

Pilot Accounts for Germany

Policy implications

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- 1 What are the UNITE pilot accounts?
- 2 A few methodological remarks
- 3 Results for Germany 1998
- 4 How to use and interpret the pilot accounts?

Full report: Link et al. (2001) The Pilot Accounts for Germany and Switzerland. Deliverable 5 of the UNITE project funded under the 5th Transport RTD Programme of the EU. Berlin.

1 What are the pilot accounts?

- Quantitative comparison of total (average) social costs and revenues (taxes, charges) of transport modes on a national level
- Strategic/monitoring instrument regarding the development of costs, financial taxes balance, level and structure of prices
- Empirical basis for in-depth policy analysis rather than for immediate price setting policy

General design of the accounts

| Costs | Revenues | |
|---|---|--|
| | (Directly related to a specific cost category) | (Other transport specific revenues) |
| Infrastructure costs | Charges for infrastructure use | Annual circulation tax Fuel tax Eco tax VAT |
| Supplier operating costs | Subsidies for concessionary fares User tariffs | |
| (External) accident costs | | |
| Environmental costs Air pollution Global warming Noise | | Subsidies Loss of revenues due to tax exemptions/reductions Non transport related revenues |
| Congestion costs (delay costs) | | |
| (Internal) accident costs | | |

The modes, networks, transport means and user groups breakdown - Germany

| Transport modes | Network & institutional differentiation | Means & user breakdown |
|--------------------------|---|--|
| Road | Motorways Other federal roads Other roads | Motorcycles Passenger cars Light goods vehicles Heavy goods vehicles Rigid Non-rigid Special & agricultural vehicles |
| Rail | National rail (DB) Other rail (non-DB) | Passenger transport Regional Long-distance Freight transport |
| Other public transport | | Tram, metro, trolley buses |
| Aviation | Airports Air transport | |
| Inland waterway shipping | Inland waterways Inland waterway harbours | |
| Maritime shipping | Seaports | |

