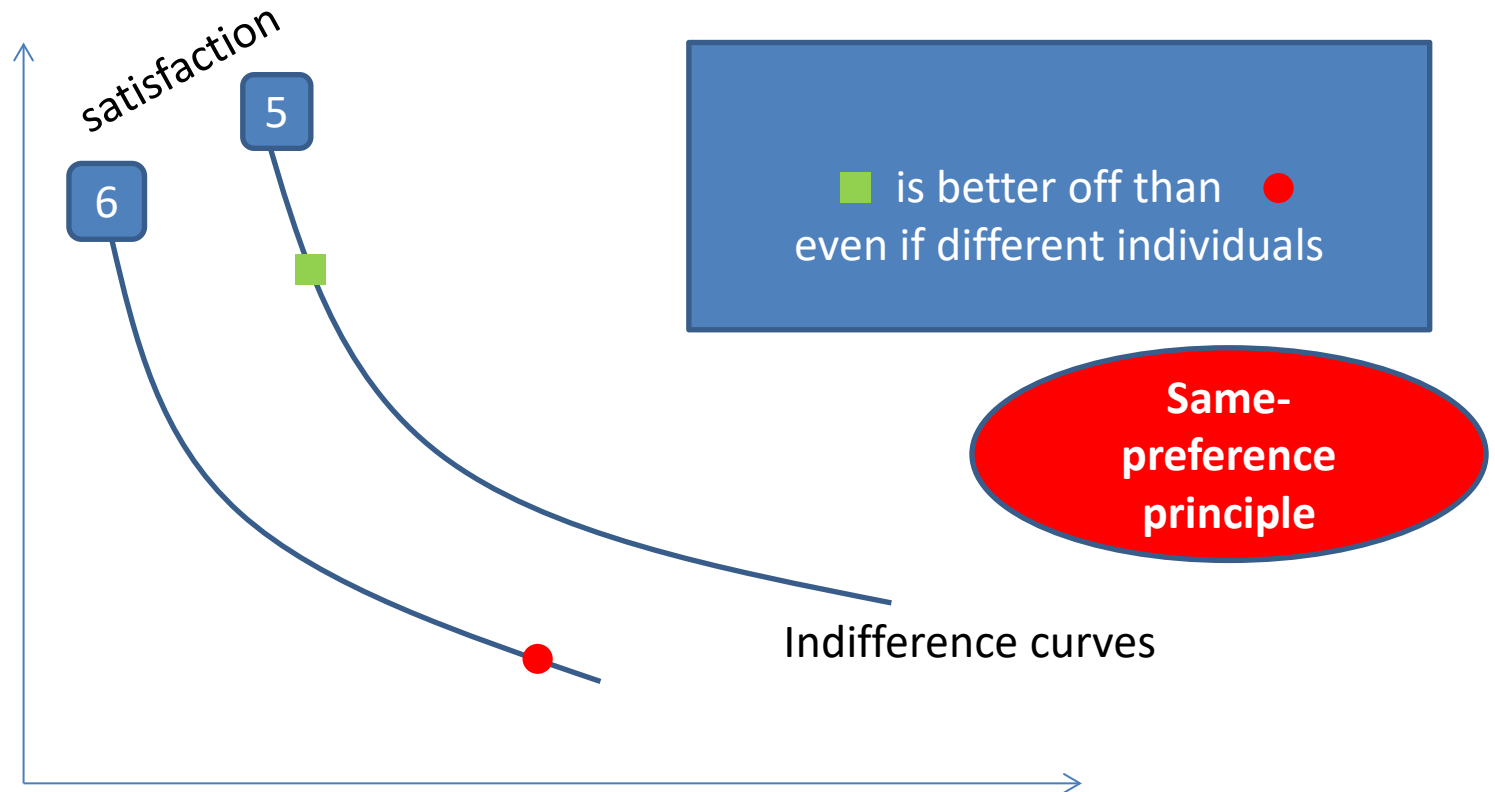
Fairness as respect for values & preferences



Fairness as respect for values & preferences



Same-pref principle not satisfied by subjective well-being



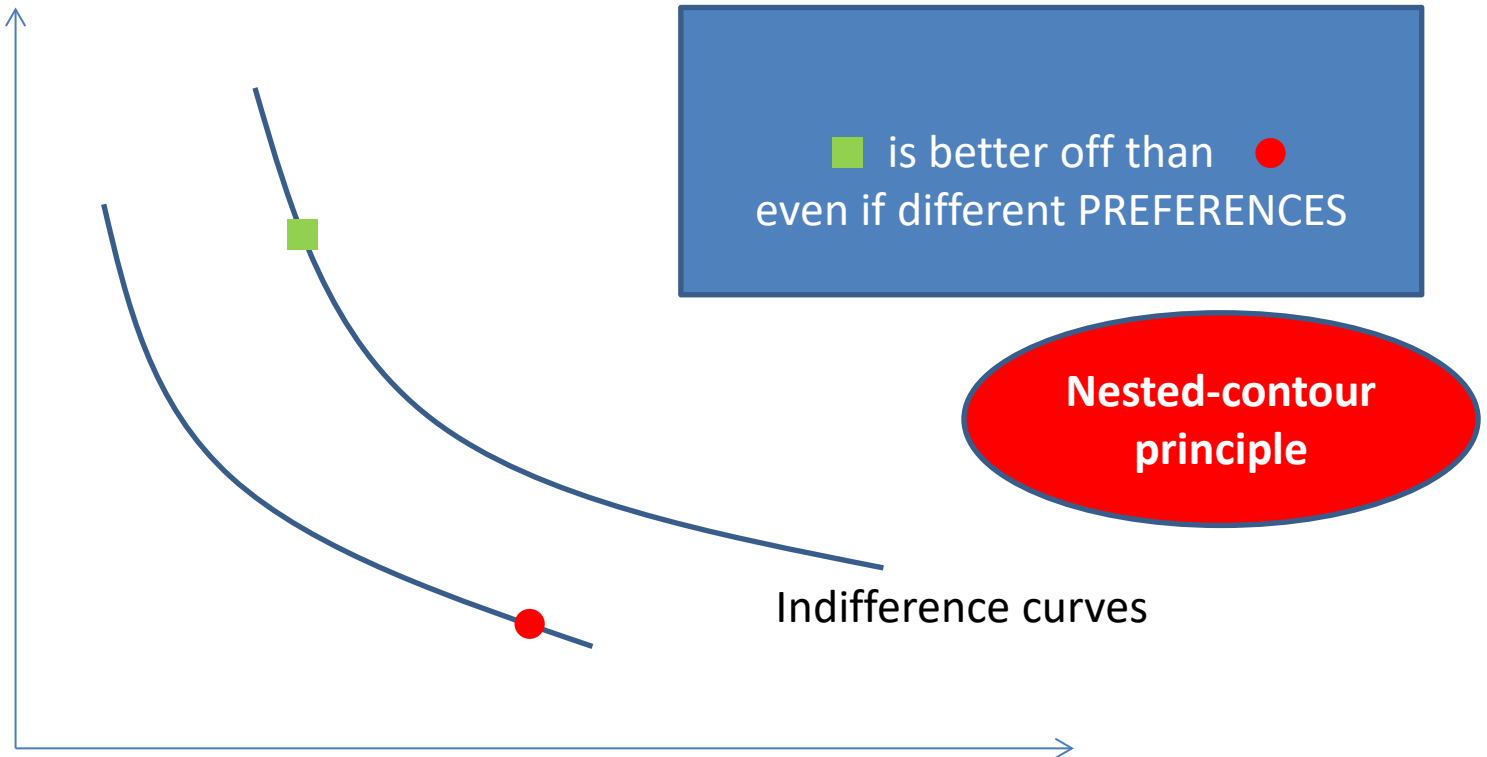
Same-pref principle not satisfied by opportunity approach

- Disparity approach: personal outcome replaced with average outcome in the circumstance group
- Hypothetical-outcome approach: personal outcome replaced with hypothetical outcome

Fairness as respect for values & preferences

- Theorem: A measure of well-being $w(x, R)$ satisfies the “same-preference” principle iff $w(x, R)$ is a representation of R for every R .
- Comment: Anonymity brings interpersonal comparisons

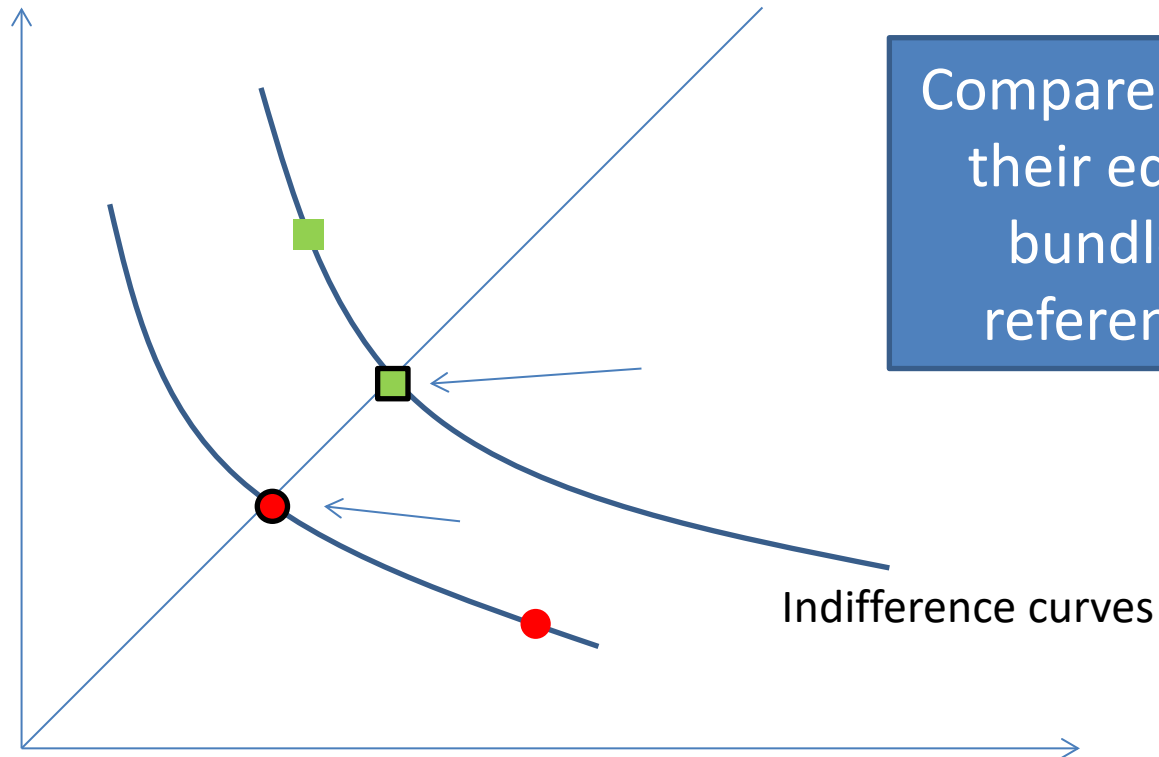
Fairness as respect for values & preferences



