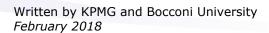


Study on State asset management in the EU

Final study report for Pillar 2 - Sweden

Contract: ECFIN/187/2016/740792





EUROPEAN COMMISSION Directorate-General for Economic and Financial Affairs Directorate Fiscal policy and policy mix and Directorate Investment, growth and structural reforms European Commission B-1049 Brussels

Sweden

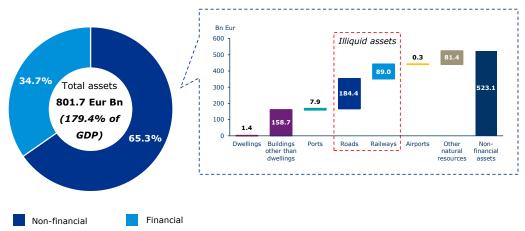
This Country fiche presents a quantitative overview of the mix of non-financial assets owned by the Swedish General government.

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 Swedish 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 Swedish General government was equal to 523.1 Eur Bn, accounting for about 65% 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), Sweden, 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 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.
- (4) In Sweden, airports are valuated both in Pillar 1 and 2 as some of them are owned by PSHs (see par. 1.2 for more details).
- (5) In Sweden, Mineral and Energy reserves are not included among the Non-financial assets identified in this Study as they are not present in the country.
- (6) Since roads and railways are illiquid assets we applied a Perpetual Inventory Method (PIM). However, this valuation method tends to slightly overestimate the estimated values of the assets. Therefore the chart shows the lower bound figure of the range of road and railways valuation estimates only.

2. DWELLINGS

Eurostat provides a comprehensive coverage of data on the value of dwellings; therefore, data on Swedish dwellings are retrieved from Eurostat only.

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.

As shown in Table 1 below, the value of the Swedish General government's dwellings in 2015 was equal to about 1.4 Eur Bn, accounting for 0.3% of the value of all the dwellings within the country.

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

Data in Eur Mn	2010	2011	2012	2013	2014	2015
General government	1,102	1,154	1,235	1,299	1,189	1,392
Share of the total economy	0.3%	0.3%	0.3%	0.3%	0.2%	0.3%

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].

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 Swedish General government, hence data on this cluster of assets is retrieved from Eurostat only.

As shown in Table 2, the value of these assets is about 159 Eur Bn in the last year worth of data (2015) – or 35.9% of all Swedish Buildings other than dwellings.

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

Data in Eur Mn	2010	2011	2012	2013	2014	2015
General government	131,678	146,596	156,970	162,031	158,605	158,683
Share of the total economy	36.3%	36.3%	36.2%	36.0%	35.9%	35.9%

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].

Ports

In Sweden, port infrastructures are owned by the municipalities where ports are located. These municipalities may lease the infrastructures to other companies for managing them.

Figure 2 shows the overall maritime port traffic (for both passengers and goods) in Sweden over the 2010-2015 time period³.

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

⁽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).

³ For the list of Maritime Ports included in this Study, please see Table B in the Appendix.

Port passengers and gross weight of goods Mn Tonnes Passengers 150 30 20 100 Gross weight of goods 10 50 handled (tonnes) 2011 2010 2012 2013 2014 2015 WLU (Bn)(a) (2 2 2 2 2 2

Figure 2 Port passengers and gross weight of goods, Sweden, 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 transactions⁴, the value of maritime ports in the country was estimated (as shown in Table 3) over the period 2010-2015. In 2015, the estimated value was equal to about 8 Eur Bn.

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

Data in Mn Eur	2010	2011	2012	2013	2014	2015
Ports	8,407	8,292	8,099	7,573	7,848	7,949

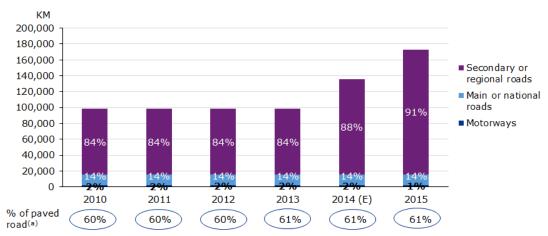
Source: KPMG calculations based on Eurostat and the Mergermarket database, 2010-2015 [downloaded in March 2017].

Roads

The state owns most of the roads, which are managed by *Trafikverket* (i.e the *Swedish Transport Administration*), which is a government agency controlled by the *Riksdag* (i.e. the *Parliament*) and the Government of Sweden. It is responsible for long-term infrastructure planning for transport: road, rail, shipping and aviation. It owns, constructs, operates and maintains all state-owned roads and railways and operates a large number of ferry services.

