

# TRAFFIC & INFRASTRUCTURE

Helgi's Pocket Guide

January 2013

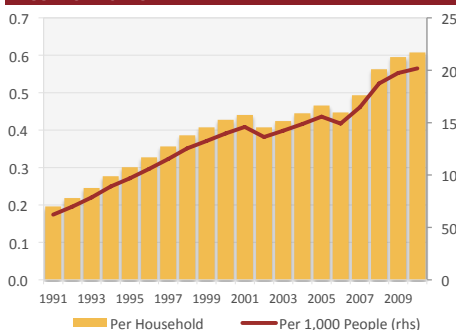
Romania



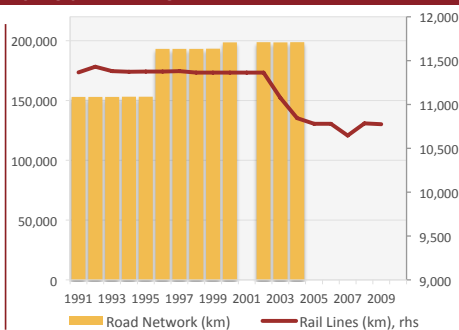
INFRASTRUCTURE AT A GLANCE	1990	1995	2000	2005	2010
Roads, Total Network (km)	153,014	153,170	198,603	198,817	
Length Of Motorways (km)	113	113	113	228	332
Passenger Cars Per 1,000 People	54	97	140	156	202
Diesel Passenger Cars (As Of Total Cars)		7.5%			30.7%
Persons Killed In Road Traffic Accidents	3,078	2,845	2,499	2,629	2,377
Rail Lines (km)	11,348	11,376	11,364	10,781	13,620
Railway Passengers (mil)	408	236	118	92	64
Railway, Average Distance Travelled Per Capita (km)	1,318	887	519	369	245
Air Transport, Passengers Carried (km)	1.3	1.2	1.2	1.7	4.0
Railway Transport In Passengers (As Of Inland Transport)		26.5%	16.5%	9.6%	
Road Transport In Passengers (As Of Inland Transport)		56.2%	72.5%	75.5%	
Bus Transport In Passengers (As Of Inland Transport)		17.3%	11.0%	14.9%	
Road Sector Energy Consumption (As Of Total)	5.8%	5.0%	7.5%	10.0%	12.5%



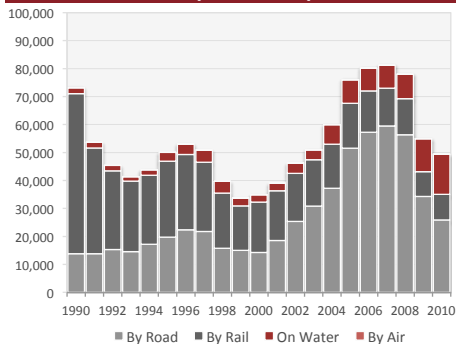
## PASSENGER CARS



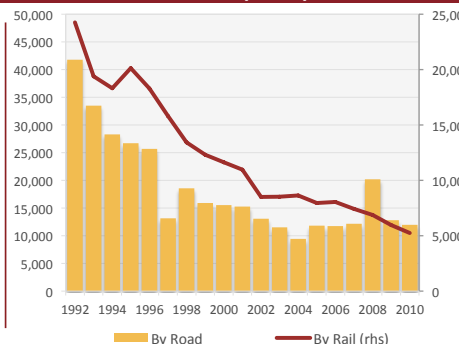
## ROADS & RAIL LINES



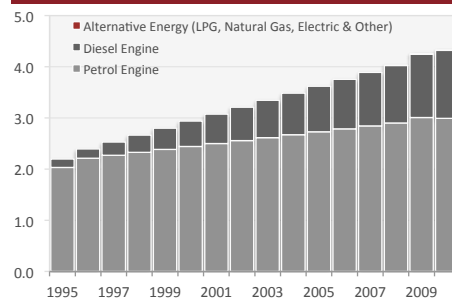
## TRANSPORT OF GOODS (mil tonne-km)



