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X. International Road Congress
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The public balance of transport in Hungary 2004-2015

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- Public balance
- Public property balance
- Externalities' balance

Conclusion

Social balance





Methodology

- transport sector
 - transport actors
 - taxes imposed on transport (consumption mainly); subsidies for transport
 - subsector breakdown (road, rail, waterborne / IWW, air transport)
- public finance
 - central budget
 - social security funds (Health & Pension Insurance Funds)
 - separate funds
 - local governments
- balance
 - revenues and expenditures viewed by cash flow (not performance)
 - special transport taxes, other transport revenues transport expenditures
 - general taxes for general expenditures (not included in the balance)
- > related years
 - **2004-2015**

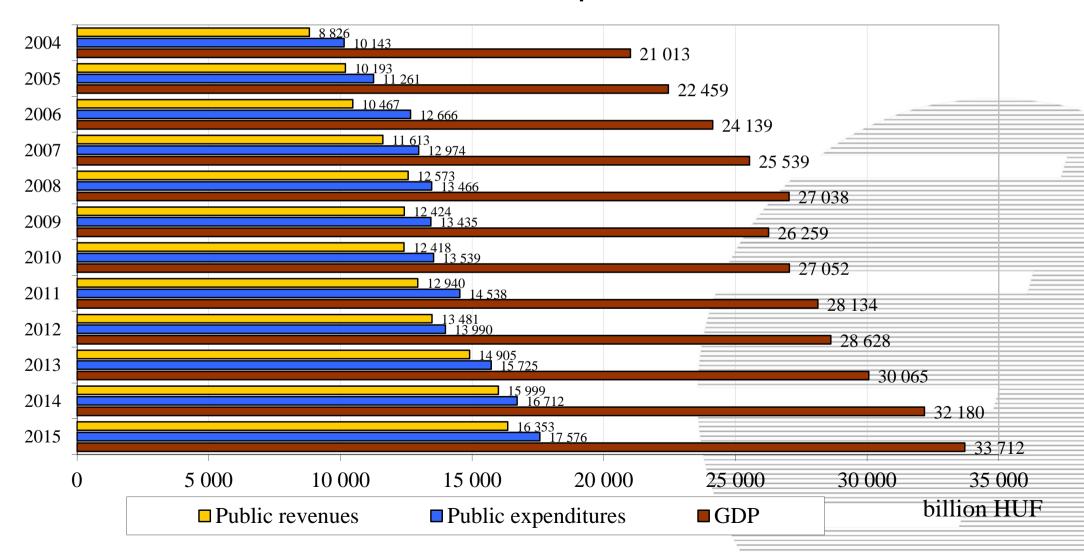


Data Sources

- Ministry of Finance (Ministry for National Economy, NGM)
- Tax authorities
 - State tax authority (taxes and customs, NAV)
 - Local governments' tax authorities
- Hungarian Central Statistical Office (KSH)
- State owned transport companies
 - Public transport companies (BKK, MÁV-START, GYSEV, Regional Transport Centres)
 - Road and rail operators (MK Hungarian Roads Non Profit Co., MÁV, GYSEV)
 - National transport infrastructure investment company (NIF)

