

# Local government debt

# 2017



KOMMUNINVEST

---

## CONTENTS

---

Is increased debt dangerous?	3	In-depth section 2:	
Local government sector economy	4	Green funding of local government investment	16
Local government sector investments	5	In-depth section 3:	
Top ten municipalities - investments	8	Local government sector debt management	18
Local government debt	9	Appendix 1:	
Top ten municipalities - debt		SALAR's categorisation of municipalities	20
Local government sector funding	13	Appendix 2:	
In-depth section 1:		Investments by county	21
Market values in public housing	14	Appendix 3:	
		Debt by county	22

## About Kommuninvest's report series

In its report series Local Government Debt, Kommuninvest reviews development in the local government sector's investments and debt. The report is unique, since both investment and debt are studied from a group perspective. This means that operations conducted in company format are included in the data on which the report is based. The group perspective is important in obtaining an accurate overall picture of a municipality or county council/region's economic and financial position, as:

- An increasing share of local government authorities' operations are being conducted in company form. For example, an increasing number of local government authorities have transferred their service and operations premises to subsidiaries in recent years.

- Local government sector companies account for slightly more than half of the sector's investments but the bulk of the external debt.

The supporting data in this report are based on details gathered directly from the municipalities' and county councils/region' own annual reports. In connection with the publication of Local Government Debt 2017, Kommuninvest is also launching an application on its website, <http://kommuninvest.se/om-oss/forskning/rappporter/kommunala-laneskulden-2017/>, allowing anyone who so wishes to access the data underlying the report. Details of investment levels and borrowing for all municipalities and county councils/regions are available for the years 2010-2016.



### Questions on the contents of this report may be addressed to:

Mattias Bokenblom  
Head of Research, Kommuninvest  
Tel.: +46 (0)10-470 88 03  
E-mail: [mattias.bokenblom@kommuninvest.se](mailto:mattias.bokenblom@kommuninvest.se)

# Is increased debt dangerous?

From a financial perspective, 2016 was an exceptionally good year for the Swedish local government sector, which, despite record-high levels of investment, was able to show the lowest increase in borrowing since 2008.

Increased tax revenues, central government grants and housing sales contributed to strong cash flow. In turn, this has meant that many local government players were able to use surplus liquidity to amortise existing loans and/or to fund new investments with their own resources rather than by borrowing.

However, there are signs that borrowing needs for 2017 will increase again, since the currently already record-high levels of investment look like continuing to rise at a faster pace than tax revenues and other income. This trend can already be discerned if we consider the borrowing that took place during the first six months of the year through the local government authorities' own borrowing programmes and via Kommuninvest. We can then see that borrowing increased faster than in the corresponding period in 2016. Kommuninvest therefore estimates that sector debt will pass the SEK 600 billion level by the end of 2017. This in turn raises the question of whether local government debt is growing too large. To answer that question, investments and liabilities must be considered in relation to both the economic and financial circumstances of the borrowers and to the size and purpose of the assets.

By their nature, tax-funded investments in municipal and regional infrastructure, and in facilities for children, the sick and the elderly,

tend to drive up costs, although, historically, they have been self-financing by almost 100 percent. However, in a situation where welfare capacity is expanding rapidly, the need for external funding for investments of this kind has also increased. Nonetheless, debt related to tax-funded investment remains very low in Sweden and municipalities and county councils/regions' interest expenses currently represent only a few per mille of their total revenue. Half of all investments, and most of the sector's borrowing, relate instead to revenue-funded operations, such as housing, property leasing, energy generation and transport services. That said, all commercial operations are subject to business risks and not all local government companies' investments are profitable. Increased indebtedness also increases interest rate sensitivity, not least for housing and property companies, where interest payments tend to be a significant part of the total expenses. The risk of costly erroneous investments and increased expenses on the day that interest rates rise again, should not be neglected - nor should they be overestimated. For example, most of the revenue-funded investments and debts are concentrated among players in the country's growth regions, which have both good earnings capacity and large asset values.

Kommuninvest is of the opinion that the current level of debt is not in itself a problem for the local government sector as a whole, although it is crucial that the sector continues to report results at levels capable of bearing a growing balance sheet.



Tomas Werngren  
President, Kommuninvest



Mattias Bokenblom  
Research Manager, Kommuninvest

# Local government sector economy

Growth in the Swedish economy was strong in 2016. Gross domestic product increased by 3.3 percent and the number of people in employment increased by approximately 70,000 individuals. Sweden's municipalities and county councils/regions achieved record earnings, corresponding to SEK 40.9 billion at the group level. There are several explanations behind this favourable development:

- The strong labour market resulted in good growth in the tax base, leading to tax revenue for the municipalities and county councils/regions increasing by SEK 35.5 billion between 2015 and 2016.
- Central government grants increased by SEK 9 billion, mainly to compensate municipalities for the costs associated with asylum immigration in the autumn of 2015.
- Major capital gains from sales, primarily of housing. By 2016, 11,000 apartments were sold, compared with almost 5,000 apartments sold in 2014 and 2015 respectively.

In the next few years, the local government sector's finances will experience greater pressure, particularly in core operations involving healthcare, education and care. There are several reasons for this. First of all, the Swedish economy is approaching its capacity ceiling and the shortage of suitably qualified labour is increasing. This means that the number of hours worked is expected to increase more slowly in the next few years, pushing down the rate of increase for the municipalities and county councils/regions' tax revenues. Secondly, cost pressure for the municipalities and county councils will remain high. The number of younger and older people in the population is continuing to rise and, in order to meet citizens' needs for additional welfare services, substantial new investment in fixed assets is therefore needed, as well as extensive recruitment of personnel, driving up operating expenses.

In a situation where annual revenue increases are expected to diminish, while high increases in expenses continue, the Swedish Association of Local Authorities and county councils (SALAR) calculates that the discrepancy between revenues and expenses will amount to approximately SEK 40 billion by 2020. That corresponds to an increase in local government taxation by approximately SEK 2.

# Local government sector investments

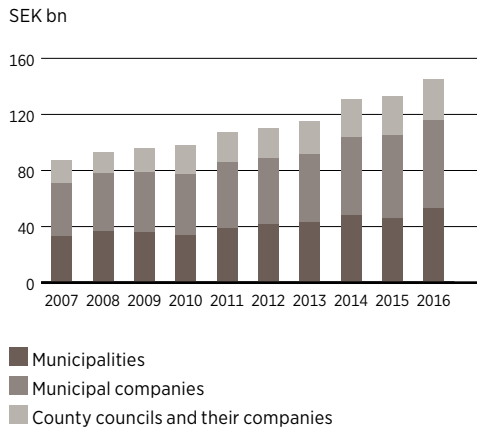
## Sweden

The municipalities and county councils/regions bear a comprehensive welfare assignment, with responsibilities including preschools, schools, social services, health care and public transport (see Figure 1). In addition, the municipalities and county councils/regions own approximately 2,000 companies engaged in housing, property and energy supply, transport, culture, education and tourism.

