INFACT

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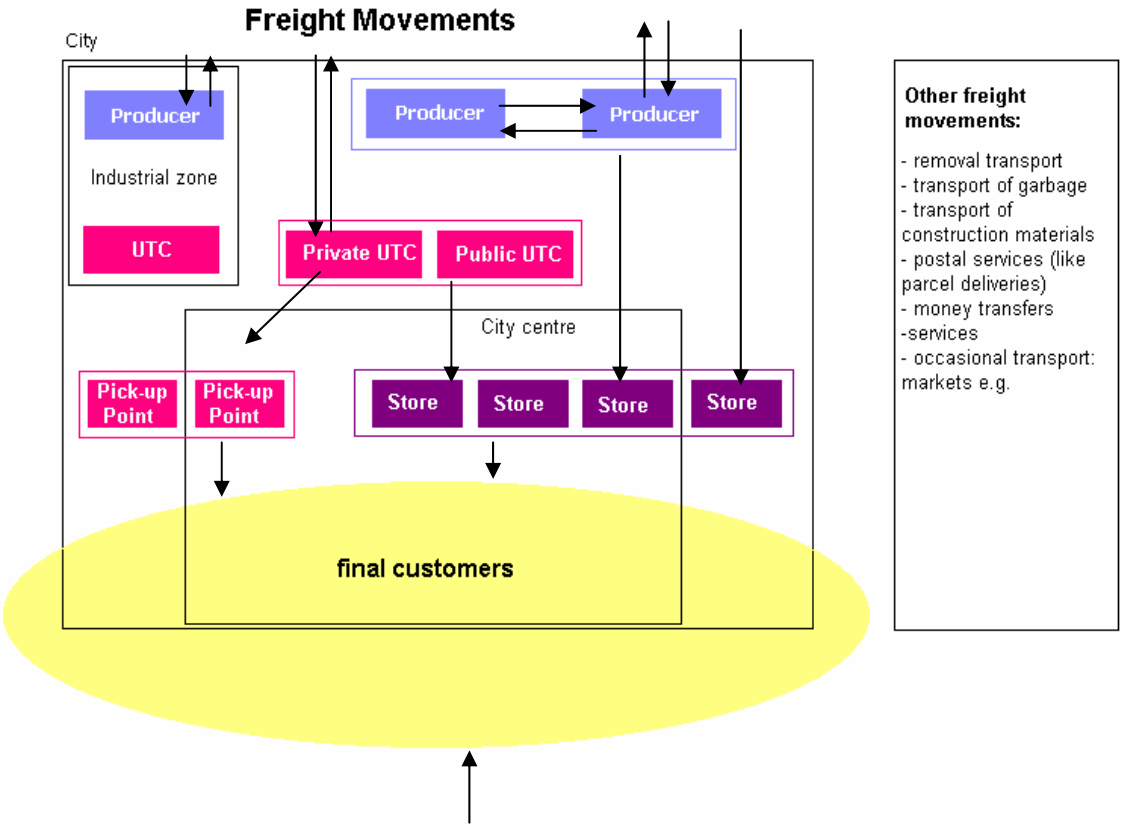
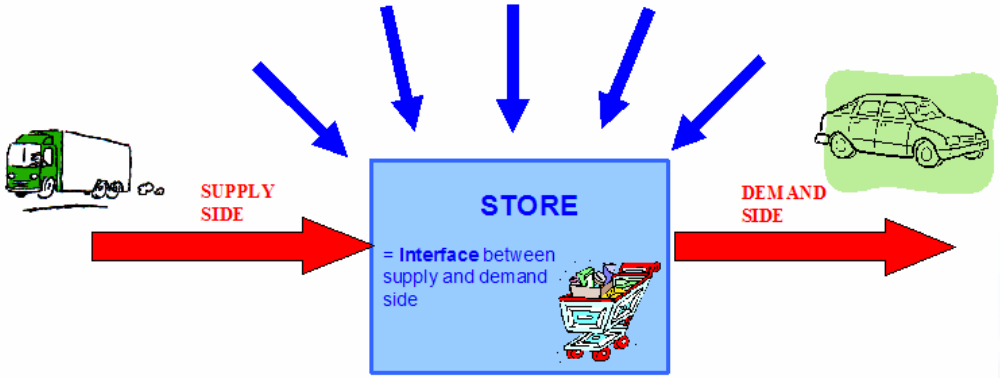
INFACT: integrated freight analysis within cities



- Research by BRRC (coordinator) and the universities of Antwerp and Namur for the Belgian Federal Public Planning Service

