



Study on State asset management in the EU

Final study report for Pillar 2 – Czech Republic

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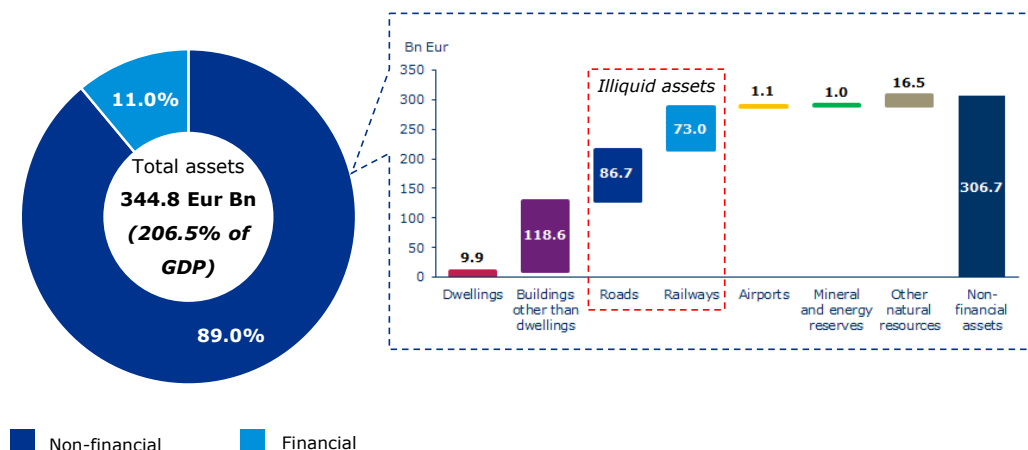
This Country fiche presents a quantitative overview of the mix of non-financial assets owned by the Czech General government.

A recap and a summary table on sources of data and valuation methods used to map and assess (as far as possible) non-financial assets owned by the Czech General government is reported in the Appendix (Table B).

1. OVERVIEW OF NON-FINANCIAL ASSETS

In 2015, the estimated value of Non-financial assets owned by the Czech General government was equal to 306.7 Eur Bn, accounting for about 89.0% of the estimated value of all assets (including Financial assets) owned by the General government. In this valuation, the relative estimated value of Non-financial assets when compared to the General government's portfolio is high. This is mainly due to the fact that all the Non-financial assets mapped are owned by General government¹.

Figure 1 General government's Financial and Non-financial assets (Eur Bn), Czech Republic, 2015



Source: KPMG elaboration. Data on Gross Domestic Product were directly retrieved from Eurostat on 19th September 2017.

- (1) Estimated values refer to 2015 as the latest available year for both financial assets and all clusters of non-financial assets.
- (2) In this chart, the "estimated value" of financial assets is reported in terms of Total Assets of the country's PSHs as weighted by the stake(s) owned by the Public sector into the PSHs themselves².
- (3) In Czech Republic, Ports are not included among the Non-financial assets identified in this Study as they are not present in the country.
- (4) Since roads and railways are an illiquid asset we applied a Perpetual Inventory Method (PIM). However, this valuation method tends to slightly overestimate the estimated value of the asset. Therefore the chart shows the lower bound figure of the range of road and railways valuation estimates only.
- (5) Values of Dwellings, Buildings other than dwellings and Other natural resources were directly retrieved from Eurostat, while values for other Non-financial assets were estimated according to the valuation approaches explained in the Methodological Notes for Pillar 2.
- (6) The estimated value for Mineral and Energy reserves refers to the estimate computed on 2015 average prices. Since the prices of Oil and Natural Gas can present many fluctuations over the year, the average of all price points was used as an accurate representation of the annual value of this assets, in order to better account for possible outliers.
- (7) The estimated value for Other Natural resources includes only the estimated value of Land. In reality, the value of Other natural resources is higher given the fact that Czech Republic is the only other

¹ As explained in the Methodological Notes for Pillar 2, Non-financial assets that are owned by PSHs are evaluated through the equity method. Therefore their value is not represented in this Pillar as it has already been accounted for in Pillar 1. The allocation of Non-financial assets between Pillar 1 and 2 is listed in Table A in the Appendix to the EU Fiche.