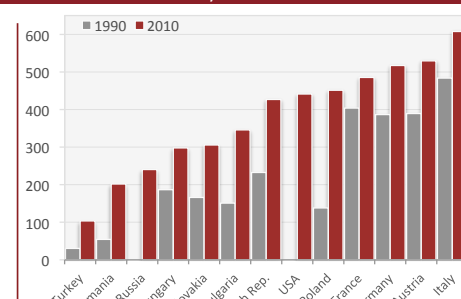
## TRANSPORT OF PASSENGERS (mil km)



## PASSENGER CARS

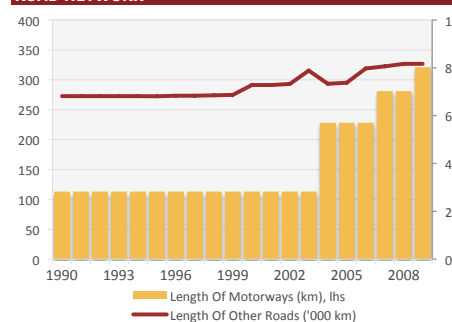


## PASSENGER CARS PER 1,000 PEOPLE

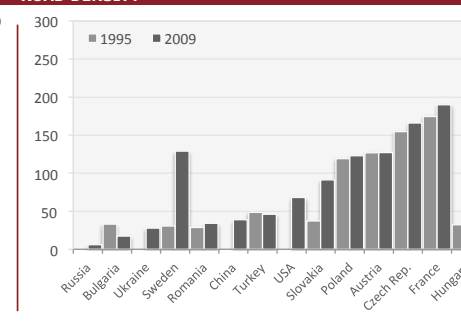


With fewer than 200 passenger cars per 1,000 inhabitants in the country at the end of 2009, Romania remains one of the least penetrated European countries from the car industry point of view. This is in spite of the fact that 586,000 cars were sold in Romania in 2008, which is an impressive 27 cars per 1,000 inhabitants! Bulgaria, for example, has 50% more cars than Romania in relative terms, in spite of having a lower GDP per capita.

## ROAD NETWORK

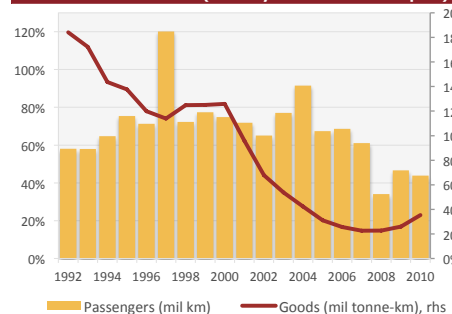


## ROAD DENSITY

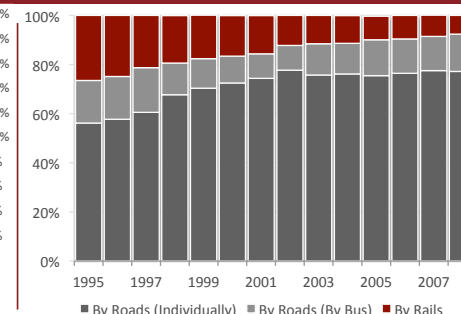


Not only do Romanians have 50% fewer cars on the roads than Bulgarians, but Romania's road network is twice as dense as Bulgaria's. Additionally, the length of Romania's motorways has tripled to more than 300 km over the last decade as the country has become richer and EU accession supported investments, cheaper funding and infrastructure subsidies in the last years. With Romania being one of the poorest countries in the EU, investments in infrastructure will probably remain high for many years to come.

## FROM RAILS TO ROADS (Railway As Of Road Transport)



## INLAND PASSENGER TRANSPORT



Similarly to the whole of Central and Eastern Europe, railway transport has clearly been losing ground to road transport in Romania. This is both in domestic and international terms, as well as in the transport of passengers and goods. In 2008, 92% of inland passengers travelled by road. While the railways transported more goods than trucks did at the beginning of the 1990s, they only carried around 20% of the amount carried by road transport in 2009.