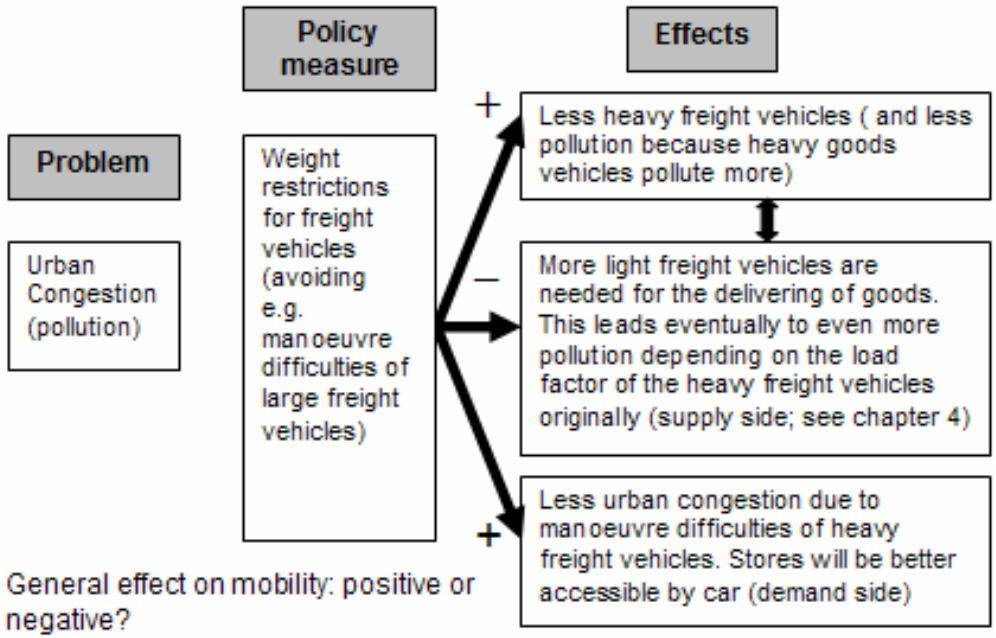
Objectives of INFACT (I)

- Understanding better upstream and downstream urban freight flows
- Considering the potential link between both transport flows?



Objectives of INFACT (II)

- Policy measures: possible effects on both transport flows!



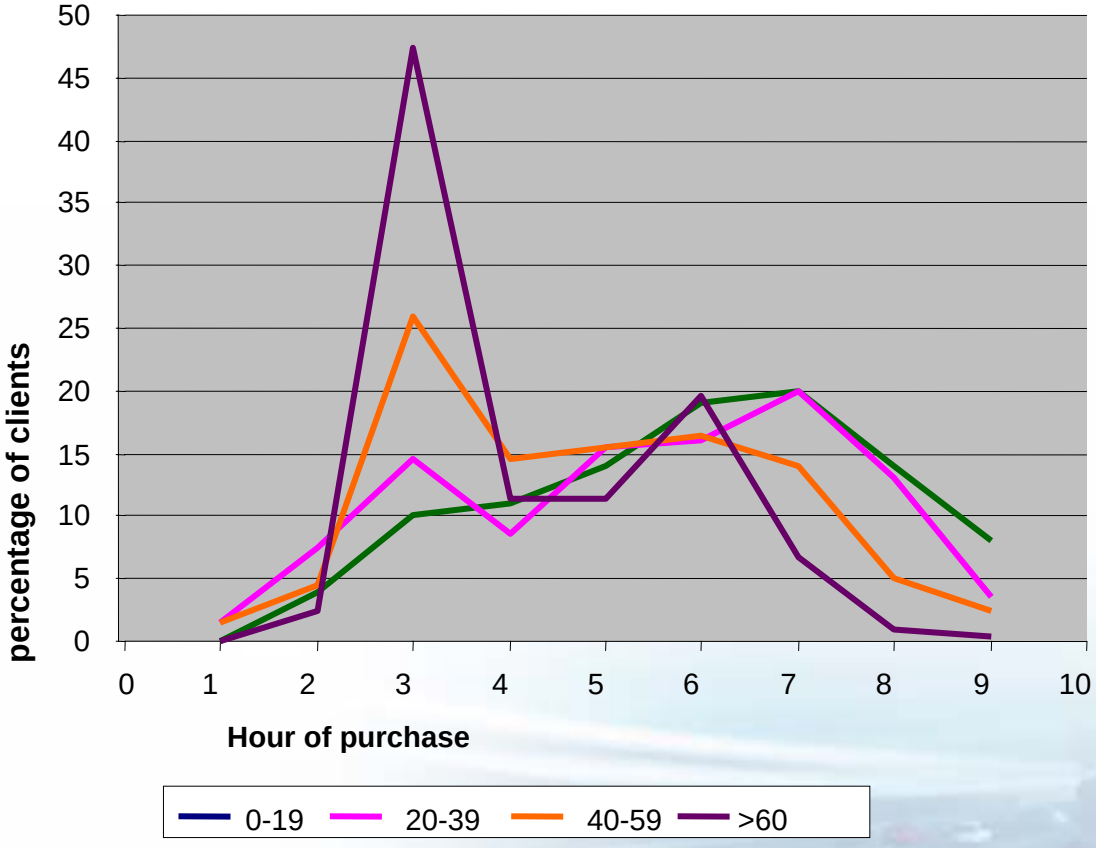
Downstream freight transport (I)