Fairness as respect for values & preferences

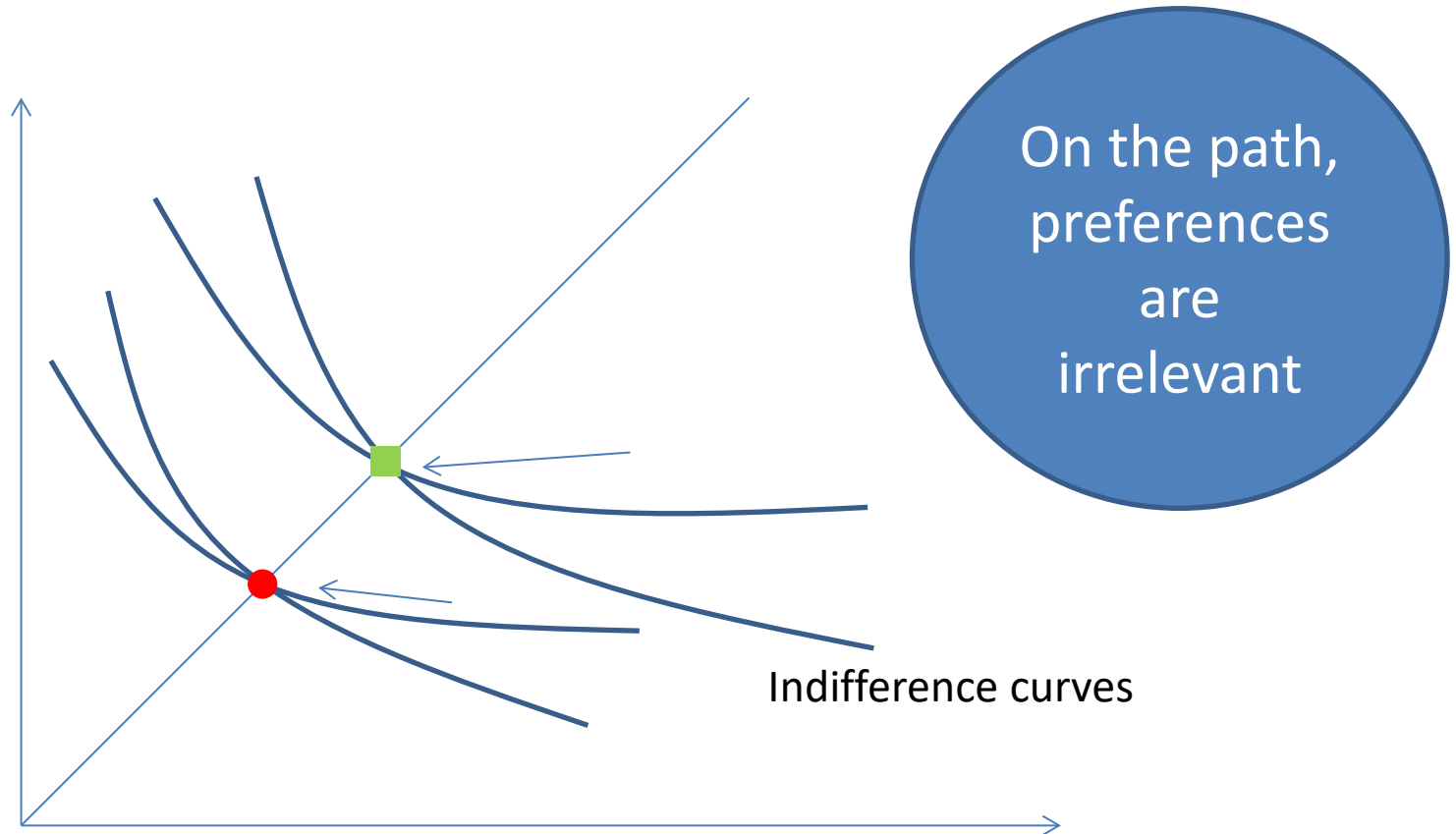
- Theorem: A measure of well-being $w(x, R)$ satisfies the “nested-contour” principle iff it is an increasing function of indifference curves.
- Comments:
 - Are these principles compelling? Only if all relevant dimensions of life are recorded
 - Is there a wedge between the same-preference principle and the nested-contour principle? The latter follows from the former under “independence of irrelevant indifference curves”
 - Are there measures that satisfy these principles?
 - Not subjective well-being
 - Not opportunities