Source: World Bank, National Statistical Office, United Nations, OECD, Eurostat, Helgi Analytics calculation

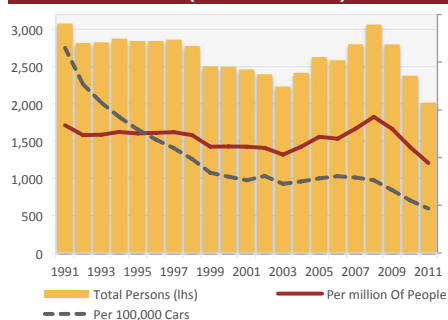


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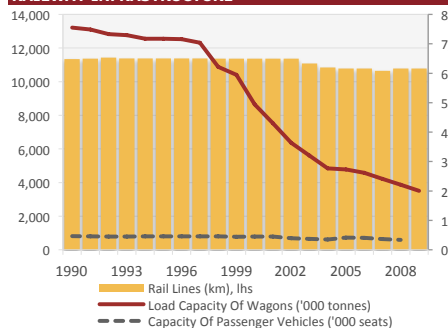
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## SAFETY ON THE ROAD (Accident Fatalities)



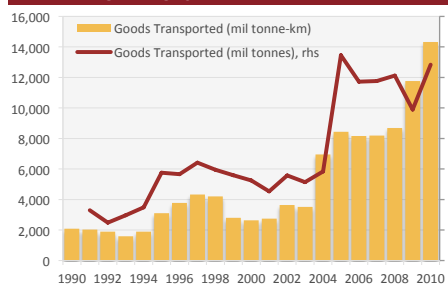
Unlike in most European countries, safety on Romanian roads has not improved significantly over the last two decades. The number of persons killed in road traffic accidents amounted to 2,800, more or less the same figure as in 1993. In the same period, for example, the number of people killed on the road in the Czech Republic or Hungary has halved. With over 111 persons killed per 1 million inhabitants a year, Romanian roads belong among the most dangerous ones in Europe.

## RAILWAY INFRASTRUCTURE



While most of Western Europe (or China, for example) prefers railway transportation to that by road, Central and Eastern Europe has gone the opposite way. In Romania, the capacity of passenger and goods transport (i.e. the number of seats) has declined by 27% when compared to 1990 and the number of people travelling by train is 80% less than two decades ago. Shame.

## WATERWAYS TRANSPORT



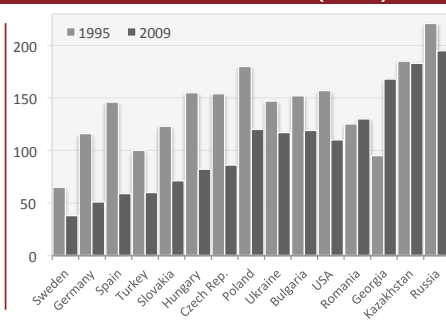
Unlike rail transport, waterways and air transportation have been booming in Romania. Having one of the busiest ports in the Black Sea and Europe (at Constanta), and using the River Danube for inland transport, no wonder that Romanian water transport has increased fivefold in the last two decades. Similarly to other Central and Eastern Europeans, Romanians have started flying a lot over the last decade as the number of passengers has nearly tripled, to nearly 13 million a year.

Source: World Bank, National Statistical Office, United Nations, OECD, Eurostat, Helgi Analytics calculation

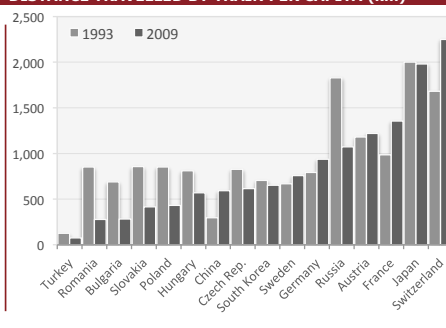


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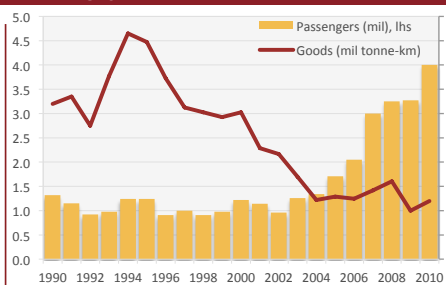
## PERSONS KILLED IN ROAD ACCIDENTS (Per mil)