The combination of extensive renovation needs for residential and commercial properties built in the record years 1965-75 and strong population growth, requiring additional operational premises and expanded infrastructure, is driving up investment volumes in the local government sector. In 2016, combined gross investment in tangible assets amounted to SEK 145.7 billion<sup>1</sup>. This is an increase of SEK 11.9 billion compared with the preceding year and, since 2010, investment volume has increased by SEK 46.9 billion.

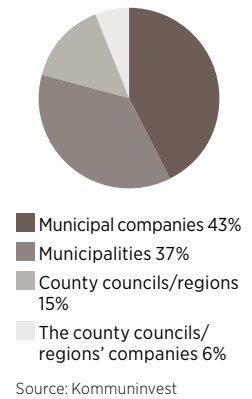
Of the sector's total investments, the municipal groups accounted for SEK 116.2 billion and the county council/regional groups for SEK 29.4 billion, an increase of 10 and 4 per-

Figure 2: Investment volume, 2007-2016<sup>2</sup>



Source: Kommuninvest

Figure 3: Distribution of the local government sector's investments between different players



Source: Kommuninvest

cent, respectively. In turn, SEK 53.2 billion of the investments by the municipal groups were made by the municipalities, and investments of SEK 63.0 billion were made by municipal companies. The corresponding figures for the county council/regional groups were SEK 21.3

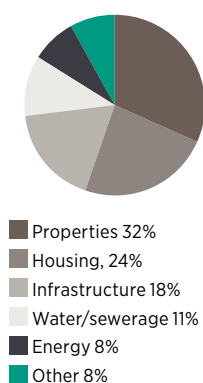
Figure 1: The tasks of the municipalities' and county councils

Municipalities			County councils	
Compulsory	Voluntary	Shared	Compulsory	Voluntary
Social operations	Leisure and culture	Public transport	Health and care	Culture
Schooling	Technical services		Dental care <sup>4</sup>	Education
Planning and building issues	Energy supply			Tourism
Environmental health protection	Business development			
Sanitation and waste	Housing construction			
Water/sewerage				
Emergency services				
Library operations <sup>3</sup>				
Crisis contingency planning				
Housing provision				

Source: "The creditworthiness of the Swedish local government sector," published by Kommuninvest and SALAR

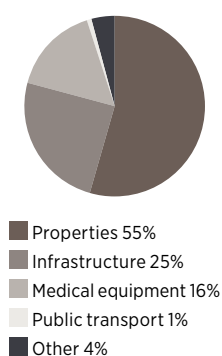
1) The actual value is higher since a number of major municipal groups choose to disclose only net investments, that is, adjusted for divestments during the year and any investment grants.  
 2) Due to changes in amortisation rules, the results for 2014-2016 are not entirely comparable with those for previous years.  
 3) A public library in each municipality.  
 4) Dental care for children and adolescents up to 20 years of age.

Figure 4: Distribution of investment in municipal groups, 2016



Source: Kommuninvest

Figure 6: Distribution of investment in county council groups, 2016



Source: Kommuninvest

billion under the auspices of the county councils and SEK 8.1 billion through companies owned by the county councils. For the sector as a whole, investments in core operations and in the companies have been distributed evenly in recent years.

### Distribution of investments

#### Municipalities

Of the local government groups' investments in 2016, 56 percent were attributable to housing and properties. Housing investment includes both renovation and long-term maintenance of existing stocks, as well as new construction, while property investments comprise service and operations premises, such as homes for the elderly, preschools and schools, and sports and bathing facilities. Some municipalities are also involved in commercial properties, such as parking garages and industrial facilities.

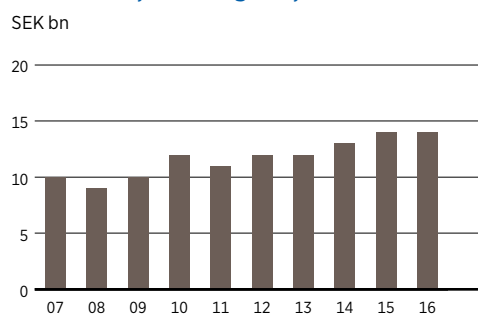
Infrastructure investments in streets, roads, parks, water treatment plants and water and sewage pipelines, ports and airports accounted for 29 percent of total investments, while investments in district heating and electricity in the energy companies owned by local government authorities accounted for 8 percent. Other items include investments in fixtures and the local government authorities' vehicle fleets.

Over time, fluctuations in the distribution between different investment areas have been small. In 2016, investment volumes in housing and commercial properties were on a par with 2015, while housing and operations properties' share of the total investment volume fell from 61 to 56 percent. Investments in water and sewage increased and amounted to more than 11 percent in 2016.

#### County councils and regions

Investment development in the country's county councils and regions is driven to a large extent by what happens at Stockholm County Council (SCC). Compared with 2015, SCC's investment volume increased by SEK 0.8 billion in 2016 to SEK 15.1 billion, accounting for more than half, 51 percent, of the county

Figure 5: County councils and regions' investments, excluding SCC, 2007-2016



Source: Kommuninvest

councils and regions' total investment volume. Like SCC, several other county councils and regions, have begun to upgrade existing hospital buildings or constructing brand new units, leading to increasing investment volumes since 2014, see Figure 5.

In 2016, property investments accounted for more than half, 55 percent, of the county councils' total investments. SCC's infrastructure projects, including new stretches of metro lines, accounted for 25 percent. New medical equipment accounted for 16 percent of the investment volume, while the remaining 5 percent was shared among investments in new trains, buses, equipment and IT systems.

For county councils and regions there is a clear trend for property investments to account for an increasing proportion of the total investment volume.

### Investments by municipal category and county

#### Municipal category

Kommuninvest uses SALAR's categorisation of municipalities in its comparisons of the country's municipalities (more information about the categorisation can be found in Appendix 1). The categorisation is primarily based on urban characteristics and allows us to compare municipalities of a similar nature, rather than according to the county in which they are located or other geographical division. It is important to note that each local govern-

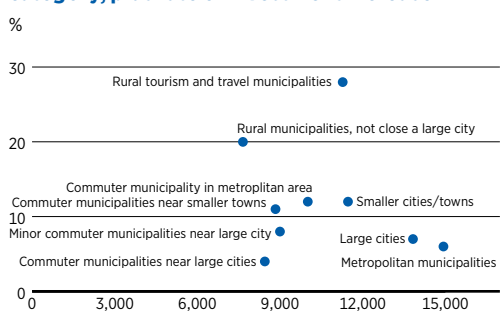
ment authority has its own unique set of geographic, demographic, political and economic conditions, and it can therefore be difficult to draw overly far-reaching and general conclusions about trends among individual local government authorities based on the trend at the level of the municipal category. The spread between municipalities within a single municipal category is often greater than between municipal categories.

