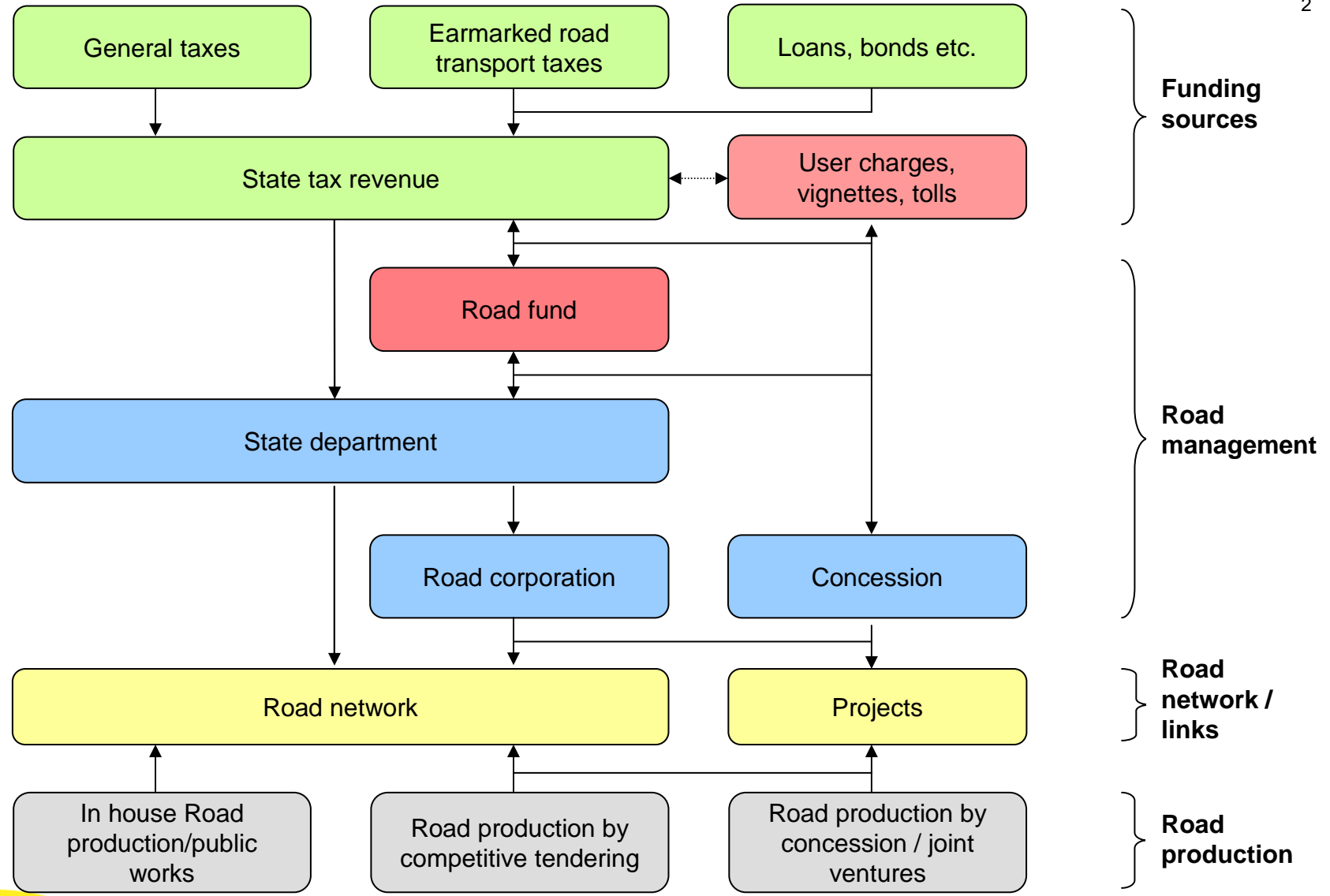


Road Transport Charging ~ Road Pricing

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Background and European policies

Viabile arguments for the use of Road Transport Charging ~ Road Pricing

- Transport infrastructure traditionally funded from the government budget
- The bulk of the government's revenue comes from taxation, including taxes and charges levied on transport, vehicles and fuel. Revenue is usually NOT connected with transport infrastructure management costs.
- Transport infrastructure usually funded from government expenditure, the extent of which is NOT connected with the revenue received from the use of the transport infrastructure.