## DISTANCE TRAVELLED BY TRAIN PER CAPITA (km)



## AIR TRANSPORT



POPULATION		2003	2004	2005	2006	2007	2008	2009	2010	2011
Population	mil	21.7	21.7	21.6	21.6	21.5	21.5	21.5	21.4	21.4
Population (As % Of World Population)	%	0.34%	0.34%	0.33%	0.33%	0.32%	0.32%	0.32%	0.31%	0.31%
Persons Per Household	persons	2.98	2.99	2.99	3.00	2.99	3.00	3.01	3.01	3.02
Share Of Population (0-14 Years Of Age)	%	17%	16%	16%	15%	15%	15%	15%	15%	15%
Share Of Population (15-64 Years Of Age)	%	69%	69%	70%	70%	70%	70%	70%	70%	70%
Share Of Population (65+ Years Of Age)	%	14%	15%	15%	15%	15%	15%	15%	15%	15%
Median Age	years	35.9	36.3	36.7	37.0	37.4	37.7	38.1	38.4	38.7
Old Age Dependency Ratio	%	21%	21%	21%	21%	21%	21%	21%	21%	22%
Youth Dependency Ratio	%	24%	23%	22%	22%	22%	22%	22%	22%	22%
Life Expectancy, both sexes	years	71.3	71.6	71.9	72.2	72.6	72.6	73.3	73.5	73.5
Life Expectancy At 65, both sexes	years	14.6	14.9	15.0	15.2	15.6	15.8	15.8	15.8	15.8
Total Fertility Rate	children	1.27	1.29	1.32	1.32	1.30	1.35	1.38	1.38	1.38
Urban Population As Of Total	%	53%	53%	53%	53%	53%	53%	53%	53%	53%

ON THE ROAD		2003	2004	2005	2006	2007	2008	2009	2010	2011
Number Of Passenger Cars	mil	3.09	3.23	3.36	3.22	3.54	4.03	4.25	4.32	
Diesel Passenger Cars (As Of Total Cars)	%						28%	29%	31%	
Petrol Passenger Cars (As Of Total Cars)	%						72%	71%	69%	
Alternative Fuel Passenger Cars (As Of Total Cars)	%						0.0%	0.0%	0.0%	
Passenger Cars Per 1,000 People	vehicles	142	149	156	149	165	187	197	202	
Passenger Cars Per Household	vehicles	0.42	0.44	0.47	0.45	0.49	0.56	0.60	0.61	
Number Of Motor Vehicles	mil	3.64	3.80	3.94	3.74	4.20	4.75	4.98	0.00	
Motor Vehicles Per 1,000 People	vehicles	177	185	180	172	194	219	230	235	
Number Of Motorcycles	'000 vehicles	103	105	94	26	27	66	74	79	
Motorcycles Per 1,000 People	vehicles	4.7	4.8	4.4	1.2	1.3	3.1	3.4	3.7	
Number Of Mopeds	'000 vehicles	133	130	104	17	29	6.0	6.0	6.0	
Mopeds Per 1,000 People	vehicles	6.1	6.0	4.8	0.8	1.3	0.3	0.3	0.3	
Number Of Trams	vehicles			1,513	1,433	1,481	891	1,411		
Number Of Coaches, Buses & Trolley Buses	vehicles	41.9	0.0	39.3	32.3	34.2	41.5	41.2	40.6	
Roads (Total Network)	km	199	199							
Roads, Paved (As Of Total Roads)	%	30%	30%							
Length Of Motorways	km	113	228	228	228	281	281	321	332	
Vehicles (Per km Of Road)	vehicles	19.0	20.0					61.0	60.8	
Road Density (km of Road Per 100 km2 Of Land Area)		83	83	34	34	34	34	34	34	
Roads, Passengers Carried	mil km	9,438	11,812	11,735	12,156	20,194	12,805	11,955		
Road Transport Freight	mil tonne-km	30,854	37,220	51,531	57,278	59,517	56,377	34,265	25,883	
Road Goods Transported	mil tonnes	276	294	307	335	357	365	293	175	
Road Sector Energy Consumption (As Of Total)	%	9.8%	10.4%	10.0%	10.0%	10.2%	11.8%	13.8%	12.5%	
Killed In Road Traffic Accidents	persons	2,235	2,418	2,629	2,587	2,800	3,065	2,797	2,377	2,018
Killed In Road Traffic Accidents (Per mil People)	persons	103	111	122	120	130	143	130	111	94
Injured In Road Traffic Accidents	persons	6,402	6,662	23,026	26,006	29,412	36,034	35,454	32,293	
Injured In Road Traffic Accidents (Per mil People)	persons	295	307	1,066	1,204	1,368	1,676	1,649	1,509	
Number Killed Per 1,000 Road Traffic Accidents	persons	321	333	133	118	114	104	98	91	
Number Of Fatalities Per 100,000 Passenger Cars	persons	72	75	78	80	79	76	66	55	47

