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Equity and Efficiency in a 2nd best world

The unspoken issue in the French Carbon Tax Debate

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Behind the French failure: fears about social impacts

- Disagreement about the best way to limit the social cost
 - priority to reduce the adv. impact on activity & employment
 - priority to reduce the adv. impact on the purchasing power of consumers
- ... therefore about how to use the carbon tax revenue
 - Local taxes on invest. or Payroll tax cuts (Rocard report, Jun.09)
 - Trade unions agreed with a broad social negotiation
 - Direct compensations (sudden rise of the “I want my money back”, Jul.09)
 - Consumer NGOs protest, media overstatement & the “*Chèque vert*” proposal

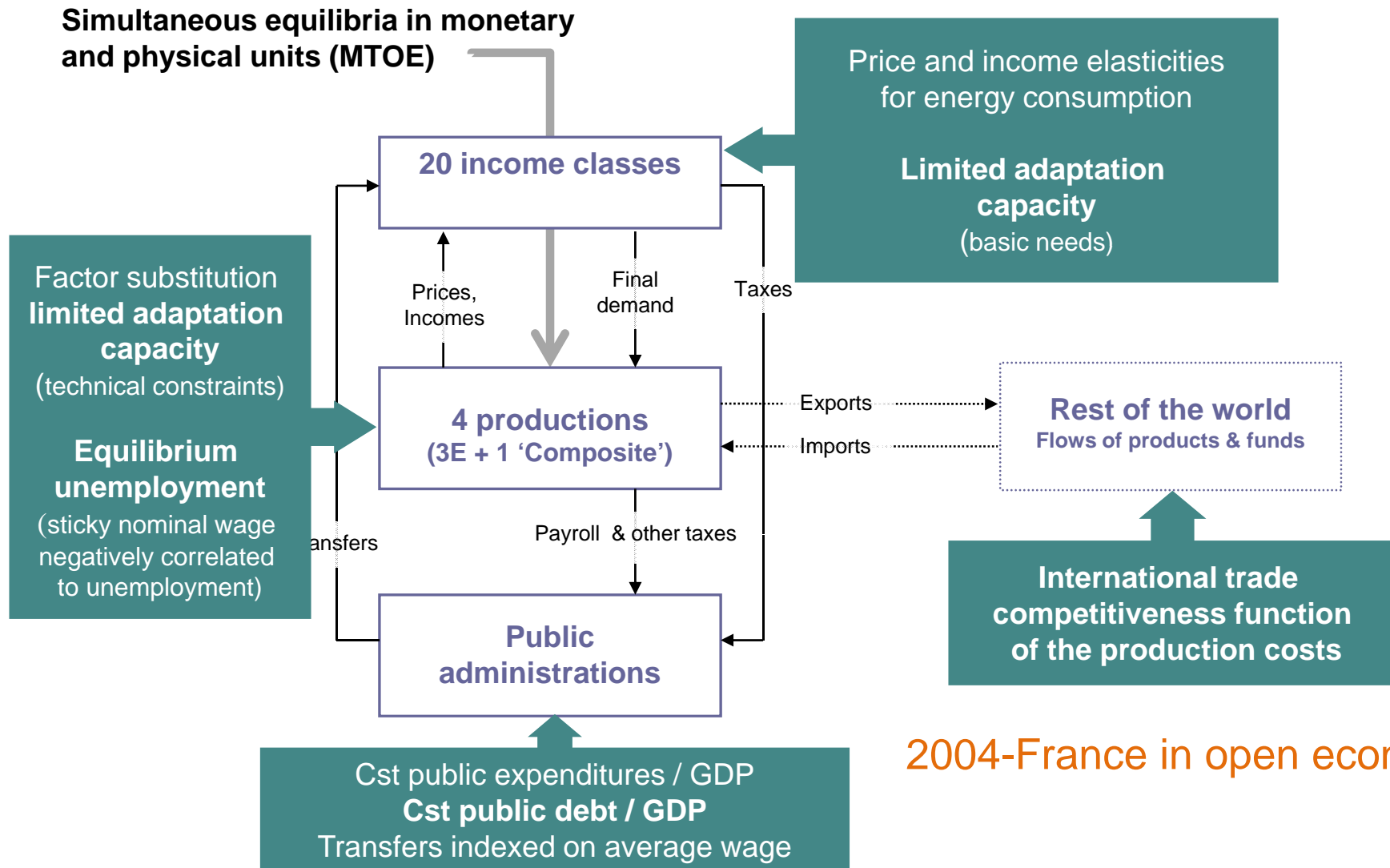
A comparative static analysis

- ❑ Evaluation of long term impacts (20 years) of revenue-recycling schemes on a same set of criteria

- ❑ A standpoint: a study of 'the worst case' to cover misunderstandings
 - Unilateral CT without border adjustment, based only on the carbon content of all consumptions, and reaching 300€/tCO₂ in 2004.