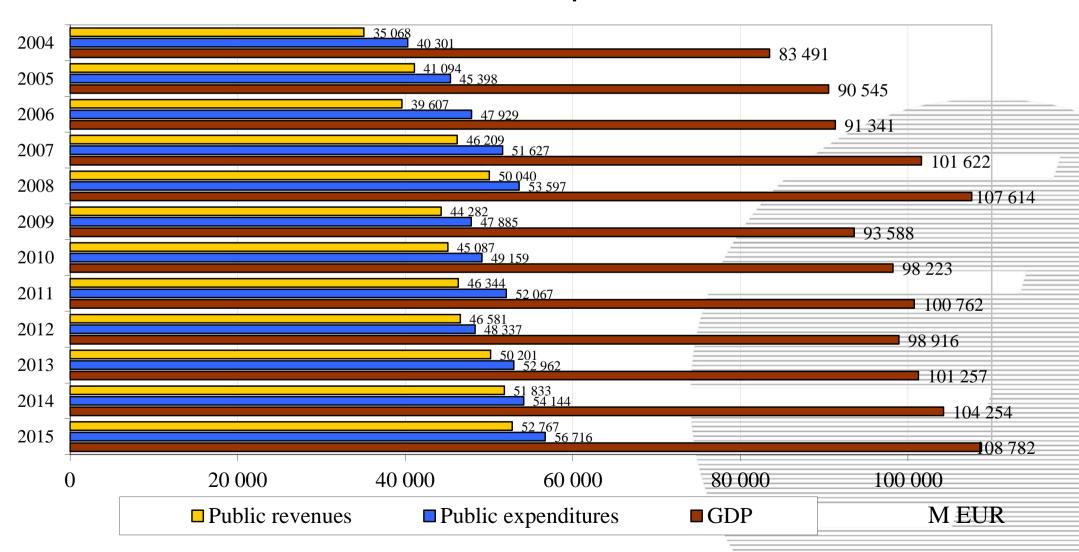


Public Revenues and Expenditures 2004-2015



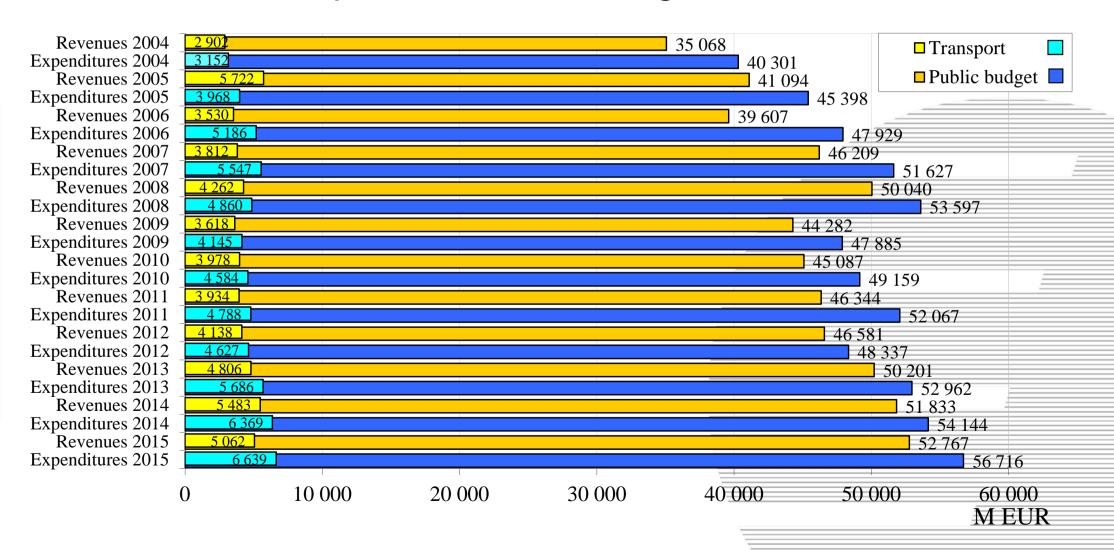


Public Revenues and Expenditures 2004-2015





Transport and Public Budget 2004-2015





KTI INSTITUTE FOR TRANSPORT SCIENCES NON-PROFIT LTD.

Country	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
Slovakia	10.5	10.1	10.7	9.9	10.9	10.8	9.6	9.7	9.5	9.6	9.9	11.3
Czech Republic	10.5	10.5	10.9	10.6	12.1	11.9	10.8	8.9	7.9	7.6	8.1	9.3
Hungary	4.1	4.9	6.6	7.8	6.8	6.4	6.5	7.1	6.9	7.5	9.3	9.3
Romania						9.9	9.5	9.3	13.1	10.4	11.2	9.2
Bulgaria	5.8	6.5	7.3	8.7	9.1	4.8	9.5	9.1	9.8	8.6	7.6	9.1
Estonia	6.7	7.7	8.4	7.3	7.1	6.0	6.8	7.4	7.1	7.9	7.9	8.1
Poland	4.4	5.5	6.1	6.8	7.6	8.8	9.5	9.6	8.1	6.9	8.1	7.8
Norway	4.5	4.6	4.5	4.8	5.1	5.6	5.6	5.8	6.0	6.5	6.8	6.9
Switzerland		8.4	8.4	8.6	8.6	8.3	8.3	8.6	7.4	7.4	7.4	6.8
Latvia				8.4	9.0	8.4	7.6	9.4	7.9	7.8	7.2	6.1
Slovenia	4.8	4.4	4.7	5.0	5.5	5.1	4.8	5.2	4.2	4.1	5.2	6.1
Greece	4.7	3.8	5.5	6.6	6.4	5.5	4.5	3.9	3.4	6.0	5.0	5.7
Austria	10.1	6.7	6.8	6.4	7.0	6.3	6.3	6.0	5.7	5.8	5.6	5.5
Sweden	4.6	4.6	4.7	4.9	5.2	5.6	5.6	5.5	5.6	5.2	5.2	5.3
Netherlands	5.2	5.1	5.0	5.2	5.4	5.4	5.6	5.4	5.1	5.2	5.2	5.0
Belgium	4.6	9.8	5.6	5.5	5.4	5.2	5.1	5.2	5.0	5.0	4.9	4.8
Croatia	9.6	8.9	8.7	10.5	10.4	9.7	6.9	6.4	6.4	6.7	5.6	4.5
Finland	4.3	4.1	4.0	4.3	4.4	4.2	4.1	4.2	4.3	4.2	4.4	4.3
EU25 / EU28						4.6	4.6	4.4	4.1	4.2	4.1	4.2
Denmark	3.2	3.3	3.3	3.2	3.2	3.2	3.6	3.6	3.8	3.7	3.9	4.0
Ireland	6.0	5.8	6.5	6.6	7.2	5.5	7.1	4.5	3.4	3.8	3.9	4.0
Lithuania	6.8	6.0	6.2	5.2	6.3	4.4	4.7	3.6	3.7	3.7	3.3	4.0
Eurozone (EUR19)				4.5	4.5	4.4	4.3	4.2	3.8	3.9	3.8	3.9
United Kingdom	4.4	4.4	4.3	4.3	4.5	4.1	3.7	3.7	3.5	3.8	3.8	3.9
Portugal	5.8	6.2	5.4	5.3	5.5	5.3	6.3	4.7	3.6	3.4	4.8	3.8
Japan		4.1	4.0	3.9	5.2	3.7	3.4	3.5	3.5	3.8	3.7	
Germany	3.4	3.4	3.6	3.6	3.5	3.5	3.5	3.8	3.6	3.7	3.4	3.6
Spain	6.7	5.8	5.7	5.7	5.8	5.5	5.8	5.1	3.5	3.5	3.6	
France	3.6	3.8	3.7	3.6	3.6	3.4	3.4	3.4	3.4	3.5	3.4	3.4
Italy	4.1	4.2	6.1	4.5	4.2	4.4	4.0	4.1	3.6	3.5	3.3	3.3

