

Results of collection and calculation

WP 5: Taxes, charges and subsidies

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Introduction

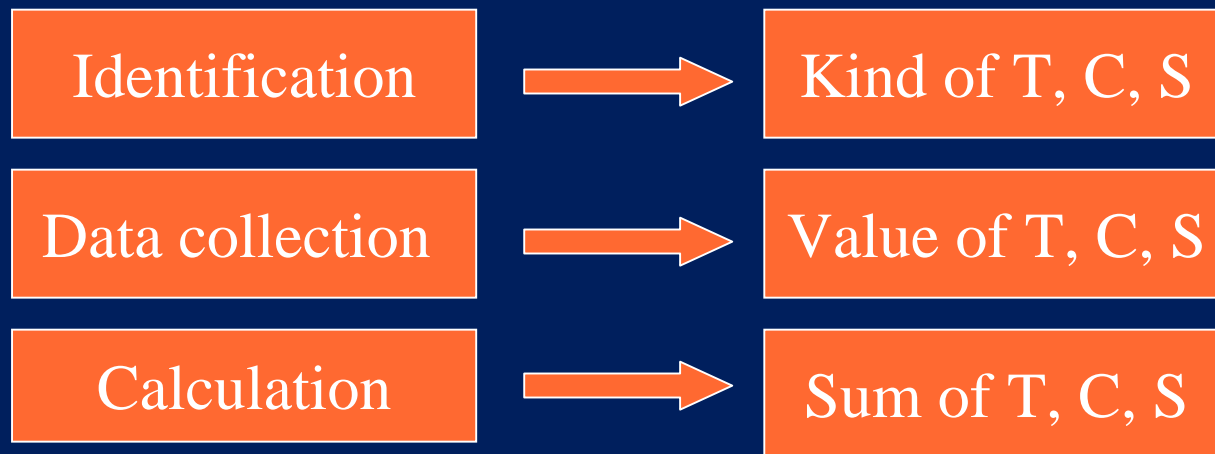
- Objectives of WP 5
- Data collection
- Some premises
- Results of calculation
- Conclusions

Introduction

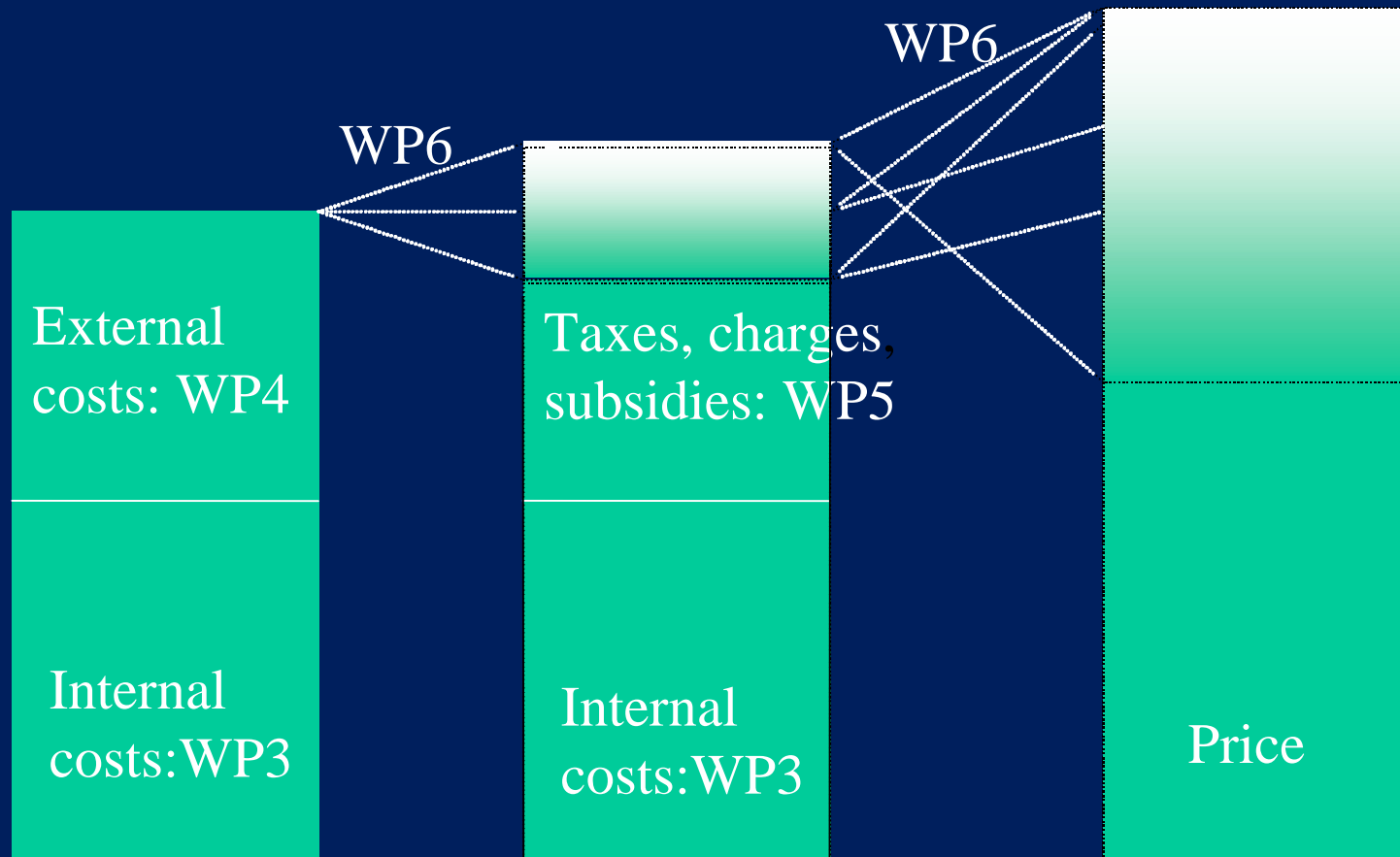
- **Data collection**
- **Scope of WP5**
- **Arithmetic method**
- **Premises**
- **Results of calculation**
- **Conclusions about calculation**
- **View on data collection**