- ❑ We simulate 'counterfactual France-2004' that are compared to a same reference situation: actual 2004-France without carbon tax

IMACLIM-S: Key features of a '2nd best world'



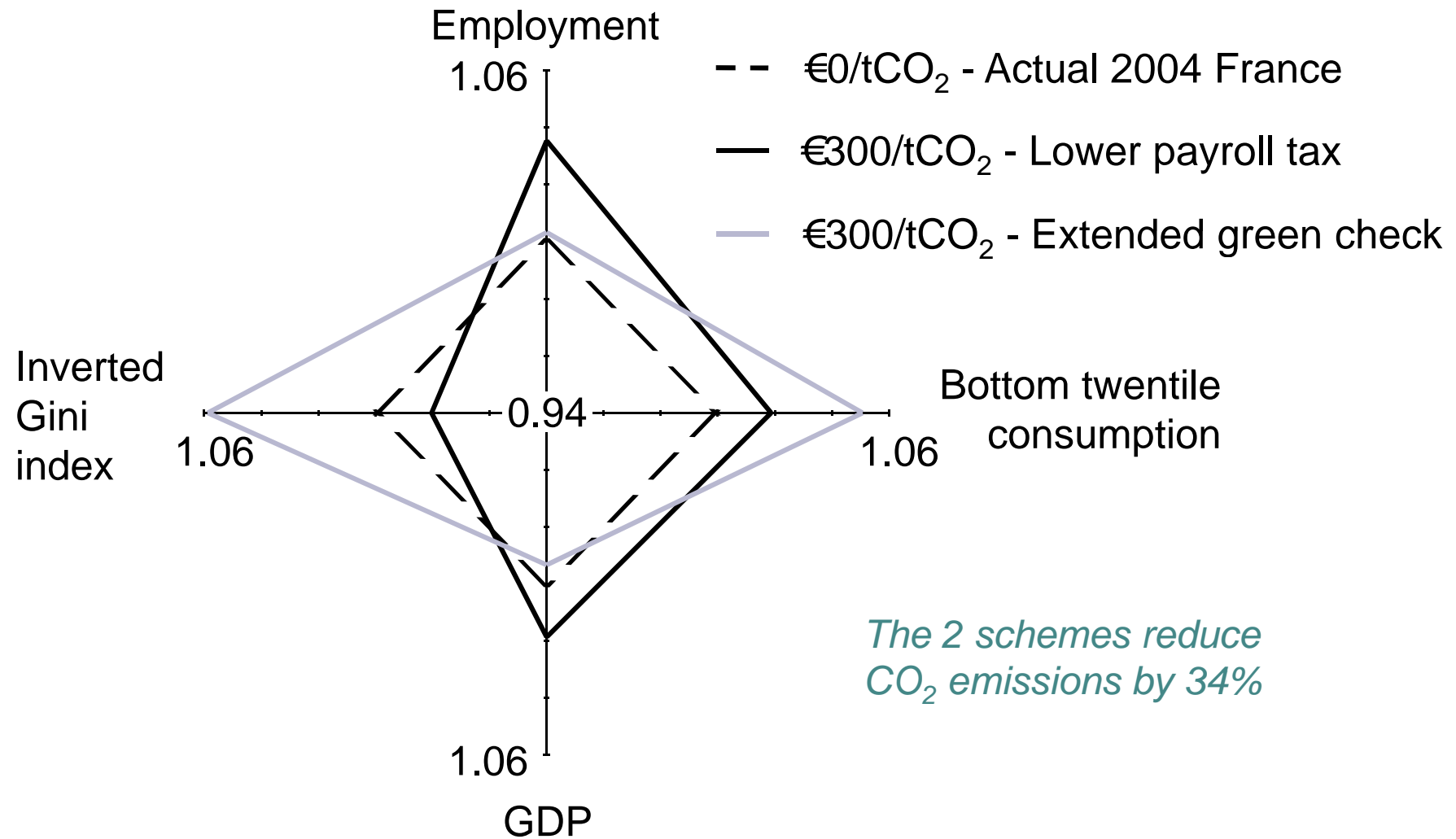
2004-France in open economy

Let us start from two polar schemes

Revenue-recycling under the same « budget neutrality » principle

1. Lower payroll tax
2. Extended “green check”

An equity-efficiency trade-off