2 A few methodological remarks

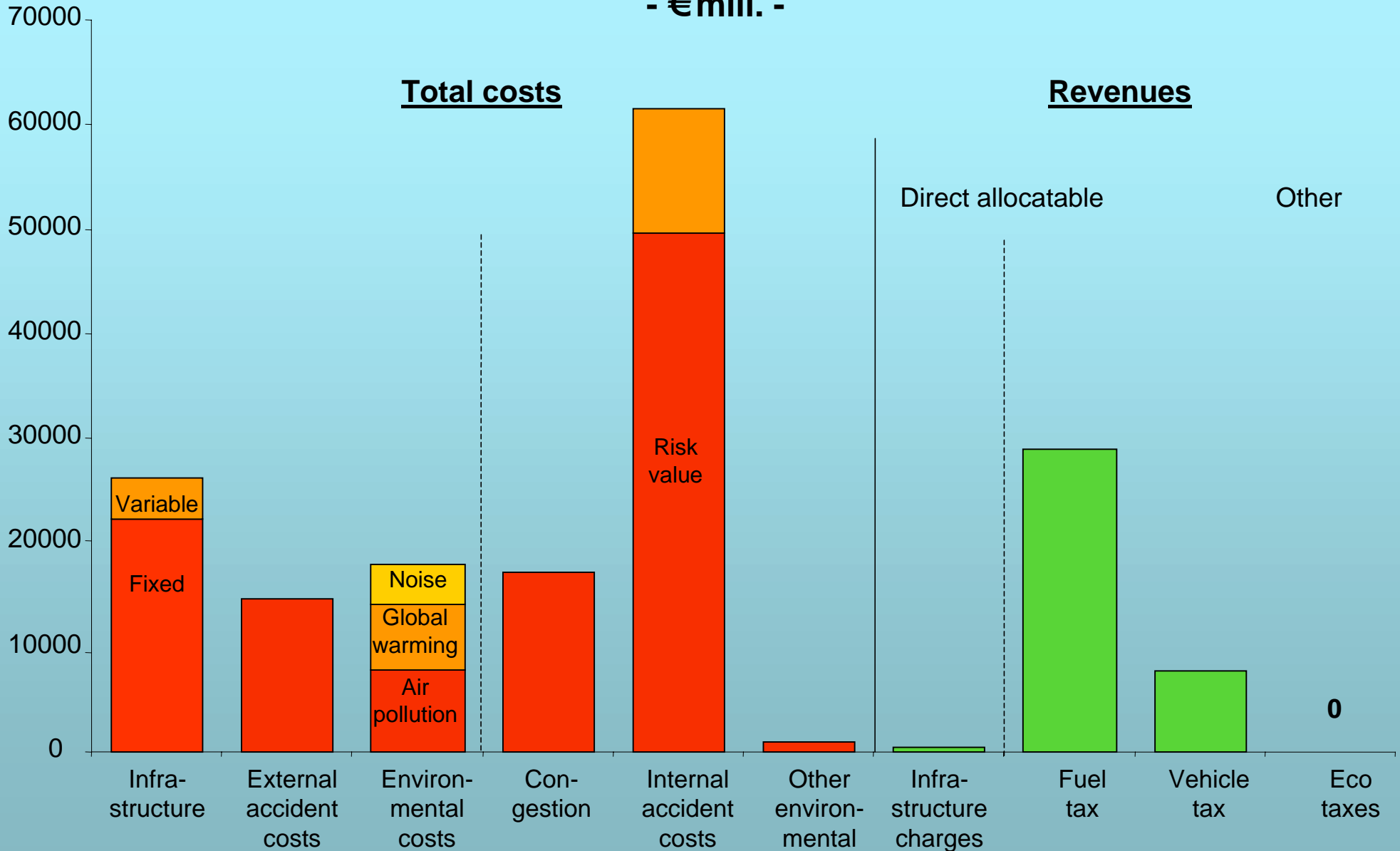
- The cost estimation for the UNITE accounts has used the best methodologies and data currently available

- Basic methodologies include findings from:
 - ◆ DIW infrastructure cost methodology (capital stock model)
 - ◆ ExternE (impact pathway approach, EcoSense model, air quality model, exposure-response functions)
 - ◆ INFRAS/IWW 2000
 - ◆ state of the art estimates on VOT's, Risk values, etc.