² For more details on how Total Assets for Financial Assets are calculated, please see Pillar 1.

country, together with France, to report data on all components taken into account for mapping Other Natural resources in Pillar 2 (Land, Non-cultivated biological resources).

2. DWELLINGS

Eurostat provides a comprehensive coverage of data on the value of Dwellings; therefore, data on Czech Dwellings is retrieved from Eurostat only.

As shown in Table 1 below, the value of the Czech General government's Dwellings in 2015 was equal to about 9.8 Eur Bn, accounting for 5.4% of the value of all the Dwellings within the country.

Table 1 General government's dwellings (Eur Mn), Czech Republic, 2010-2015

Data in Eur Mn	2010	2011	2012	2013	2014	2015
General government	11,280	12,305	10,966	10,328	9,568	9,852
Share of the total economy	6.1%	6.3%	5.8%	5.7%	5.5%	5.4%

Source: Eurostat database, 2010-2015, Balance sheets for non-financial assets, Available at: http://appsso.eurostat.ec.europa.eu/nui/show.do?dataset=nama_10_nfa_bs&lang=en [downloaded in July 2017].

(1) The share of Dwellings in the economy refers to the value of Dwellings (rather than the number of Dwellings).

3. OTHER BUILDINGS AND STRUCTURES

- Buildings other than dwellings

Eurostat provides good coverage of data on the value of Buildings other than dwellings owned by the Czech General government, hence data on this cluster of assets is retrieved from Eurostat only.

As shown in Table 2, the value of these assets, in 2015 was equal to about 118.7 Eur Bn, accounting for 42.6% of the value of all the Buildings other than dwellings within the country.

Table 2 General government's Buildings other than dwellings (Eur Mn), Czech Republic, 2010-2015.

Data in Eur Mn	2010	2011	2012	2013	2014	2015
General government	133,173	134,646	129,899	123,365	116,482	118,579
Share of the total economy	45.9%	44.8%	44.3%	43.5%	43.0%	42.6%

Source: Eurostat database, 2010-2015, Balance sheets for non-financial assets, Available at: http://appsso.eurostat.ec.europa.eu/nui/show.do?dataset=nama_10_nfa_bs&lang=en [downloaded in July 2017].

(1) The share of Buildings other than dwellings in the economy refers to the value of Buildings other than dwellings (rather than the number of Buildings other than dwellings).

- Ports

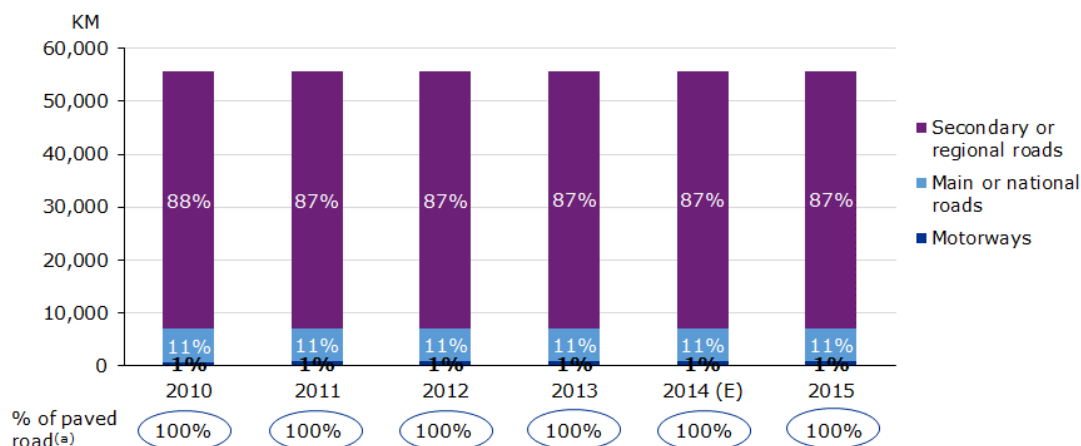
Czech Republic does not have maritime ports.