Objectives of WP 5

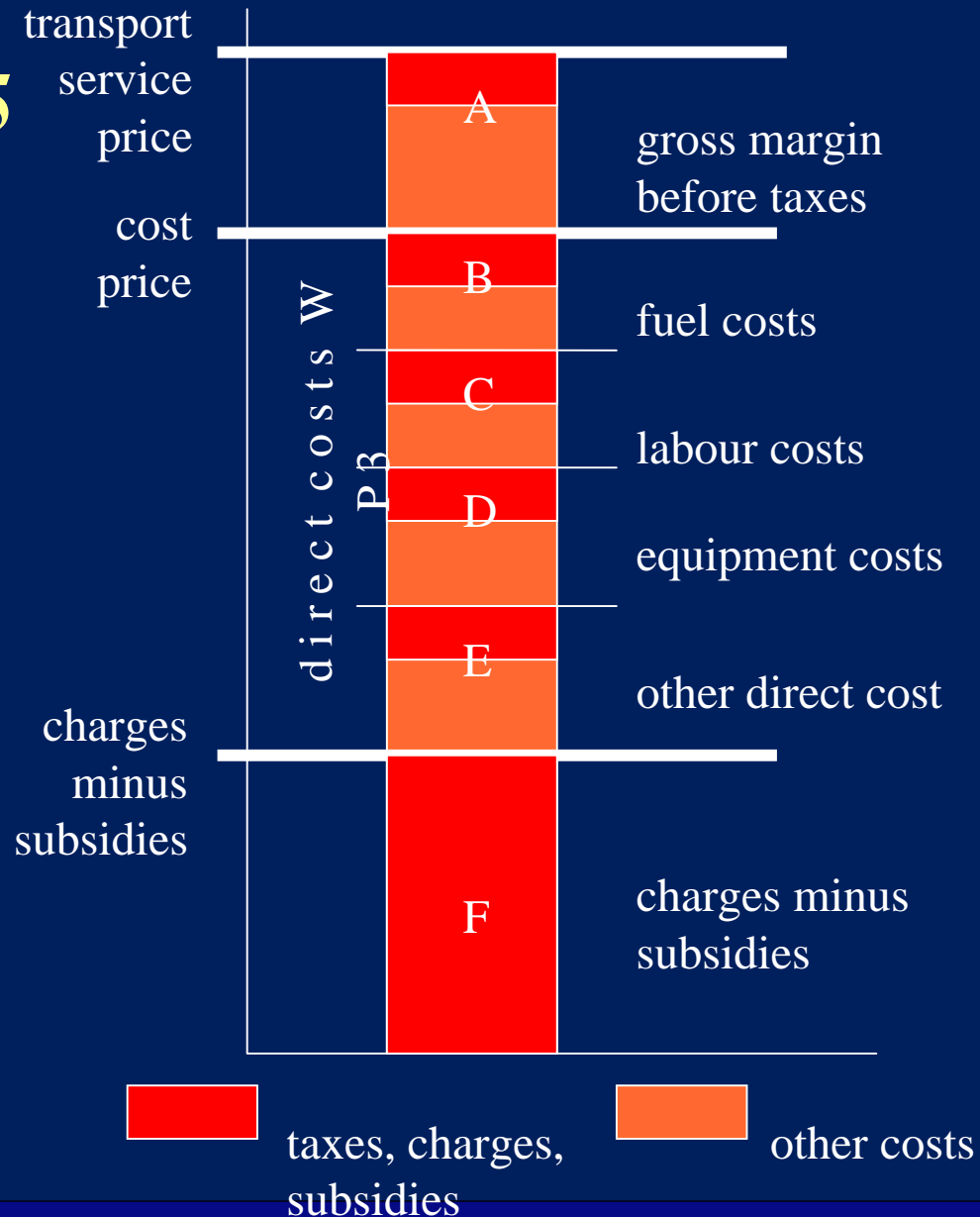
- Determine all relevant TCS
- Collect data of all relevant TCS
- Calculate the sum of TCS