3 Results for Germany

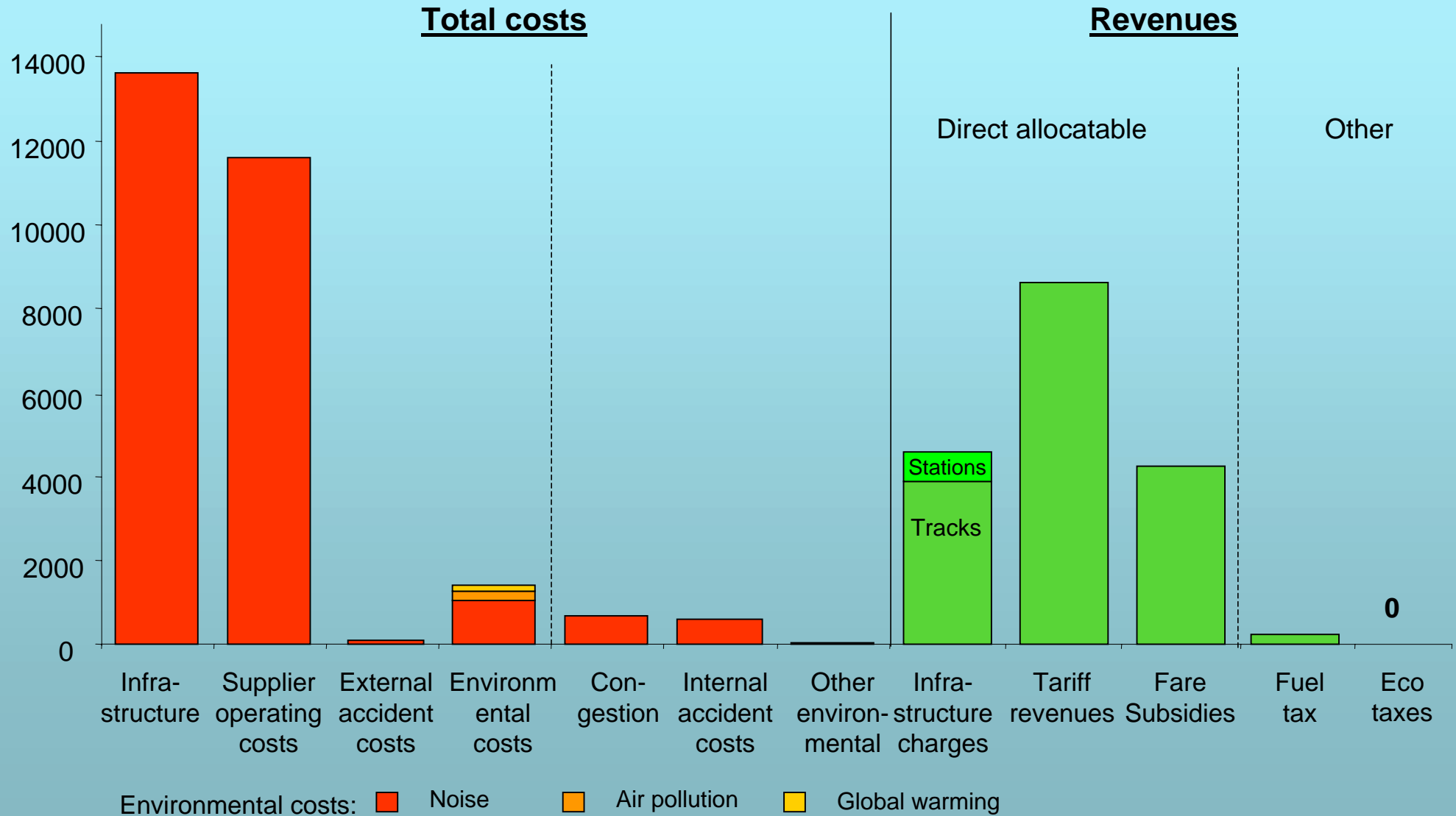
Aggregated road account for Germany 1998