- Roads

According to current legislation, Motorways and other national roads are owned by the Central Government. The *Road and Motorway Directorate (RMD)* of the Czech Republic, which is a government body established by the *Ministry of Transport*, has ownership rights to state highways and Main or national roads.

Moreover, it is in charge of security, management, maintenance and repairs of motorways and first class roads; as well as the duty of ensuring construction and modernization of highways and roads.

Figure 2 Length (in km) of Motorways, Main or national roads and Secondary or regional roads, Czech Republic, 2010-2015



Source: Directorate-General for Mobility and Transport (DG MOVE) database, 2010-2015 [downloaded in September 2017]. Values for percentage of paved road were calculated using Eurostat data on length of other roads by type of surface.

- (1) DG MOVE's data does not report the length of Main or national roads and Secondary or regional roads for year 2014. Therefore, the values for the year 2014 have been estimated as average between 2013 and 2015 values.
- (2) For the sake of accuracy and comparability among the EU28 Member States, the valuation includes Motorways, Main or national roads and Secondary or regional roads only.
- (3) According to DG MOVE's data, the extension of the Czech road network is equal to 130,657 Km (including the length of Motorways, Main or national roads, Secondary or regional roads and Other roads) in 2015.
- (a) The percentage of paved road has been calculated based on the total extension of the road network (including other roads). It represents the length of paved road network over the total length of road network.

Table 3 reports the results of the valuation exercise carried out according to the valuation procedure described in the Methodological Notes for Pillar 2. In this respect, please be reminded that, to ensure accuracy and comparability, the valuation includes Motorways and Main or national roads only.

In Czech Republic, overall, in 2015, the estimated value of roads ranged between 87 Eur Bn to 94 Eur Bn. Secondary or regional roads take the lion's share with an estimated value between 58 Eur Bn and 61 Eur Bn.

Table 3 Estimated road value for Motorways ,Main or national roads and Secondary or regional roads only (Eur Mn), Czech Republic, 2010-2015

Data in Eur Mn		2010	2011	2012	2013	2014	2015
Motorways	Min	6,960	7,316	7,771	7,998	8,007	8,072
	Max	7,449	7,808	8,273	8,498	8,501	8,560
Main or national roads	Min	19,973	20,189	20,650	20,632	20,457	20,244
	Max	24,479	24,719	25,269	25,237	25,010	24,732
Secondary or regional roads	Min	55,832	56,990	58,609	58,782	58,567	58,355
	Max	58,661	59,834	61,509	61,673	61,426	61,172
Total	Min	82,764	84,495	87,030	87,413	87,031	86,671
	Max	90,589	92,361	95,051	95,409	94,937	94,464

Source: KPMG calculations on Directorate-General for Mobility and Transport (DG MOVE) and Eurostat data, 2010-2015 [downloaded in July 2017].

