

Endogenous Theories of Social Justice

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1) Introduction to the problem

- In search of the genuine approach
 - e.g., John Rawls: - superiority of egalitarianism
- restricted by some arguments of desert / incentives
- purpose of economic analysis of justice
 - ⇒ clarify the ideas involved
 - ⇒ reveal weaknesses of theory and application due to imperfect consideration of economic conditions
 - ⇒ *development of a “pure” economic approach of justice*

(or challenge of the idea and the relevance of (economic and social) justice)
 - ⇒ towards an endogenous economic theory of (social) justice

→ economics as a strictly positive or normative and positive science

⇒ positive theory: no room for (explicit) value judgements

no need for economic justice or economics of justice

↔ description of emergence of justice, collective decision between different criteria of justice, and incentives towards implementation of justice, perception of justice:

positive economics of justice (economic and politico-economic calculus of justice)

⇒ normative theory: value judgements

endogenous:
out of
economic rationality
(preferences, constraints, beliefs)

and/or

collective action
(collective decision-making on just social rules/outcomes)

2) (Historical) examples of “the economics” of social justice

→ example 1: ‘ethics’ of laissez-faire and free trade

⇒ simple accordance of criterion of justice and (perfect) market allocation

⇒ natural tendency of all markets towards market perfection

⇒ belief in general failure of non-market transactions/allocations

→ example 2 (history): classical utilitarianism

⇒ ‘how the wealth can best be spent’

⇒ problem of social stratification

⇒ summation of individual happiness (happiness = pleasure minus pain)

⇒ social measure of happiness

⇒ greatest happiness for the greatest number

→ major principle of economic justice

- example 3: ordinal ranking
 - ⇒ determination of the social benefit on average
 - ⇒ *potential* compensation of losers
(Kaldor-Hicks criterion)
 - (implicit) normative criterion of equitable economic policy:

on average over all policy moves, the individual will be a winner
 - positive analysis of justice:

implicit application of the criterion in economic and public policy
 - ‘naturalized’ criterion of justice
- ⇒ process-orientation vs. outcome-orientation
or: choice and trade vs. happiness
 - ordinal scale (relative ranking)
 - no interpersonal comparison of utility / scales
 - ⇒ mutual gains: win-win situations
 - ⇒ Pareto-*improvements* are just

- example 4: Pareto-*optimality* as a criterion of justice
 - = necessary condition? (see above)
 - = sufficient condition?
 - multiple Pareto-optima
 - ⇒ win-win economics
 - ⇒ Optimum optimorum:
equity as an external criterion
 - ⇒ strict division of efficiency and justice
 - problem of 'relative' win
 - problem of reality of Pareto-improvements
 - problem of uncertainty
 - = problems of positive political economy of justice:
 - unjust economy as a result of delay and resistance to act in economic policy (reform) due to the search Pareto-improvement
- Pareto-optimality of outcomes or rules?
 - ≈ consequentialist vs. procedural interpretation of the Pareto criterion
 - ↳ consequentialist vs. pure process-orientated derivation of just rules

3) Related literature to the endogeneity problem

(a) “Starting Points”

→ *Fair Allocation: (Social) Preferences*

(Foley 1969, Kolm 1972, Varian 1974, Pazner/Schmeidler 1976, ...)

feelings of envy, malice, guilt, ..

⇒ norm of envy freeness / no envy
 (“freeness” as (implicit) *ex post* agreement on the norm of justice)

~ *Behavioral Economics*
(Rabin 1993, Fehr/Schmidt 1999, ...)

⇒ no endogenous theory/norm of social justice out of it [perhaps “Liberal paternalism”]

⇒ self centered social preferences

→ *Just social contract: Fair rules/procedures*

(Rawls 1971, Buchanan 1975, [Kolm 1995], Mueller 2003, ...)

⇒ fair procedures / just rules as *ex ante* agreement on the norm of justice

(b) Special contributions to the endogeneity problem

→ Equity First or Efficiency First Principles

(Tadenuma 2002, 2005, Nishimura 2004, 2008)

→ based on envy freeness and egalitarian equivalence

→ decision-theoretic social choice solution to the equity vs. efficiency trade-off

→ endogenous “ranking” of the problems:
which criterion should one take first to select socially desirable *allocations*: efficiency of equity (axiomatic *choice-consistency*)

→ related to fair allocation problems

→ result depending on “precise notion of equity”
(Tadenuma 2009)

⇒ real endogeneity of justice?

→ Blame freeness

(Schotter 1990, Blanco/Çelen/Schotter 2010)

→ fair/just *ex post* procedure (not consequence!)

→ first impression about the relation between *ex ante* just procedures/rules and *ex post* just procedures/rules

⇒ research agenda (future):
combination/relation of *ex ante* just procedures and *ex post* just procedures/rules!

