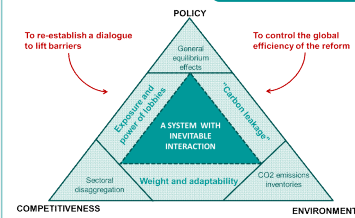




1. Challenge and objectives



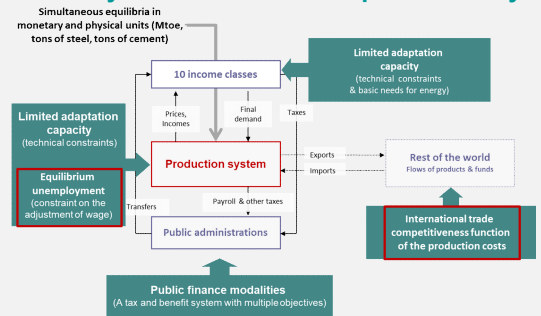
A new modelling platform developed around the French case

- Understanding main macroeconomics mechanisms
- Sensitivity tests around controversial parameters
- Opening the box of the compact model

Methodological innovations implemented step by step

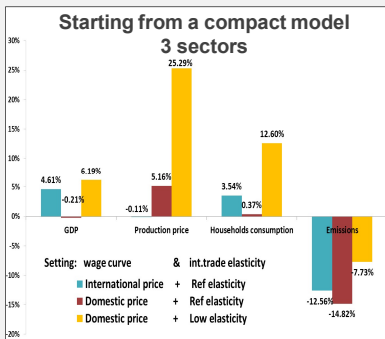
- A gain in sectoral "granularity"
- Sectoral articulation of wage formation and exposure degree

A IMACLIM-country: a hybrid CGE model in open economy

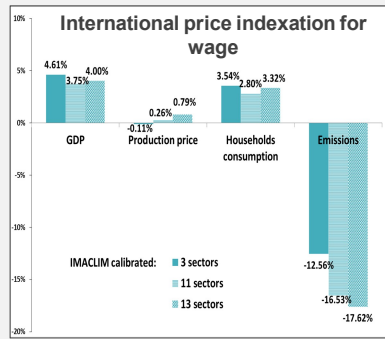


Simulations : unilateral carbon tax 500€/tCO2 recycled into labour tax reduction

1st Obs. : link between wage indexation and trade exposure



2th Obs. : sectoral granularity impacts at calibration



2. Observations and sensitivity analysis

A double dividend depending on two controversial parameters

- The production price decrease: an unavoidable condition for a virtuous circle
- The production price increase: a recessive circle or 'apparent' positive outcomes which hides important debt

Granularity effects

- Non-linear influence
- Second-order effects on macroeconomics outcomes BUT important disparities among sectors

3. A two-steps implementation for heterogeneous representation across sectors

1- The "puzzle" of international trade elasticities

- Non-up-to-date sectoral assessments
- An inconsistency between literature estimations and the representation in real physical units : unexpected results
- A reinterpretation that keeps relative sensitivity: main mechanisms retrieved

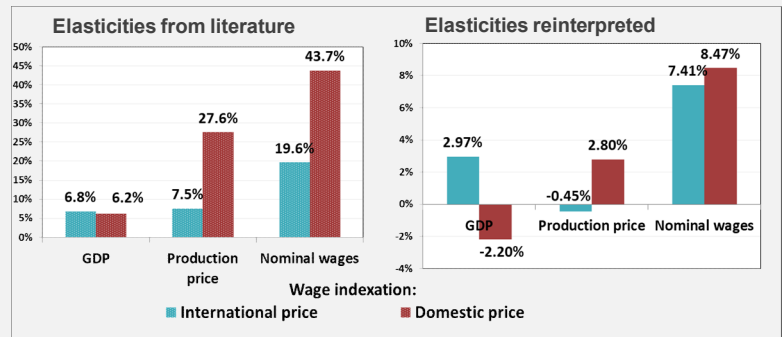
2- Three levels of 'wage adjustment' to justify where we are within a large range of different visions

- The intensity of international trade
- The degree of exposure jobs

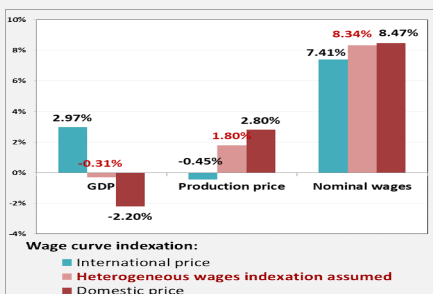
Not predictive results BUT an opportunity to

- To discuss with sectoral experts
- To better control conditions for getting synergies from policies

1st step: integrating differentiated elasticities compatible with IMACLIM



2nd step: differentiated wage curve indexation for sectors



Classification assumptions

Sector classification	Bargain power
Exposed	Low
Intermediate case	Middle
Protected	High

4. Conclusion and perspectives

- Understanding the decisive game between trade exposure and wage formations
 - A linked dynamic into CGE for jobs and trade
 - An heterogeneous sectoral representation
- A tool to feed the debate around energy transition
 - Dialogue with sectoral experts
 - Synergies for inward activities
 - To be used for French climate plans of government
- Extension of the IMACLIM-country platform
 - New modelling capacities
 - Inter-regional comparison

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