Relationship WP 5 - other WPs



Scope of WP 5



Identified taxes, charges and subsidies

- Euro/loading unit/kilometre

Taxes	Charges	Subsidies
Fuel Registration Circulation Insurance VAT	Fuel Road tolls Road Infrastructure Harbour dues Marshalling	Fuel Road toll Purchase

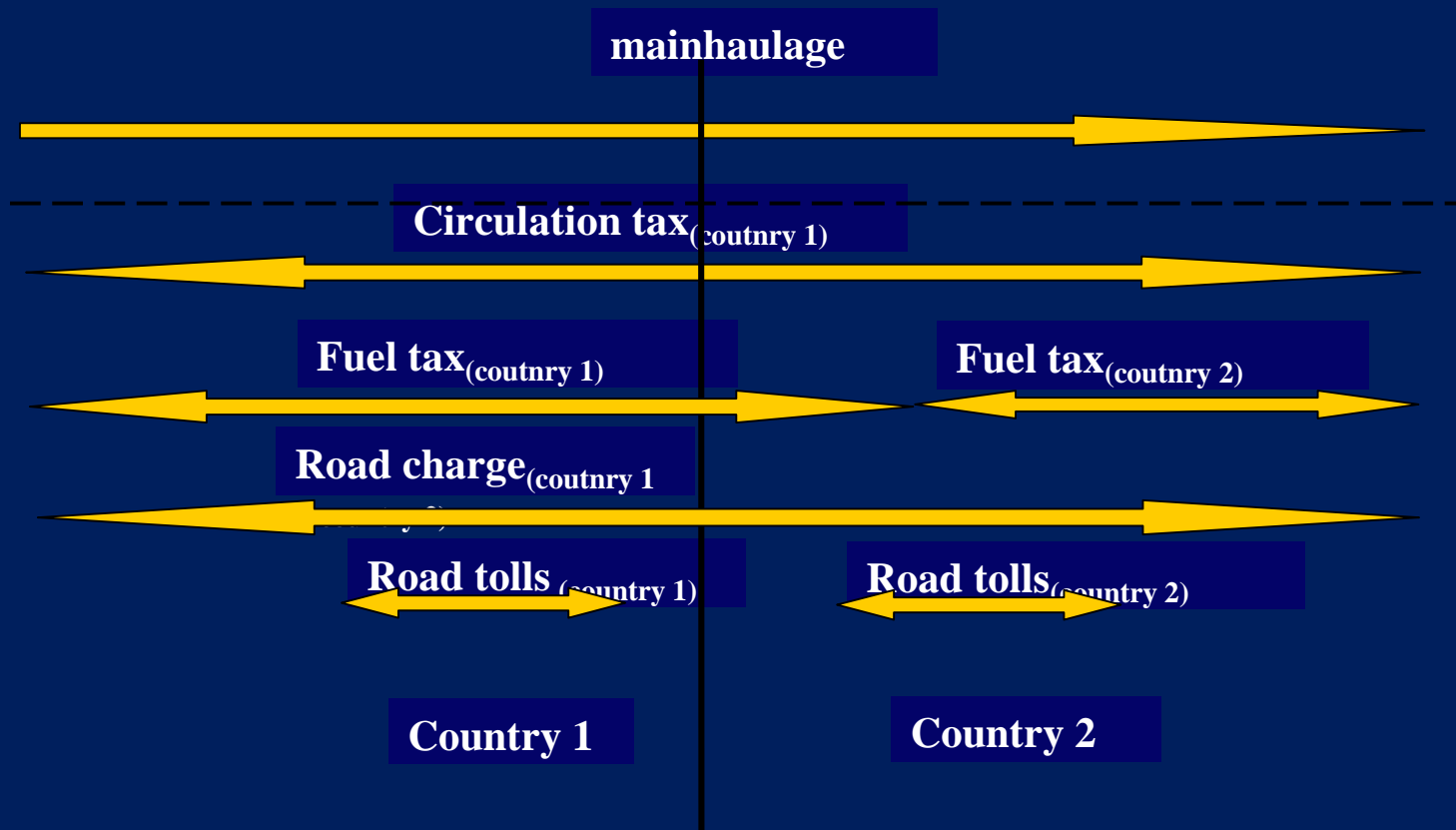
4 step approach

- *Tax, charge, subsidy per LU per km* $[Tax/LU/km]_{country}$
- $[Tax/LU/km]_{country} * km_{case, country} [km] = [Tax/LU]_{country}$
- $\Sigma [Tax/LU]_{country} = [Tax/LU]_{corridor}$
- $[Tax/LU]_{corridor} / km_{corridors} = [Tax/LU/km]_{corridor}$

