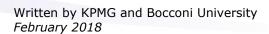


Study on State asset management in the EU

Final study report for Pillar 2 - Spain

Contract: ECFIN/187/2016/740792





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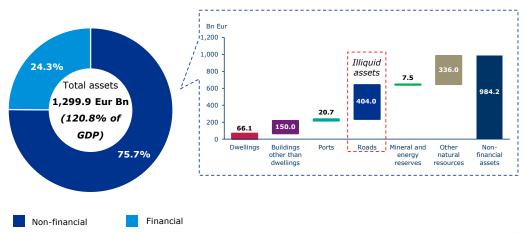
This Country fiche presents a quantitative overview of the mix of non-financial assets owned by the Spanish General government.

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 Spanish General government is reported in the Appendix (Table C).

1. OVERVIEW OF NON-FINANCIAL ASSETS

In 2015, the estimated value of Non-financial assets owned by the Spanish General government was equal to 984.2 Eur Bn, accounting for about 75.7% of the estimated value of all assets (including Financial assets) owned by the General government¹.

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



Source: KPMG elaboration. Data on Gross Domestic Product were directly retrivied 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) Values of Non-financial assets were estimated according to the valuation approaches explained in the Methodological Notes for Pillar 2.
- (4) In this chart the estimated value of Other natural resources only includes the estimated value of lands.
- (5) In this chart, the values of Railways and Airports are not represented as they have already been accounted for in Pillar 1.
- (6) Since roads are an illiquid asset we applied a depreciated replacement cost. However, this valuation method tends to slightly overestimate the value of the asset. Therefore the chart shows the lower bound figure of the range of road and railways valuation estimates only.
- (7) 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.

2. DWELLINGS

Eurostat and other sources do not provide the value of Dwellings for Spain, as Spain was granted a derogation to start transmitting relevant data in 2017.

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.

The value of residential buildings has been estimated through a market approach, as outlined in Methodological Notes. As Table 1 shows, the estimated value of Spanish residential buildings is equal to 66 Eur Bn in 2015.

Table 1 Estimated values of General government's Dwellings (Eur Mn), Spain, 2010-2015

Data in Eur Mn	2010 (E)	2011 (E)	2012 (E)	2013 (E)	2014 (E)	2015 (E)
General government	79,326	73,311	71,433	65,050	61,759	66,063
Share of the total economy	2.1%	2.1%	2.3%	2.3%	2.2%	2.4%

Source: KPMG calculations on EU Building Stock and Eurostat data [downloaded in July 2017]. The country-specific capital value of the asset was directly retrieved from a global specific real estate database: MSCI Real Estate Analytics Portal.

3. OTHER BUILDINGS AND STRUCTURES

Buildings other than dwellings

Eurostat and other sources do not provide the value of Buildings other than dwellings for Spain, as Spain was granted a derogation to start transmitting relevant data in 2017.

The value of non-residential buildings has been estimated through a market approach, as outlined in Methodological Notes. As Table 2 shows, the estimated value of Spanish non-residential buildings is equal to 150 Eur Bn in 2015.

Table 2 Estimated values of General government's Buildings other than dwellings (Eur Mn), Spain, 2010-2015

Data in Eur Mn	2010 (E)	2011 (E)	2012 (E)	2013 (E)	2014 (E)	2015 (E)
General government	165,152	171,141	157,893	161,686	148,220	150,047
Share of the total economy	29.5%	29.5%	27.9%	27.9%	26.7%	26.6%

Source: KPMG calculations on ENTRANZE and Eurostat data [downloaded in July 2017].

Ports

In compliance with the art. 5 of $Ley\ 27/1992^3$ as modified by the $Ley\ 62/1997^4$, the so called "ports of general interest" (i.e. those ports involved in international maritime commerce) are owned by the State (in compliance with the article 149.1.20 of the Spanish Constitution).