- Pilot study: Intercept and follow method
- Interception at shop exits in Jette (near Brussels)
  - Face to face questionnaire or auto-administrated questionnaire
  - A logbook (purchase behaviour during one week)
  - Use of an incentive (lottery ticket)
- Content of questionnaires
  - Questions about the respondent
  - Questions about the purchase
  - Questions about the movements of clients
- Only trends can be found

Downstream freight transport (II)

- Time of first purchase related with age of respondent

1 = 0h till 6h59
2 = 7h till 8h59
3 = 9h till 10h59
4 = 11h till 11h59
5 = 12h till 13h59
6 = 14h till 15h59
7 = 16h till 17h59
8 = 18h till 19h59
9 = 20h till 23h59



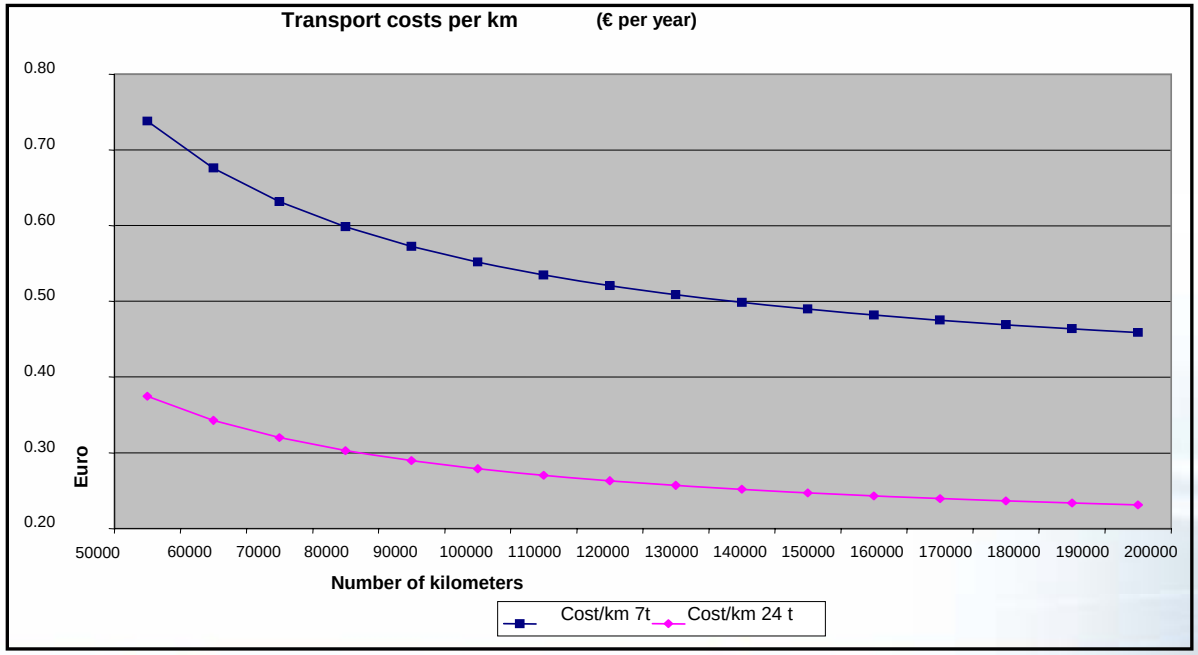
Downstream freight transport (III)

Conclusions:

- Methodology (general)
- The survey hours have effects on the customers' characteristics
- Researchers should be aware of possible bias (e.g. the incentive used could have introduced some bias);
- Representability of each class of the population (relative to age, sex or status) is difficult to obtain.