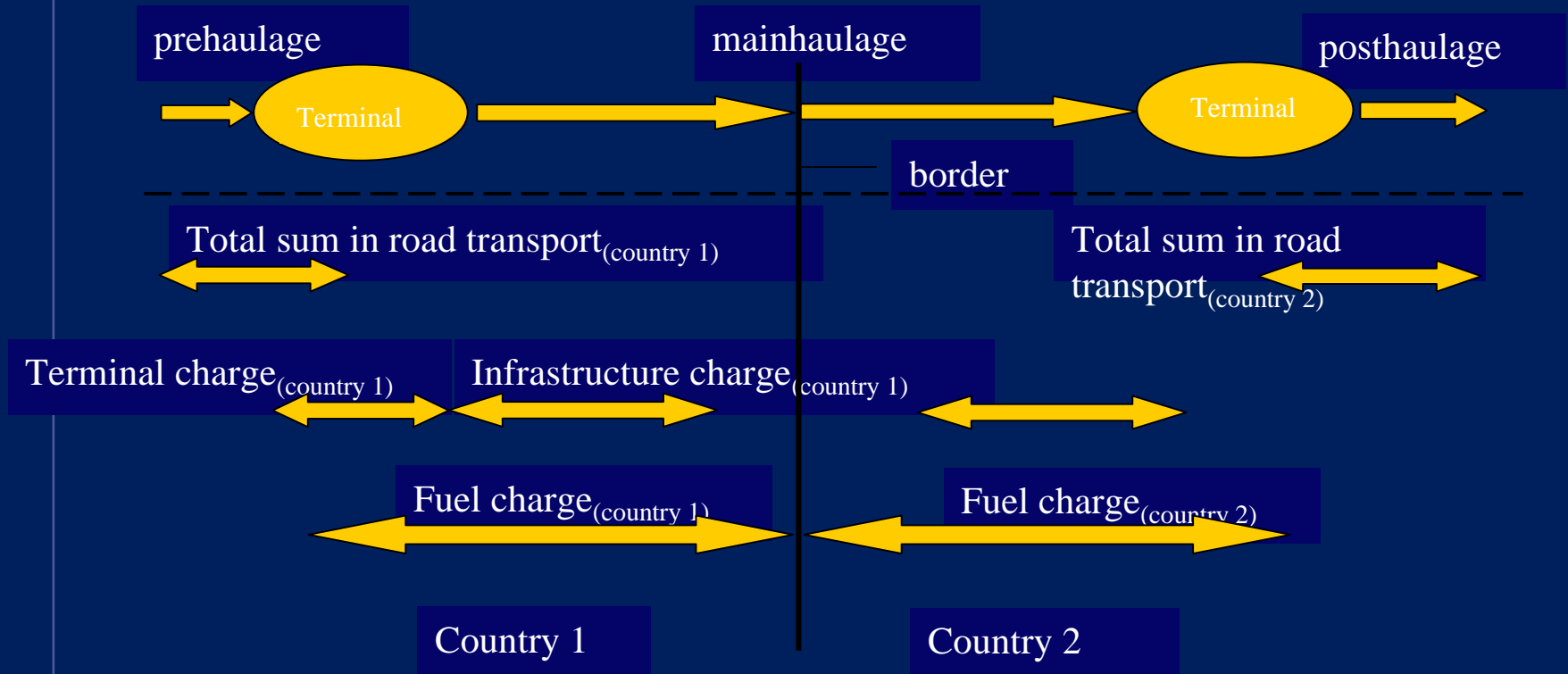
Arithmetic method

- $Tax_{circulation} [E/LU/km] = Tax_{circulation, annual} [E/yr/truck] / Annual\ kilometres [km/yr] / [LU/truck]$
- $Tax_{fuel} [E/LU/km] = Tax_{fuel, litre} [E/l] / Fuel\ usage [km/l/truck] / [LU/truck]$
- $Charge_{road} [E/LU/km] = (Charge_{road, country1} + Charge_{road, country2} [E/truck]) / Annual\ kilometres [km/yr] / [LU/truck]$
- $Tolls_{road} [E/LU] = Tolls_{road, truck} [E/truck] / [LU/truck]$
- $Charge_{infrastructure} [E/LU/km] = Charge_{infrastructure, country1} [E/vehicle/km] / [LU/vehicle]$
- $Subsidy_{tolls} [E/LU/km] = Subsidy_{tolls} [E/vehicle/km] / [LU/vehicle]$