The public balance of transport in Hungary

Transport expenses per total government expenses (in %)

Source: Eurostat, OECD



Public Revenues from Transport

Transport modes	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
Road transport	2,751	3,888	3,359	3,706	3,883	3,466	3,547	3,610	3,697	4,168	4,675	4,556
Rail transport	43	71	84	74	365	136	355	299	420	622	790	492
IWW transport	1	15	7	9	7	3	2	2	1	1	1	1
Air transport	107	1,748	80	23	6	13	74	23	20	15	17	12
Total	2,902	5,722	3,530	3,812	4,261	3,618	3,978	3,934	4,138	4,806	5,483	5,062

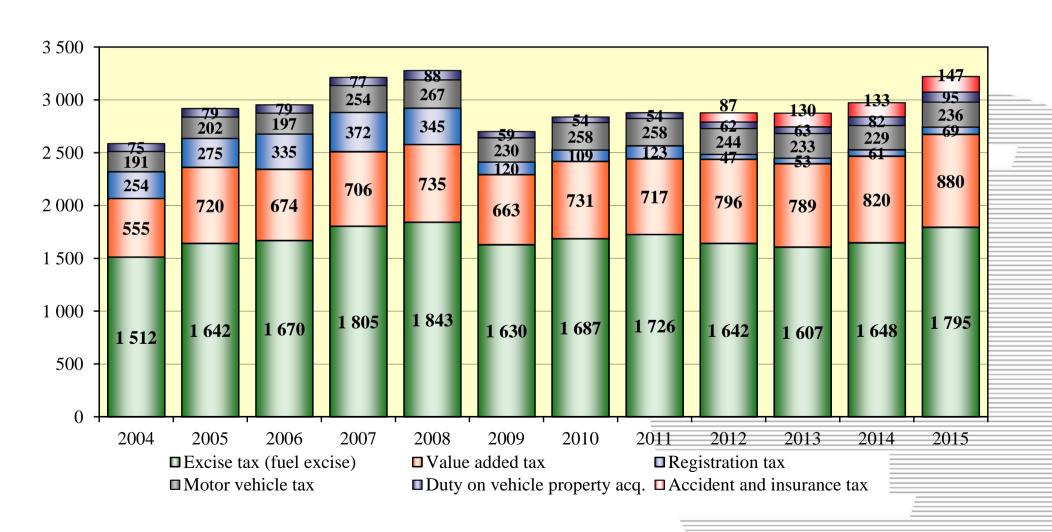


Public Revenues from Transport 2015

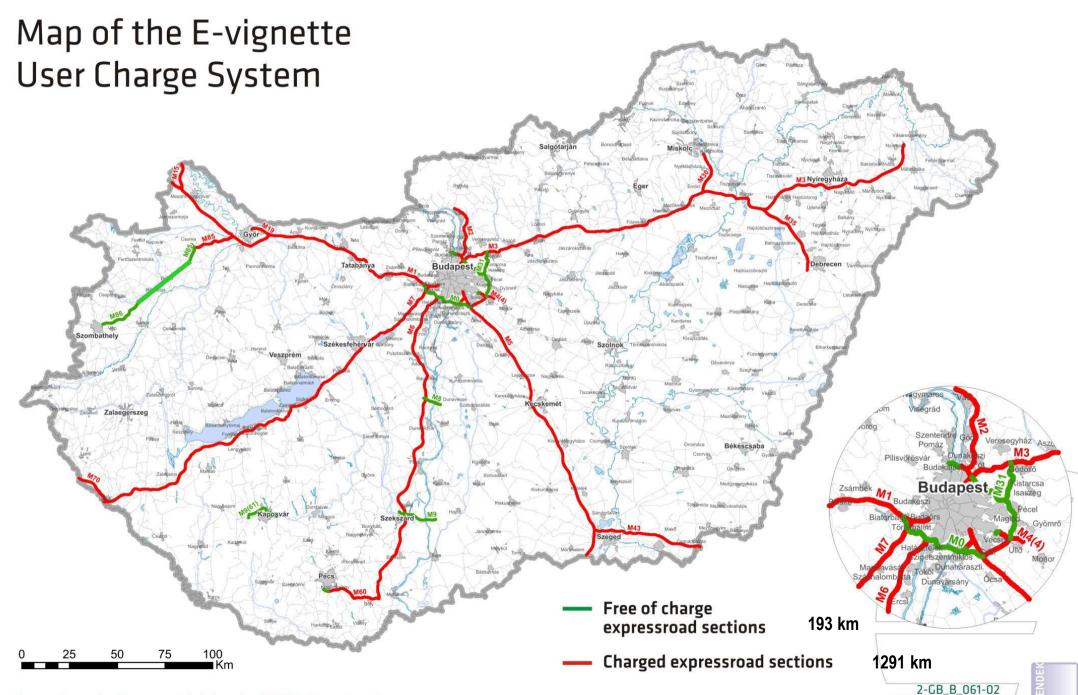
Tax	Total	Road	Rail	IWW	Air
Excise tax (fuel excise)	1,794	1,794			0
Value added tax (as special tax)	910	880	29	1	
Motor vehicle tax	236	236			
Accident tax	89	89	_		
Insurance tax	58	58	Æ		
Registration tax	69	69			
Product fees	35	31	1	0	3
Eco-taxes	3	1	2		
Mine supplies	19	19			
Duty on vehicle property acq.	95	95			
Customs	7	7			
Tax revenues total	3,315	3,279	32	1	3