Equivalence approach

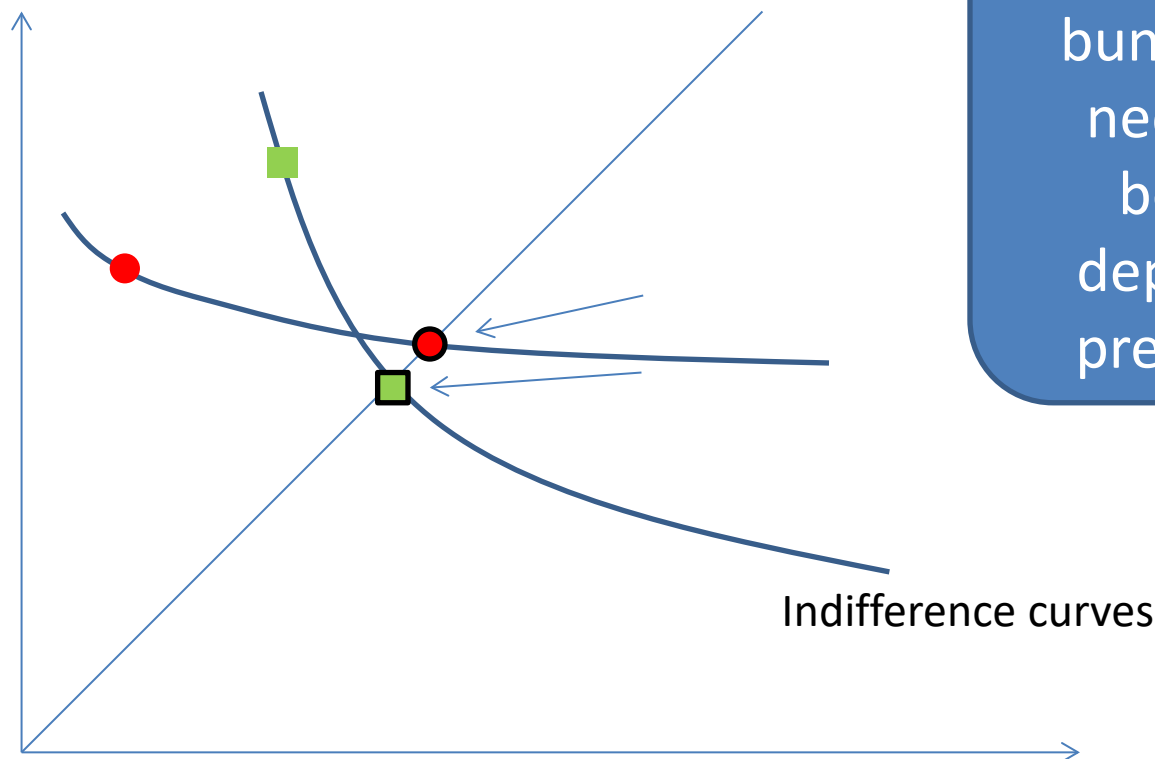


Compare people by
their equivalent
bundles on a
reference path

Equivalence approach

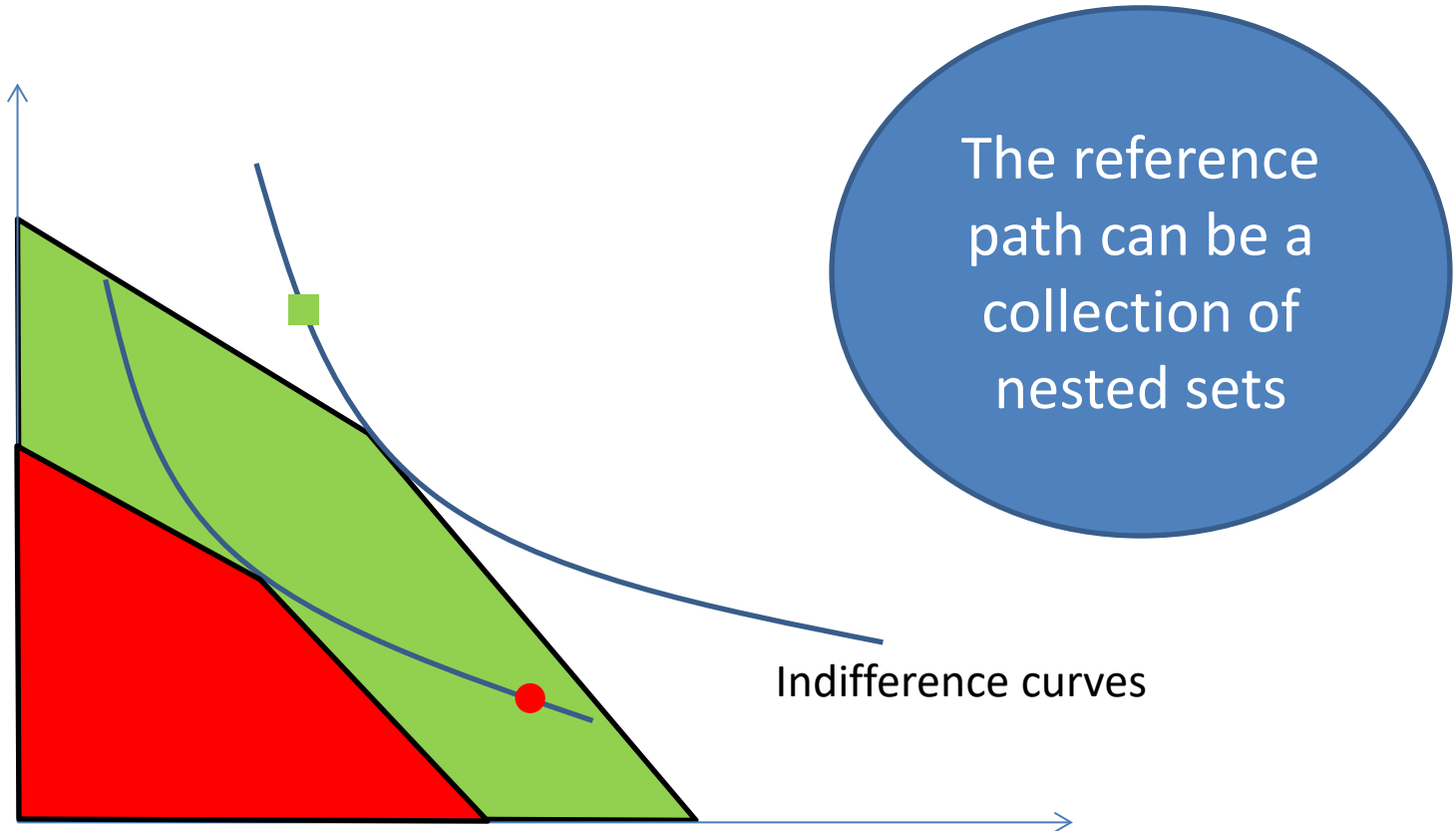


Equivalence approach

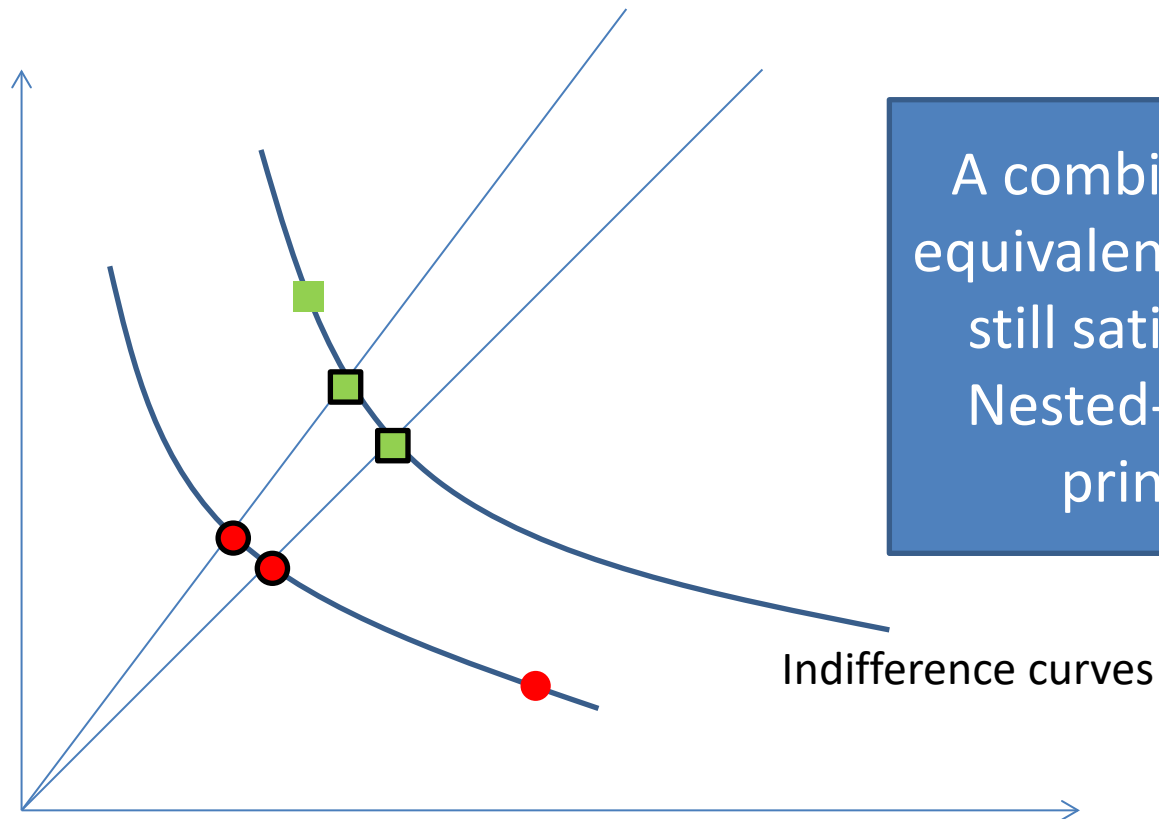


Theorem: No approach satisfies Same-Preference principle and Dominance principle

Equivalence approach

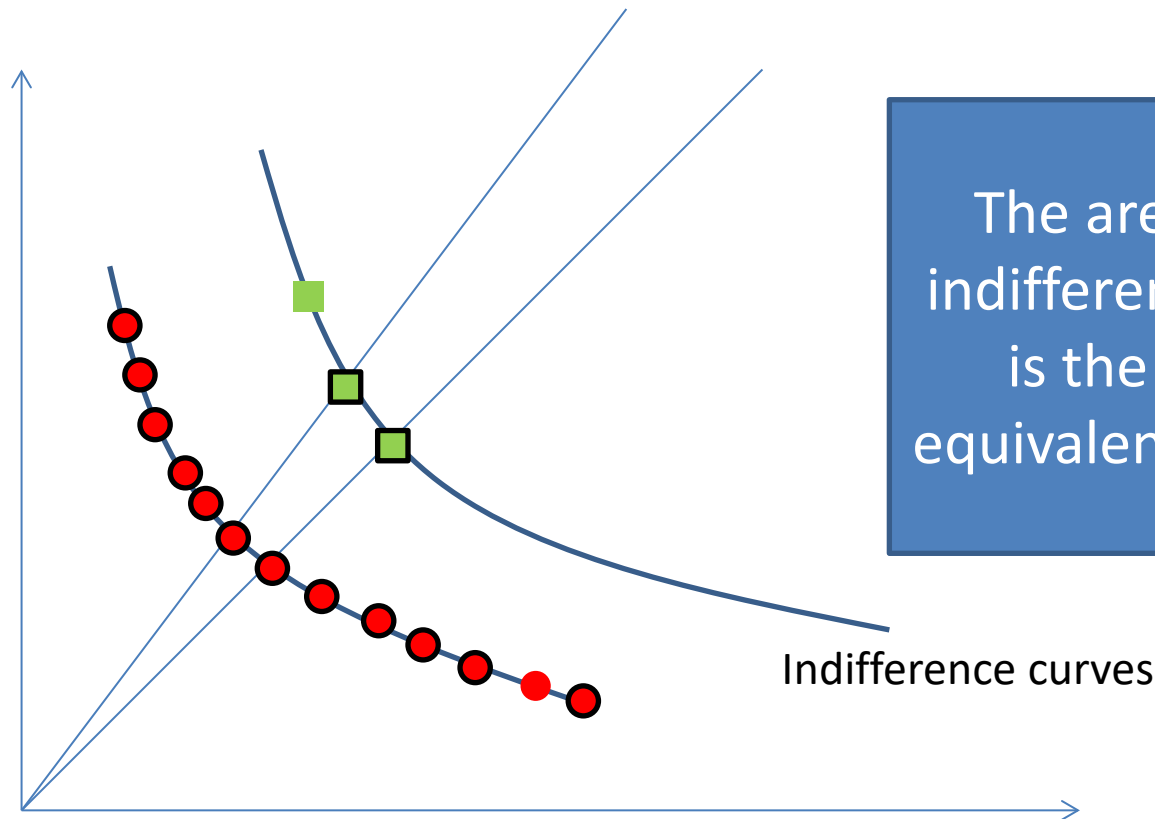


Equivalence approach



A combination of equivalence indexes still satisfies the Nested-Contour principle

Area approach

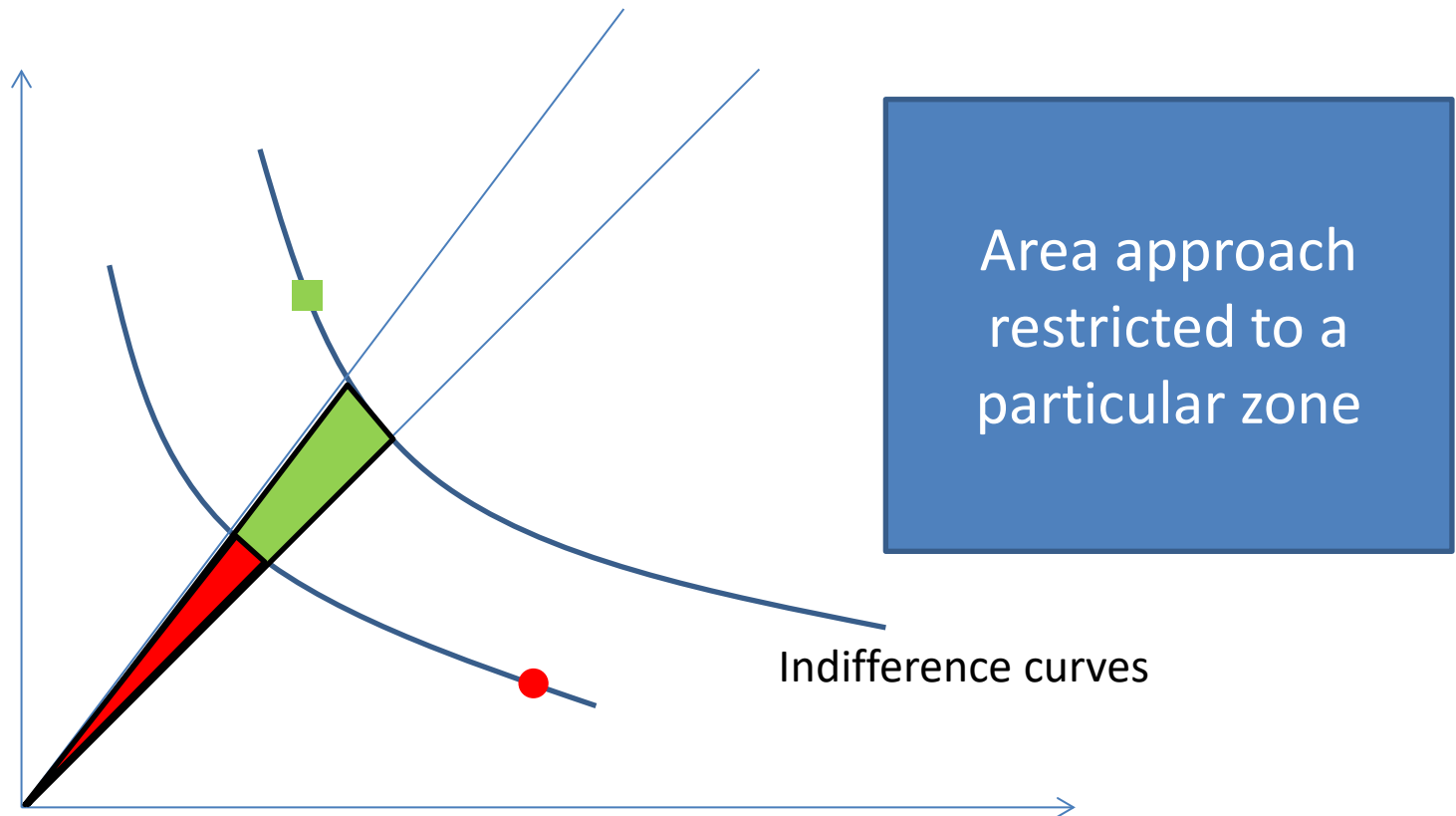


The area below
indifference curves
is the sum of
equivalence indexes

How to choose the reference(s)?