Tax accounting in all road solution



Tax accounting in intermodal corridor

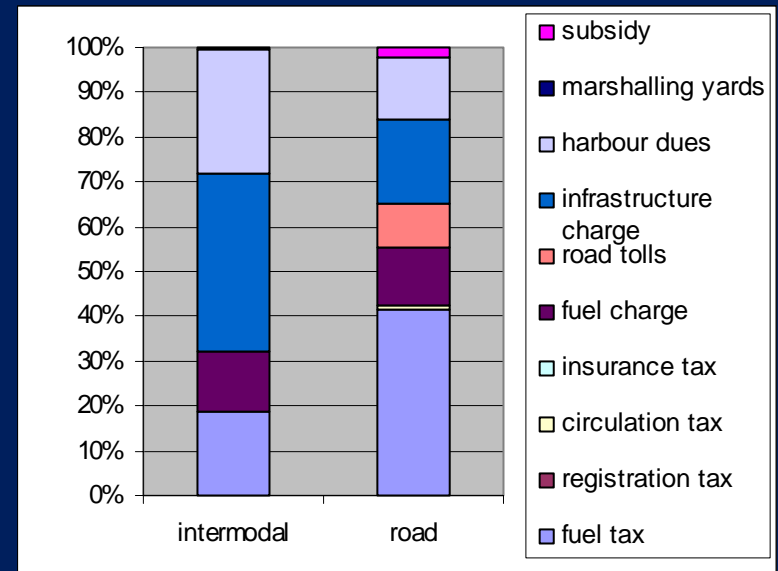
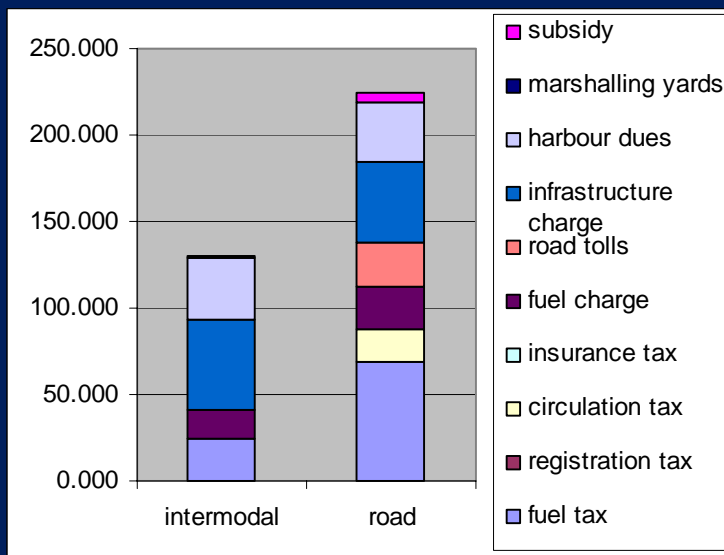


Premises for calculation

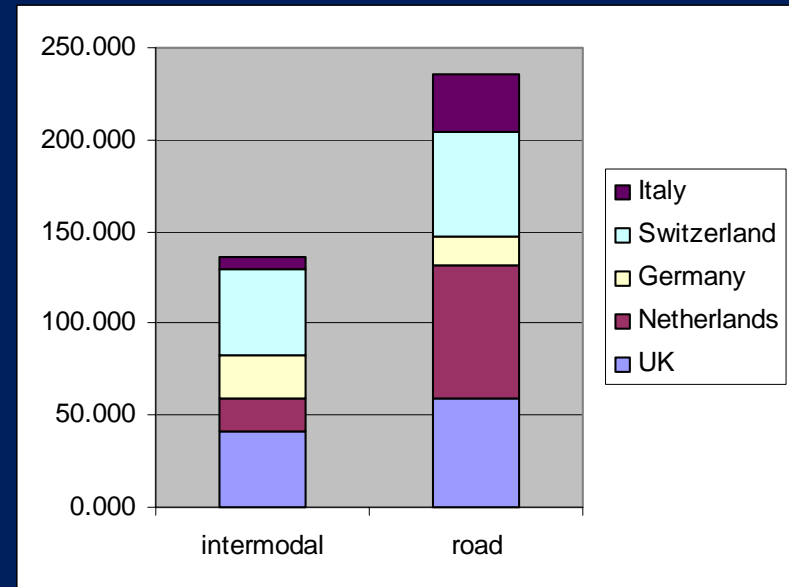
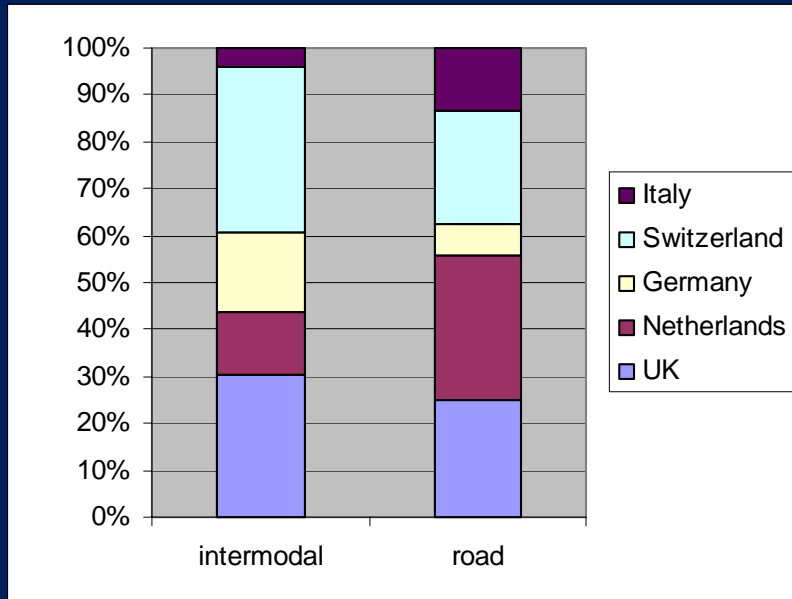
- **Road: Italian truck (1727 km)**
- **Intermodal: Rail, short sea, inland shipping, rail**
- **120 000 kilometre per year per truck**
- **truck: 40 tonnes, 2+3 axles**
- **rail: 40 LU per train, maximum capacity: 1000 tonnes**
- **short sea: Ro-Ro 350 TEU**
- **inland shipping: containership 200 TEU**
- **Fuel in UK (480 km), Netherlands (750 km), Switzerland (497 km)**