However, the basic scheme set by Ley 27/1992 as modified by the Ley 62/1997 involves a single model for the organisation and management of general interest ports. Several autoridades portuarias (i.e. public port authorities) are responsible for managing the port infrastructures. These authorities operate under the coordination and control of the Ente Público Puertos del Estado (EPPE), which is the public body in

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

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

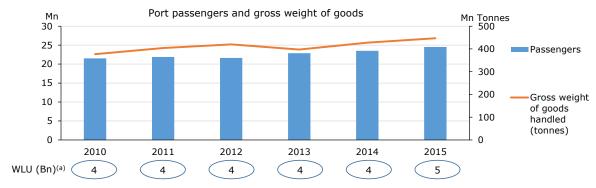
³ Ley 27/1992, de 24 de noviembre, de Puertos del Estado y de la Marina Mercante. Available at: https://www.boe.es/buscar/doc.php?id=BOE-A-1992-26146 [Accessed 08th November 2017].

⁴ Ley 62/1997, de 26 de diciembre, de modificación de la Ley 27/1992, de 24 de noviembre, de Puertos del Estado y de la Marina Mercante. Available at: https://www.boe.es/buscar/doc.php?id=BOE-A-1997-27988 [Accessed 08th November 2017]. Please note that this law has been derogated by the Real Decreto Legislativo 2/2011, de 5 de septiembre, por el que se aprueba el Texto Refundido de la Ley de Puertos del Estado y de la Marina Mercante. Available at: https://www.boe.es/buscar/doc.php?id=BOE-A-2011-16467 [Accessed 08th November 2017].

charge of the governmental port policy and has general responsibility for the port system as a whole.

Figure 2 shows the overall maritime port traffic (for both passengers and goods) in Spain over the 2010-2015 time period⁵.

Figure 2 Port passengers and gross weight of goods, Spain, 2010-2015



Source: Eurostat database, 2010-2015 [downloaded in March 2017]. Country level - passengers embarked and disembarked in all ports by direction (available at:

http://appsso.eurostat.ec.europa.eu/nui/show.do?dataset=mar_mp_aa_cphd&lang=en) and Gross weight of goods handled in all ports by direction (available at: http://appsso.eurostat.ec.europa.eu/nui/show.do?dataset=mar_go_aa&lang=en).

- (1) With regard to passengers, all passengers embarked from and disembarked to all maritime ports within the country have been considered.
- (2) With regard to the gross weight of goods handled, the Gross weight of goods handled in all maritime ports within the country have been considered.
- (a) A Workload Unit (WLU) is defined as one passenger or 100 kg of cargo.

On the basis of the market value (per workload unit) for ports, retrieved from recent transactions⁶, the value of maritime ports in Spain was estimated (as shown in Table 3) over the period 2010-2015. In 2015, the estimated value was equal to about 20.7 Eur Bn.

Table 3 Estimated value for Maritime Ports (Eur Mn), Spain, 2010-2015

Data in Mn Eur	2010	2011	2012	2013	2014	2015
Ports	17.460	18.693	19.430	18.404	19.798	20.695

Source: KPMG calculations based on Eurostat and the Mergermarket database, 2010-2015 [downloaded in March 2017].

Roads

The road network is owned by the General government in Spain; out of the whole network, 26,329 km are directly managed by the Central Administration. In addition, there are 71,324 km managed by the *Autonomous Communities* and 68,349 by the Provincial Councils. The state grants the remaining of the network to Private operating Companies such as *Abertis* (which manages 56% of the total network).

⁵ For the list of Maritime Ports included in this Study, please see Table B in the Appendix.

⁶ For the list of the so-called "comparable" transactions included in our "peer group", please see the list of Table 8 in the Annex.

Figure 3 Length (in km) of Motorways, Main or national roads and Secondary or regional roads, Spain, 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 Spanish road network is equal to 667,056 Km (including the length of Motorways, Main or national roads, Secondary or regional roads and Other roads) in 2015.
- (4) Eurostat does not report the length of paved road network for years before 2014.
- (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 4 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 Spain, overall, in 2015, the estimated value of roads ranged between 404 Eur Bn to 422 Eur Bn.