- One reference:
 - Locus of interpersonal comparisons that do not depend on preferences
 - “Normal” path (e.g., good health)
 - Average path of development: this minimizes the dependence on preferences
- Several references:
 - Then all interpersonal comparisons depend on preferences
 - Can there be several normal paths?
 - Central paths of development: can be combined with the area approach

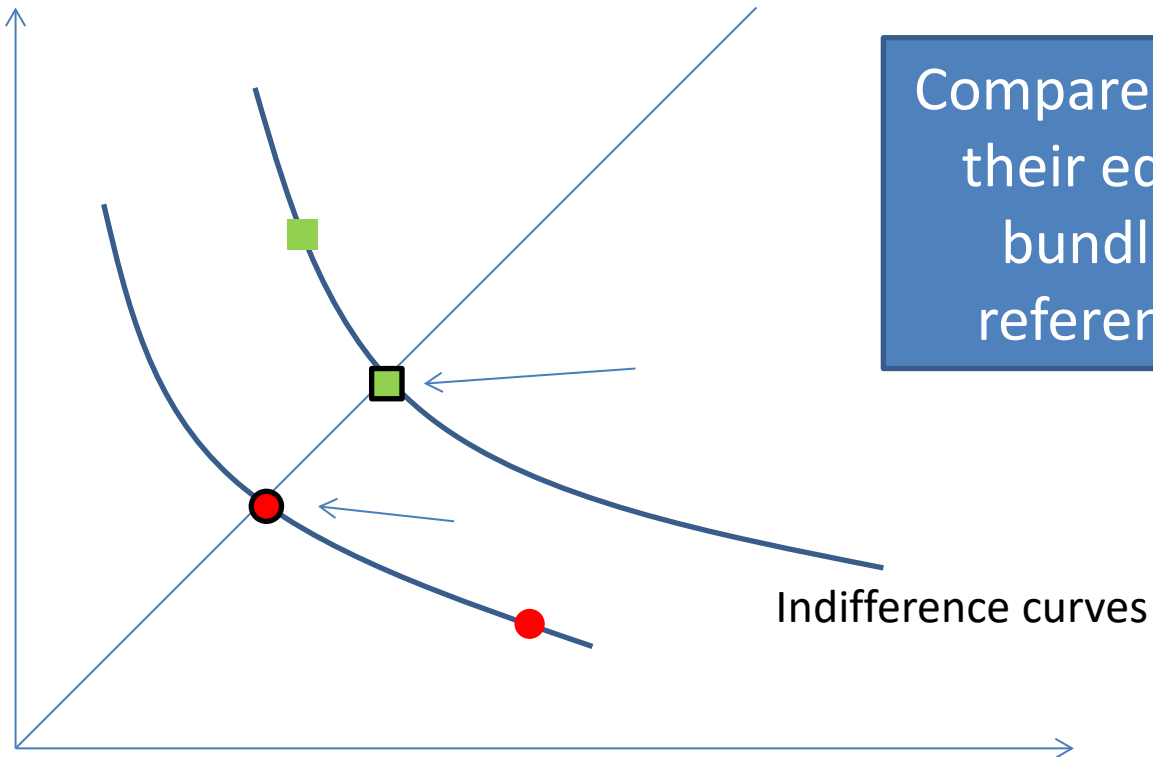
Equivalence/area approach



Other fairness principles

- Dominance (of bundles) restricted to a particular zone
- Theorem: The single-path equivalence approach is characterized by the Same-Preference principle and the Dominance principle restricted to a zone (and the zone must be a single path)

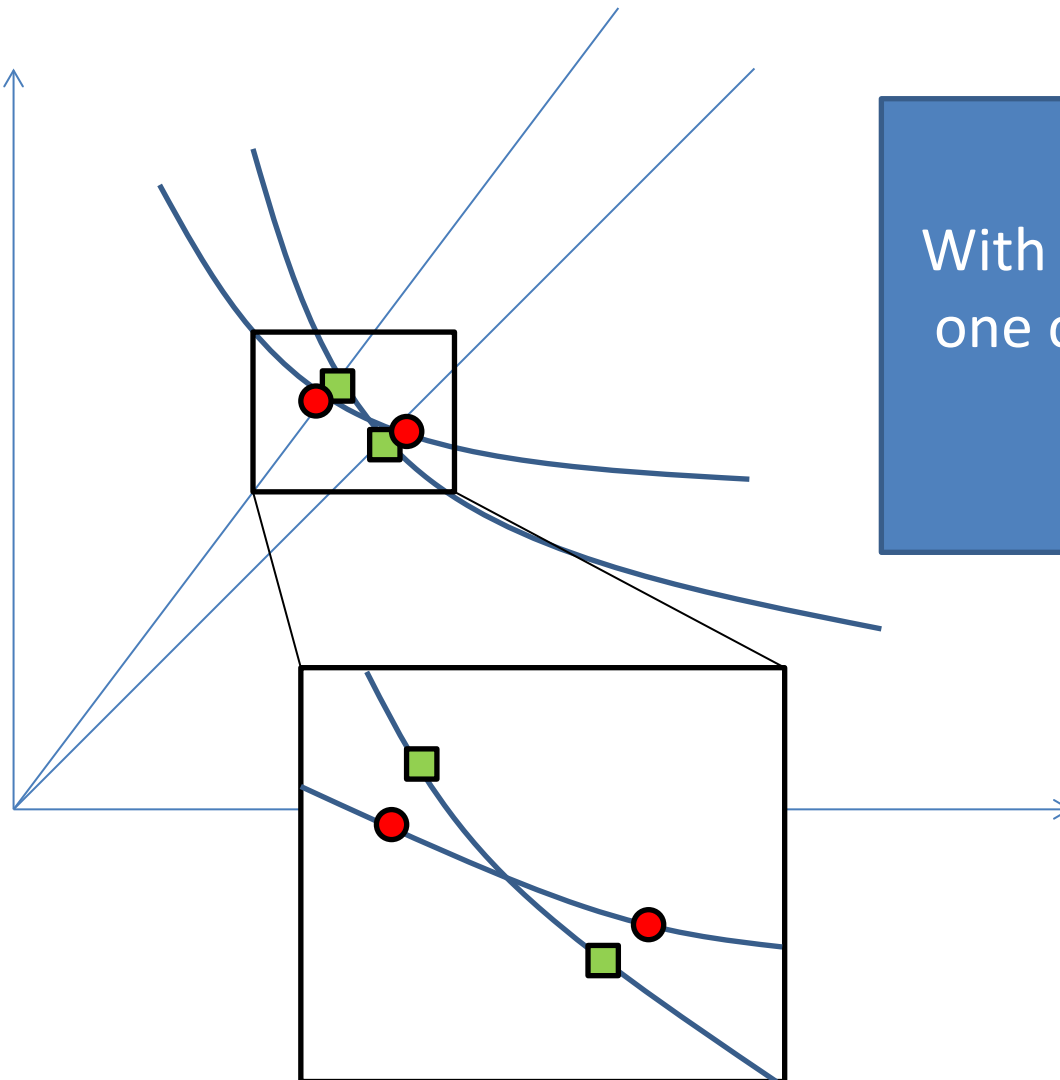
Equivalence approach characterized



Compare people by
their equivalent
bundles on a
reference path

Indifference curves

Equivalence approach characterized

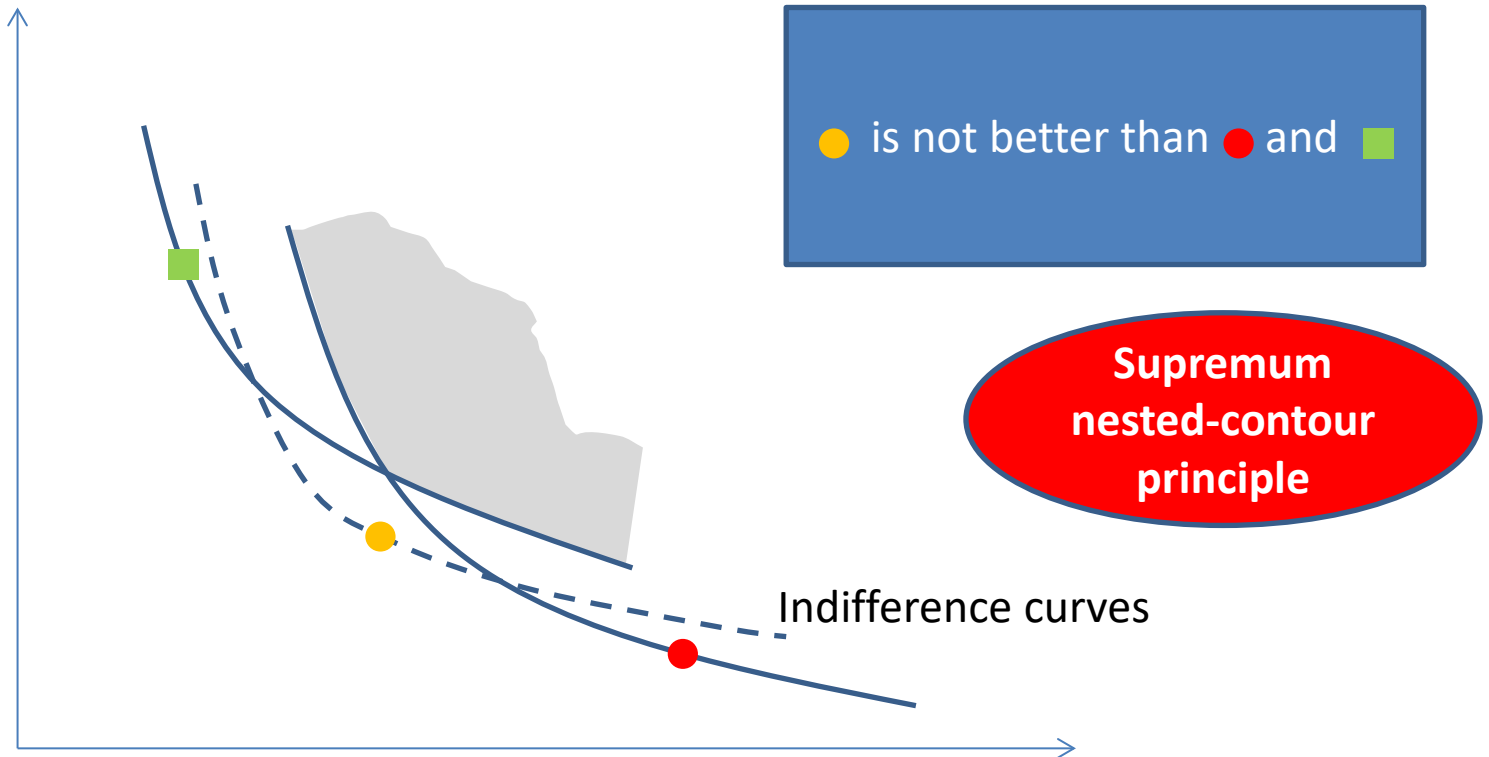


With a larger zone,
one can construct
cycles

Other fairness principles

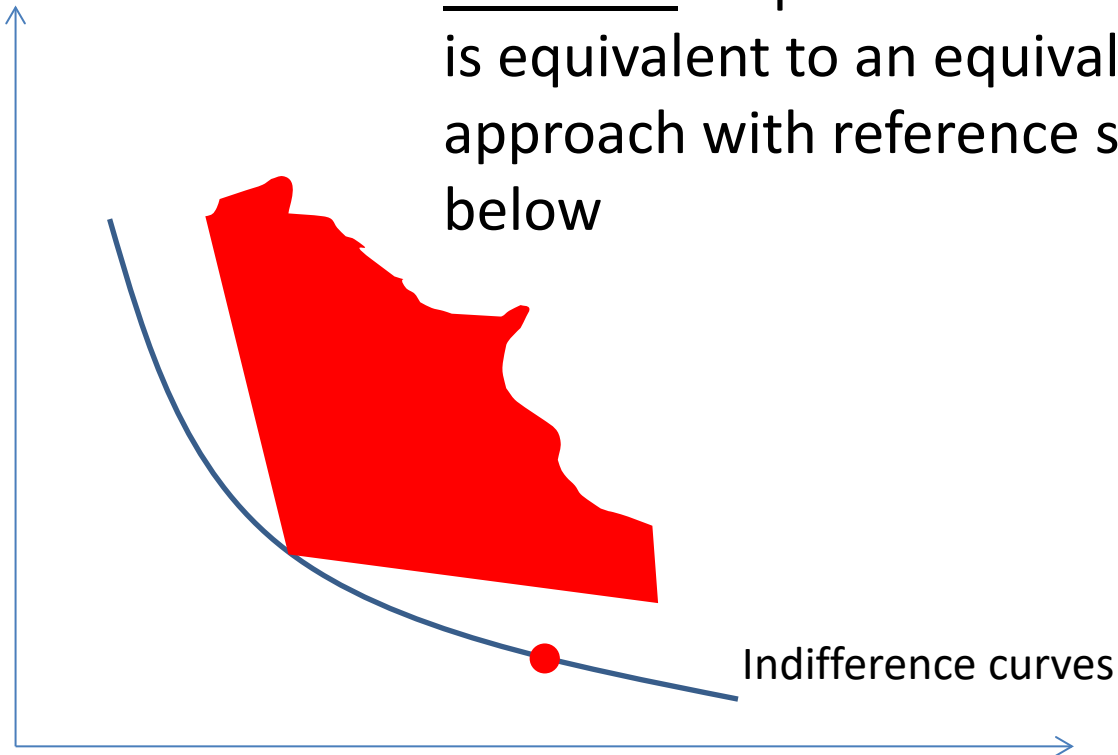
- Dominance (of bundles) restricted to a particular zone
- Theorem: The single-path equivalence approach is characterized by the Same-Preference principle and the Dominance principle restricted to a zone (and the zone must be a single path)
- This shows that the equivalence approach is compatible with an “objective” type of comparisons (i.e., made in the space of bundles)