Preliminary results Manchester - Genua (1)

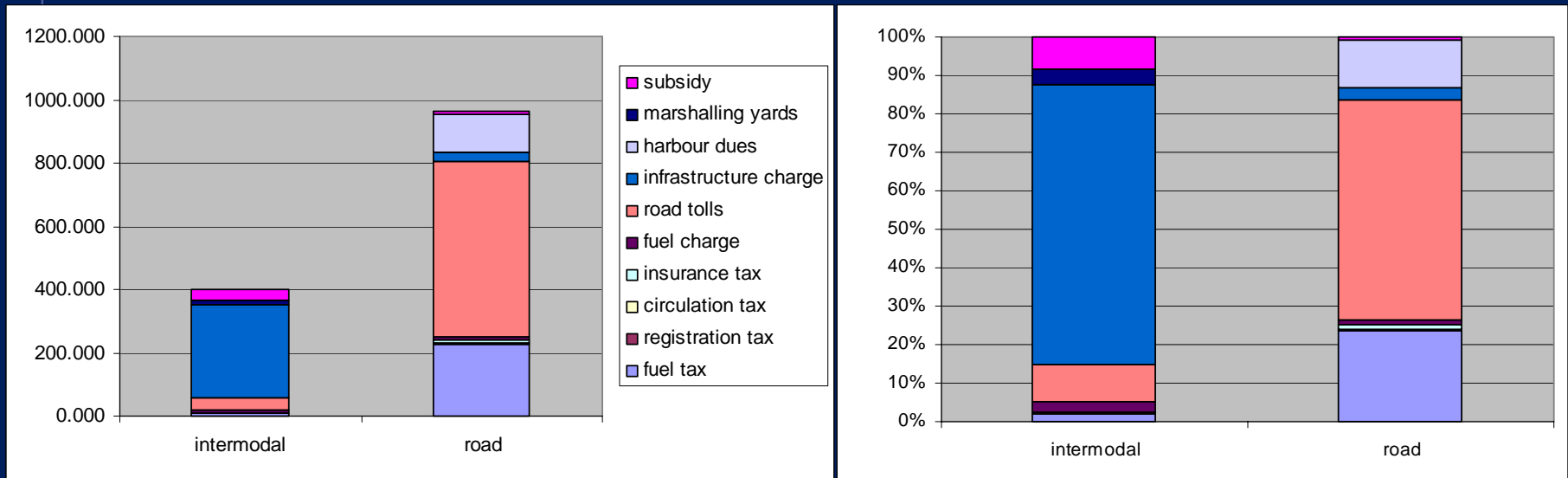
- Road: 210 E/LU 0.12 E/LU/km
- Intermodaal: 130 E/LU 0.07 E/LU/km



Preliminary results Manchester - Genua (2)