- €mill. -



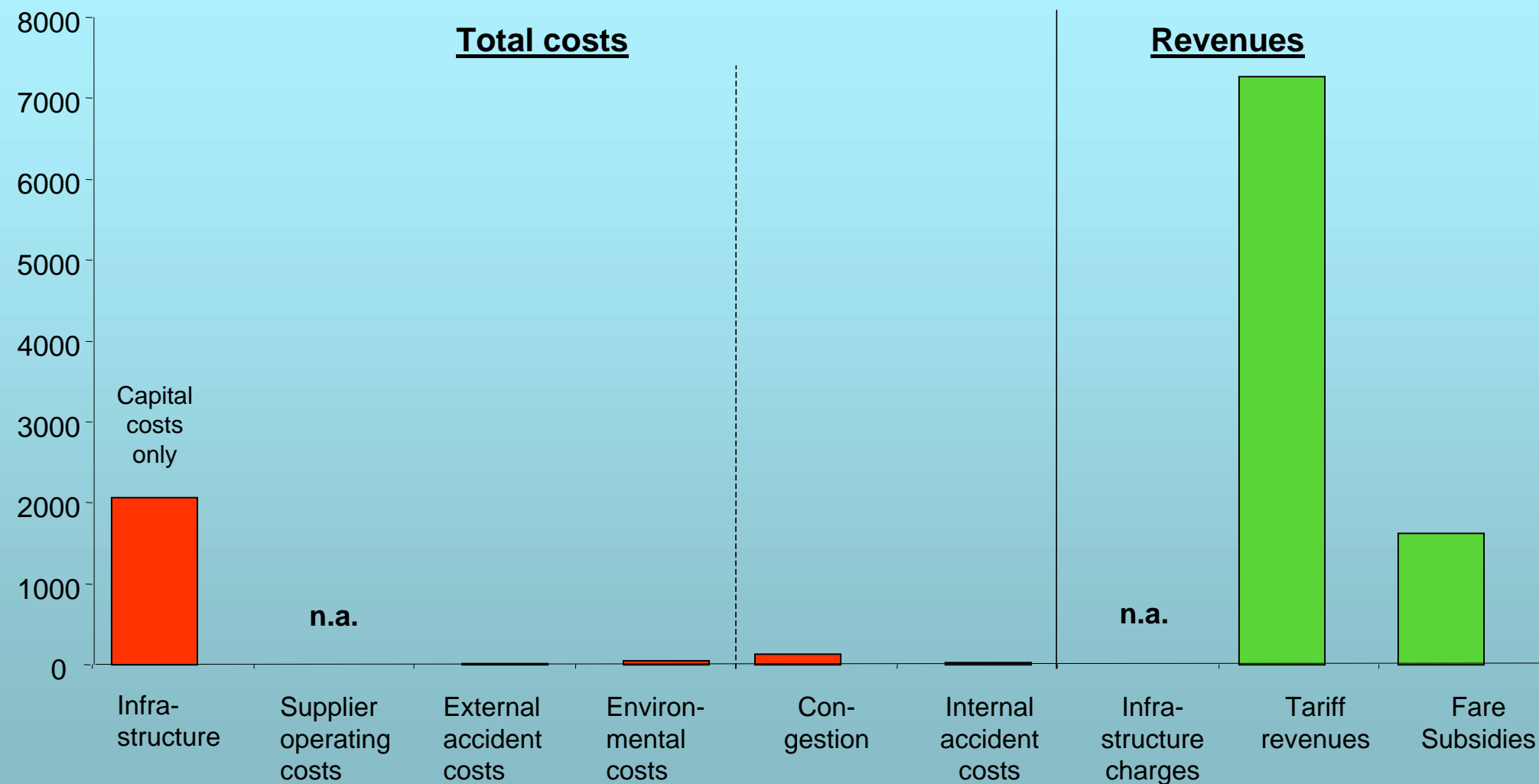
Aggregated rail account - DB for Germany 1998