ON THE RAILS		2003	2004	2005	2006	2007	2008	2009	2010	2011
Rail Lines (Total)	km	11,077	10,844	10,781	10,781	10,646	10,784	10,776	13,620	
Electrified Rail Lines (As Of Total Rail Lines)	%	36%	37%	37%	37%	37%	37%	37%	30%	
Railway Density (km of Road Per 1,000 km2 Of Land Area)		90	90	89	87	87	87	86	86	
Railway Passengers	mil	95	99	92	94	88	78	70	64	
Railways Passengers Carried	mil km	8,528	8,633	7,960	8,053	7,417	6,880	5,975	5,248	
Railways Transport Freight	mil tonne-km	16,584	15,767	16,032	14,720	13,471	12,861	8,902	9,134	
Railways Goods Transported	mil tonnes	71.4	72.7	69.2	68.3	68.8	66.7	50.6	52.9	
Railway (Average Distance Travelled Per Passenger)	km	90.0	87.5	87.0	85.3	84.0	87.9	85.0	81.7	
Railway (Average Distance Travelled Per Capita)	km	393	398	369	373	345	320	278	245	
Principle Railways Enterprise (s) Workforce	persons	77,776	65,568				41,520	41,340		
Number Of Railway Locomotives	vehicles	2,059	2,061	1,982	1,986	1,986	1,907	1,845	1,834	
Number Of Passenger Railway Vehicles	vehicles	5,584	5,523	5,522	5,326	5,105	5,137	4,904		
Capacity Of Passenger Railway Vehicles (Total)	'000 seats	354	412	411	365	338				
Number Of Railway Wagons	vehicles	60,964	58,951	55,503	54,713	47,420	45,505	43,311		
Load Capacity Of Railway Wagons (Total)	'000 tonnes	2,766	2,733	2,619					2,003	

Source: World Bank, National Statistical Office, United Nations, OECD, Eurostat, Helgi Analytics calculation. For more details, description and explanation of particular indicators, please, visit [www.helgilibrary.com](http://www.helgilibrary.com)



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IN THE AIR		2003	2004	2005	2006	2007	2008	2009	2010	2011
Air Transport (Passengers Carried)	<i>mil</i>	1.26	1.34	1.71	2.05	3.00	3.25	3.27	4.00	
Air Transport Freight	<i>mil tonne-km</i>	6.8	4.9	5.2	5.0	5.7	6.4	4.0	4.8	
Air Goods Transported	<i>mil tonnes</i>	15.8	19.3	18.0	20.7	19.2	24.4	23.5	24.5	26.2

ON THE WATER		2003	2004	2005	2006	2007	2008	2009	2010	2011
Waterway Transport Freight	<i>mil tonne-km</i>	3,521	6,956	8,438	8,158	8,195	8,687	11,765	14,317	
Waterway Goods Transported	<i>mil tonnes</i>	12.8	14.6	33.6	29.3	29.4	30.3	24.7	32.1	
Number Of Inland Waterway Vessels	<i>vessels</i>									
Number Of Maritime Merchant Vessels	<i>vessels</i>	758	686	481	372	277	273	263	244	65
Number Of Maritime Container Ships	<i>vessels</i>									
Number Of Maritime Oil Tankers	<i>vessels</i>	99	97	88	90	51	51	48	47	8
Waterways Transport (As Of Inland Transport)	<i>%</i>	7.1%	11.4%	11.0%	10.0%	9.8%	10.8%	20.6%		