The municipal sector’s investment volume grew by 9 percent in 2016. However, there are major differences between the municipal categories. Municipalities with large populations, relatively large corporate groups and high population growth generally have higher investment levels than other municipalities in the country, while municipalities with low population growth or in sparsely populated parts of the country are often characterised by low investment levels. *Figure 7* also shows that the municipal categories “Metropolitan municipalities” and “Large cities” had a higher average level of investment per inhabitant than other municipal categories, at SEK 14,900 and SEK 13,800 per inhabitant respectively, although the rate of increase was below the national average between 2015 and 2016. The municipal category “Rural municipalities, not close a large city” had the lowest investment level at SEK 7,700 per inhabitant. Nonetheless, that municipal category had the second-highest increase in investment level, 20 percent higher than in the preceding year. Only the municipal category “Rural tourism and travel industry municipalities” had a higher increase, at 28 percent. In the two municipal categories with rural municipalities, the increased investment levels were attributable to increased investment volumes in many municipalities in both categories.

#### County

At the county level, the County of Stockholm had the highest investment level by far in 2016, at SEK 19,000 per inhabitant (A summary of investments by county can be found in Appendix 2). It is primarily the City of Stockholm and scc’s high levels of invest-

**Figure 7: Investment per inhabitant and municipal category, plus rate of investment increase**



Source: Kommuninvest

ment that put the county in the top position. Excluding the county councils and regions’ investments, the municipalities in the County of Uppsala and the County of Västerbotten are at the top. In the County of Uppsala, the figures were pushed up by high development investment, and in the County of Västerbotten, both the municipalities of Umeå and Skellefteå invested more than SEK 1.5 billion in 2016. The lowest investment levels were in the counties of Blekinge and Värmland, with an average investment level of less than SEK 10,000 per inhabitant.

The greatest increase between 2015 and 2016 was to be found in the counties of Uppsala, Halland, Dalarna and Jämtland. In the counties of Halland and Dalarna, significantly increased investment volumes in several municipalities explained the increase in the county as a whole, while the trend in the counties of Uppsala and Jämtland were due to increased investment in their county towns. On the other hand, the counties of Örebro, Södermanland and Kronoberg showed declining investment volumes. In the counties of Södermanland and Kronoberg, several municipalities had lower investment volumes in 2016 compared with 2015, while the decline in the County of Örebro was attributable to the municipality of Örebro having reduced its investment volume compared with the high level of 2015.

# Top ten municipalities – investments

Municipalities with the largest investment volumes and highest investment levels in 2016

To a large extent, the country's largest municipalities in terms of population are to be found in Table 1. With a few exceptions, investment volumes, in absolute terms, follow the population size of the municipalities. Of the municipalities in the table, Linköping had the highest investment level per inhabitant at SEK 17,500 per inhabitant, while Malmö had the lowest investment level, per inhabitant at SEK 12,500. Even though Gothenburg and Malmö increased their investment volumes in 2016, Stockholm's per capita investment level still leads the country's three metropolitan municipalities.

The list of municipalities with the highest levels of investment per inhabitant differs considerably from year to year. This is

usually due to the fact that a number of small and medium-sized municipalities appear on the list each year having implemented individual major investments. Åsele's and Köping's acquisitions of energy companies, as well as Älmhult's water supply projects were examples of this in 2016.

Skellefteå is the only major municipality to have reappeared on the top list since 2014. In 2016, Skellefteå made major investments in Skellefteå Kraft and in the municipality's operations premises and water supply.

Kiruna's and Gällivare's high investment levels derive largely from the urban transformation that both municipalities are undergoing with parts of their urban centres having to be moved to accommodate the mining industry.

Table 1: Investment volume in 2016, in total and per inhabitant

Municipality	Investment volume in SEK million, 2016	Investment level per inhabitant, 2016	Investment volume in SEK million, 2015	Investment level per inhabitant, 2015
Stockholm	15,475	16,540	15,456	16,737
Gothenburg	7,594	13,643	6,031	11,001
Malmö	4,116	12,530	3,895	12,075
Uppsala	3,676	17,133	2,043	9,722
Linköping	2,730	17,521	2,621	17,134
Helsingborg	2,322	16,521	2,347	17,018
Örebro	2,076	14,158	2,688	18,641
Västerås	1,937	13,139	2,037	14,027
Borås	1,821	16,573	1,388	12,333
Lund	1,775	14,974	1,562	13,369

Source: Kommuninvest

Table 2: Investment level per inhabitant, 2016

Municipality	Investment volume per inh	Comments
Åsele	28,661	Acquisition of Åsele Kraft AB and Åsele Elnät AB
Kumla	22,273	Construction and remodelling of operations premises, properties and housing
Skellefteå	21,518	Wind power, operations premises and water supply
Kiruna	19,601	Urban transformation
Mullsjö	19,499	Operations properties and housing
Gällivare	19,406	Urban transformation
Öckerö	19,377	Construction and remodelling of operations premises, properties and housing
Nykvarn	18,973	New school
Köping	18,817	Acquisition of Arboga Energi
Älmhult	18,752	Water supply and renovation of town centre

Source: Kommuninvest



# Local government sector debt

## Sweden

At the end of 2016, the sector's total debt amounted to SEK 576.1 billion, an increase of SEK 20.8 billion compared with the previous year. In 2015, debt increased by SEK 42.3 billion. In 2016, average debt per inhabitant amounted to SEK 57,600 – SEK 1,200 more than in 2015. The relative increase in local government debt in 2016, 3.7 percent, was the lowest since 2008. Debt as a share of GDP declined by 0.1 percentage point to 13.2 percent, which is the first time in over a decade that the debt's share of GDP declined.