- €mill. -



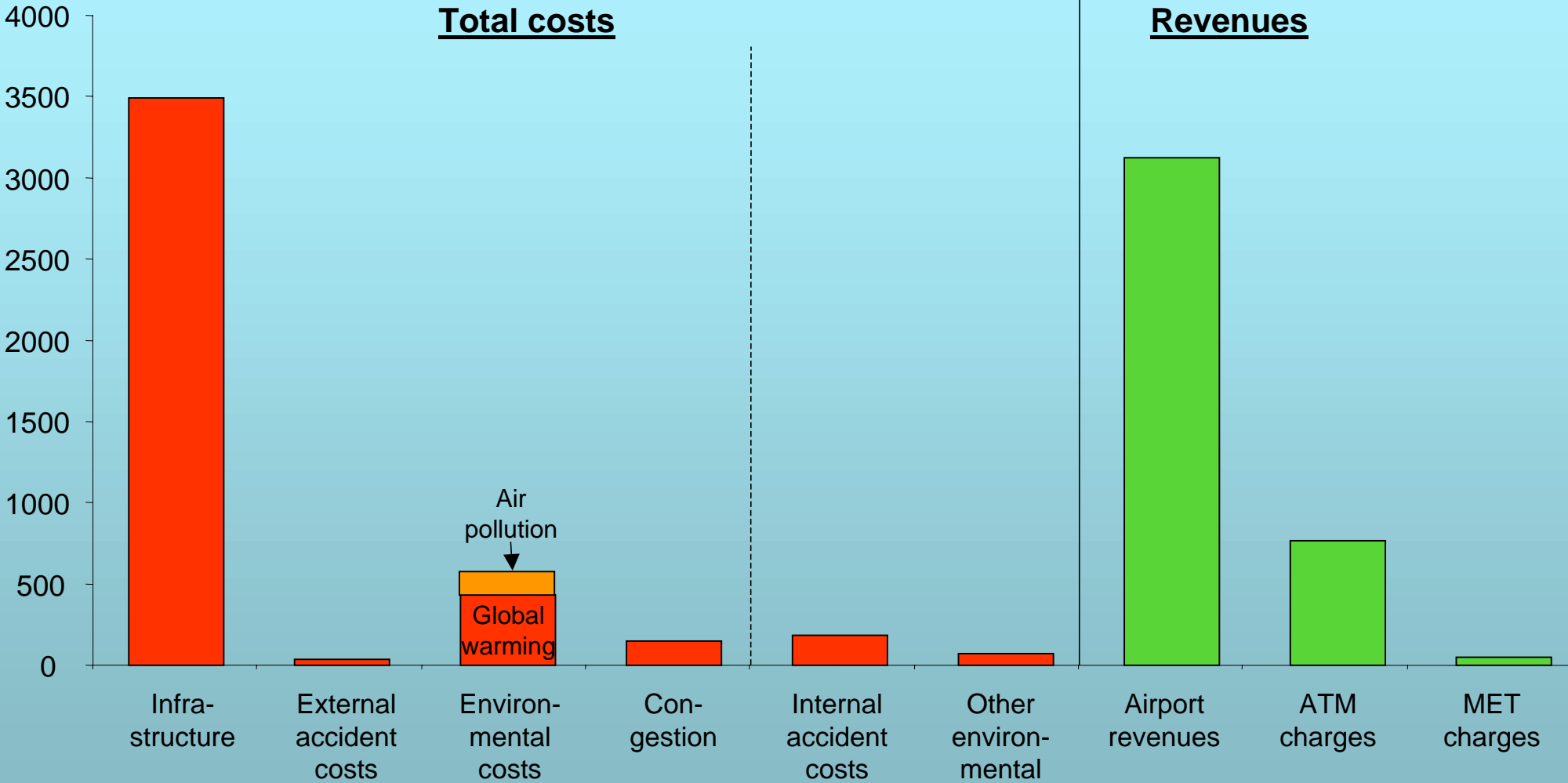
Aggregated account for tram, metro and bus operators Germany 1998