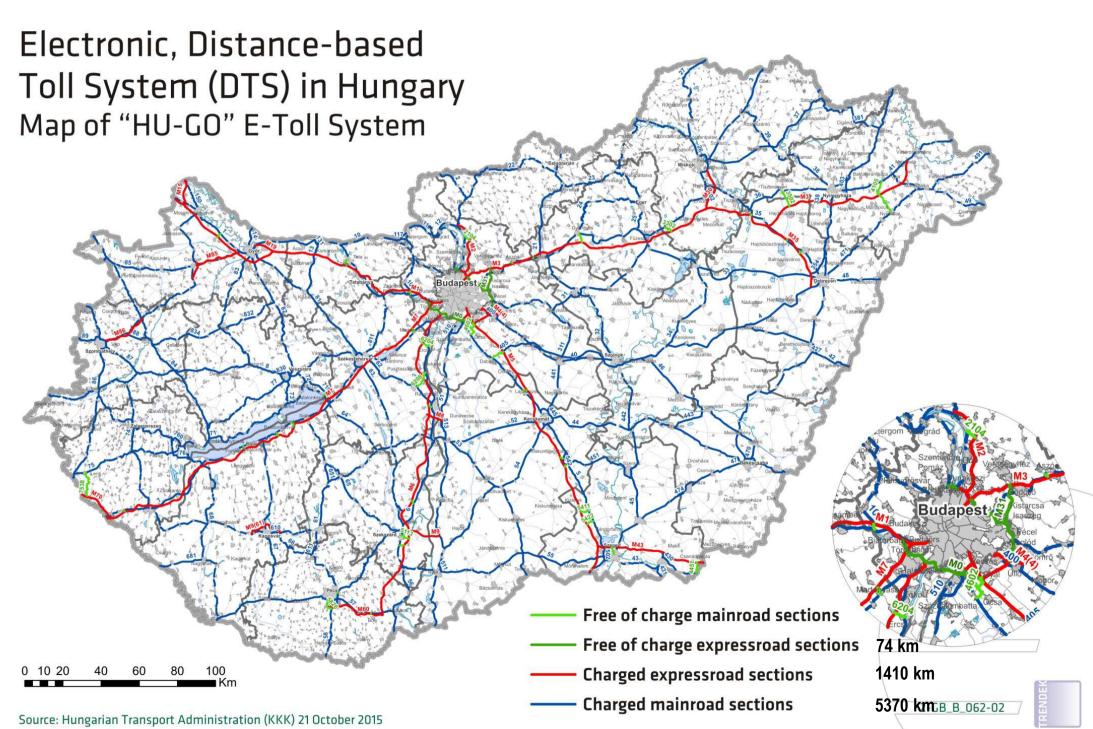
Main Public Revenues from Road Transport













Road toll revenues

in million EUR excl. VAT *

Category	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
Vehicles above 3.5 tons **	27	30	34	67	74	60	61	67	69	243	415	472
Vehicles up to 3.5 tons	52	65	75	90	98	86	87	98	113	113	117	143
Buses ***								_		3	4	4
Total	79	95	109	157	172	146	148	165	182	359	536	619

^{*} Performance based data

^{**} Distance based e-toll system since 1st July 2013, vignette system before

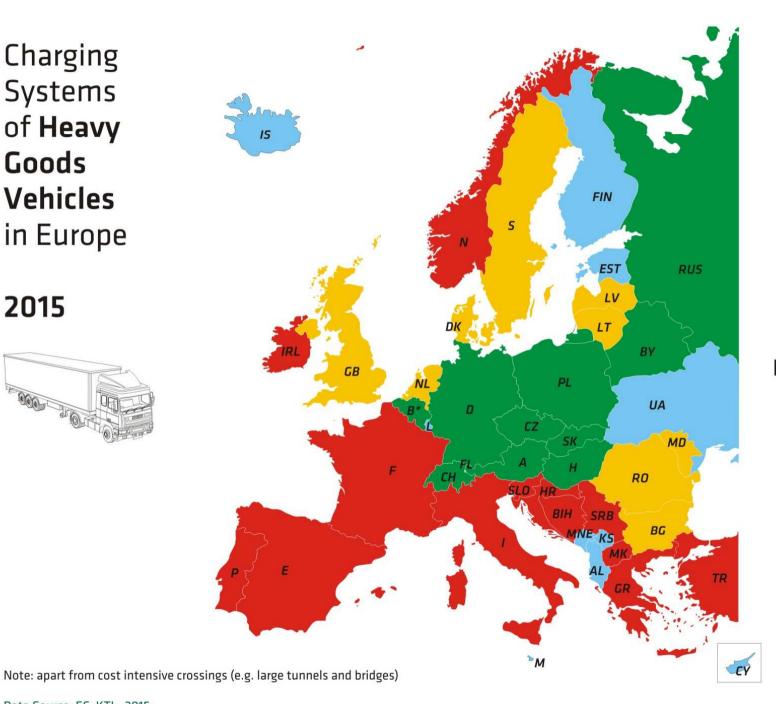
^{***} Bus revenues till June 2013: up to 7.5 tons included in light vehicles, above 7.5 tons included in heavy good vehicles figures