Viabile arguments for the use of Road Transport Charging (2)

- The direction in transport infrastructure funding is towards the principle where costs are allocated to the users ~ transport infrastructure charging
- User charges can
 - enable cuts in general taxation and in taxes on vehicle ownership
 - be used to cover increasing capital costs and costs arising from the adverse effects of traffic
 - be used for transport demand management

Road Transport Charging in the European Transport Policy

- Union-wide problems related to road infrastructure, which include
 - a financing gap in investments
 - related internal and external transport costs
 - congestion
- A key solution proposed is transport infrastructure charging
- Charging is based on the economic theory of socio-economic charging I) enabling the improvement of the efficiency of the transport system, II) the reduction of external adverse effects and III) the funding of maintenance and development, all at the same time

Road Transport Charging in the European Transport Policy (2)

- Charges can also impact
 - the need for and scaling of investments
 - major investments may be avoided by controlling the temporal or modal demand of transport.
- The policy documents recommend the utilisation of new technologies in traffic control and charges

The White Paper on transport charging (European Commission, 1998)

- A policy towards harmonised transport taxes and charges
- Set out the principles of the appropriate charging
 - for wear and tear of infrastructure
 - capital costs
 - external costs.
- Although the White Paper did not address infrastructure funding, it pointed out that user charges support the direct funding of infrastructures. Where there is sufficient demand for infrastructure, user charges are justifiable.

The White Paper European Transport Policy for 2010: *Time to decide* (European Commission, 2001)

- Introduction of cost-based user charges in the road network connected to the challenge of funding
- Utilisation of private capital and private sector expertise (public/private partnerships) as well as user charges as key elements in closing the financing gap
- Funding transport networks across the modes, regardless of the source of funding; development of the Swiss motorway and rail network was given as an example

Road Transport Charging in the European Countries

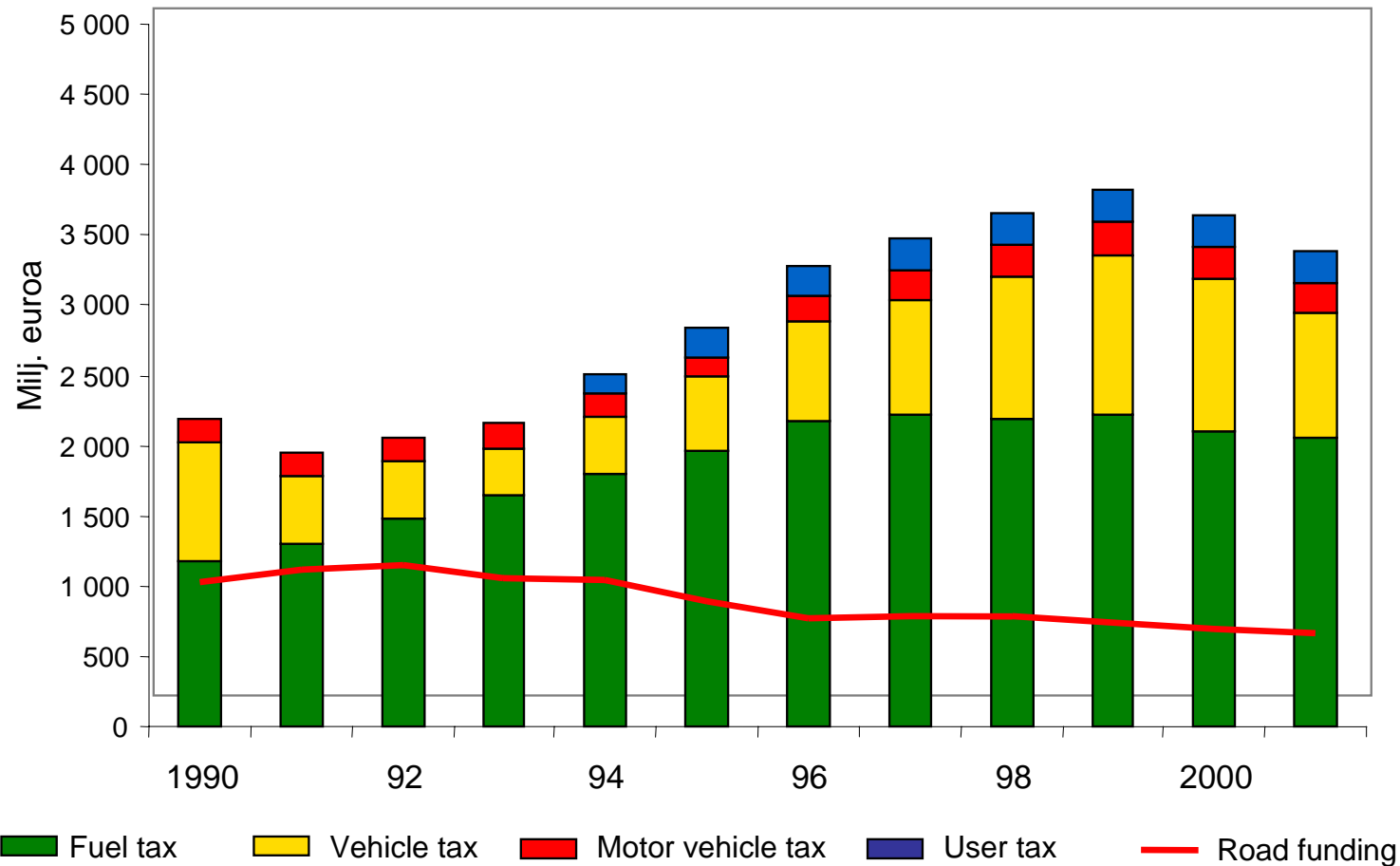
- Harmonisation of transport charging (Directive on the charging of heavy goods vehicles, 2003)
 - the Directive is needed as most Member States have adopted or are planning road network user charges for heavy goods vehicles
 - the user-based charging and funding of the road network is becoming a reality in many countries, although the new systems do not comply strictly with the principles of the White Paper on transport charging
- All the other countries than Finland and Baltic countries are utilising user-based charging at some level
- After 1.1.2007 charging has to be based on GPS (Galileo), GSM-GPRS, or 5,8 GHz microwave technology