Upstream freight transport (I)

- Simulation (modelling)
- Calculation of transport costs:
  - Time costs
  - Kilometer costs

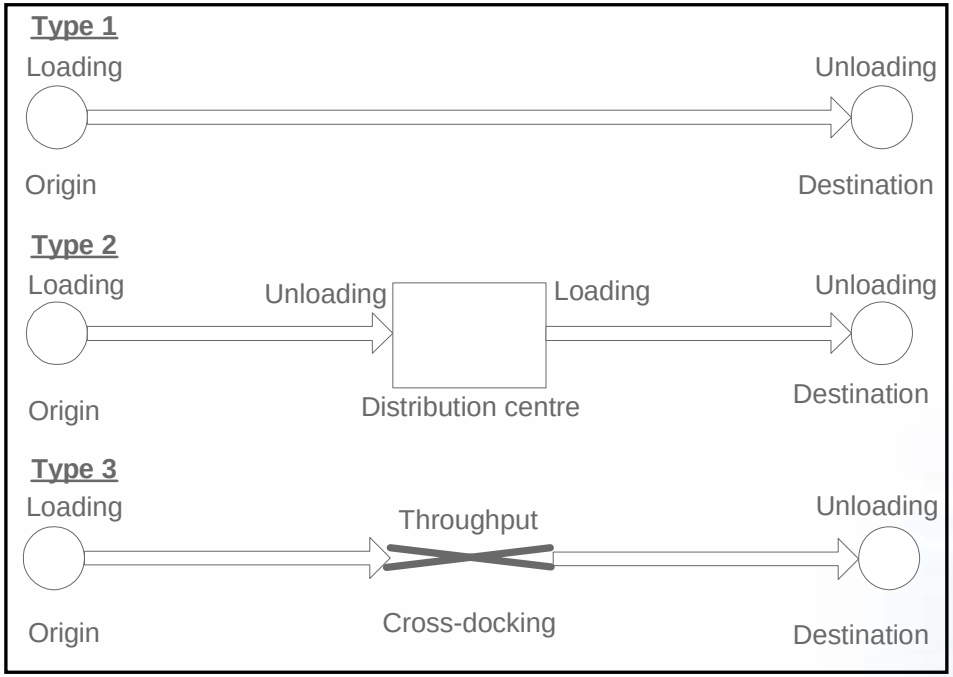


Sensitivity analyses

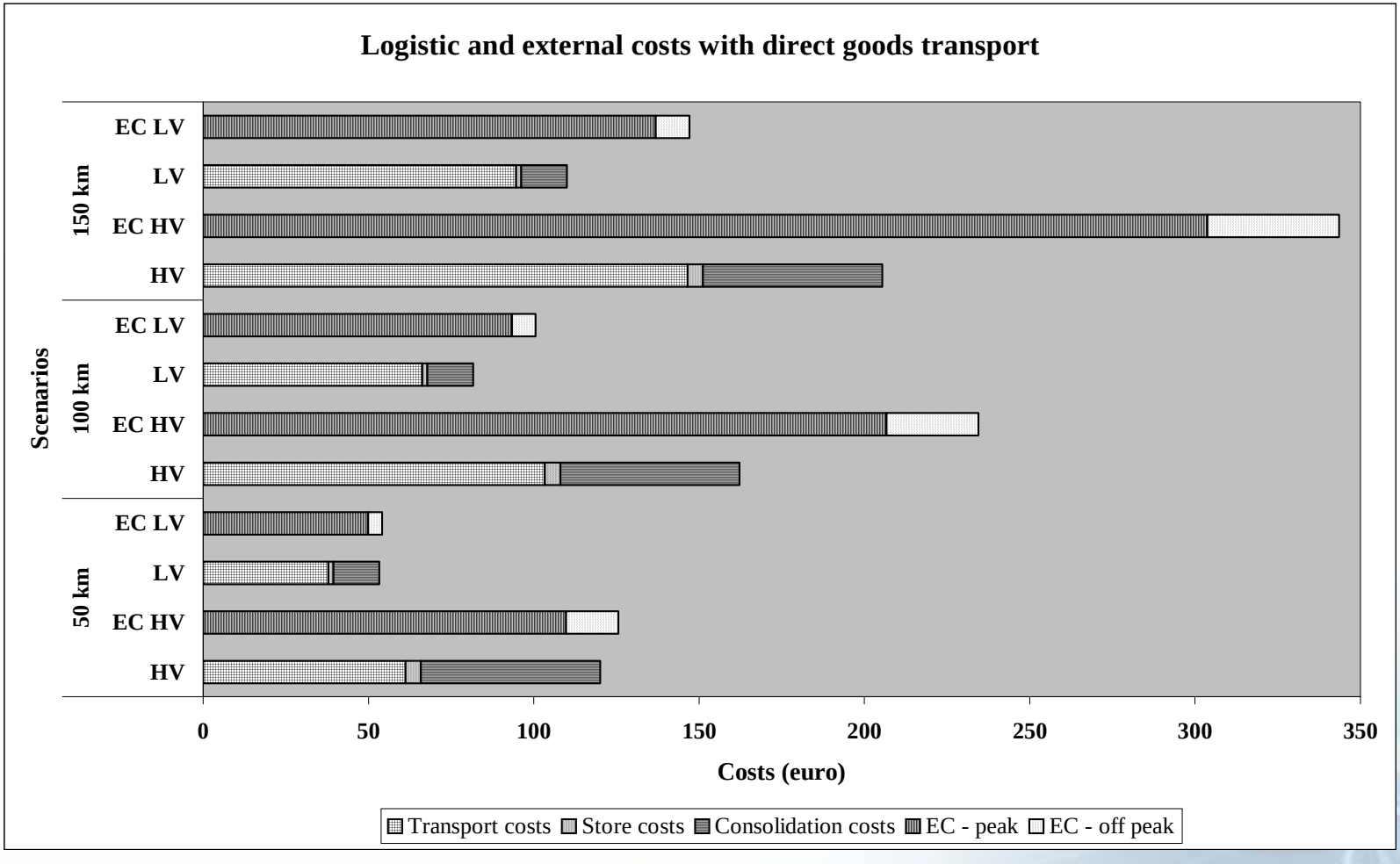
Upstream freight transport (II)