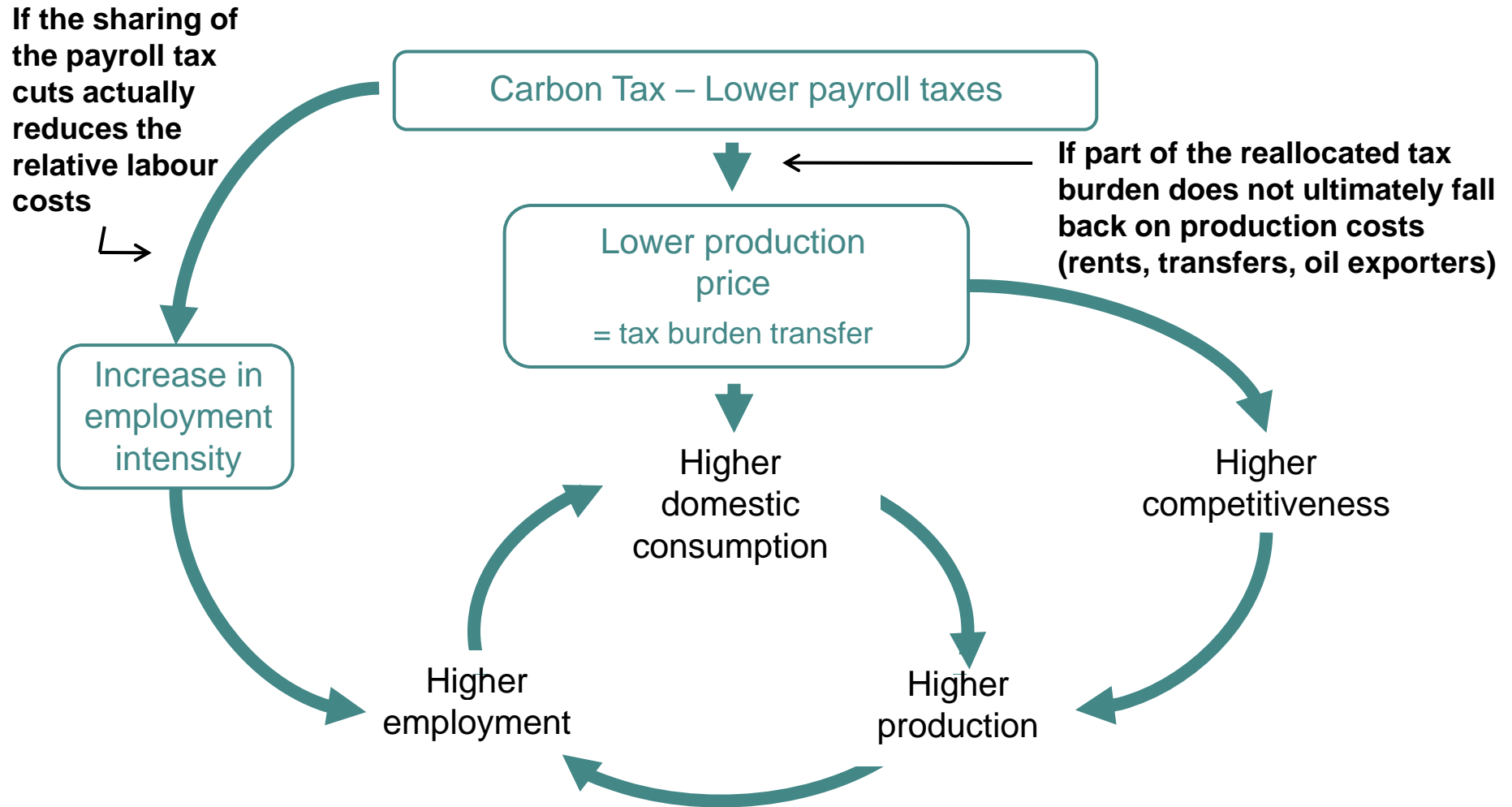


Contrasted impacts on the production costs

€300/tCO2 and	Green Check	Lower payroll tax
Total variation	+3.7%	-1.0%
energy costs variation	+1.6%	+1.6%
net wages variation	+0.1%	+1.5%
Payroll tax variation	id.	-3.6%

- Same direct impact on the energy bill
- BUT when payroll tax are lowered:
- Limited propagation of the costs increases
 - Slight alleviation of the tax burden on production
 - Higher progression of nominal net wages