Other fairness principles



Other fairness principles

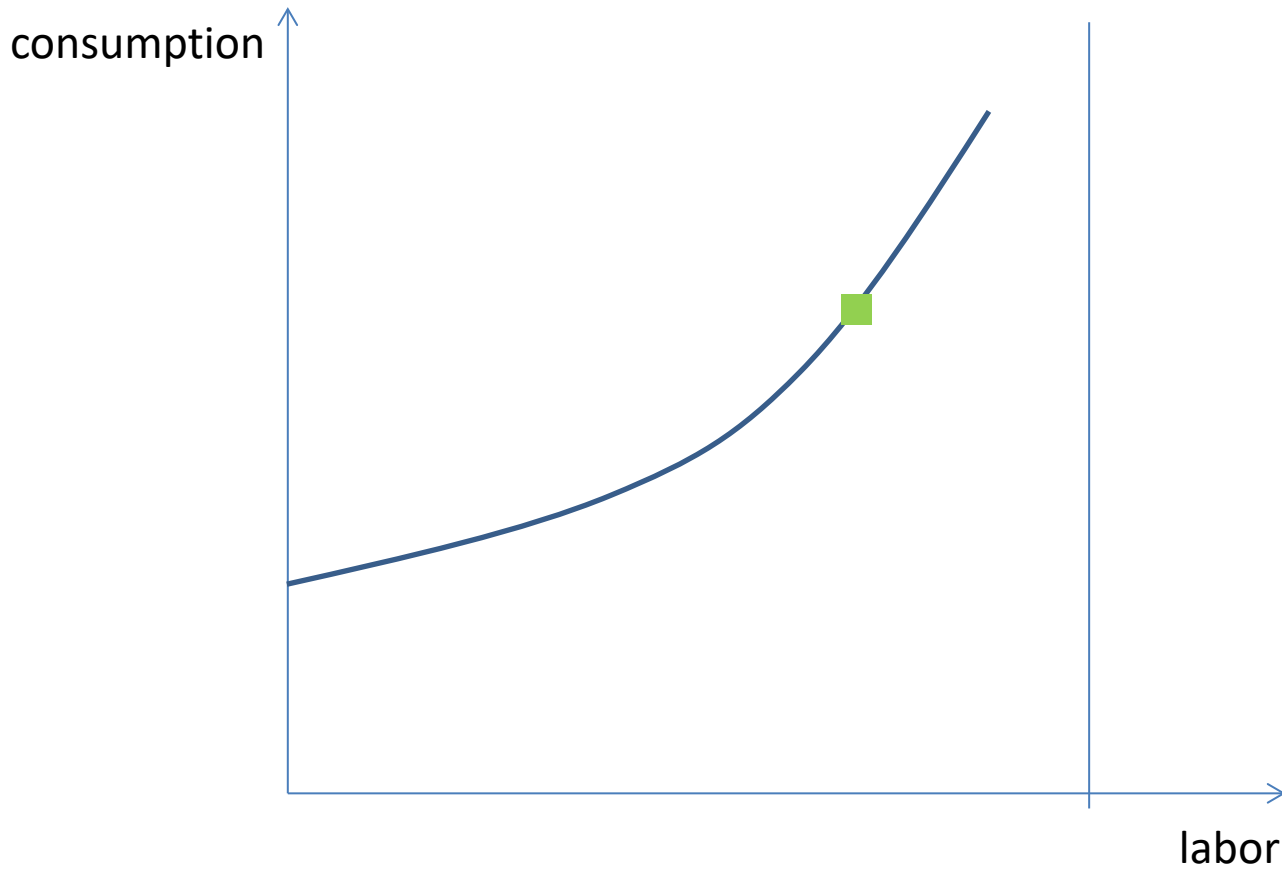
Theorem: Supremum nested-contour is equivalent to an equivalence approach with reference sets from below



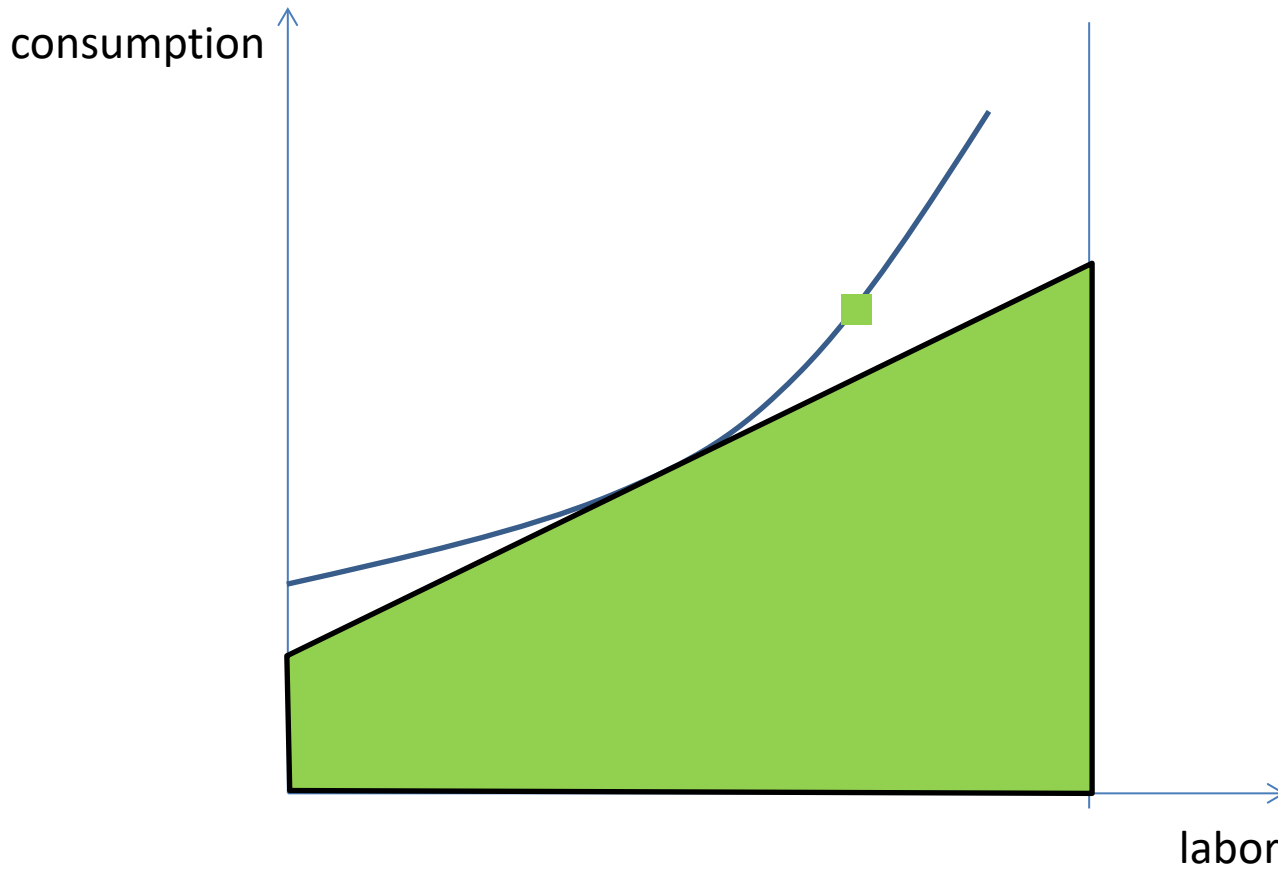
Other fairness principles

- Do people deserve their market earning potential (wage rates, for ordinary workers)?
- Does work aversion deserve favorable treatment? (e.g., because of care burden)