Table 3: Local government sector borrowing

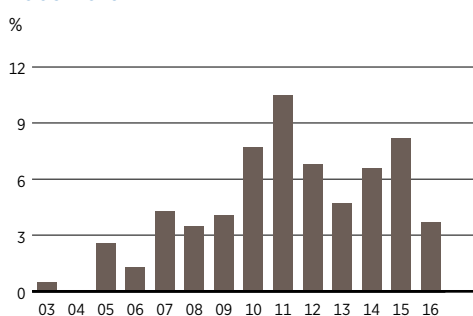
	2016	2015	2014
Borrowing, SEK bn	576.1	555.3	513
Municipal groups	520.9	503.8	468.8
County council groups	54.6	51.5	44.1
Borrowing per inhabitant in SEK	57,639	56,370	52,629
Proportion of GDP	13.2%	13.3%	13.0%

Source: Kommuninvest

Of 290 municipalities, there were 109 that reduced their borrowing by a total of SEK 10.0 billion, four municipalities had unchanged debt and 177 municipalities increased their borrowing by a total of SEK 27.7 billion. The corresponding figures for county councils/regions are four county councils/regions with SEK 0.7 billion in reduced borrowing and seven with increased debt totalling SEK 3.8 billion.

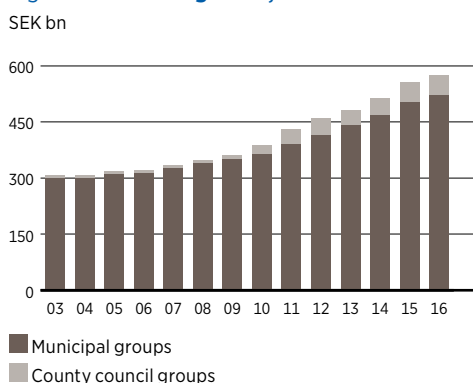
In the 2000s, the local government sector's borrowing rose slower than nominal GDP or at about the same rate, leading to debt as a share of GDP falling during certain years in the middle of that decade. In the current decade, the rate of increase has risen. Since 2010, borrowing in absolute terms has increased by SEK 186.6 billion, corresponding to an annual rate of increase of 6.8 percent. Despite borrowing among the county councils/regions more than

Figure 8: Rate of increase in borrowing, 2003-2016



Source: Kommuninvest

Figure 9: Borrowing trend, 2003-2016



Source: Kommuninvest

doubling from SEK 26.2 billion to SEK 54.6 billion, the municipalities accounted for 85 percent of the increase in borrowing. It is primarily the country's metropolitan municipalities and university towns that have driven debt development among the municipalities. By themselves, the municipalities in the municipal categories "Metropolitan municipalities" and "Large cities" (a total of 24 municipalities) and SLL accounted for 63 percent of the local government sector's debt increase between 2010 and 2016.

**Borrowing debt by municipal category and county**

**Municipal category**

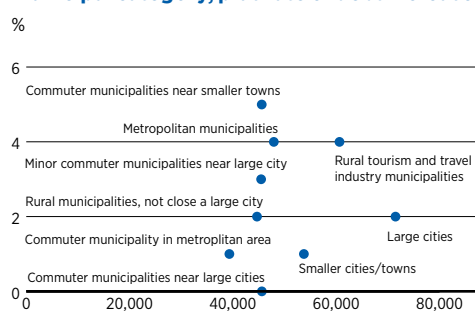
Figure 10 shows a relatively large spread of average debt per inhabitant between municipal categories. The municipal category “Large cities” has significantly higher average debt than other municipal categories, at SEK 71,500 per inhabitant. That is SEK 32,200 higher per inhabitant than the average for the category “Commuter municipalities near large cities” whose debt is SEK 39,300. The reason why “Large cities” have higher average debt than other municipal categories is that the combination of relatively large municipal companies and high population growth leads to higher investment levels and thus greater need for external funding. “Commuter municipalities near large cities” is a group in which most municipalities are experiencing strong population growth, although both the number and size of the subsidiaries in each municipality varies considerably. Municipalities without housing companies are often virtually debt-free, bringing down the debt level for the category as a whole.

The largest increase in borrowing per inhabitant between 2015 and 2016 was in the municipal category “Commuter municipalities near smaller towns”, while the borrowing per resident increased least in the municipal category “Commuter municipalities near large cities”.

**County**

At the county level, the County of Örebro had the highest average debt per inhabitant, at SEK 82,000. (A compilation of borrowing

Figure 10: Debt per inhabitant and municipal category, plus rate of debt increase



Source: Kommuninvest

by county can be found in Appendix 3). In recent years, high investment volumes, primarily in the Municipality of Örebro and neighbouring municipalities have contributed to growing borrowing in the county. The County of Halland had the lowest debt, at SEK 42,600 per inhabitant, despite borrowing having increased in several of the county’s growth municipalities in recent years. Excluding county councils/regions, the County of Stockholm had the lowest borrowing, at SEK 39,200 per inhabitant. Several of the municipalities surrounding Stockholm have few and small municipal companies, which generally entails lower borrowing.

The County of Uppsala had the highest per capita borrowing between 2015 and 2016, at 8 percent.

High investment levels increased borrowing needs for, among others, the Municipality of Uppsala and Region Uppsala.

# Top ten municipalities – debt

## Municipalities with the highest debt

Tables 4 and 5 rank the municipal groups with the highest nominal debt and the highest borrowing per inhabitant. It should be noted that the comparisons give an incomplete picture of the financial conditions in the individual municipalities because the debt levels are not set in relation to the individual municipality's earnings or assets. A high level of debt usually indicates significant asset values in, for example, property, housing and/or energy generation. In practice, this means that the municipality with the highest debt per inhabitant in a county may also be the municipality with the greatest net assets per inhabitant.

Although the overall debt level is interesting in itself, generally the change in debt level is a more interesting indicator of the economic trend in a municipality. Municipalities that are rapidly increasing their debt over a number of years are in a period of increased investment levels, while a longer period of constant or decreasing borrowing indicates a period of lower investment levels and financial consolidation.

Distinguishing for the 2016 report was that Södertälje continued its consolidation phase.

With an amortisation of approximately SEK 1.5 billion, the municipality leaves the list of municipalities with the highest debt in absolute terms. So does Västerås, which was passed by both Norrköping and Helsingborg.

Linköping, with one of the country's largest municipal groups and asset portfolios, had the country's highest borrowing per inhabitant, at SEK 106,100. With its record amortisation in 2016, Södertälje's loan debt decreased from SEK 109,000 per inhabitant to SEK 91,000. In Vimmerby, whose debt grew rapidly in 2013 and 2014 as a result of major investments in a thermal power plant, borrowing decreased by SEK 12,000 per inhabitant.

Lessebo and Skellefteå reduced their borrowing by SEK 10,000 and SEK 8,000 respectively per inhabitant in 2016, thereby leaving the list of municipalities with the highest debt per inhabitant. Instead, Rättvik and Örebro were added. Örebro, Kumla and Trollhättan are examples of municipalities that are in an investment phase and where the need for external funding has increased the debt level.