⇒ *ex post* (implicit) unanimous agreement

→ Congruence rule

(Silver 1989)

→ fair/just (ex post) procedure *Theft freeness*

⇒ ex post (implicit) unanimous agreement

4) Basic structure of ‘pure’ economic theories of justice

- Classical” structure in economics

→ normative and positive economics

normative issues:

- criteria for the evaluation of public policies and policy advice

⇒ dominance of allocation-based norms:

- Pareto-optimality
- actual Pareto-improvement
- potential Pareto-improvement

- general statement:
impossibility to avoid mingling with value judgements

- clarification of (exogenously given) ethic values
and their consequences in economic life

⇒ no own normative content in the normative economics of ethics and justice

⇒ economic theory of justice as solely an investigation into the role of ethical judgments in economics

- ⇒ positive analysis:
economic effects of applied ethical
rules
- ⇒ e.g., trade-off between equity and
efficiency
- ⇒ normative analysis:
assumed ethical judgments improve
normative statements in economics
- ⇒ e.g., optimum optimorum
(refined selection/ranking of
Pareto-efficient allocations)
- *welfare economics, (traditional)
social choice and welfare functions*

≠ (!)

- *endogenous* development of values and judgments
out of economic logic or logic of collective action



- ‘Pure’ *economic* theory of justice

(1) *preferences for just outcomes / rules*

⇒ necessary condition:

interdependent preferences / utility functions

(see envy, jealousy, malice, malevolence, reciprocity, trust)

⇒ sufficient condition:

no internalization by markets

(compare positive externality of envy)

→ economics of *fair allocation*

(2) justice as a *result of voluntary agreements*
(voluntary social contracting)

⇒ necessary conditions:

- stage of rule formation
(e.g., stage of contracting)
- ‘pre-play’ level

⇒ sufficient conditions:

- environment for fair agreements in the stage of contracting
- participation of all potential players in the constitutional decision (no exclusion)
- no asymmetry in power and knowledge about the enforcement resp. possible consequences of rules in the stage of contract formation
- no other exogenously given discrimination (no different interpersonal weight)
- + *strategy-proofness* of the rule in the post-contractual stage!
[strategic post-contractual behavior under asymmetric information]
(Moulin 1995):
rule/procedure as a strategy-proof direct revelation mechanism

⇒ postconstitutional/-contractual stage:

compliance with the rules is defined as just behavior

⇒ noncompliance: injustice

⇒ no breach or erosion/misuse of rules

⇒ no post-contractual alteration of rules
(exception: rules for alterations are codified in the contract)

⇒ *but is the postconstitutional stage strategy proof from the viewpoint of the contractual stage(?!?):*
problem of hidden breaches, alterations and (untruthful) strategic adjustments

→ economics of *just social contracts*

- example:

- voluntary agreement on a contest
→ fastest participant wins
→ winner takes the prize

- during the run some participants decide to divide the prize equally between all participants and enforce the “new” rules

⇒ unfair process of outcome determination

⇒ unfair outcome of the game

5) Essential properties of endogenous economic justice

	procedural		consequentialist	
	ex ante	ex post	ex ante	ex post
exogenous	<i>constrained economics</i> <i>(rule-governed)</i> rules of the social game by ethical principles		<i>constrained economics</i> <i>(outcome-governed)</i> outcome of the social game by (ethical) principles	
endogenous	<i>constrained justice</i> <i>(rule-governed)</i> formation of rules of the social game by economic logic of collective action		<i>constrained economics</i> <i>and/or constrained justice</i> <i>(outcome-governed)</i> outcome of the social game governs collective decision-making (occasionally decision on rules)	

Based on Schotter (1990)

→ PC: “Problem of collective action”
(objective function)

→ constrained economics

⇒ e.g., justice-constrained efficiency
(subarea of *second best economics*)
[optimal taxation without lump-sum tax]

⇒ economics out of justice/ethics

JOC: Just Outcome Constraint(s)

JRC: Just Rule Constraint(s)

⇒ social problem:

“economics (PC1)

s.t.

principle(s) of just outcome
is (are) satisfied (JOC)

principle(s) of just rules
is (are) satisfied” (JRC)

JOC and/or JRC may be empty

→ constrained justice

⇒ e.g., efficiency-constrained justice
(subarea of *second best justice*)
[principle of equality softened by effects
on incentives to work]

⇒ justice out of economics

EOC: Economic Outcome Constraint(s)

ERC: Economic Rule Constraint(s)

⇒ social problem:

“Justice (PC2)

s.t.

economic principle(s) of outcome
creation is (are) satisfied (EOC)

economic principle(s) of collective
rule-formation is (are) satisfied” (ERC)