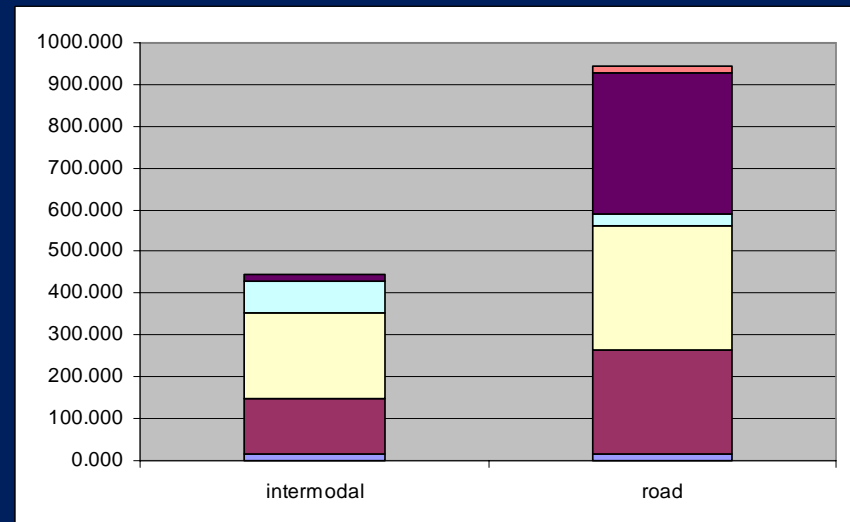
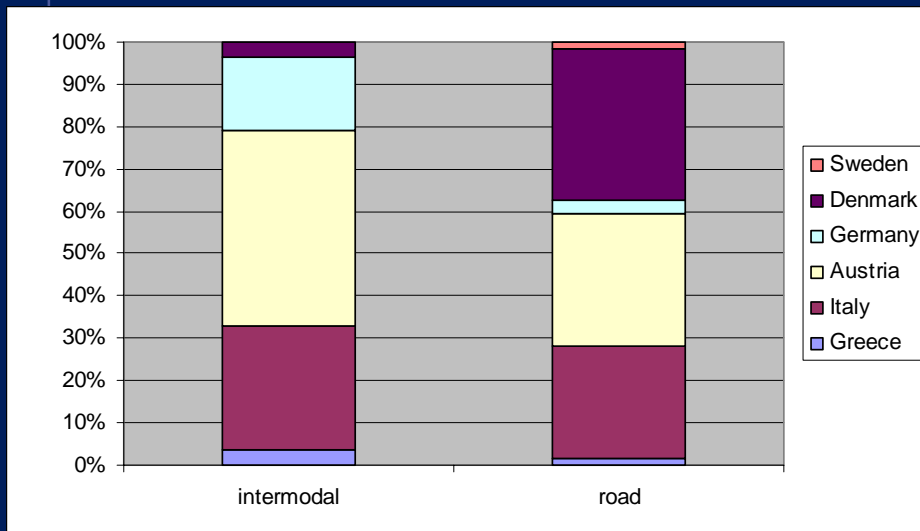


Preliminary results Athens - Gothenborg



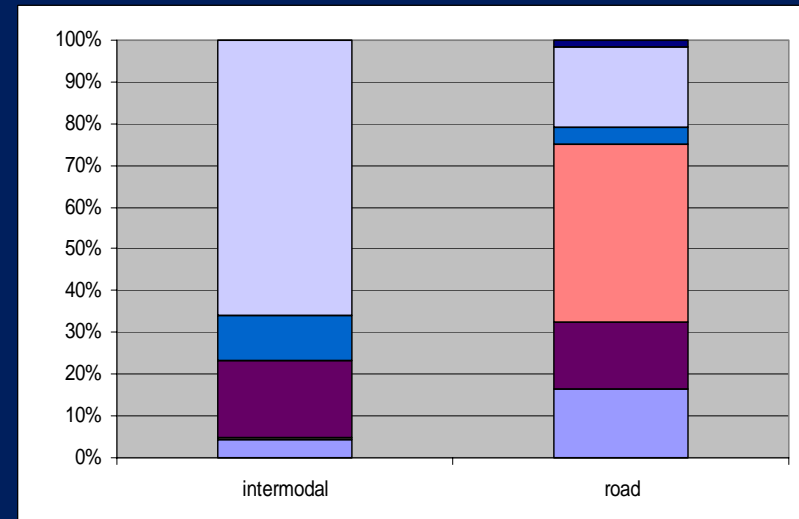
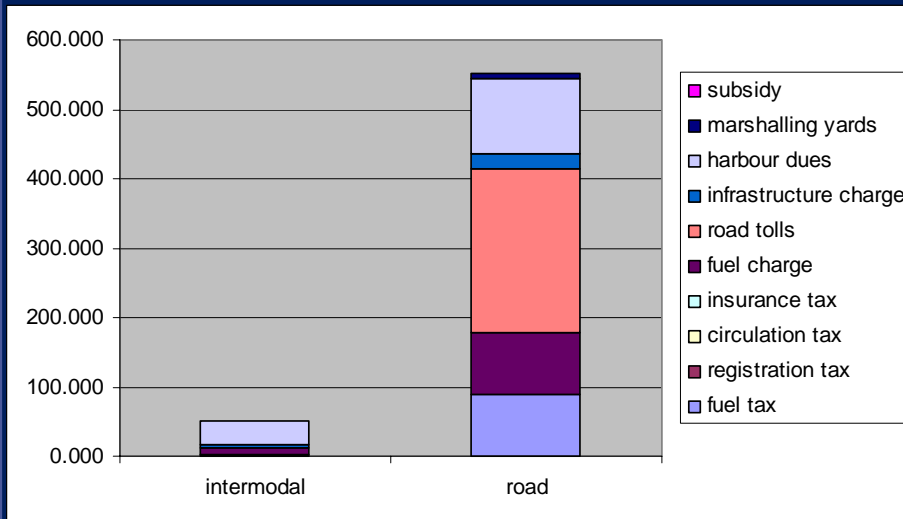
Preliminary results Athens - Gothenborg-2