Table 4: Municipalities with the highest debt in 2016

	Debt in SEK bn, 2016	Percentage change, 2016	Debt in SEK bn 2015 (investment)	Debt in SEK bn 2014 (investment)
1 Gothenburg	38.7	1%	38.5 (1)	38.1 (1)
2 Stockholm	36.6	9%	33.6 (2)	23.4 (2)
3 Linköping	16.5	4%	15.9 (3)	15.5 (3)
4 Uppsala	14.1	11%	12.6 (5)	11.9 (4)
5 Örebro	13.3	5%	12.7 (4)	11.1 (5)
6 Malmö	12	10%	10.9 (6)	9.4 (8)
7 Umeå	10.1	1%	10.0 (8)	9.7 (7)
8 Jönköping	9.5	2%	9.4 (9)	8.8 (9)
9 Norrköping	9.4	12%	8.4 (11)	7.4 (14)
10 Helsingborg	8.8	24%	7.1 (14)	5.4 (20)

Source: Kommuninvest

Table 5: Municipalities with highest debt per inhabitant in 2016

	Debt per inhabitant in SEK, thousands, 2016	Percentage change, 2016	Debt per inhabitant in SEK, thousands, 2015 (investment)	Debt per inhabitant in SEK, thousands, 2014 (investment)
1 Linköping	106.1	2%	104.0 (3)	101.9 (2)
2 Kumla	100.2	7%	93.4 (4)	87.6 (10)
3 Trollhättan	97.8	8%	90.8 (7)	86.5 (11)
4 Vimmerby	93.9	-11%	106.0 (2)	100.5 (3)
5 Strömstad	93.3	1%	92.2 (5)	87.8 (9)
6 Berg	91.8	4%	88.3 (10)	93.0 (6)
7 Örebro	90.8	3%	88.3 (11)	77.8 (18)
8 Södertälje	90.5	-17%	108.9 (1)	112.8 (1)
9 Rättvik	85.6	7%	81.3 (17)	73.3 (22)
10 Växjö	84.1	-8%	91.4 (6)	88.5 (8)

Source: Kommuninvest

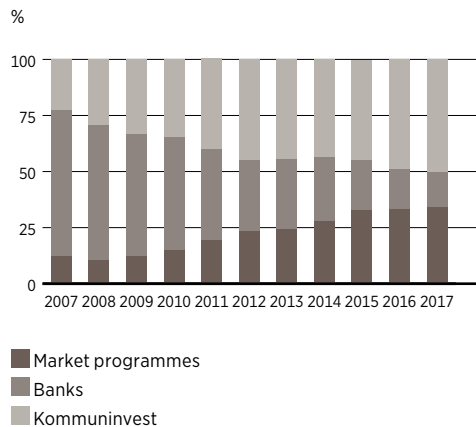
# Local government sector funding

As recently as in 2007, the banks accounted for two thirds of lending to Sweden’s municipalities and county councils. Kommuninvest was the largest individual lender with a market share of more than 20 percent, and half a dozen larger municipalities and an equal number of municipal housing companies were active in the capital market.

Ten years and one financial crisis later, the landscape of local government funding has changed fundamentally. From a situation in which several Swedish and foreign banks and credit market companies competed with each other for lending to virtually all local government players, the market is now more segmented and the number of lenders has decreased. At present, Kommuninvest finances half of the local government sector’s borrowing, but there are major differences depending on the size of the municipalities. For small and medium-sized municipal groups, with consolidated debt of up to SEK 4 billion, Kommuninvest has an almost monopoly-like position. In that segment, the company’s market share is around 80 percent and growing.

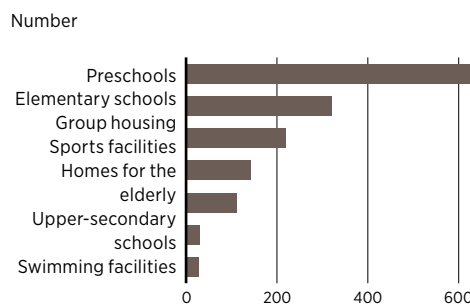
Larger municipal groups can choose between funding from the money and capital markets, funding from Kommuninvest or a combination of the two. Borrowing through bonds and commercial papers continues to grow and is approaching SEK 200 billion, as the borrowing needs of the larger municipal groups in particular grow. The banks’ lending to the sector continues to decline and is around SEK 100 billion, even when loans from the European and Nordic Investment Bank are included. The introduction of negative interest rates in 2015 has eroded the commercial banks’ competitiveness and contributed to the rapid decline in their lending to the local government sector over the past two years.

Figure 11: Market share, 2007-2017



Source: Kommuninvest

Figure 12: Planned local government investment until 2020



Source: SALAR

## Borrowing needs in the future

In its financial report from May 2017, SALAR presents a summary of the municipalities’ plans to invest in service and operations properties up until 2020.

The investment plans (see Figure 12) can be compared with the fact that the municipalities currently operate approximately 7,000 preschools, 4,000 primary schools, 1,300 secondary schools and 350 swimming facilities.

A strong expansion of tax-funded operations premises, combined with increased investment in water and sewage and a high level of new production of rental flats in public housing companies suggest that demand for external funding will remain strong in the coming years.

If the municipalities and county councils/regions’ finances were to deteriorate in the way that SALAR’s projections of future revenues and expenses indicate, it is likely that some planned investments will be deprioritised or delayed in the future. Under such a scenario, borrowing needs may either decrease or increase. The borrowing trend depends on how low a level of self-financing local government sector players can accept on their investments in a situation in which profit levels decline.

# Market values in public housing

Local government sector assets have a book value of more than SEK 1,200 billion divided between a large number of asset classes, such as:

- Water and sewer mains covering a distance equivalent to four trips around the equator.
- 40,000 km of roads and streets with almost 3,000 roundabouts.
- 300,000 hectares of forest.
- More than 100 municipal energy companies, which together produced over 30,000 GWh of district heating.
- More than 15,000 operations premises for pre-school and school operations, health and medical care, administration, and leisure and sports activities.
- Ports, airports, bus terminals, tramways and metro lines.

It is not possible to divest certain assets for legal and political reasons and consequently they do not have a market value. For other assets, there is a well functioning market.

Through their approximately 300 public housing companies, Sweden's municipalities own more than 800,000 rental apartments. Effective from 2014, all property companies following the K3 accounting standard are to report the market values of their property portfolios. There are a number of different methods for estimating the market value of a rental property. The two most common methods are the market price method and the present value method.

The market price method derives the market value from sales data from other rental properties sold in the vicinity. The quality of the assessment depends on relevant comparison material being available, making it pos-

sible to take into account the differences in the properties' characteristics, such as location, year of construction and standard.

The present value method derives the market value of the property from the sum of the property's expected future returns. The quality of the assessment depends on the reliability of the data on rental revenues and operating and maintenance costs.