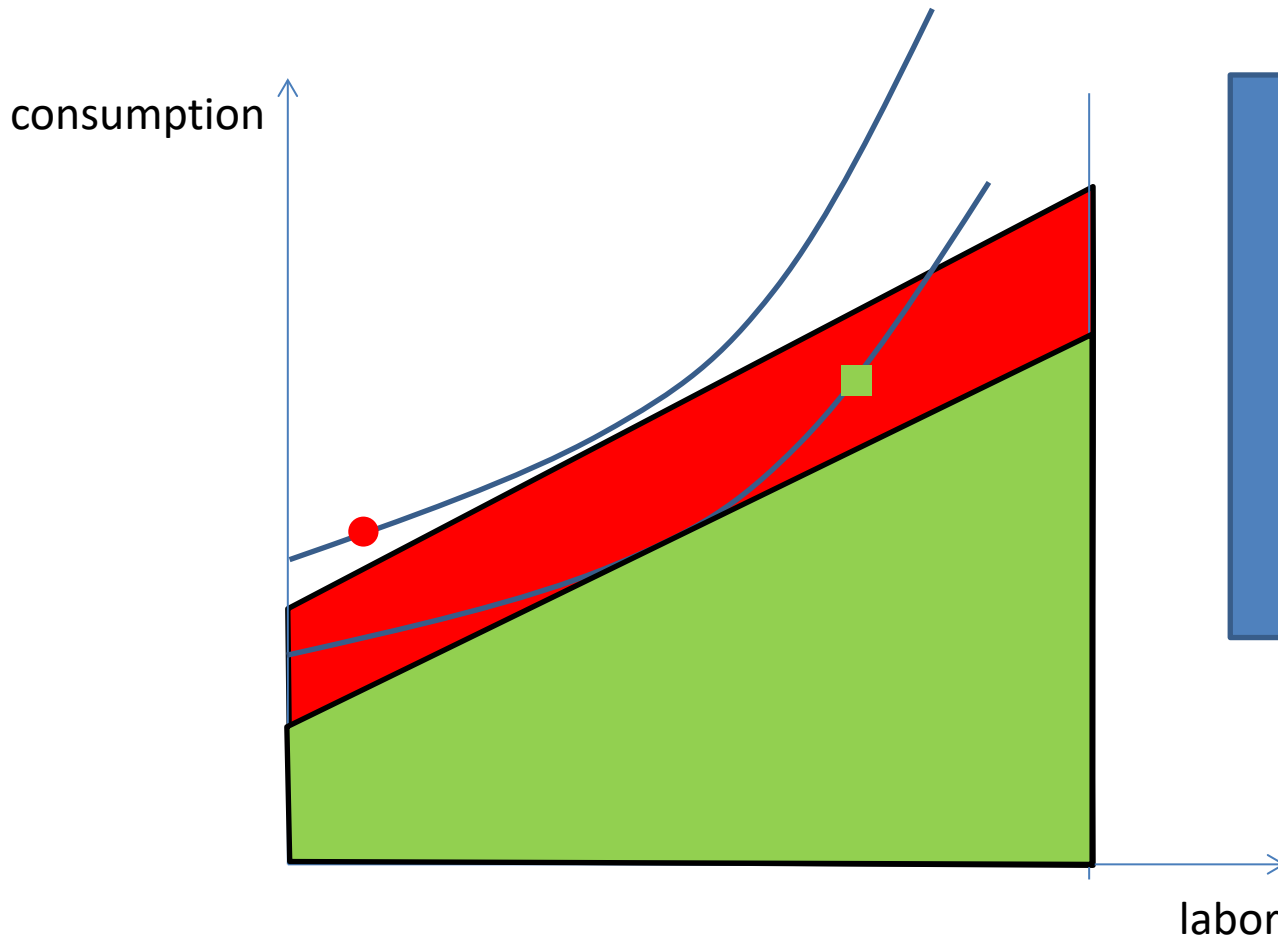
Consumption-work setting



Equivalent budget of the 1st-best type

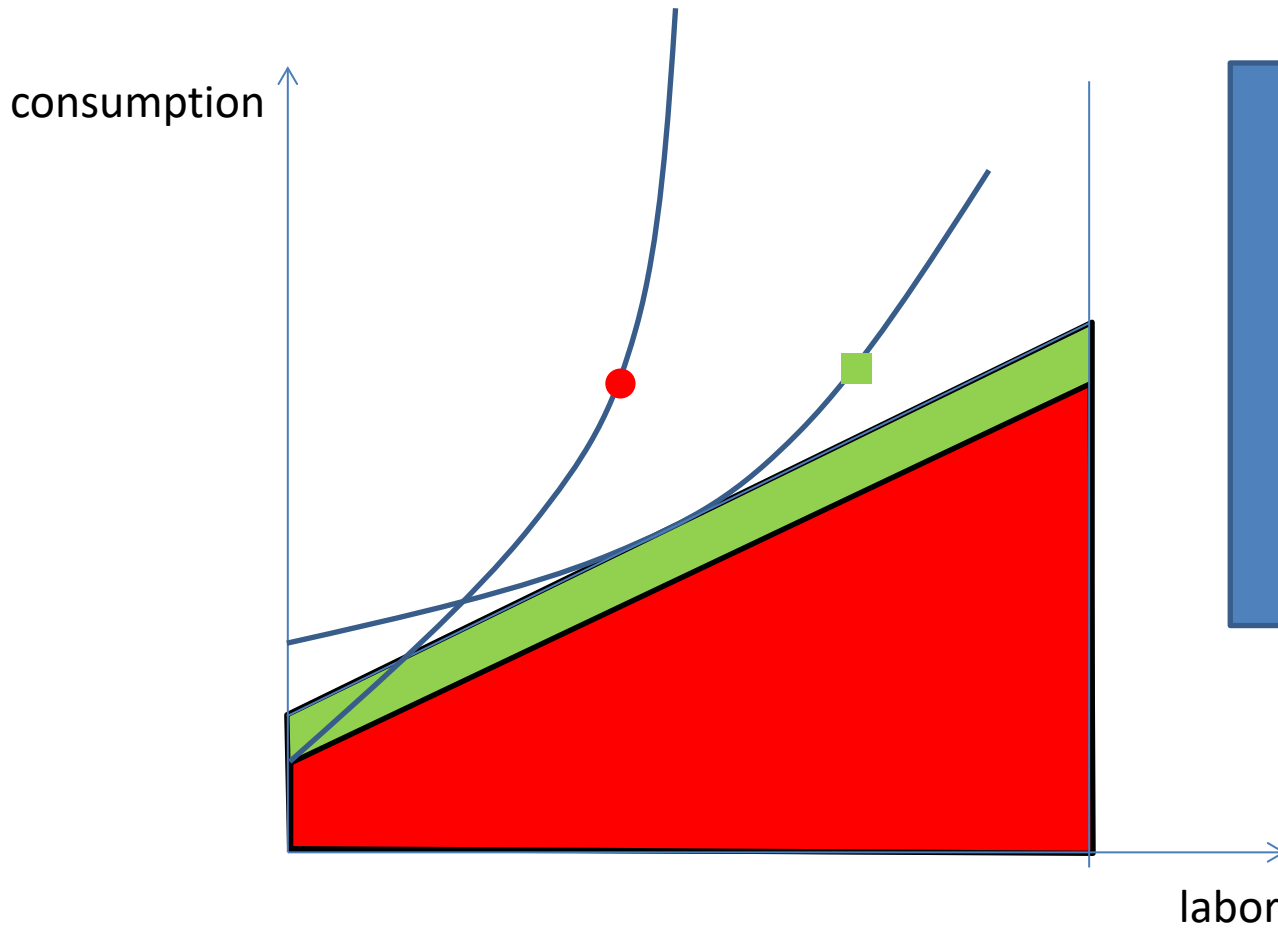


Choice of equivalent budget slope



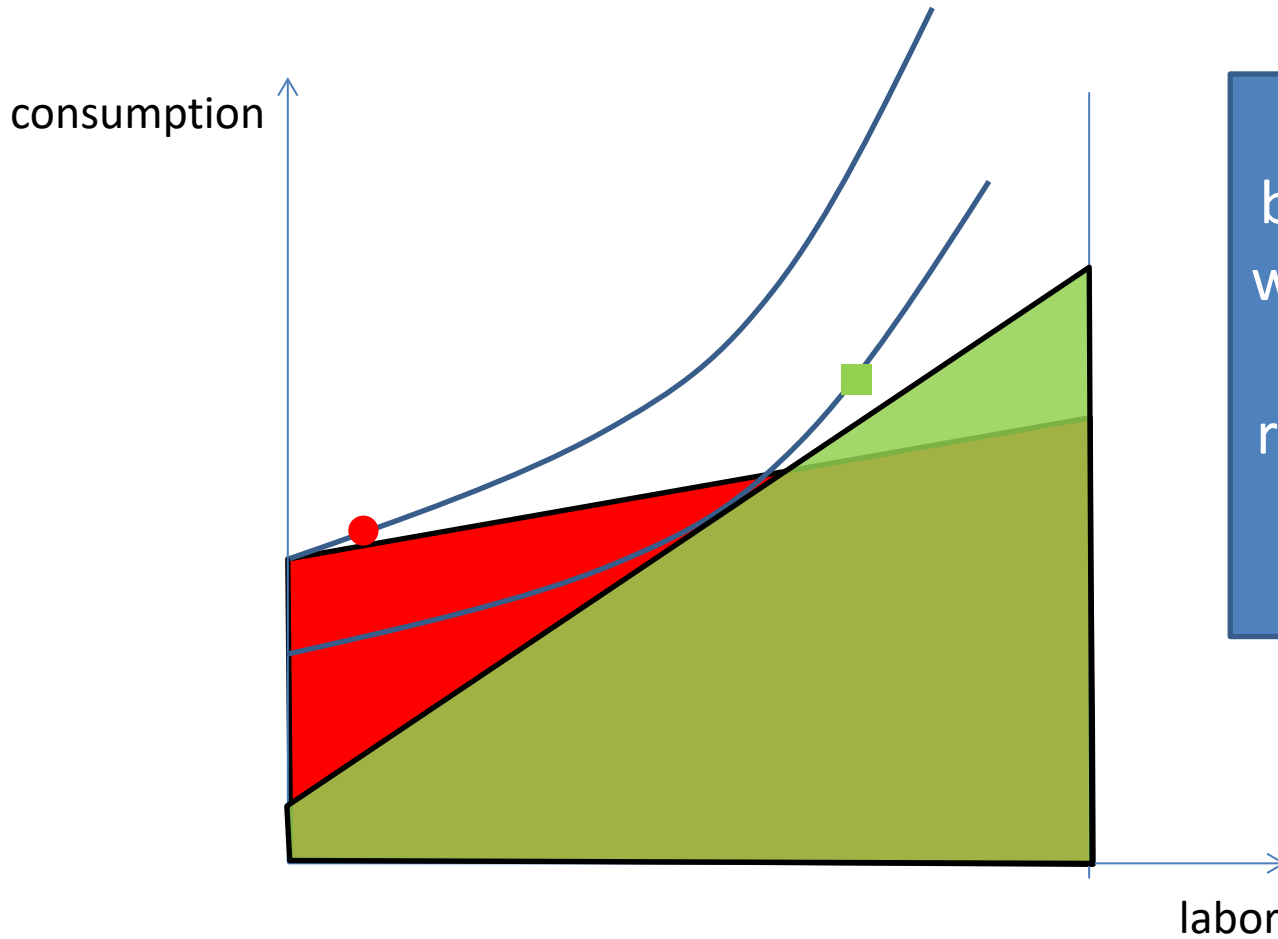
Same slope for
all: personal
wage rate is
irrelevant