Charging **Systems** of **Heavy** Goods **Vehicles** in Europe

2015





Neither vignettes nor tolls

Vignette (time-based charge)

Toll with physical barriers (distance-based charge)

Electronic network wide toll (distance-based charge)

Introduction of electronic network wide toll collection

Switzerland 1 Jan 2001 Austria 1 Jan 2004 Germany 1 Jan 2005

(HGVs above 12 tonnes,

since 1 October 2015 HGVs for 7.5 tonnes)

Czech Rep. 1 Jan 2007 (HGVs above 12 tonnes,

since 1 Jan 2010 HGVs for 3.5 tonnes)

Slovakia 1 Jan 2010 Poland 1 Jul 2011 Hungary 1 Jul 2013

Belarus 1 Jul 2013

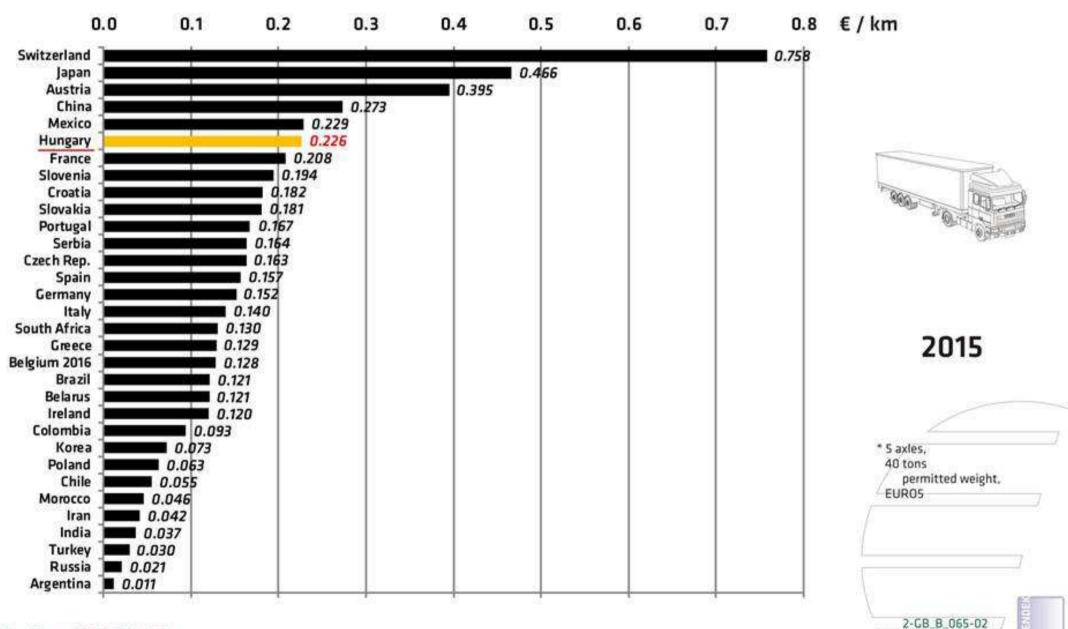
Russia 15 Nov 2015 (HGVs above 12 tonnes) *Belgium 1 Apr 2016

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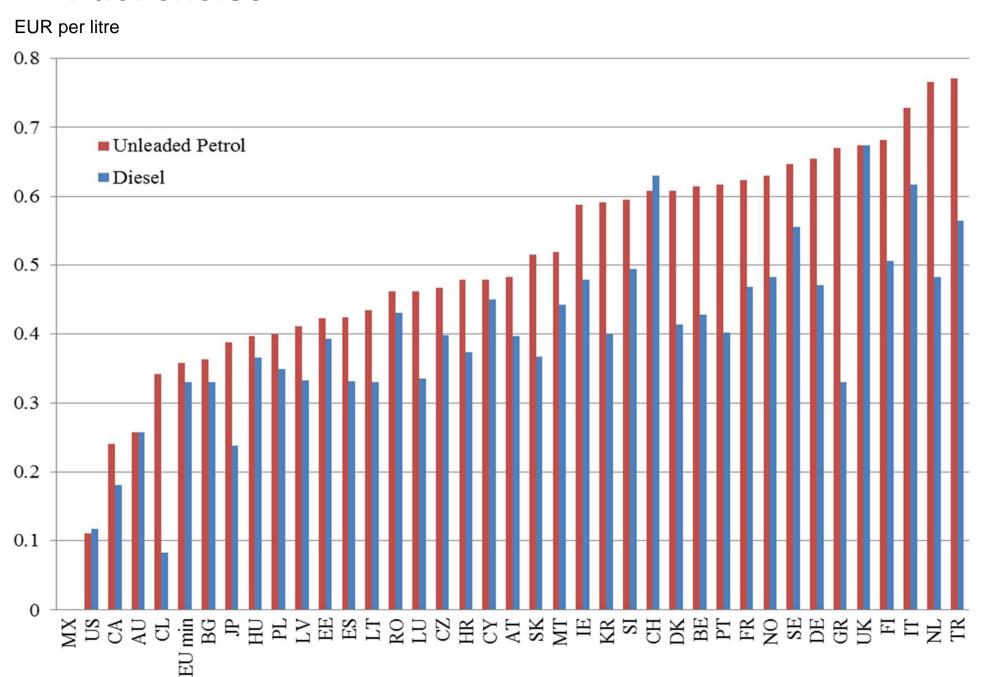


