## Transport

## CSI 035 Passenger transport demand

#### Indicator definition:

The indicator can be presented in two different ways:

- The volume of passenger transport relative to GDP, including separate trends for its two components in order to measure decoupling of passenger demand from economic growth.
- The percentage share of transport by passenger car in total inland transport (including road, railway and air transport) providing information on modal split share of passenger transport.

## Key policy question:

Is passenger transport demand being decoupled from economic growth?

### Specific policy question:

Is the share of passenger car transport in total inland transport being reduced relative to other transport modes?

#### Past and present trends

#### Key message:

The fluctuations in passenger transport demand trend are attributable both to restructuring efforts following political turmoil's in the region as well as to gaps in passenger transport data as opposed to precise GDP figures in some countries. Although road transport remained as the dominant mode of travel in the region, air transport achieved the largest growth, more than 200 % during the period analysed.

Balkans, 2000-2007







Passenger transport demand by mode in the Western



Note: If the decoupling indicator (vertical bars) is above 100 transport demand is outpacing GDP growth (i.e. positive bar = no decoupling) whereas a value below 100 means transport demand is growing less rapidly than GDP (i.e. negative bar = decoupling). The actual data for Bosnia and Herzegovina covers only the period between 2004 and 2007; the time series between 2000 and 2003 was estimated. For Serbia, the value for 2007 has been estimated. Data on air transport was not provided for Albania and Bosnia and Herzegovina.

#### Assessment:

Passenger transport demand outpaced the increase in GDP between 2000 and 2007, with the exception of 2004 when decoupling occurred. Transport demand exceeded GDP growth by 6 percentage points in 2001, the highest gap during the overall period. The fluctuation is attributable both to restructuring following political turmoils in the region as well as to gaps in passenger transport data and precise GDP figures in some countries. Although road transport remained as the dominant mode of travel in the region, air transport saw the largest growth, more than 200% over the period analysed. It should be noted that air transport data for Albania and Bosnia and Herzegovina were not available.

Passenger transport demand data: National Statistical Offices; GDP constant 1990 USD data: National Accounts Main Aggregates Source: Database, United Nations Statistics Division, http://unstats.un.org/unsd/snaama/selectionbasicFast.asp.

Temporal coverage: 2000-2007.

Albania, Bosnia and Herzegovina, Croatia, the former Yugoslav Republic of Macedonia, Serbia. Spatial coverage:



## **Outlook trends — Eastern Europe**

The outlook below is based on data for a larger region containing the Western Balkans data. It should therefore be used with care and only seen as an indication of trends.

#### Key message:

GDP in Eastern Europe is expected to grow faster than passenger travel, indicating a relative decoupling of GDP and passenger transport growth. Air travel is expected to continue its current trend of growing faster than other transport means.

# Projected decoupling of passenger transport demand in Eastern Europe until 2050





Projected passenger transport demand by mode in Eastern

Gross domestic product 1990 prices index (2000 = 100)

#### Assessment:

In the timeframe from 2000 to 2050, GDP in Eastern Europe is forecast to grow by ca 460 % while passenger transport kilometers would grow by ca 250 %, indicating a relative decoupling of the two.

Air transport is forecast to grow from its current share off 7 % to about 33 % of total passenger kilometers traveled by 2050. While road travel is projected to decline from 83 % to 57 % in the total share of passenger transport, it will remain the dominant form of travel with car ownership increasing by 174 % over the projection period. Rail passenger transport is expected to remain steady at a share of slightly below 10 %.

Source: WBCSD (2004), Mobility 2030. Spreadsheets at: www.wbcsd.org/web/publications/mobility/smp-model-spreadsheet.xls.

Temporal coverage: 2000-2050.

Spatial coverage: Albania, Bosnia and Herzegovina, Bulgaria, Croatia, the former Yugoslav Republic of Macedonia, Poland, Romania, Slovakia, Slovenia, Serbia and Montenegro.



## CSI 036 Freight transport demand

#### Indicator definition:

Decoupling of freight demand from economic growth can be expressed by using the volume of freight transport relative to GDP, including separate trends for its two components.

#### Key policy question:

Is freight transport demand being decoupled from economic growth?

#### Past and present trends

#### Key message:

Freight transport growth has outpaced GDP growth in the Western Balkan region by nearly 70 percentage points between 2000 and 2007. Decoupling of 10 % occurred in 2007 only. These results should be taken with caution, due to the different national approaches used in data collection as well as several data gaps.

#### Decoupling of freight transport demand in the Western





**Note:** The decoupling indicator is calculated as the ratio of freight transport demand to GDP measured in 1990 USD market prices. The bars depict the intensity of transport demand in the current year in relation to the intensity in the previous year. An index above 100 results from transport demand outpacing GDP growth (i.e. positive bar = no decoupling) whereas an index below 100 results from transport demand growing less rapidly than GDP (i.e. negative bar = decoupling).

#### Assessment:

Freight transport demand almost doubled between 2000 and 2007 in the Western Balkan region, indicating a growth in environmental impacts. The increase exceeded GDP growth significantly in this period, reaching a gap of 16 percentage points in 2006. Nevertheless, the figures for 2007 indicate a decoupling of 10 percentage points. The average annual gap of 10 percentage points between 2000 and 2006 is close to that in EU-10 countries of 15 %.

The modal split in the region shows that road transport, although being the prevailing mode of transport, declined from 81 % in 2003 to 75 % in 2006. On the other hand rail transport increased from 15 % to 20 % during the same period. Air transport has slowly increased from 4 % to 6 % of the total. It is difficult to outline trends in the split by transport mode by country due to the incomplete time series and limited data on transport modes for certain countries.

#### Source: Freight transport demand data: National Statistical Offices. GDP constant 1990 USD data: National Accounts Main Aggregates Database, United Nations Statistics Division, http://unstats.un.org/unsd/snaama/selectionbasicFast.asp.

#### Temporal coverage: 2000-2007.

Spatial coverage: Albania, Bosnia and Herzegovina, Croatia, the former Yugoslav Republic of Macedonia, Serbia.



## **Outlook trends — Eastern Europe**

The outlook is based on data for a larger region containing the Western Balkans data. It should therefore be used with care and only seen as an indication of trends.

#### Key message:

Projections indicate a relative decoupling of GDP and freight transport growth for Eastern Europe in the period 2000 to 2050. The share of road freight transport in freight is set to increase over rail freight transport.

Projected decoupling of freight transport demand in Eastern Europe until 2050





## Assessment:

While a relative decoupling between GDP and freight transport is projected for the period between 2000 and 2050, this process is expected to be slow at first and to accelerate in the later years. Road transport, which in 2000 accounted for one-third of the total, is expected to grow faster than rail transport and should consequently reach an equal share to rail transport by 2050.

Source: WBCSD (2004), Mobility 2030. Spreadsheets at: www.wbcsd.org/web/publications/mobility/smp-model-spreadsheet.xls.

Temporal coverage: 2000-2050.

Spatial coverage: Albania, Bosnia and Herzegovina, Bulgaria, Croatia, the former Yugoslav Republic of Macedonia, Poland, Romania, Slovakia, Slovenia, Serbia and Montenegro.