Table 4 Estimated road value for Motorways, Main or national roads and Secondary or regional roads only (Fur Mn), Spain, 2010-2015

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Data in Eur Mn		2010	2011	2012	2013	2014	2015
Matamuaya	Min	72,533	76,402	79,561	81,698	82,240	82,380
Motorways	Max	63,315	67,075	70,686	73,548	75,363	76,197
Main or national	Min	52,331	53,378	54,091	54,280	53,509	52,518
roads	Max	63,810	65,020	65,827	66,004	65,019	63,768
Secondary or	Min	263,185	269,701	274,397	276,307	273,261	269,063
regional roads	Max	276,134	282,833	287,635	289,531	286,244	281,753
T-4-1	Min	388,049	399,482	408,048	412,284	409,010	403,961
Total	Max	403,259	414,927	424,148	429,083	426,625	421,718

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

Airports

The majority of Spanish airports are managed by *Aeropuertos Españoles y Navegación Aérea (AENA) SA*, a PSH in which the Spanish Government holds 51% of shares.

According to Art. 9 of the *Real Decreto-ley 13/2010 de 3 de diciembre*, the ownership of the majority of Spanish airports has been transferred to *AENA SA*.

As shown in Figure 4 below, the overall airport traffic in Spain has been increasing over the 2010-2015 time period⁷.

Figure 4 Airports passengers, freight and mail air transport, Spain, 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 gooa&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 refers 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).

Since the property of the majority of Spanish airports belongs to AENA S.A., then their value is assessed using the equity method (please see the Methodological notes for Pillar 2 for more details), and results are reported in Pillar 1 of this Study⁸.

Railways

In Spain, railways infrastructures are owned by *Administrador de Infraestructuras Ferroviarias (ADIF)*, in compliance to the *Real Decreto-ley 4/2013, de 22 de febrero.*

In 2013, the Real Decreto-ley 15/2013, de 13 de diciembre, created Administrador de Infraestructuras Ferroviarias Alta Velocidad (ADIF AV), a PSH that has the responsibility for the construction and administration of part of the high-speed rail infrastructure, as well as other infrastructures and functions transferred to it, high-speed station business or, again, telecommunications and energy activities.

As shown in Figure 5, the extension of the railway network in Spain was equal to about $15,700 \ \text{km}$ in 2015.

 $^{^{\}rm 7}$ For the list of Airports included in this Study, please see Table A in Appendix.

⁸ 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.

ΚM % electrified 20,000 100% 80% 15,000 60% 10,000 40% 5,000 20% 0 0% 2010 2011 2012 2013 2014 2015

Figure 5 Extension of railway lines (in Km), Spain, 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: 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.

Since the Spanish railway network is owned by a PSH (i.e. *ADIF SA*), then its value is assessed using the equity method (please see the Methodological notes for Pillar 2 for more details), and results are reported in Pillar 1 of this Study.

4. NATURAL RESOURCES

Mineral and Energy reserves

Mineral reserves belong to the spanish public sector under the arrangement "Regalía Principal". In fact, according to the Mining Law of 21st July 1973, and the Hydrocarbon Law of 7th October 1998, the spanish public sector directly controls the mining industry; the "Dirección General de Política Energética y Minas" further supports this legislative framework.

Table 5 reports the capacity of the Spanish proven reserves for Oil and Natural gas in 2015.

Table 5 Proven reserves of mineral and energy reserves, Spain, 2015

Data	Oil (Barrels)	Natural gas (cubic meters)
Proven reserves	150,000,000	2,548,000,000

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

As shown in Table 6, the estimated value for Oil reserves in Spain in 2015 was equal, on average, to 7.3 Eur bn. With regard to Natural Gas, the estimated value was instead equal to an average of about 0.2 Eur bn.

Table 6 Estimated value of oil and natural gas proven reserves (Eur Mn), Spain, 2015

Data in Mn Eur	Min	Max	Average
Oil	4,885	9,168	7,251
Natural gas	138	271	207
Total	5,023	9,439	7,458

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

- (1) Proven reserves are valuated using average prices for 2015.
- (2) Range is calculated using the minimum and the maximum prices for 2015.