Total logistic concept:

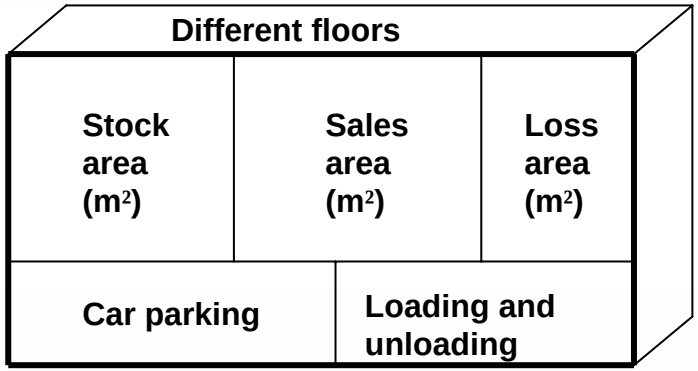
also other costs like store, consolidation and external costs were included in the analysis



Upstream freight transport (III)

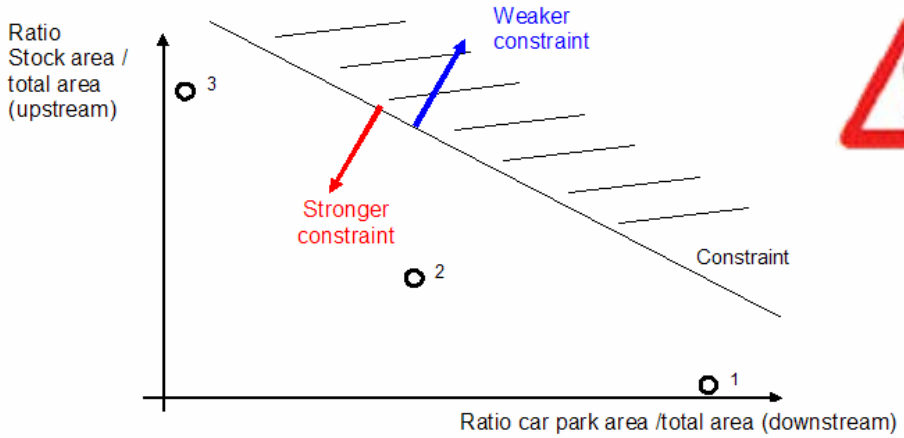


Potential link between both transport flows



Surface: crucial

- Distinction of different surfaces
- Stock possibilities influence deliveries
- Parking possibilities influence behaviour customers



No surface constraints

NO INTERACTION

Conclusions

- Integration is possible
- Knowledge about the supply chain is necessary
  - Typology offer
  - Typology demand
  - Typology surroundings
- Knowledge helps to estimate the impact on the effectiveness of policy measures (CBA)

More info?

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