Kommuninvest has reviewed the annual accounts of the public housing companies in the 50 largest municipalities in order to compare the book value and estimated market value of their property portfolios.

*Table 6* shows the book value and market value for 30 and 48 public housing companies for the years 2013 and 2016 respectively. In 2013, the total book value was SEK 152 billion, while the estimated market value was SEK 348 billion. Three years later, book value and estimated market value for the same companies had risen to SEK 179 billion and SEK 450 billion respectively. Between 2013 and 2016, the ratio between market value and book value increased from 2.28 to 2.51.

When the 18 housing companies whose market values were not reported publicly in 2013, are included in the compilation, the book value increases to SEK 225 billion, while the estimated market value increases to SEK 544 billion. In 2016, the total surplus value of the 48 companies surveyed amounted to SEK 319 billion. The Framtiden company in Gothenburg had the highest market value, at SEK 80.2 billion, while Stockholm is the municipality whose company has the highest combined market value, at SEK 124.9 billion.

Table 6: Public housing companies' book value and market value in SEK bn

Municipality	Companies	Book value 2013	Market value 2013	Book value 2016	Market value 2016
Gothenburg	Framtiden	25.5	65.9	25.9	80.2
Stockholm	Svenska Bostäder	15.9	38.3	20.2	49.4
Stockholm	AB Stockholmshem	14.2	33.2	17.5	43.1
Stockholm	Familjebostäder	10.6	26.6	12.5	32.4
Malmö	MKB	7.7	21.6	11.4	30.3
Örebro	Örebro Bostäder	6.8	16.2	7.6	22.1
Linköping	Stångåstaden	5.2	13.7	6.3	19
Uppsala	Uppsalahem	7.3	12.8	9.9	19.2
Helsingborg	Helsingborgshem	4.1	10.5	5.7	14.4
Sundbyberg	Fastighets AB Förvaltaren	3.9	10.2	5.5	14.2
Umeå	Bostaden i Umeå	4.9	9.8	5.3	12.2
Västerås	Mimer	4.9	7.9	6	10.2
Sollentuna	Sollentunahem	3.5	7.9	3.5	9.7
Norrköping	Hyresbostäder i Norrköping	4.1	7.4	4.8	9.3
Halmstad	Halmstad Fastighets AB	2.8	6.7	3.5	11
Botkyrka	Botkyrkabyggen	2.5	6.5	2.6	7.6
Gävle	Gavlegårdarna	4.1	6	4.2	7.2
Linköping	Lejonfastigheter	3.2	5.7	4.1	7.4
Solna	Signalisten	1.3	5.6	1.6	7.9
Järfälla	Järfällahus	1.7	5.5	1.9	5.9
Karlstad	Karlstads Bostads AB	2.3	4.3	2.5	4.8
Eskilstuna	Kommunfastigheter	2.5	3.9	2.9	6.2
Mölnadal	Mölnaldsbostäder	1.9	3.6	1.9	4.6
Skellefteå	Polaris	2.7	3.4	2.7	3.4
Tyresö	Tyresö Bostäder	1.8	3.1	1.7	3.5
Varberg	Varbergs Bostads AB	1.2	3	1.3	4.8
Östersund	Östersundshem	1.4	2.8	1.5	2.6
Karlskrona	Karlskronahem	1.7	2.6	1.8	2.9
Kalmar	Kalmarhem	1.8	2.2	1.7	2.7
Trelleborg	Trelleborgshem	0.9	1.3	1	1.7
Jönköping	Vätterhem			2.9	7.8
Lund	LKF			4.7	10.4
Huddinge	Huge			9.4	17.4
Sundsvall	Mitthem			1.9	4.2
Karlstad	KBAB			2.5	4.8
Växjö	Växjöbostäder			2.6	6.7
Kristianstad	ABK			3.2	6.5
Haninge	Haninge bostäder			1.1	2.6
Kungsbacka	Eksta			3.2	4.7
Gotland	Gotlandshem			1.5	4.8
Norrköping	Roslagsbostäder			1.1	2
Falun	Kopparstaden			2	3.9
Trollhättan	Eidar			2.5	3.8
Örnsköldsvik	Övikshem			1	1.9
Uddevalla	Uddevallahem			1.5	3.2
Skövde	Skövdebostäder			1.9	4.2
Hässleholm	Hässlehem			0.7	1.1
Borlänge	Tunabyggen AB			2.1	3.8

Source: Kommuninvest

# Green funding of local government investment

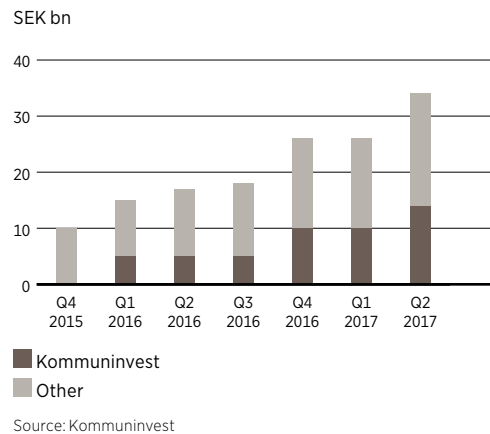
## Demand for green funding is growing in the local government sector

In recent years, demand for green funding has grown sharply and the Swedish local government sector is no exception. In October 2013, Gothenburg became the first municipality in the world to issue a green bond and interest among investors was considerable. In the following year, Stockholm County Council was the first county council to issue a green bond to finance major investments in green development projects. In March 2016, Kommuninvest issued the largest green bond to date from a Nordic player, equivalent to SEK 5 billion. Borrowing was made possible by 25 green projects in 18 municipalities, from Skellefteå in the north to Trelleborg in the south.

Figure 13 shows that the volume of green bonds from municipal players outstanding has grown sharply over the past year and amounted to just over SEK 34 billion at the end of the second quarter of 2017. A total of 32 green bonds from 12 municipal players have been identified in the compilation, see Table 7.

Green bonds allow investors to support funding of projects aimed at reducing climate change and promoting sustainable social development. The market for green funding also forms a platform where environmental experts and financial players can meet to discuss challenges and strategies for the local government sector's climate adaptation. Local government players invest more than SEK 140 billion annually, with the largest investment areas being property, housing, infrastructure and energy. Both the scale and focus of the investments indicate the opportunities for the local government sector to be a forerunner in green adaptation and funding.