Case Finland

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Taxation versus Road Budget



Note: Figures do not include Value Added Taxes -22% Price level: Year 2001 Source: The Finnish Centre of Automobile Sector

Taxation of road transportation in Finland

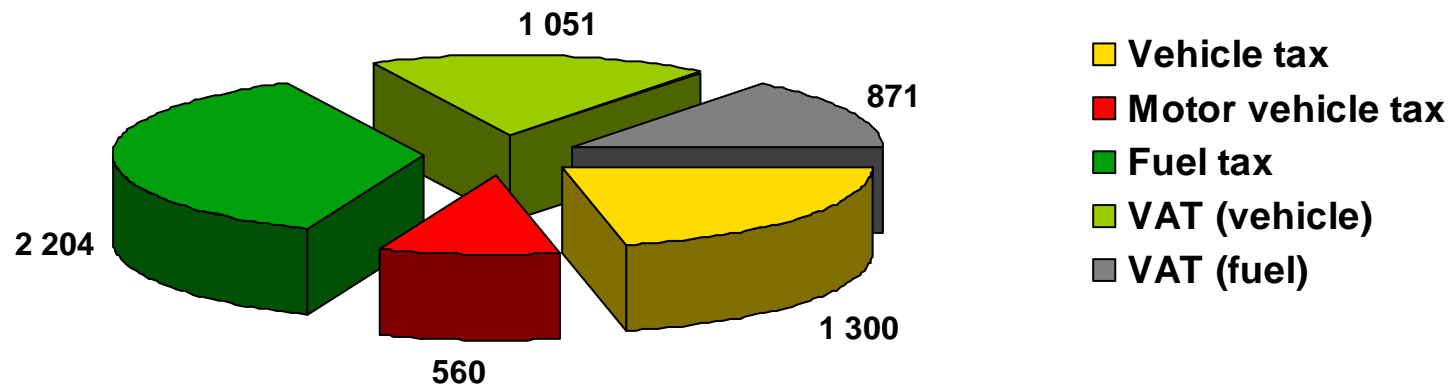
- Vehicle tax:
 - 28 % of the end price of a private personal vehicle - 650 € / - 450 € (diesel)
 - 35 % of the import price of vans
 - income 1 300 mill. € in 2006
- Motor vehicle tax:
 - annual tax 35 cnt/day / 26 cnt/day (vehicles registered before 1994) from all the private personal vehicles and vans (< 3 500 kg)
 - 6,7 cnt/day from diesel cars per 100 kg
 - 0,9 cnt/day from vans and trucks per 100 kg
 - income 560 mill. € in 2006
- Fuel tax:
 - Benzin 58,76 cnt/l / diesel 31,94 cnt/l including additional tax and huoltovarmuustax
 - total income 2 979 mill. € in 2006, 2204 mill. € from road transportation