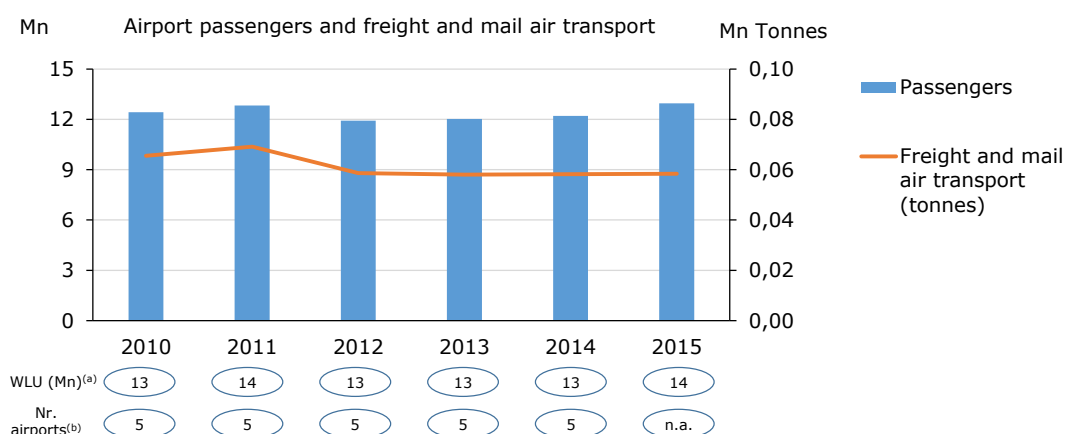
- *Airports*

According to the current legislation, Czech airports are publicly owned and managed through companies.

The major international airport of the Czech Republic is *Praha/Ruzyně Airport* operated by Prague Airport, (*Letiště Praha, a. s.*) a joint stock company. Other, smaller airports such as *Brno/Tuřany*, *Ostrava/Mošnov* and *Karlovy Vary* have been progressively transferred to the respective regional governments. *Brno/Tuřany Airport* was leased to a private operator *Letiště Brno, a.s.* on 1st July 2002, followed by *Ostrava/Mošnov Airport* (leased to *Letiště Ostrava, a.s.*) and *Karlovy Vary* (leased to *Letiště Karlovy Vary, s.r.o.*) on 1st July 2004.

As shown in Figure 3 below, airport traffic in Czech Republic has been increasing over the 2010–2015 time period³.

Figure 3 Airports passengers, freight and mail air transport, Czech Republic, 2010-2015



Source: Eurostat database, 2010-2015, [downloaded in March 2017]. Air passenger transport by main airports in each reporting country (available at: http://appsso.eurostat.ec.europa.eu/nui/show.do?dataset=avia_paoa&lang=en), Freight and mail air transport by main airports in each reporting country (available at: http://appsso.eurostat.ec.europa.eu/nui/show.do?dataset=avia_qooa&lang=en) and Number of commercial airports with more than 15,000 passenger units per year (available at: http://appsso.eurostat.ec.europa.eu/nui/show.do?dataset=avia_if_arp&lang=en).

- (1) The number of passengers relates to all on board passengers.
- (2) All freight and mail air transport is included.
- (3) Eurostat does not report the number of commercial airports for 2015.
- (a) A Workload Unit (WLU) is defined as one passenger or 100 kg of cargo.
- (b) Total number of airports (with more than 15,000 passenger units per year).

To assess the value of airports, an income approach was applied (for more details, please see the Methodological Notes for Pillar 2).

According to the estimates reported in Table 4, in 2015, the overall estimated value of public Airports was equal to about 1.1 Eur Bn, with an increase of about 3.5% since 2010.

³ For the list of Airports included in this Study, please see Table A in Appendix.

Table 4 Airport estimated value (Eur Mn), Czech Republic, 2010-2015

Data in Mn Eur	2010	2011	2012	2013	2014	2015
Airports	1,100	1,137	1,053	1,060	1,076	1,139

Source: KPMG calculations on Eurostat database, 2010-2015 [downloaded in May 2017].

1) The WLUs used to calculate the value of airports do not match with those represented in Figure 3 as they were calculated by adding the WLUs of all airports considered within the scope of this Pillar (see Table A in Appendix).

- *Railways*

The predominant owner and operator of the railway lines throughout history (the Czech railway network dates back to the first quarter of 19th Century) has been the state. However, the network was built primarily by private owners. Nowadays, the owner of the majority of railway lines in the Czech Republic is the state represented by the governmental body *Railway Infrastructure Administration*⁴.