Choice of equivalent budget slope



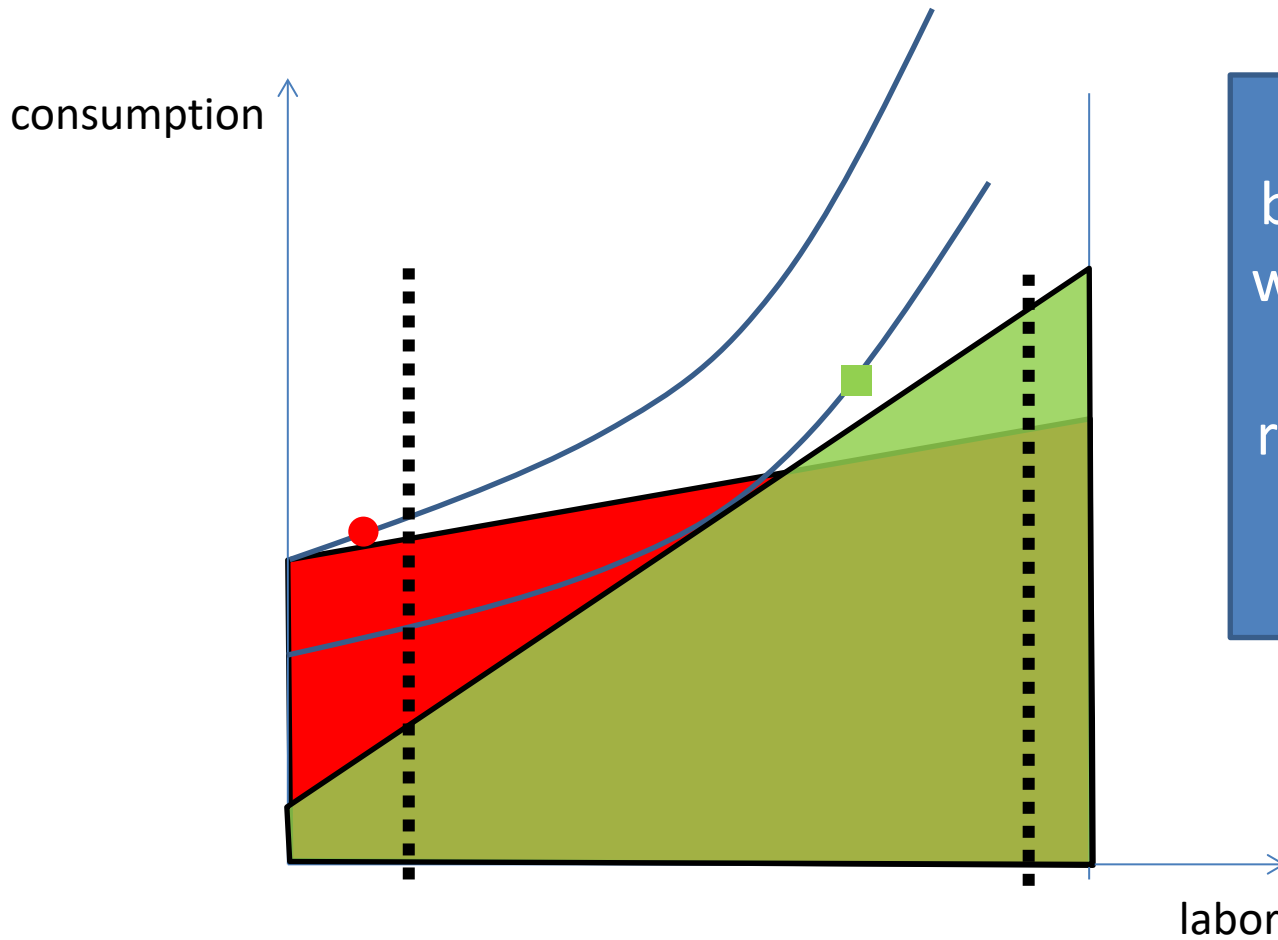
Flatter slope:
more favorable
to work-averse
preferences

Choice of equivalent budget slope



Personal slope based on market wage rate: makes it possible to reward or punish the more productive

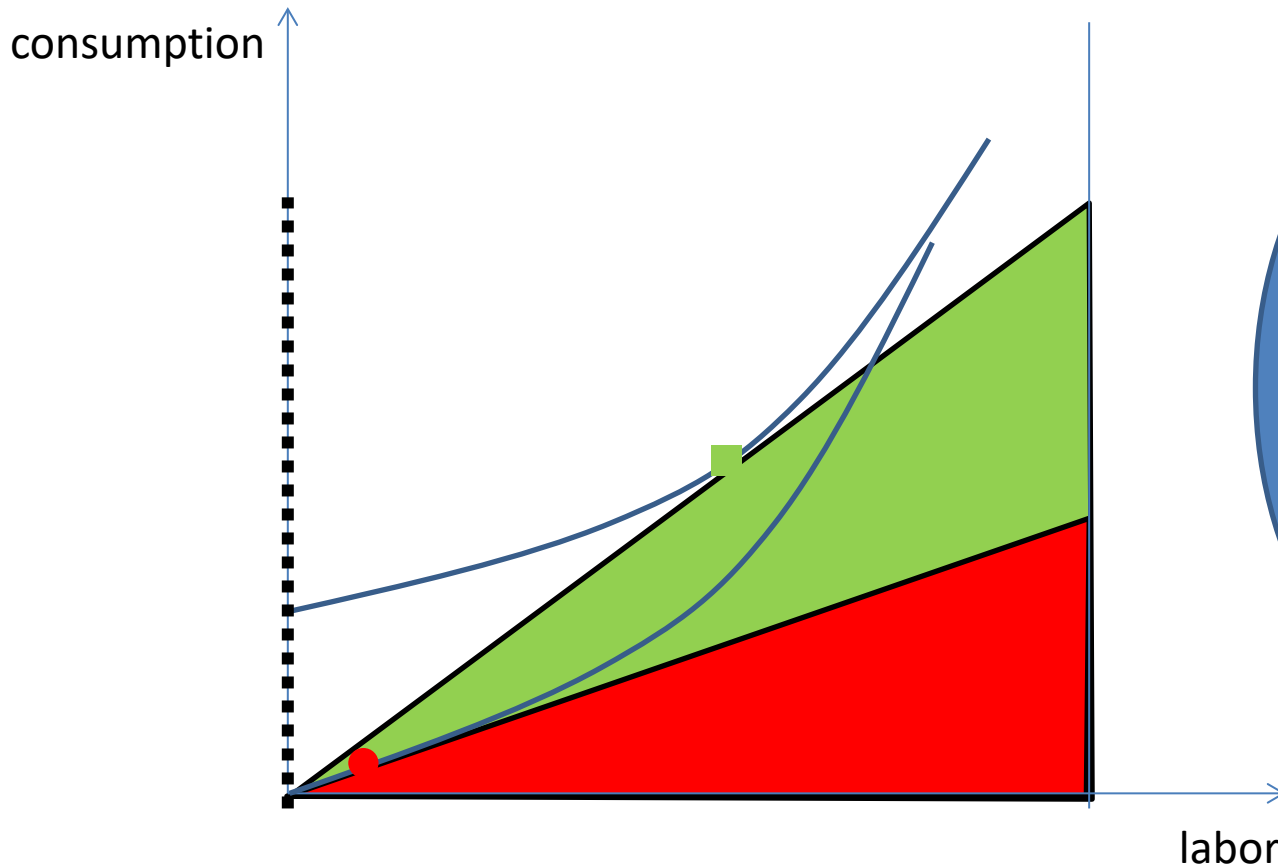
Reward the more productive



Personal slope based on market wage rate: makes it possible to reward or punish the more productive

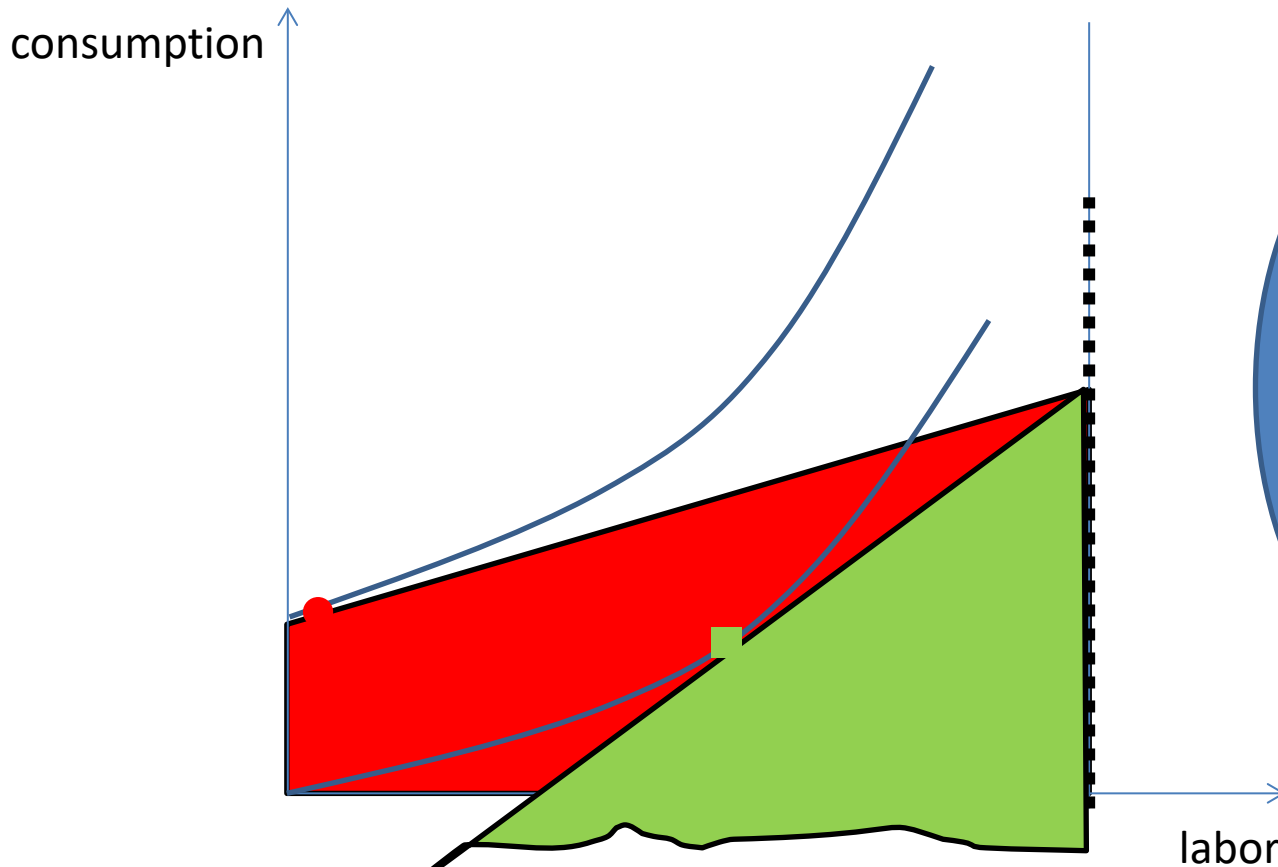
The lower the reference labor for budget comparisons, the more productive people are rewarded

Reward the more productive



The lower the reference labor for budget comparisons, the more productive people are rewarded