- Road: 0.210 Euro/LU/km all rail: 0.100 Euro/LU/km

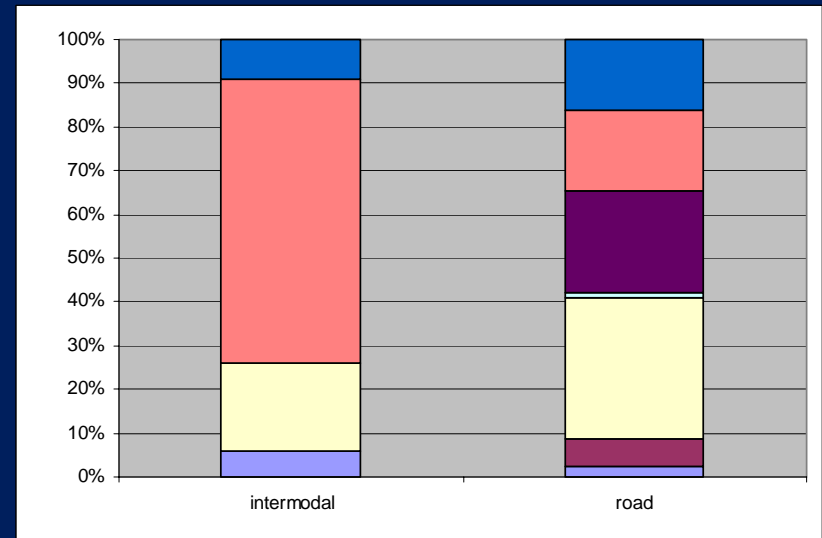
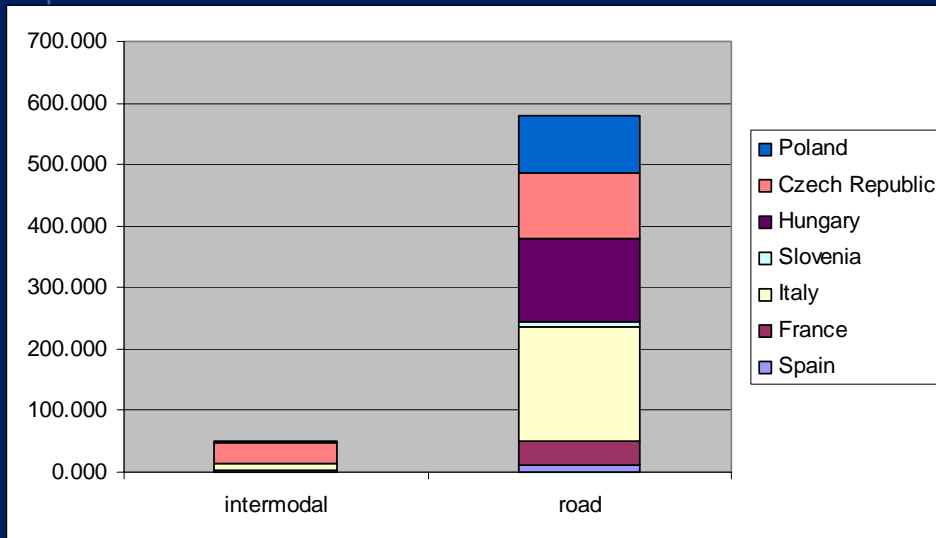


Preliminary results Barcelona - Warsaw

- Road: 0.145 E/LU/km Intermodal: 0.158 E/LU/km



Preliminary results Barcelona - Warsaw -2



Conclusions on calculation

- **Taxes and charges: highest in road transport**
- **CEE countries: hardly any charges in rail transport**
- **Taxes are low in rail and inland shipping**
- **Choice for origin of truck is modifying results**

View on data collection

- **Circulation taxes vary: 250 - 4700 Euro per truck**
- **Registration tax has little influence**
- **VAT rate level is quite the same**
- **CEE countries are below minimum road user charge**
- **Lack of harmonisation in rail infrastructure charges**
- **Very little information about subsidies**
- **Taxes do not belong to EU > variation**