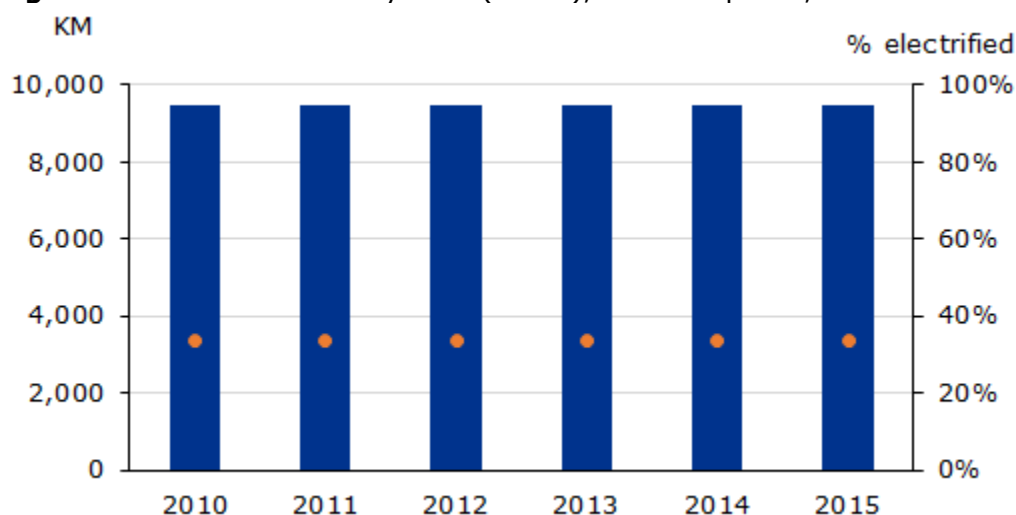
A crucial event with regard to the ownership/management model for railways, pursuant to the *Parliament Act of the Czech Republic No. 77/2002 Coll. dated 5th February 2002*, was the split of *Czech Railways* (a state organisation) into two entities:

- *Czech Railways*, which is a joint-stock company;
- the *Railway Infrastructure Administration*, which is a public body.

Both were established as of 1st January 2003 (as of this date the *Acts No. 9/1993 Coll. and 212/1993 Coll. expired*). The *Railway Infrastructure Administration* thus became the guarantor for operations, modernisation and development of the railway network of the Czech Republic.

As shown in Figure 4, the extension of the railway network in Czech Republic was equal to about 9.600 km in 2015.

Figure 4 Extension of railway lines (in Km), Czech Republic, 2010-2015



Source: Directorate-General for Mobility and Transport (DG MOVE), 2010-2015 [downloaded in October 2017]. The percentages of electrified lines were calculated using Eurostat database "Railway transport - length of tracks" available at:

⁴ Although this data collection and analysis exercise represents the "best effort" to provide an updated picture on EU28 ownership/management models for Non-financial assets, due to data limitations, we have assumed the prevalent ownership model to be applicable for all other assets within the cluster.

http://appsso.eurostat.ec.europa.eu/nui/show.do?dataset=rail_if_tracks&lang=en [downloaded in October 2017].

(1) The percentage of electrified network represents the length of electrified railway tracks over the total length of railway tracks for year.

According to the estimates reported in Table 5, in 2015, the overall estimated value of public railways ranged between 73 Eur Bn to 78 Eur Bn.

Table 5 Estimated value for railways (Eur Mn), Czech Republic, 2010-2015

Data in Mn Eur		2010	2011	2012	2013	2014	2015
Railways	Min	72,015	72,542	74,044	73,844	73,156	72,969
	Max	76,875	77,406	78,984	78,748	77,985	77,708

Source: KPMG calculations on Eurostat data [downloaded in May 2017].

4. NATURAL RESOURCES

- Mineral and Energy reserves

Please be reminded that, across Europe, the property of the ownership rights over the land from which Oil and Gas can be potentially extracted is separated from the ownership rights assigned to the Oil and Gas reserves extracted from it. In Czech Republic, this is established by Act No. 44/1988 Coll on the protection and utilisation of mineral resources.

According to Art. 5 (2), mineral resources within the territory of the Czech Republic are owned by the state.

Table 6 reports capacity of the Czech proven reserves for Oil and Natural gas in 2015.