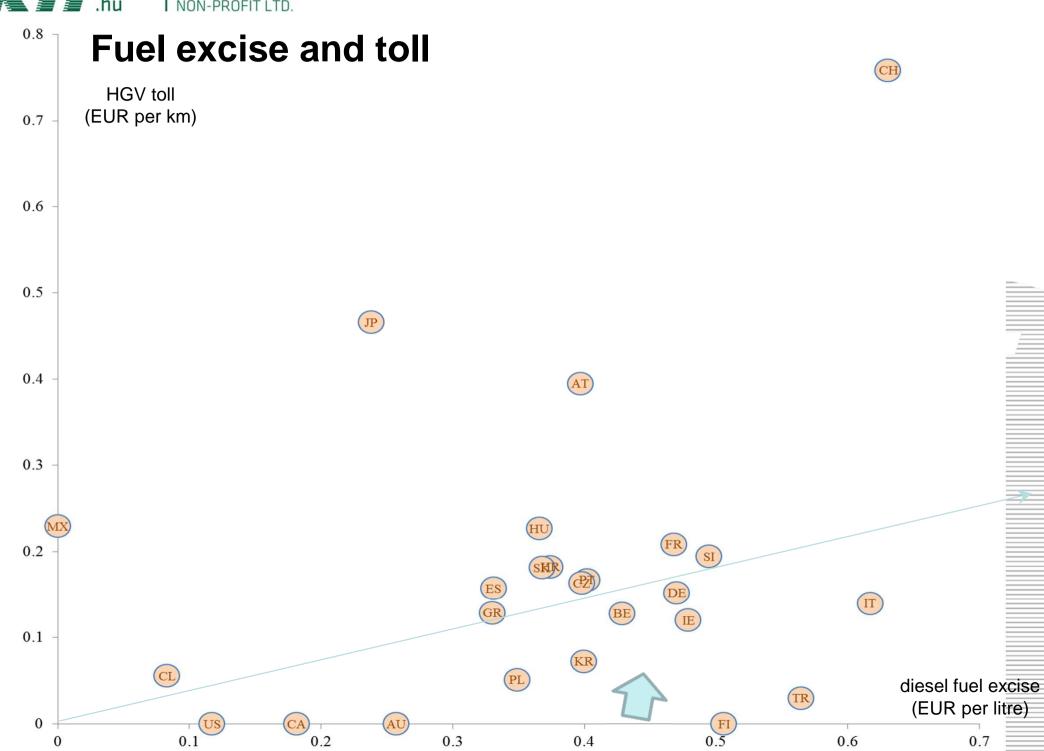
Toll Rates for Heavy Goods Vehicles* (EUR per km, VAT excluded)





Fuel excise







Expressway
Charging
Systems for
Light Private
Vehicles
in Europe

2015



* MD: No expressway but main roads are subject to vignette.

Note: apart from cost intensive crossings (e.g. large tunnels and bridges)

FIN RUS LT BY UA RO MNE KS BG

Neither vignettes nor tolls

Vignette (time-based charge)

Toll with physical barriers (distance-based charge)

Electronic network wide toll (distance-based charge)

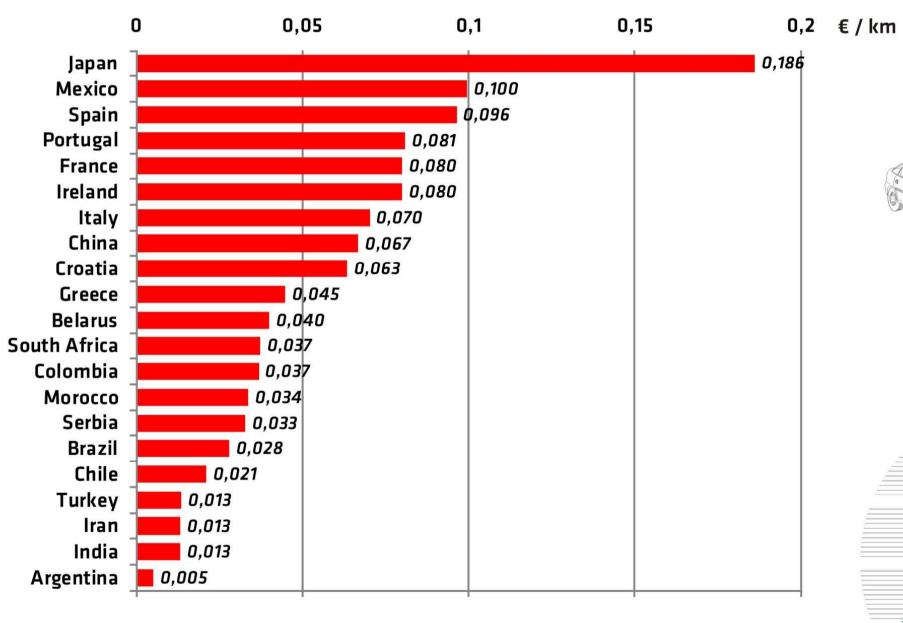
Neither expressways nor tolls

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Data Source: EC, KTI - 2015



Toll rates for private cars (EUR per km, VAT inclusive)