Taxation of road transportation in Finland (2)

- Insurance tax:
 - 22 % of the insurance fee
 - total income 460 mill. € in 2006, 219 mill. € from vehicle and traffic insurances
- VAT:
 - 22 % of the price of the products or services.
 - total income 871 mill. € in 2006, from fuel consumed in road transportation
 - total income 1 051 mill. € from motor vehicles, spare parts and repairing and maintenance
- **Total:**
 - direct taxes 4 064 mill. € (10 % of the state budget)
 - VAT's etc. total 2 141 mill. € (5 %)
 - total 6 205 mill. € (15 %)
 - 700 mill € (17 % / 11-12 % of income) allocated to roads

Taxation of road transportation in Finland

Taxes € million / year 2006



Taxes and fees from other modes of transportation

■ Aviation

- landing and passenger fees (paid by airlines) to cover the costs of Finnish Civil Aviation Administration (State-owned enterprise, maintenance and investments of airports) ~ € 240 mill. / year
- aviation control fee for Aviation Administration (State Department) ~ € 5,8 mill. / year

■ Railroads

- railroad fee (paid by transportation companies) to cover the costs of Finnish Railroad Administration (State Department, maintenance only without capital costs) ~ € 42,5 mill. / year
- railroad tax (paid by transportation companies) for the state € 18 mill. / year

■ Maritime

- sea way fee (paid by the ship owners) € 76,3 mill. / year to cover the costs of Finnish Maritime Administration (State Department, maintenance and capital costs)

Road Transport Charging - what it is about?

Road Transport Charging; Costs

- Internal costs
 - wear and tear of infrastructure; maintenance costs
 - reconstruction and new investments; capital costs
- External costs
 - accident costs
 - environmental costs, pollution etc.
 - other socio-economical costs
- Other costs
 - transferring costs between the traffic modes
 - subsidising public transport etc.

Road Transport Charging; Income

- General taxation
 - vehicles
 - fuel
 - value added taxes etc.
- Earmarked taxation
 - fuel etc.
- Charges or fees on transport
 - vignettes, annual fees
 - insurance etc.
- User charges
 - vignettes
 - fees, tolls etc.

Road Transport Charging; Impacts

- General taxation
- Transport infrastructure funding
 - maintenance
 - capital investments
- Reducing the adverse effects of traffic
 - less polluting or safer vehicles
 - costs arising from the adverse effects of traffic such as accidents, pollution, noise etc.
- Transport demand management
 - traffic management etc.
- Macro-economic, social or other impacts (?)
- Regulation (?)

Transport Charging; Conclusion

- Transfer towards the principle where transport infrastructure costs are allocated to the users~ transport infrastructure charging
- Transport charging should include all income and costs of transport
 - all tax revenues, fees, vignettes, user charges and tolls related to the transportation, vehicles and fuel
 - all costs of transport; maintenance, capital costs, external cost

Transport Charging; Conclusion

- Transport charging should be utilised for
 - financing maintenance, operations and investments
 - to cover external transport costs
 - to manage congestion > **increase efficiency of the road transportation system**
 - other purposes set by the local policies (cross subsidization etc.)
- Should be transparent

Framework of Road Pricing

Income

- taxes
- fees
- user charges
- others ?

Costs

- maintenance
- capital
- external
- others ?

Tariffs

- driven kilometres
- time, place
- vehicle type, axel load
- other ?

Goals or objectives

- infrastructure funding
- covering external costs
- traffic management
- subsidizing of other modes
- other ?