The mechanisms at play in a field of constraints



Poverty alleviation... at cost of higher disparities

€300/tCO ₂ & <i>Lower payroll tax</i>	Direct impact on the energy bill	Unemployment (% points)	Disposable Income	Gini inequality index
Bottom twentile	+78.3%	-12.2	+5.4%	+2.0%
Top twentile	+72.0%	-0.9	+7.3%	

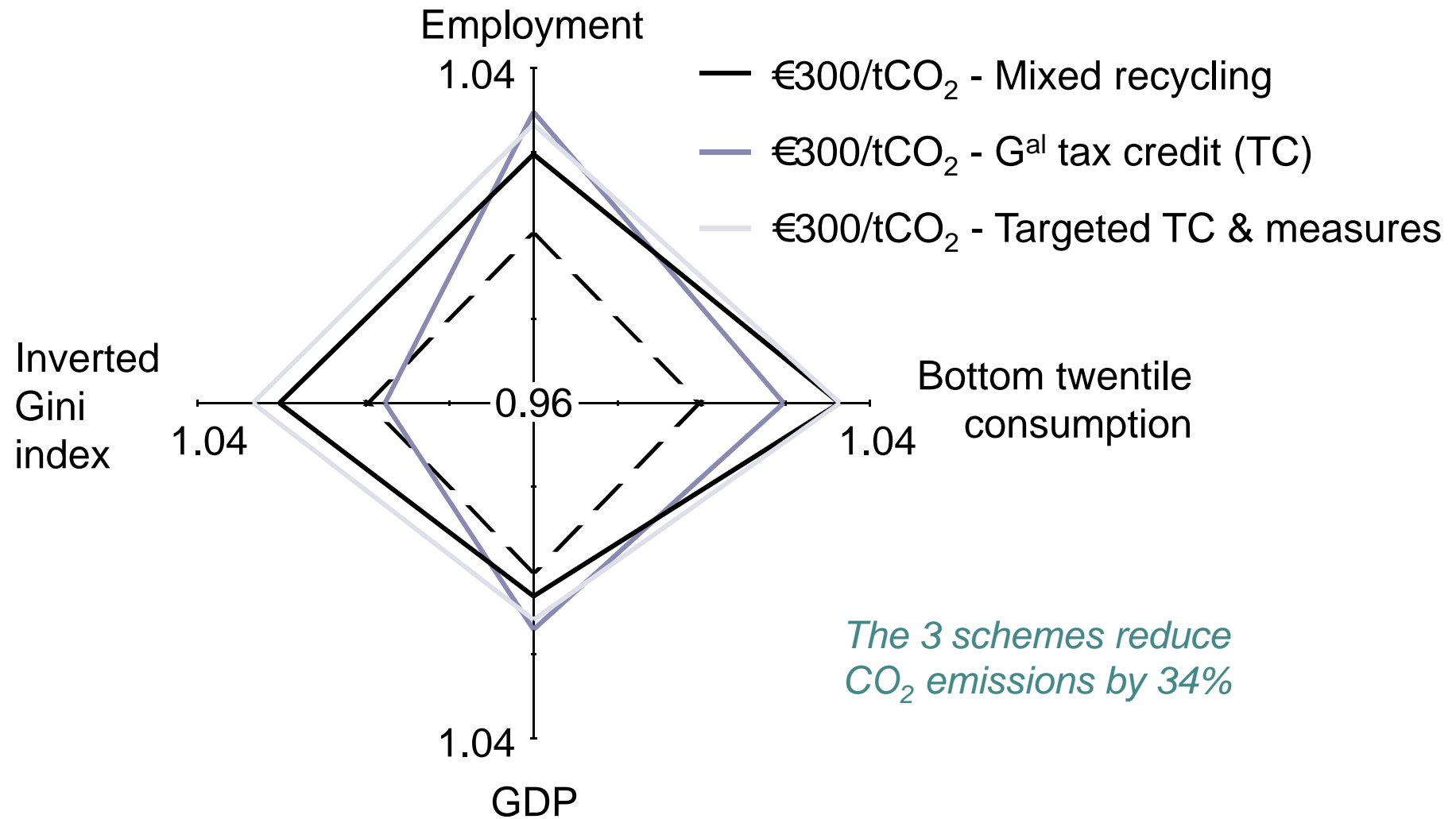
Main determinants:

- 1) Budget share devoted to energy, energy saving potential
- 2) Initial unemployment rates, jobseeker's allowance-wage gap
- 3) Relative weights of income sources (activity, property, transfers, *etc.*)