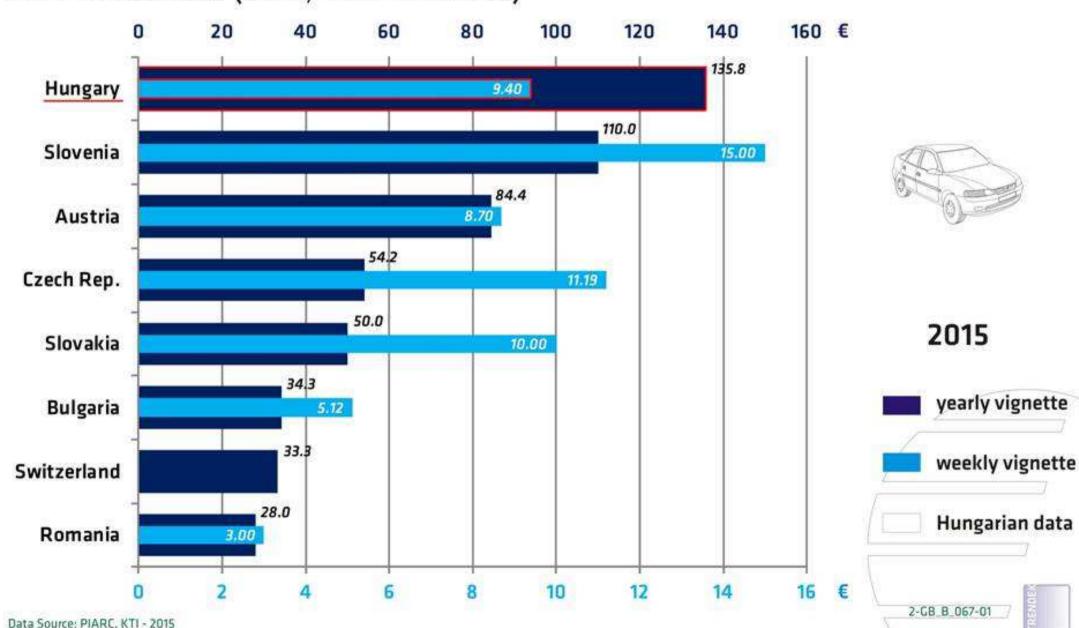


2015

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Yearly and Weekly Vignette Prices of National Expressway Networks for Private Cars (EUR, VAT inclusive)





Public Revenues from Transport 2015

Other revenues (not tax)	Total	Road	Rail	IWW	Air
Fines	60	60			
Authorities' own revenues	106	102	2		2
Road tolls (up to 3.5 tons and bus)	161	161			
Road tolls (above 3.5 tons)	467	467	Ź		
Parking revenues	38	38			
Revenues related to state property	6	1			5
Other transport revenues total	838	829	2	0	7



Public Revenues from Transport 2015

EU Programmes	Total	Road	Rail	IWW	Air
Széchenyi 2020 (2014-2020)	0				
National Strategic Reference Framework (2007-2013)	868	427	441	0	0
Transport OP	822	385	437		
Regional Operational Programmes (ROPs)	37	33	4		
Other (ETC)	9	9			
Cohesion Fund & ERDF (2004-2006)	41	22	17		2
Other grants	0				
EU grants total	909	449	458	0	2

Public revenues	Total	Road	Rail	IWW	Air
Tax revenues total	3,315	3,279	32	1	3
Other transport revenues total	838	829	2	0	7
EU grants total	909	449	458	0	2
TOTAL	5,062	4,557	492	1	12



Public Expenditures on Transport

Transport modes	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
Road transport	2,351	3,026	3,916	3,497	3,126	2,615	2,895	2,907	2,712	3,517	4,061	4,223
Rail transport	698	822	1,070	1,948	1,633	1,455	1,467	1,762	1,831	2,109	2,244	2,355
IWW transport	36	40	41	49	82	45	43	43	41	45	48	45
Air transport	67	80	159	53	19	30	179	77	43	15	16	15
Total	3,152	3,968	5,186	5,547	4,860	4,145	4,584	4,789	4,627	5,686	6,369	6,638



Public Expenditures on Transport 2015

Public expenditures	Total	Road	Rail	IWW	Air
Expressway development	322	322			
Expressway PPP fee	377	377			
Expressway maintenance	5	5			
Expressway operation	18	18			
Road development and maintenance	712	712			
Road operation	112	112			
Rail development (mostly EU projects)	850		850		
Rail passenger transport and track maintenance	789		789		
Rail general (loss) financing	0		0		
Road passenger transport (interurban)	123	123			
Support of transport for local governments	98	27	70	1	
Transport expenses of Budapest from own source	383	201	182		
Other	888	724	160	1	3
Public expenditures on transport	4,677	2,621	2,051	2	3



Public Expenditures on Transport 2015

Public expenditures	Total	Road	Rail	IWW	Air
Social fare subsidy of passenger transport	315	202	110	3	
Expressway development	164	164			
Financing state owned transport companies	0	0	0		
State debt management	579	461	95	17	6
Security expenditures (police)	312	248	51	9	4
Multipurpose developments	330	316	7	7	
Other (health care, environment)	261	211	41	7	2
Public expenditures on transport without transport marking	1 961	1 602	304	43	12