MACROECONOMIC ROUND-UP		2003	2004	2005	2006	2007	2008	2009	2010	2011
GDP	<i>USD bil</i>	59.5	75.5	98.9	122.6	169.3	200.1	161.1	161.6	179.8
GDP Growth	<i>%</i>	5.2%	8.4%	4.2%	7.9%	6.0%	9.4%	-8.5%	1.0%	-0.4%
GDP Per Capita	<i>USD</i>	2,737	3,481	4,572	5,681	7,856	9,300	7,500	7,539	8,405
Industrial Production Growth	<i>%</i>	-0.8%	2.7%	-3.1%	9.3%	10.4%	2.6%	-5.5%	5.5%	
Retail Sales Growth	<i>%</i>									
Government Budget Balance (As % Of GDP)	<i>%</i>	-1.5%	-1.2%	-1.2%	-2.2%	-2.5%	-5.4%	-7.4%	-6.8%	
Public Debt (As % Of GDP)	<i>%</i>	21%	19%	18%	13%	13%	14%	24%	31%	33%
Unemployment Rate	<i>%</i>	7.4%	6.3%	5.9%	5.2%	4.0%	4.4%	7.8%	7.0%	5.2%
Gross Average Monthly Wage	<i>USD</i>	200	251	332	408	573	699	606	598	649
Foreign Debt (As % Of GDP)	<i>%</i>	38%	39%	39%	44%	50%	50%	74%	76%	
Imports (As % Of GDP)	<i>%</i>	42%	45%	43%	39%	43%	44%	40%	30%	29%
Exports (As % Of GDP)	<i>%</i>	35%	36%	33%	30%	31%	31%	33%	24%	22%
Current Account Balance (As % Of GDP)	<i>%</i>	-5.6%	-8.5%	-8.6%	-10.4%	-13.4%	-11.6%	-4.2%	-4.5%	-4.4%
Foreign Exchange Reserves (Including Gold)	<i>USD bil</i>	9.4	16.1	21.6	30.2	40.0	39.8	44.4	48.0	48.0
Foreign Exchange Reserves (As % Of Imports)	<i>%</i>	38%	47%	50%	64%	55%	45%	69%	100%	92%
Foreign Direct Investments	<i>USD bil</i>	1.8	6.4	6.9	11.5	10.3	13.8	4.9	3.2	2.6
Foreign Direct Investments (As % Of GDP)	<i>%</i>	3.1%	8.5%	6.9%	9.3%	6.1%	6.9%	3.1%	2.0%	1.4%
Foreign Direct Investments (As % Of CA Deficit)	<i>%</i>	56%	101%	81%	90%	45%	59%	73%	45%	32%
Workers' Remittances, Received (As % Of GDP)	<i>%</i>	0.2%	0.2%	4.8%	5.4%	5.0%	4.6%	3.0%	2.4%	2.2%
Portfolio Investments (As % Of GDP)	<i>%</i>	1.0%	-0.7%	1.0%	-0.2%	0.4%	-0.4%	0.5%	0.8%	1.4%
Development Assistance (As % Of GDP)	<i>%</i>	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%

INFLATION, FOREX & INTEREST RATES		2003	2004	2005	2006	2007	2008	2009	2010	2011
Inflation, CPI (Average)	<i>%</i>	15.3%	11.9%	9.0%	6.6%	4.8%	7.8%	5.6%	6.1%	5.8%
Long-Term Interest Rate (10-Year Gov. Bond Yield)	<i>%</i>				7.2%	7.1%	7.7%	9.7%	7.3%	
Short-Term Interbank Interest Rate (3-Month)	<i>%</i>	17.7%	19.1%	8.4%	8.1%	7.2%	12.3%	11.3%	6.5%	
Interest Spread To USD, 10-Year Gov. Bond	<i>%</i>	-4.0%	-4.3%	-4.3%	2.4%	2.5%	4.0%	6.4%	4.1%	-2.8%
Interest Spread To USD, 3M IBOR	<i>%</i>	16.6%	17.6%	4.8%	2.9%	2.0%	9.1%	10.4%	6.0%	-0.4%
FX Rate To USD (Average)	<i>per USD</i>	3.32	3.26	2.91	2.81	2.44	2.52	3.05	3.18	3.05
FX Rate To EUR (Average)	<i>per EUR</i>	3.75	4.05	3.62	3.52	3.34	3.68	4.24	4.21	4.24

Source: World Bank, National Statistical Office, United Nations, OECD, Eurostat, Helgi Analytics calculation. For more details, description and explanation of particular indicators, please, visit [www.helgilibrary.com](http://www.helgilibrary.com)

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Helgi Analytics also runs a web application called Helgi Library, which is a database/library offering data and analyses on more than 95% of the world's economy and population. The Library aims to bring interesting statistical data and analyses to a wide audience under affordable conditions. If you wish to get more details, please visit [www.helgilibrary.com](http://www.helgilibrary.com) or contact us at [info@helgianalytics.com](mailto:info@helgianalytics.com).

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