Table 6 Proven reserves of mineral and energy reserves, Czech Republic, 2015

Data	Oil (Barrels)	Natural gas (cubic meters)
Proven reserves	15,000,000	3,964,000,000

Source: Central Intelligence Agency (CIA). World Factbook Database, 2015 [downloaded in March 2017].

As shown in Table 7, the estimated value for Oil reserves in Czech Republic in 2015 was equal, on average, to 0.7 Eur bn. With regard to Natural Gas, the estimated value was instead equal to an average of about 0.3 Eur bn⁵.

Table 7 Estimated value of oil and natural gas proven reserves (Eur Mn), Czech Republic, 2015

Data in Mn Eur	Min	Max	Average
Oil	489	917	725
Natural gas	215	421	321
Total	703	1,338	1,046

Source: KPMG calculations on World Factbook Database, 2015 [downloaded in March 2017].

⁵ Please note that:

- according to ESA2010, Mineral and Energy reserves (AN.212) need to be valued as acquisitions less disposals of non-produced assets;
- payments for the temporary use of natural resources (in this case, the royalties that accrue to State) are not recorded as acquisitions of natural resources, but rather as rent (rent for subsoil assets using ESA2010 classification);
- the estimates reported in this Study do not match exactly the values reported in Eurostat (259 bn Eur). In fact, the latter do only include the value of those reserves that are not currently being exploited.

(1) Proven reserves are valuated using the average prices for 2015.

(2) Range is calculated using the minimum and the maximum prices for 2015.

- Other natural resources

For more details about limitations on data on Other natural resources and a detail of what is mapped and valuated in this Country fiche, please refer back to the relevant section of the Methodological Notes for Pillar 2.

Czech Republic reports the value of all Other natural resources (as classified by ESA2010) in its national accountings, as shown in Table 8.

Table 8 Other natural resources (Eur Mn), Czech Republic, 2010-2015.

Data in Eur Mn		2010	2011	2012	2013	2014	2015
Land (net)	General government	15.256	15.856	15.622	15.120	14.962	16.493
	Share of the total economy	19,4%	19,2%	19,0%	18,9%	18,6%	18,5%
Non-cultivated biological resources and water resources (net)	General government	209	197	205	260	166	149
	Share of the total economy	100,0%	100,0%	100,0%	100,0%	100,0%	100,0%

Source: Eurostat database, 2010-2015 [downloaded in July 2017].

(1) The share of the economy refers to the value of natural resources (rather than the volume of the natural resources).

Appendix I Czech Republic

Table A List of airports, Czech Republic, 2015 (Number of airports: 5)

List of airports
Non-financial (Pillar 2) ^(a)
BRNO/TURANY airport
KARLOVY VARY airport
OSTRAVA/MOSNOV airport
PARDUBICE airport
PRAHA/RUZYNE airport

Source: Eurostat database, 2015 [downloaded in May 2017].

(1) The list above includes the airports defined by Eurostat as "main airports", which meet the following criteria: at least 150 000 passenger movements per year.

(a) Within the scope of this Pillar.

Table B Overview of the valuation approaches and the sources used to value Non-Financial assets in this Study, Czech Republic

Clusters of Non-financial assets	Valuation approach	Sources
Dwellings	Market value	- Eurostat
Buildings other than dwellings	Market value	- Eurostat
Ports	Not present in this Country	n.a.
Roads	Perpetual Inventory Method (PIM)	- DG MOVE - Eurostat - EIB - Other sources
Airports	Market value	- Eurostat
Railways	Perpetual Inventory Method (PIM)	- DG MOVE - EIB - Other sources
Mineral and Energy reserves	Market value	- World Factbook Database
Other natural resources	Market value	- Eurostat

Sources: KPMG elaborations

(1) For more details on "other sources" used to carry out road valuations, please see Table 3, Table 4, and Table 5 at the Annex.

(2) For more details on "other sources" used to carry out railways valuations, please see Table 6 in the Annex