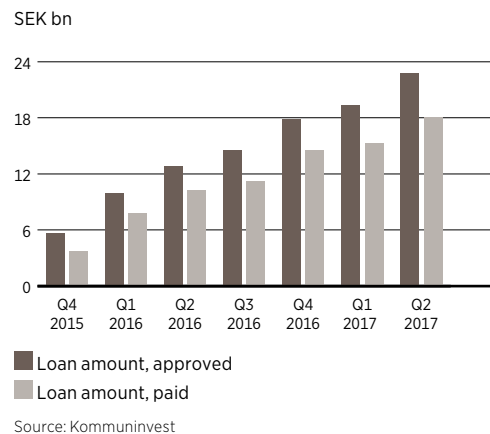
Figure 13: Outstanding volume of green bonds from the local government sector



## Kommuninvest's green loans

At the end of the second quarter of 2017, Kommuninvest had approved 125 green investment projects with a total volume of SEK 22.8 billion. Of this, SEK 18.1 billion had been disbursed. Figure 14 shows the development of approved and disbursed green loans from Kommuninvest since the last quarter of 2015.

Figure 14: Approved and paid volume of green loans from Kommuninvest<sup>1)</sup>



<sup>1)</sup> Note that Kommuninvest's green lending consistently exceeds the company's borrowing. This means that Kommuninvest can guarantee that borrowing is allocated to assessed and approved green projects.



Table 7: Green issuers in the local government sector

Issuer	Number of issues	Outstanding volume on 30 June 2017 in SEK million	Purpose
Fortum värme <sup>1</sup> , City of Stockholm	1	1,250	Renewable cogeneration
Förvaltaren, Sundbyberg	2	600	Environmentally certified new production of housing and energy efficiency improvement
City of Gothenburg	7	5,560	Biogas production, water treatment, nitrogen filtration, energy efficiency improvement and sustainable construction
Kommuninvest	3	14,349	125 green investment projects
Municipality of Lund	1	750	Tramway, photovoltaic facility and environmentally certified new production of housing
Municipality of Norrköping	1	600	Sustainable transport, energy efficiency improvement and environmentally certified new production of housing
Region Skåne	2	1,200	Wind power and local trains
Stockholm County Council	6	6,400	Sustainable public transport, sustainable buildings, waste management and water management
Stångåstaden, Municipality of Linköping	3	1,075	Environmentally certified new production of housing and energy efficiency improvement
Uppsalahem, Municipality of Uppsala	1	500	Environmentally certified new production of housing and energy efficiency improvement
City of Västerås	2	750	Sustainable transport, energy efficiency improvement and environmentally certified new production of housing
Municipality of Örebro	3	1,250	Wind power production, energy efficiency improvement and nitrogen filtration

Source: Kommuninvest

1) Since 1 December 2015, Fortum Värme (AB Fortum Värme Holding) has been a joint venture between Stockholm Stadshus AB and Fortum Power & Heat AB. Accordingly, 50 percent of the total issue volume of SEK 2.5 billion is included in the compilation.

# Local government sector debt management

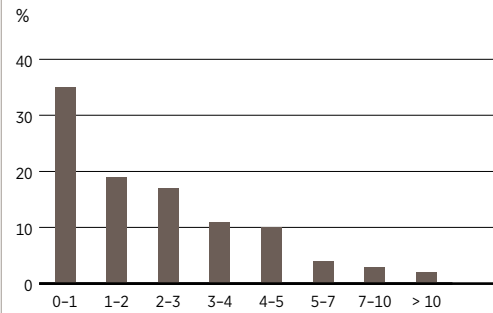
The Local government sector’s borrowing of almost SEK 600 billion is distributed among approximately 1,000 different players, 300 municipalities and county councils/regions and 700 companies. In Sweden, debt management in this sector is characterised by:

- Substantial variation between different players with respect to maturities and rate commitment, resulting in a lack of common practice for what is considered sound debt management.
- Borrowing with short maturities and a large annual refinancing requirement.
- Variable-rate borrowing is preferred above fixed-interest loans, while derivatives are used to extend the period over which interest is fixed.

As per 30 June 2017, the average capital commitment was 2.5 years. As shown in *Figure 15*, 35 percent of the loan portfolio matures within a year. In turn, about a fifth of that volume consists of shorter-term loan products, such as commercial papers and perpetual loans that are renewed three to four times annually. A further 19 percent of the loan portfolio matures within two years and 9 percent has a remaining maturity of more than five years. For the sector as a whole, the short period for which capital is tied up means that the gross refinancing requirement alone amounts to approximately SEK 250 billion per year. In addition, new borrowing needs amount to SEK 30 billion to SEK 50 billion.

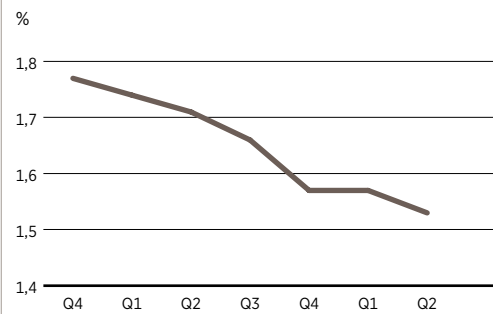
Of local government sector borrowing, on 30 June 2017, 57 percent was linked to a floa-

Figure 15: Local government sector debt maturity structure



Source: Kommuninvest

Figure 16: Local government average interest rates



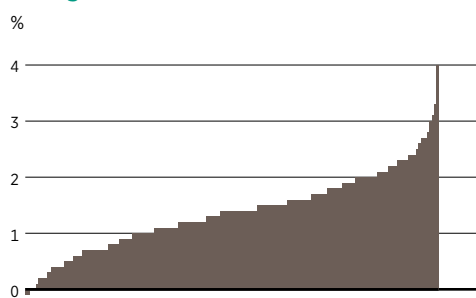
Source: Kommuninvest

ting interest rate base, generally 3M Stibor. At the same time, the average rate commitment on the funding itself was 1.2 years. By using derivatives, the average period of fixed interest is extended to 2.9 years.

On 30 June 2017, the average interest on local government sector borrowing was 0.57 percent. Including derivatives, the average interest rate increases by almost one percentage point to 1.53 percent. Due to the relatively short capital- and rate commitment, the local government sector has benefited from the fall in interest rates in recent years. About 40 percent of borrowing is currently raised at negative or zero interest. As previous borrowing at higher interest rates is replaced with loans at lower interest rates, the average interest rate for local government borrowing continues to be pushed down. Since mid-year 2016, the average interest rate has fallen from 1.71 percent to 1.53 percent a year later. The lower interest level corresponds to about SEK 1 billion annually in lower interest expenses.

As shown in *Figure 17*, the spread of average interest levels at the local government group level is relatively large. Of the groups, 28 percent had an average interest rate below 1 percent as per 30 June 2017, 54 percent were between 1 and 2 percent, and 17 percent are paying an interest rate of more than 2 percent. Compared with a year earlier, the proportion of municipalities with an average rate below 1 percent increased by 8 percentage points, while the share with an average rate above 2 percent decreased by an equal number of percentage points.