Punish the more productive

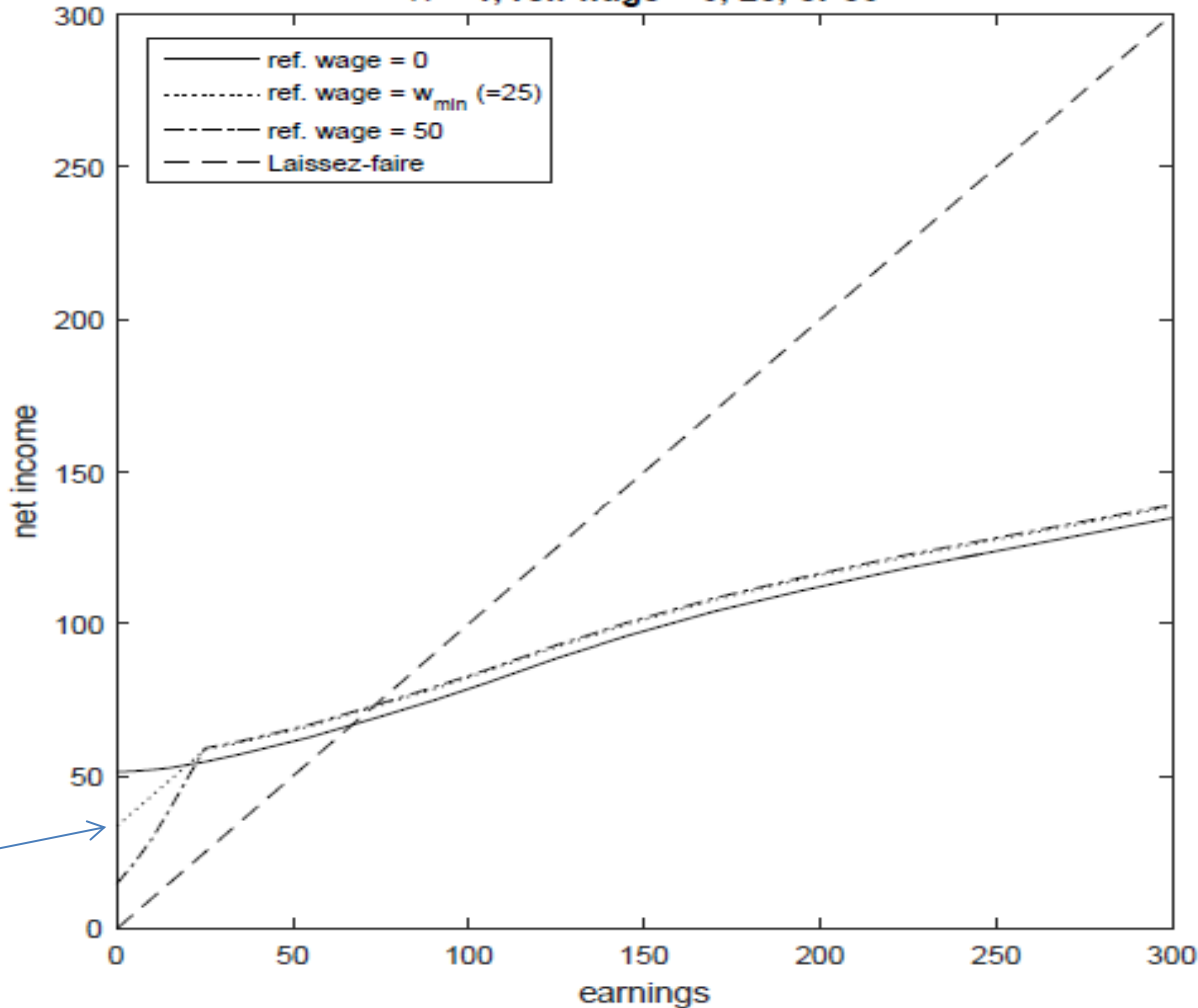


The lower the reference labor for budget comparisons, the more productive people are rewarded

In the other extreme, one obtains the slavery of the talented

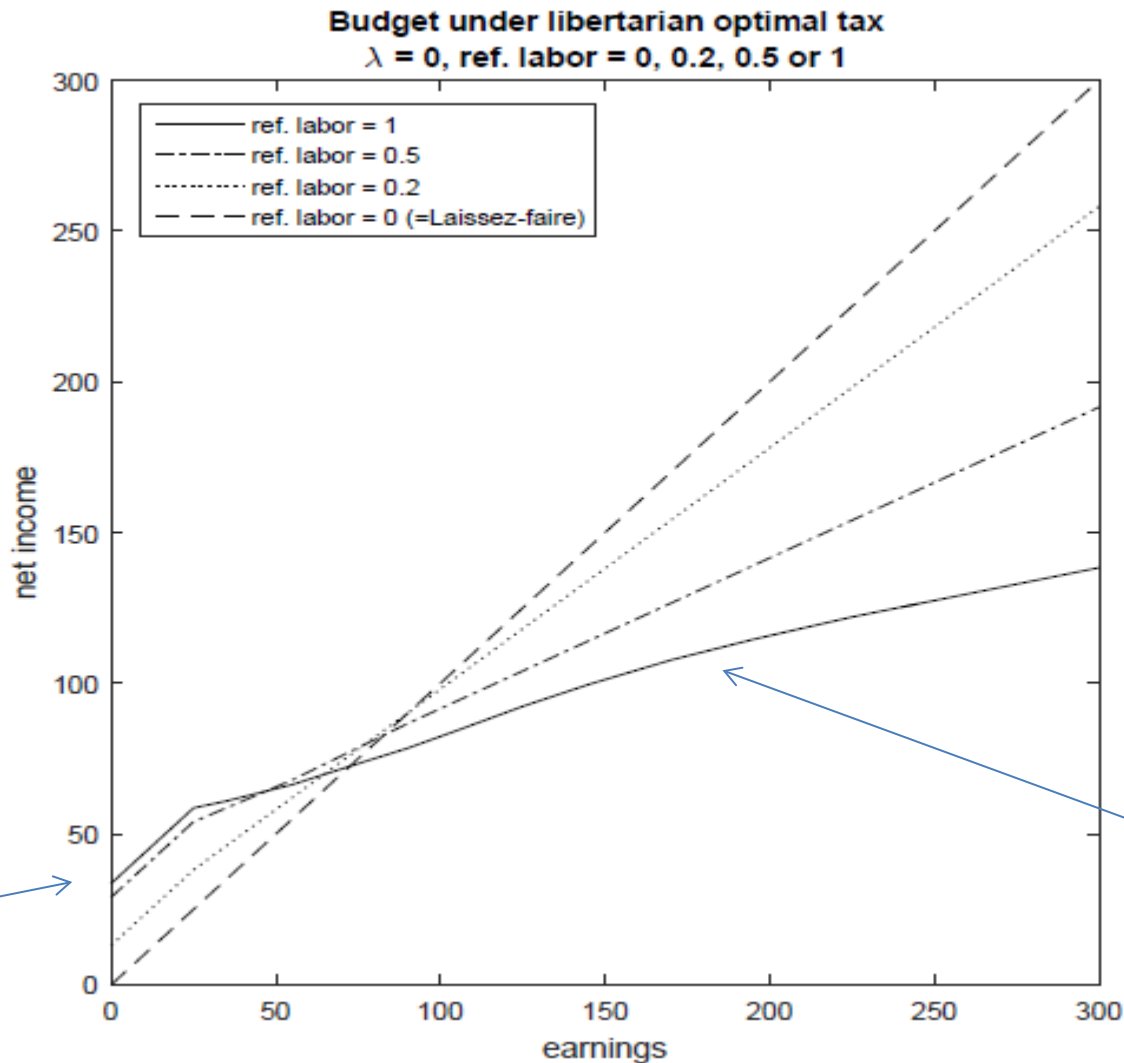
Illustration: optimal income tax in the USA (maximin)

Budget under egalitarian-equivalent optimal tax
 $\lambda = 1$, ref. wage = 0, 25, or 50



Same slope for all,
at 3 levels: 0,
minimum wage,
2xminimum wage

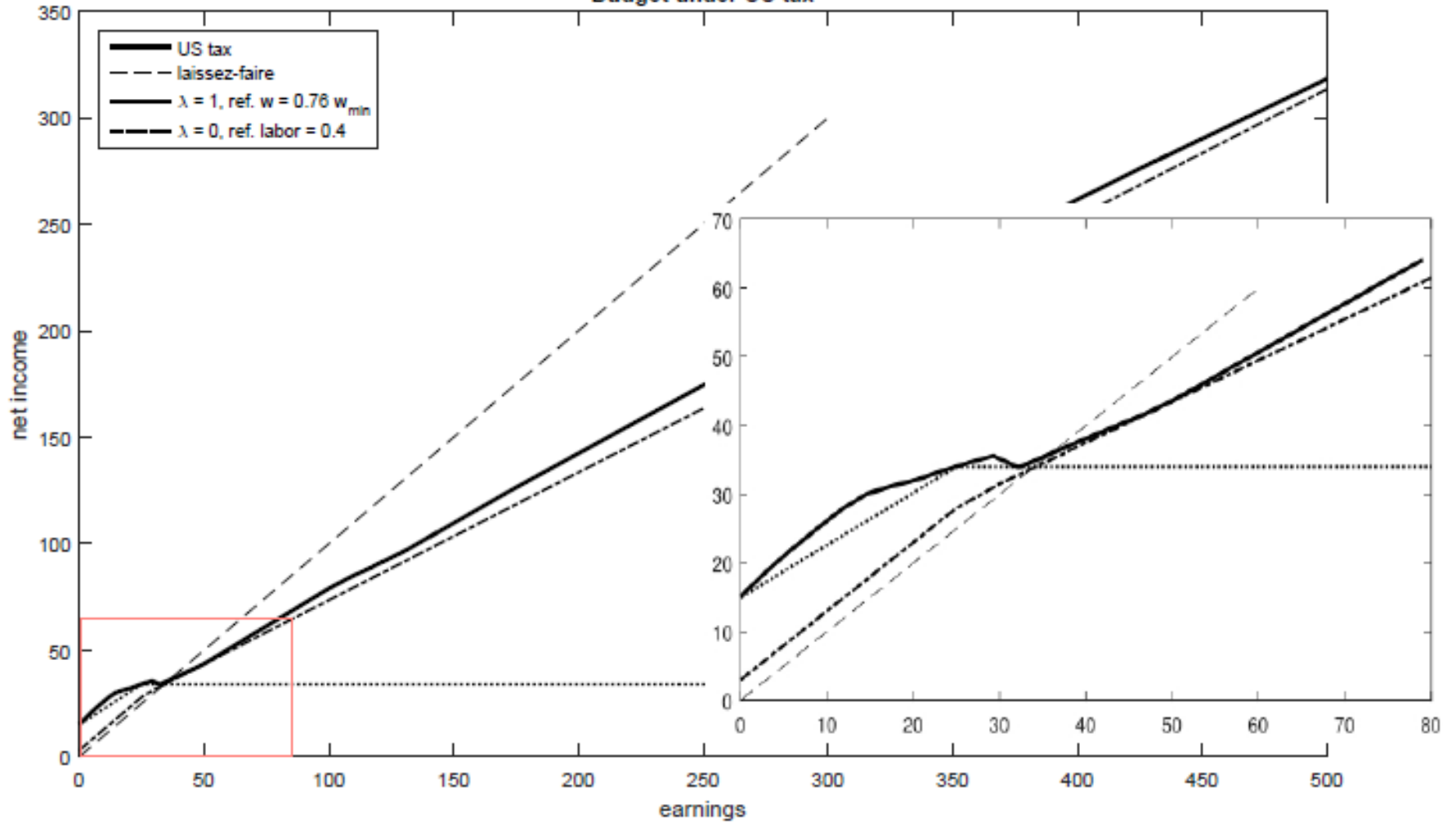
Illustration: optimal income tax in the USA (maximin)



Slope = personal market wage rate, with 4 reference labor values: 0, 20%, 50%, 100% of full time

Actual US tax

Budget under US tax



Conclusion

- Fairness conditions help select well-being measures:
 - Same-preference principle excludes SWB and opportunity
 - Add Dominance principle over a zone -> equivalence approach
 - Market earning potential, work aversion -> particular equivalent budgets

References and further readings

- Decancq, Neumann, “Does the choice of well-being measure matter empirically?” in *Oxford Handbook of Well-Being and Public Policy*, 2016
- Decancq, Fleurbaey, Schokkaert, "Inequality, income, and well-being", in *Handbook of Income Distribution 2A*, Elsevier, 2015
- Fleurbaey, "Equal opportunity, reward, and respect for preferences: Reply to Roemer", *Economics and Philosophy* 28: 201-216, 2012
- Fleurbaey, Blanchet, *Beyond GDP*, Oxford UP, 2013
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- --- "Optimal income taxation theory and principles of fairness", *Journal of Economic Literature* 56 (3): 1029-79, 2018