(EOC) and/or (ERC) may be empty

- The economist' notions of social justice
 - exogenous theories ("mainstream" welfare economics)
 - ≡ application of principles without relying on individual (ethical) preferences
 - ⇒ top-down approach:
 - principles from above upon the population
 - ⇔ right of an external authority to impose its view of justice on society
 - ⇒ no (proofed) acceptance by the people
 - axioms of the economic approach
 - ⇒ endogenous justice theories
 - judgments of fairness
 - (1) preferences or ethical codes of the members in the society
 - (2) unanimous agreement
 - justifying a social state
 - problem (?):
 - theories change with the population of society (Blackorby/Bossert/Donaldson)

↔

- justifying a social rule

long-term rules of the social
game (for changing population
or relevant preferences)

→ operational concept of social justice

⇒ *bottom-up approach*

⇒ *pure process-orientation*
(rule-governance)

≡ social outcomes or income
distributions are judged in terms of
the process that determinates them

⇒ no importance of the properties of the
actual outcomes

≠ endogenous predetermination of
outcomes
(via government redistribution of
income)

⇔ violation of individual (ex post)
property rights

6) Classification of some theories

	procedural		consequentialist	
	ex ante	ex post	ex ante	ex post
exogenous	Nozick's entitlement theory		AU: act-utilitarianism Egalitarianism Harsanyi's Axiomatic RU Just wealth maximization (Posner) Nash-SWF Nash-Bargaining solution Kalai/Smorodinski-Bargaining solution Rawlsian SWF	
endogenous	[Binmore's Social Contract (cons.?)] Blame-freeness Buchanan's Constitutional Approach Congruence rule Social justice as a mirage (Hayek) [Egalitarian Equivalence (cons.?)] 		[Dworkin's just insurance] Envy-freeness Equity-Efficiency-First Harsanyi's "Veil"-RU [Kolm's rational social choice (proc.?)] Rawlsian Social Contract Utilitarian Constitution (proc.?) 	

7) Concluding example: the problem of just rationing

→ Moulin 1995:

⇒ problem of excess demand

⇒ two ‘natural’ rules of fair division:
proportional or uniform rationing

⇒ collective choice between the rules

→ numerical example:

- 15 hrs baby sitting
- A prefers 15 hrs, B prefers 6, C prefers 3
- excess demand: $24 > 15$
- cap δ under UR

P	D	PR	UR ($\delta=6$)	Pref
A	15	9,375	6	PR \succ UR
B	6	3,75	6	UR \succ PR
C	3	1,875	3	UR \succ PR
Σ	24	15	15	

→ no unanimous agreement on the rule (?)

→ strategy-proofness

example:

incentive for C (and B) for a strategic report of preferences

⇒ misrepresentation

→ assumption: sequence of reports

→ Proportionality rule

P	Report 1	PR ₁	Report 2	PR ₂	...	Report _∞	PR _∞ (UR)
A	15	8,58	15	6,66	...	15	6
B	6	3,42	13,5	6	...	15	6
C	5,25	3	5,25	2,34	...	7,5	3
Σ	26,25	15	33,75	15	...	37,5	15

→ Uniform rationing

→ determination of δ :
start with $\delta = 15$

δ	15	9	6	5	4	...
A	15	9	6	5	4	...
B	6	6	6	5	4	...
C	3	3	3	3	3	...
Σ	24	18	15	13	11	...

- B and C (individuals below or on the cap) without any incentive misrepresent
- no incentive for underrepresentation for A (individuals over the cap): receives 6 or less

⇒ rule is ex post just:
envy free / unanimous ex post agreement

⇒ rule is ex ante just:

exchange of positions does not change
solution: (equal) agents in
the contractarian stage have equal
opportunities (Buchanan 1983: non-
individualized knowledge: no asymmetric
information or decision power \cong Moulin
1995: anonymity property)

rule is strategy-proof (truthful reports are
dominant strategies) and strategic behavior
cannot end up in a superior position with
the alternative of proportional rationing

⇒ unanimous agreement on the strategy-
proof rule

⇒ concluding propositions

→ non-feasibility of endogenous ex post justice

→ impossibility of pure ex ante justice

⇒ endogenous theories of social justice need a mix of ex ante *and* ex post requirements

⇒ for endogenous *justice*, strategy-proofness is more important than efficiency

→ example of just rationing:

ex ante agreement on the rule (contractarian notion) and ex post envy-freeness (consequentialist proof)

→ example of “dynamic trade-off” between ex ante and ex post justice:

constitutional economic policy rule against monopolies and repeated/stable blame-freeness of monopolistic behavior

⇒ (Schotter 1990)

repeated and permanent breach of an ex ante just rule by (endogenous/unanimous) ex post justice leads to a justified erosion of the fair constitution. The constitution has to be reformed so to meet ex post justice

- ⇒ ax ante justice without ex post justice does not work
- ⇒ ex ante and ex post justice cannot be based on exactly the same principle
(agreement on ex ante envy-free rules restricted by the set of ex post envy-free allocations which are ex ante envy-free also?)
- ⇒ ex ante or ex post harmonization of ex ante just rules and justice a posteriori