⁴ 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, Sweden, 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) The significant increase in the road network length beetwen 2013 and 2015 is mainly due to the inclusion in the Secondary or regional roads cluster of roads previously included in the cluster Other road (not included in the present analysis and graph).
- (2)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.
- (3) 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.
- (4) According to DG MOVE's data, the extension of the Swedish road network is equal to 215,091 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 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 Sweden, overall, in 2015 the estimated value of roads ranged between 184 Eur Bn to 202 Eur Bn. Secondary or regional roads take the lion's share with a estimated value between 126 Eur Bn and 132 Eur Bn.

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

Data in Eur Mn 2010 2011 2012 2013 2014 2015 11,912 12,793 13,759 14,557 15,986 Min 15,238 Motorways 13,437 14,313 15,269 16,049 16,709 17,443 Max Min 44,148 44,171 44,024 43,650 43,125 42,803 Main or national roads 54,316 54,313 54,095 53,601 52,934 52,521 Min 126,778 127,305 127,409 126,803 125,867 125,597 Secondary or regional roads 133.713 Max 134,223 134.278 133.591 132.557 132,225 182.838 184,269 185,192 185,010 184,230 184,385 Min Total 202,849 203,641 203,241 202,200 202,189

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

Airports

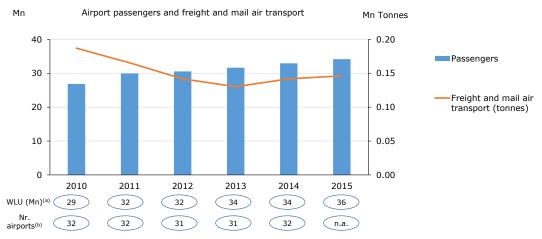
As reported in its annual report, 10 of the main Swedish airports are owned and managed by the PSH *Swedavia AB*, which is a PSH fully owned by the *Regeringshansliet*.

More in detail, Swedavia's network includes *Are Oestersund Airport, Goeteborg Landvetter Airport, Kiruna Airport, Lulea Airport, Malmoe Airport, Ronneby Airport, Stockholm-Arlanda Airport, Stockholm-Bromma Airport, Umea Airport, and Visby Airport^5.*

Remaining airports are are owned and managed by the relevant municipal governments where these airports are located.

Figure 4 below shows the airport traffic over the 2010–2015 time period⁶.

Figure 4 Airports passengers, freight and mail air transport, Sweden, 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 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).

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 5, in 2015, the overall estimated value of Public Airports was equal to about 0.3 Eur Bn, with a decrease of about 24.8% since 2010 Please note that, as already mentioned earlier on, assets owned by *Swedavia* do not qualify as public Non-financial assets; therefore, their value is not included in this estimation.

Table 5 Estimated value for airports (Eur Mn), Sweden, 2010-2015

Data in Mn Eur	2010	2011	2012	2013	2014	2015
Airports	401	422	407	400	353	301

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 those represented in Figure 4 as they were calculated by adding the WLUs of all airports considered within the scope of this Pillar (see Table A in Appendix).

⁽²⁾ The WLUs used to estimate the estimated value for Sweden airports do not include those related to the airports owned by Swedavia.

⁵ It is important to point out that Swedavia owns, among its assets, the three largest airports in Sweden.

⁶ For the list of Airports included in this Study, please see Table A in Appendix.

Railways

The state owns most of the tracks, which are managed by the Swedish Transport Administration (*Trafikverket*)⁷. It is a government agency, controlled by the *Riksdag* and the Government of Sweden, and it is responsible for long-term infrastructure planning for transport: road, rail, shipping and aviation.

Trafikverter owns, constructs, operates and maintains all state-owned roads and railways and operates a large number of ferry services.

As shown in Figure 5, the extension of the railway network in Sweden was equal to about 11,000 km in 2015.

% electrified 12,000 100% 80% 9,000 60% 6,000 40% 3,000 20% 0 0% 2010 2011 2012 2013 2014 2015

Figure 5 Extension of railway lines (in Km), Sweden, 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].

Table 6 reports the results of the valuation exercise carried out according to the valuation procedure described in the Methodological Notes for Pillar 2.

In Sweden, in 2015 the estimated value of the railway network ranged between 89 Eur Bn to 94 Eur Bn.