Three compromise schemes

- **Mixed recycling**
 - Firms: what they paid in lower payroll tax
 - Households: what they paid in uniform green check
- **Generalised tax credit (TC)**
 - lump-sum rebate covering some levels of 'basic needs' (commuting by car + similar share of residential consumption)
- **Targeted TC & measures**
 - same tax credit limited to T1-16
 - remaining proceeds to payroll tax reduction
 - any budget margin in other accompanying measures to T1-T16

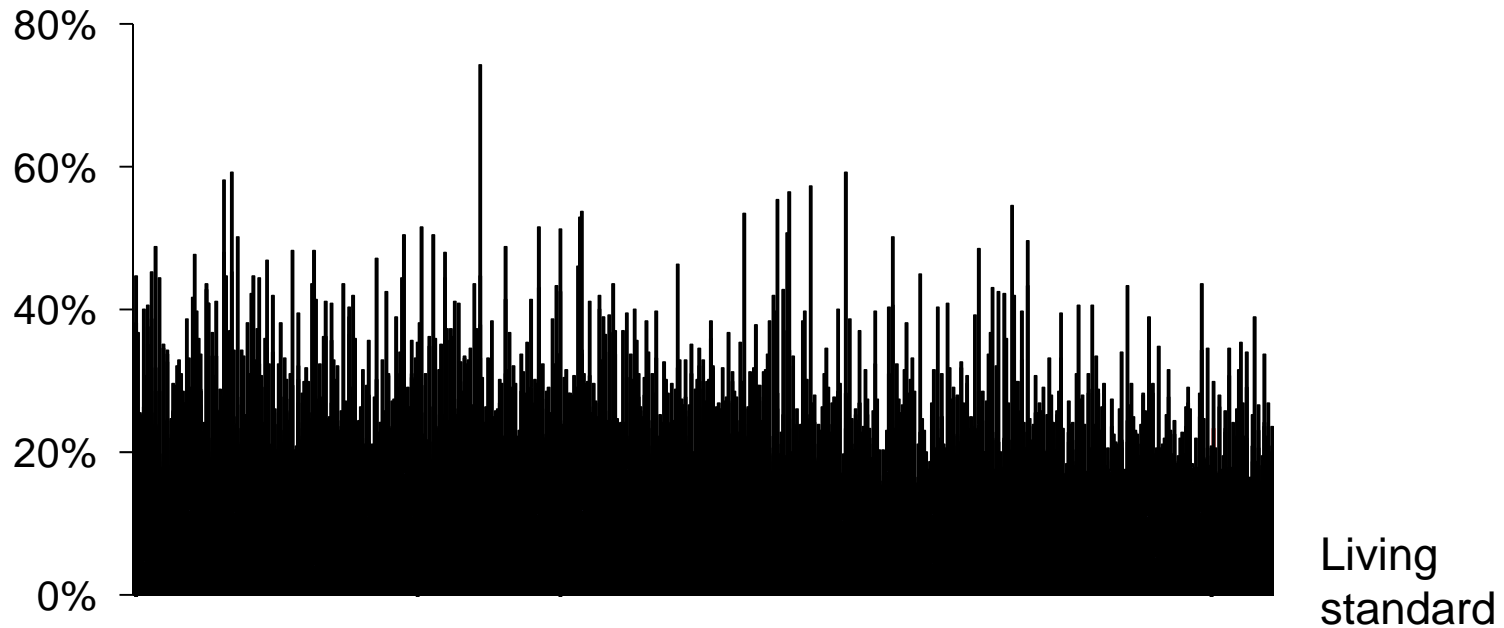
A space for reconciling efficiency and equity



Why the TC is 'more equitable' than the green check

Annual energy budget share

Energy vulnerability ill-explained by 'income'



10 307 households, income and expenditure survey, INSEE 2001

Conclusion: Design & Political Economy Matter

A carbon tax reform can produce different socio-economic outcomes

It can constitute a core for a social policy (conciliating long/short views)

- IF**
- Compensation policy (CP) is limited to the most vulnerables
 - The propagation of higher production costs is slowed down

A broad social negotiation linking climate policies with other social and economic challenges is needed to determine:

- A set of social vulnerability weights to define the 'recipients' of the CP
- A set of public priorities to define the best use of the C tax revenue

Prospective studies that link carbon mitigation, ageing, and public deficits can be helpful to frame the debates (ongoing research)

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Papers available on my personal web page at:

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