Figure 17: Distribution of municipal groups' average interest rates



# SALAR's classification of municipalities

Here is a description of SALAR's division of municipal categories for 2017, applicable effective from 1 January 2017. This has been reworked from the previous division of municipal categories from 2011.

Principal category	Municipal category	Brief definition	Number
<b>A. Metropolitan municipalities and municipalities near metropolitan municipalities</b>	A1. Metropolitan municipalities	At least 200,000 inhabitants in the municipality's largest urban area	3
	A2. Commuter municipality near metropolitan municipality	At least 40 percent outbound commuting to a metropolitan municipality or a municipality near a metropolitan municipality	43
<b>B. Large cities and municipalities near large cities</b>	B3. Large city	At least 40,000 but less than 200,000 inhabitants in the municipality's largest urban area	21
	B4. Commuter municipality near large city	At least 40 percent outbound commuting to a large city	52
	B5. Minor commuter municipality near large city	Less than 40 percent outbound commuting to a large city	35
<b>C. Smaller cities/towns and rural municipalities</b>	C6. Smaller city/town	At least 15,000 but less than 40,000 inhabitants in the municipality's largest urban area	29
	C7. Commuter municipality near smaller city/town	At least 30 percent outbound commuting to, or inbound commuting from, a smaller city/town.	52
	C8. Rural municipality	Less than 15,000 inhabitants in the municipality's largest urban area, less pronounced commuting pattern	40
	C9. Rural municipality with tourism and travel industry	Rural municipality meeting at least two tourism and travel industry criteria, that is, number of hotel nights, turnover in the retail/hotel/restaurant areas in relation to the population.	15

# Investment by county

Table 7: Investment by county in 2016 and change compared with 2015

	Investment in SEK million	Investment in SEK million (excluding county council/ region)	Investment per inhabitant	Investment per inhabitant (excluding county council/ region)	Change since 2015	Change since 2015 (excluding county council/region)
Stockholm	43,118	28,053	19,003	12,363	2%	1%
Uppsala	6,401	4,935	17,713	13,657	28%	48%
Sörmland	3,333	2,756	11,568	9,565	-6%	-9%
Östergötland	6,978	5,543	15,434	12,260	0%	6%
Jönköping	4,367	3,747	12,382	10,623	14%	10%
Kronoberg	2,006	1,740	10,307	8,940	-10%	-12%
Kalmar	2,811	2,491	11,601	10,283	4%	1%
Blekinge	1,548	1,275	9,771	8,044	6%	5%
Skåne	17,436	14,812	13,164	11,183	7%	6%
Halland	4,147	3,733	12,944	11,654	33%	35%
Västra Götaland	23,649	20,552	14,146	12,294	16%	19%
Värmland	2,737	2,322	9,798	8,312	-2%	4%
Örebro	4,211	3,585	14,276	12,154	-9%	-13%
Västmanland	3,565	3,170	13,322	11,843	9%	11%
Dalarna	3,197	2,901	11,237	10,197	27%	36%
Gävle	3,546	3,222	12,460	11,322	16%	16%
Västernorrland	2,547	2,273	10,370	9,254	6%	1%
Jämtland	1,665	1,544	12,937	12,003	38%	44%
Västerbotten	4,248	3,708	15,977	13,946	3%	1%
Norrbottnen	3,330	3,042	13,290	12,141	6%	5%
Sweden	145,667	116,231	14,574	11,629	7%	9%

Source: Kommuninvest

# Debt by county

Table 8: Debt by county 2016

	Debt in SEK million	Debt in SEK million (excluding county council/ region)	Debt per inhabitant	Debt per inhabi- tant (excluding county council/ region)	Change since 2015	Change since 2015 (excluding county council/ region)
Stockholm	133,460	88,865	58,817	39,164	1%	0%
Uppsala	22,191	21,594	61,407	59,755	8%	7%
Sörmland	17,471	17,471	60,643	60,643	4%	5%
Östergötland	32,570	32,117	72,041	71,039	4%	5%
Jönköping	19,404	19,404	55,011	55,011	2%	2%
Kronoberg	13,050	12,986	67,050	66,721	-3%	-4%
Kalmar	14,371	14,371	59,312	59,312	-2%	-2%
Blekinge	10,377	10,377	65,491	65,491	2%	2%
Skåne	68,085	62,517	51,402	47,198	6%	6%
Halland	13,654	13,654	42,624	42,624	2%	4%
Västra Götaland	91,853	91,853	54,943	54,943	3%	3%
Värmland	14,484	12,848	51,850	45,994	-4%	-2%
Örebro	24,190	23,445	82,015	79,489	3%	3%
Västmanland	14,361	13,865	53,659	51,807	3%	4%
Dalarna	16,912	16,512	59,440	58,034	-2%	-2%
Gävle	13,669	13,669	48,032	48,032	-1%	-1%
Västernorrland	15,895	15,890	64,724	64,704	5%	5%
Jämtland	7,948	7,890	61,770	61,316	-2%	-2%
Västerbotten	18,409	18,409	69,240	69,240	-3%	-3%
Norrbottn	11,909	11,909	47,526	47,526	0%	0%
Sweden <sup>1</sup>	576,113	521,496	57,639	52,175	2%	2%

Source: Kommuninvest

<sup>1</sup>) The sharp increase in population in Sweden in 2016 means that the rate at which borrowing per capita has grown is about one and a half percentage points lower than the growth rate for borrowing.



**ABOUT KOMMUNINVEST** Kommuninvest finances welfare. We are a local government finance partnership, working for efficient and sustainable financing of housing, infrastructure, schools and hospitals, etc.

We secure better loan terms together than individually. Since its inception in 1986, the partnership has saved billions of kronor for its members in the form of lower interest rates.

The Swedish local government sector is strong, including through its constitutionally protected right to levy taxes. This fact, along with the joint and several guarantee issued by its members, helps ensure that Kommuninvest secures the highest credit ratings from both Moody's and Standard & Poor's.

Eleven counties/regions and 277 municipalities are now members of this voluntary partnership. The operations are owned and democratically governed by the members, who also share any financial surpluses. The office is located in Örebro. With some SEK 370 billion in total assets, we are Sweden's sixth largest credit institution.



**KOMMUNINVEST**

The Swedish Local Government Debt Office

Postal address: P.O. Box 124, SE-701 42 Örebro, Sweden. Visitors: Fenixhuset, Drottninggatan 2, Örebro.  
Telephone: +46 (0)10-470 87 00. Telefax: +46 (0)19-12 11 98. E-mail: name.surname@kommuninvest.se  
[www.kommuninvest.org](http://www.kommuninvest.org)