Public expenditures	Total	Road	Rail	IWW	Air	
Public expenditures on transport	4 677	2 621	2 051	2	3	
Public expenditures on transport without transport marking	1 961	1 602	304	43	12	
TOTAL	6 638	4 223	2 355	45	15	



Public Revenues from Transport

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Public Expenditures on Transport

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IWW transport	36	40	41	49	82	45	43	43	41	45	48	45
Air transport	67	80	159	53	19	30	179	77	43	15	16	15
Total	3,152	3,968	5,186	5,547	4,860	4,145	4,584	4,789	4,627	5,686	6,369	6,638



Public Balance of Transport

Transport modes	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
Road transport	400	862	-557	209	757	851	652	703	985	651	614	333
Rail transport	-655	-751	-986	-1,874	-1,268	-1,319	-1,112	-1,463	-1,411	-1,487	-1,454	-1,863
IWW transport	-35	-25	-34	-40	-75	-42	-41	-41	-40	-44	-47	-44
Air transport	40	1,668	-79	-30	-13	-17	-105	-54	-23	0	1	-3
Total	-250	1,754	-1,656	-1735	-599	-527	-606	-855	-489	-880	-886	-1,577



Passenger revenues per total costs of transport public services 2015

in million HUF

Items \ Companies	MÁV- START	GYSEV	Volán interurban	BKK **	Total
Passenger revenues	40.3	2.4	61.5	61.7	165.9
Operational costs of public services	204.0	13.6	140.5	159.9	518.0
Operational support of infrastructure	41.7	2.2			43.9
Investment support of public services *	74.8	20.7	4.0	30.7	130.2
Investment support of public services (through other companies) *	105.9	0.0	2.0	30.7	138.6
Other support of the transport companies (pl. capital increase, debt assumption) *	20.6	0.0	0.0	52.8	73.4
Total costs	447.0	36.5	146.5	274.1	904.1
Passenger revenues per total costs	9.0%	6.7%	42.0%	22.5%	18.4%

^{*} Support spent on national railway network is taken into account by 75% (passenger transport) x 90% (public services) as a cost of transport public services.

Source: Annual report of the companies, Ministry of Finance (NGM)

^{**} Overlapping between BKK transport organising level and és Volán interurban service provider level in the Budapest agglomeration.



Passenger revenues per total costs of transport public services 2015

Indicators	MÁV- START	GYSEV	Volán interurban	ВКК	Total
Passenger kilometres (billions)	6,993	230	8,331	5,910	21,465
Total costs (HUF / pkm)	63.9	158.7	17.6	46.4	42.1
Total support (HUF / pkm)	58.2	148.1	10.2	35.9	34.4
Passenger carried (millions)	135.6	5.6	432.9	1,576.7	2,150.8
Total costs (HUF / passenger)	3,297	6,496	338	174	420
Total support (HUF / passenger)	3,000	6,062	196	135	343
Average travel distance (km)	51.6	40.9	19.2	3.7	10.0

Source: Annual report of the companies, Hungarian Central Statistical Office (KSH), Ministry of Finance (NGM)



Passenger revenues per total costs of transport public services 2007-2015 *

in million HUF

Items \ Companies	MÁV- START	GYSEV	Volán interurban	BKK	Total
Passenger revenues	40.9	1.8	59.9	57.9	160.5
Operational costs of public services	233.4	10.4	132.6	144.9	521.3
Operational support of infrastructure	23.6	1.6			25.2
Investment support of public services **	14.1	7.8	2.7	39.2	63.7
Investment support of public services (through other companies) **	63.7	0.0	1.4	19.4	84.5
Other support of the transport companies (e.g. capital increase, debt assumption) **	32.9	0.0	0.0	5.9	38.9
Total costs	367.7	19.8	136.7	209.3	733.6
Passenger revenues per total costs	11.1%	8.9%	43.8%	27.7%	21.9%

^{* 2015} Real value; Volán interurban: 2010-2015 average; Overlapping between BKK transport organising level and Volán interurban service provider level in the Budapest agglomeration.

Source: Annual report of the companies, Ministry of Finance (NGM)

^{**} Support spent on national railway network is taken into account by 75% (passenger transport) x 90% (public services) as a cost of transport public services.



Passenger revenues per total costs of transport public services 2007-2015

Indicators	MÁV- START	GYSEV	Volán * interurban	BKK	Total
Passenger kilometres (billions)	7,379	183	8,612	5,407	21,582
Total costs (HUF / pkm)	49.8	108.5	15.9	38.7	41.9
Total support (HUF / pkm)	44.3	98.8	8.9	28.0	34.2
Passenger carried (millions)	138.6	4.4	440.9	1,431.5	2,015.3
Total costs (HUF / passenger)	2,652	4,534	310	146	449
Total support (HUF / passenger)	2,357	4,130	174	106	366
Average travel distance (km)	53.2	41.8	19.5	3.8	10.7

^{* 2015} Real value; Volán interurban: 2010-2015 average Source: Annual report of the companies, Hungarian Central Statistical Office (KSH), Ministry of Finance (NGM)



THANK YOU FOR YOUR ATTENTION!