Other natural resources

Eurostat and National Statistics do not provide figures for the cluster of "Other natural resources" in Spain.

The value of other natural resources has been estimated through a market approach, as outlined in Methodological Notes. As Table 7 shows, the estimated value of other natural resources is equal to 336 Eur Bn in 2015.

Table 7 Estimated values of General government's Other natural resources (Eur Mn), Spain, 2010-2015

Data in Eur Mn		2010 (E)	2011 (E)	2012 (E)	2013 (E)	2014 (E)	2015 (E)
Land (nat)	General government	348,310	357,725	341,263	323,132	322,801	335,973
Land (net)	Share of the total economy	13.0%	13.0%	13.2%	13.1%	12.7%	12.4%

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

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

Appendix I Spain

Table A List of airports, Spain, 2015 (Number of airports: 33)

List of airports
Financial (Pillar 1) ^(a)
A CORUNA airport
ADOLFO SUAREZ MADRID-BARAJAS airport
ALICANTE airport
ALMERIA airport
ASTURIAS airport
BARCELONA/EL PRAT airport
BILBAO airport
FUERTEVENTURA airport
GIRONA airport
GRAN CANARIA airport
GRANADA/FEDERICO GARCIA LORCA GRANADA-JAEN airport
IBIZA airport
JEREZ airport
LA PALMA airport
LANZAROTE airport
MALAGA/COSTA DEL SOL airport
MELILLA airport
MENORCA airport
MURCIA/SAN JAVIER airport
PALMA DE MALLORCA airport
PAMPLONA airport
REUS airport
SAN SEBASTIAN airport
SANTIAGO airport
SEVE BALLESTEROS-SANTANDER airport
SEVILLA airport
TENERIFE NORTE airport
TENERIFE SUR/REINA SOFIA airport
VALENCIA airport
VALLADOLID airport
VIGO airport
VITORIA airport
ZARAGOZA airport
Source: Furostat database 2015 [downloaded in May 2017]

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) Not valuated here since they are not in the scope of Pillar 2.

Table B List of ports, Spain, 2015 (Number of ports: 37)

Table B List of ports, Spain, 2	015 (Number of	ports:
List of ports		
Non-financial (Pillar 2) ^(a)		
Agaete		
Alcanar		
Algeciras		
Alicante		
Almería		
Avilés		
Barcelona		
Bermeo		
Bilbao		
Cádiz		
Cartagena		
Castellón		
Ceuta		
Corralejo		
Ferrol		
Garrucha		
Gijón		
Huelva		
La Coruña		
Las Palmas		
Málaga		
Marín-Pontevedra		
Melilla		
Morro Jable		
Motril		
Palma Mallorca		
Pasajes		
Playa Blanca		
San Carlos de la Rápita		
Santa Cruz de Tenerife		
Santander		
Sevilla		
Tarragona		
Valencia		
Vigo		
Vilanova i la Geltrú		
Villagarcía (de Arosa)		

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

(1) The list above includes those ports defined by Eurostat as "reporting ports", for which statistics of inward and outward maritime transport flows are compiled.

⁽a) Within the scope of this Pillar.

Table C Overview of the valuation approaches and the sources used to valuate Non-Financial assets in this Study, Spain

Clusters of Non-financial assets	Valuation approach	Sources
Dwellings	Market value	- EU Building Stock Observatory - Eurostat
Buildings other than dwellings	Market value	- ENTRANZE - Eurostat
Ports	Market value	- Eurostat- Mergermarket
Roads	Perpetual Inventory Method (PIM)	DG MOVEEurostatEIBOther sources
Airports	Equity method (Pillar 1)	- Bureau van Dijk (BvD) Orbis
Railways	Equity method (Pillar 1)	- Bureau van Dijk (BvD) Orbis
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, 4 and 5 in Annex.

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