- €mill. -



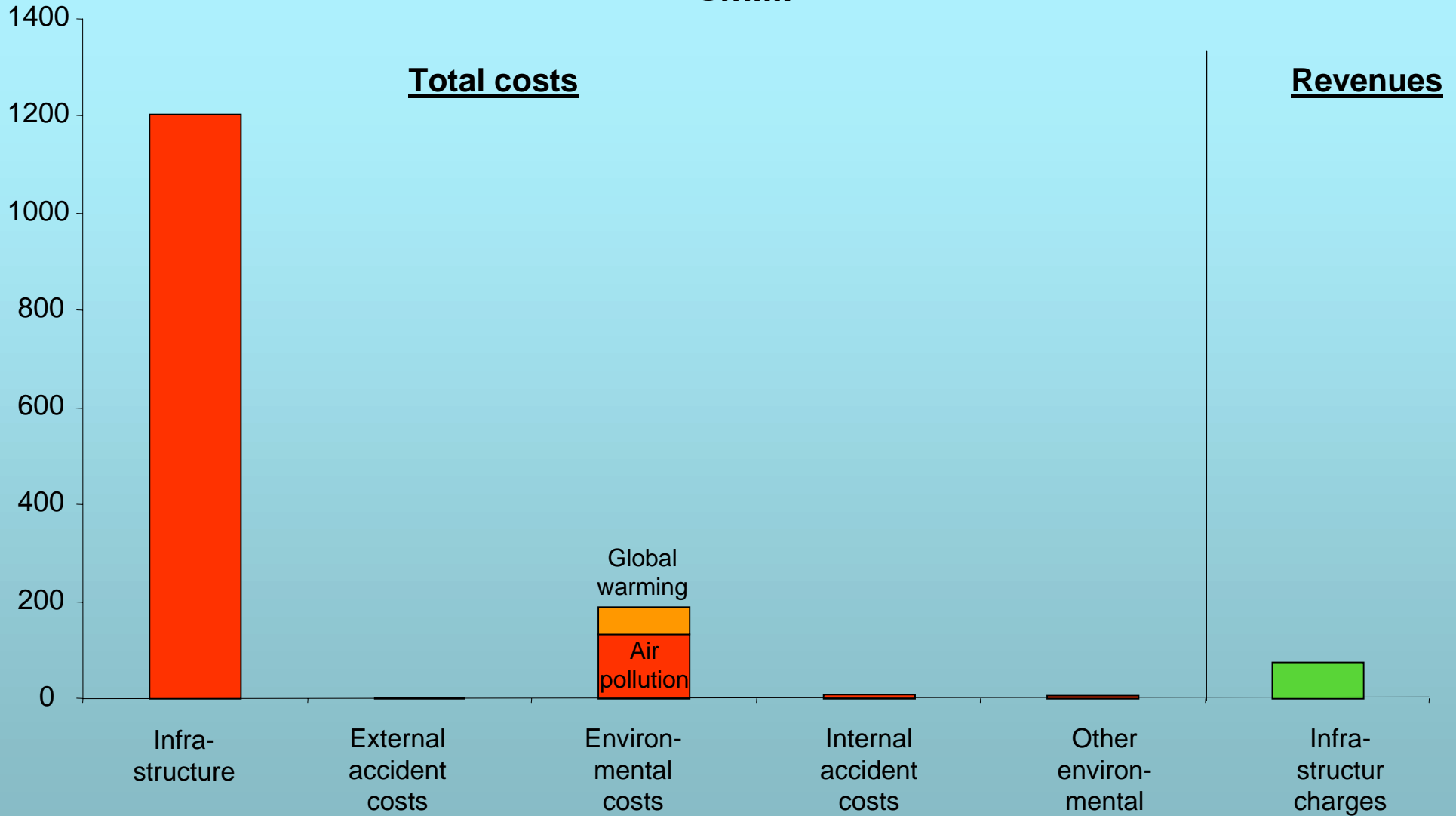
Aggregated Aviation account for Germany 1998

- €mill. -



Aggregated Inland Waterways account for Germany 1998

- €mill. -



4 How to use and interpret the pilot accounts?

First best pricing rules refer to marginal cost pricing → What is than the rule of the UNITE pilot accounts?

1) Equity

| Dimensions of equity | Use of the (German) pilot accounts |
|---|------------------------------------|
| Modes | ✓ |
| Individual transport users | |
| User groups defined by income classes | Area of future development |
| Vehicle classes (HGV versus passenger cars) | ✓ |
| Country | ✓ |

⇒ **Contribution to the policy discussion on the level of HGV charging in Germany**

2) Efficiency:

Cost recovery as a binding constraint → second best pricing rules require:

- knowledge on total costs to be covered
- Monitoring to avoid overcharging
- Information on fixed costs to indicate if subsidies for fixed costs are worthwhile

⇒ **Contribution to the debate on rail track access charges of German rail**

3) Financial viability:

(if cost recovery is binding)

- Knowledge on total costs to be covered is essential for regulators (rail!) and governments.
- Knowledge on deficit occurring with marginal cost pricing is essential for subsidy negotiations!

⇒ **Contribution to the debate on rail track access charges of German rail**