Table 6 Estimated value for railways (Eur Mn), Sweden, 2010-2015

				,,	,		
Data in Mn E	ur	2010	2011	2012	2013	2014	2015
Dailman	Min	88,478	89,277	89,609	89,276	88,814	89,008
Railways	Max	94,216	94,976	95,244	94,821	94,256	94,377

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

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

⁷ 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.

4. NATURAL RESOURCES

Mineral and Energy reserves

As reported by the CIA's World Factbook Database Sweden does not have any proven Oil or Natural Gas reserves⁸.

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.

Sweden reports the value of lands (as classified by ESA2010) in its National Accounts, as shown in Table 7.

Table 7 Other natural resources, Land (Eur Mn), Sweden, 2010-2015.

Data in Eur Mn		2010	2011	2012	2013	2014	2015
Land (net)	General government	68,222	71,110	71,822	84,786	81,345	81,430
	Share of the total economy	13.6%	13.2%	13.2%	13.5%	13.3%	11.5%

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

(1) The share of the economy refers to the value of lands (rather than the surface area of lands).

⁸ The estimated value of Mineral and Energy reserves for Sweden is zero because it reflectes the estimates reported by the CIA's World Factbook Database regarding proven Oil and Natural Gas reserves.

Appendix I Sweden

Table A List of airports, Sweden, 2015 (Number of airports: 19)

List of airports
Non-financial (Pillar 2) ^(a)
ANGELHOLM airport
GOTEBORG/SAVE airport
KALMAR airport
OREBRO airport
SKELLEFTEA airport
STOCKHOLM/SKAVSTA airport
STOCKHOLM/VASTERAS airport
SUNDSVALL-TIMRA airport
VAXJO/KRONOBERG airport
Financial (Pillar 1) ^(b)
Financial (Pillar 1) ^(b) ARE OSTERSUND airport
ARE OSTERSUND airport
ARE OSTERSUND airport GOTEBORG/LANDVETTER airport
ARE OSTERSUND airport GOTEBORG/LANDVETTER airport KIRUNA airport
ARE OSTERSUND airport GOTEBORG/LANDVETTER airport KIRUNA airport LULEA/KALLAX airport
ARE OSTERSUND airport GOTEBORG/LANDVETTER airport KIRUNA airport LULEA/KALLAX airport MALMO airport
ARE OSTERSUND airport GOTEBORG/LANDVETTER airport KIRUNA airport LULEA/KALLAX airport MALMO airport RONNEBY airport
ARE OSTERSUND airport GOTEBORG/LANDVETTER airport KIRUNA airport LULEA/KALLAX airport MALMO airport RONNEBY airport STOCKHOLM/ARLANDA 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.

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

Table B List of ports, Sweden, 2015 (Number of ports: 54)

List of parts. Sweden, 2015 (Number of ports: 54)						
List of ports						
Non-financial (Pillar 2) ^(a)	M 1 "					
Åhus	Malmö					
Åmål	Norrköping 					
Bergs Oljehamn	Örnsköldsvik					
Elleholm	Oskarshamn					
Falkenberg	Otterbäcken					
Gävle	Oxelösund (ports)					
Göteborg	Piteå					
Grisslehamn	Skattkärr					
Halmstad	Skellefteå					
Hargshamn	Söderhamn					
Helsingborg	Södertälje					
Husum	Sölvesborg					
Iggesund	Söråker					
Jätterssön	Stenungsund (Ports)					
Kalmar	Stockholm					
Kappelshamn	Strömstad					
Kappelskär	Sundsvall					
Karlshamn	Trelleborg					
Karlskrona	Trollhättan (Ports)					
Karlstad	Uddevalla					
Klintehamn	Umeå					
Köping	Vänersborg					
Kristinehamn	Varberg					
Landskrona	Västerås					
Lidköping	Västervik					
Luleå	Visby					
Lysekil	Ystad					
Course Function detailed 2015 Edeumlanded in	March 20171					

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, Sweden

I maneral assets in this study, sweden							
Clusters of Non-financial assets	Valuation approach	Sources					
Dwellings	Market value	- Eurostat					
Buildings other than dwellings	Market value	- Eurostat					
Ports	Market value	- Eurostat - Mergermarket					
Roads	Perpetual Inventory Method (PIM)	- DG MOVE - Eurostat - EIB - Other sources					
Airports	 Market value Equity method^(a) 	 Eurostat Bureau van Dijk (BvD) Orbis^(a) 					
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, 4 and 5 in Annex.

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

⁽a) In Sweden, airports are valuated both in Pillar 1 and 2 as some of them are owned by PSHs (see para 1.2 for more details).