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Mini-presentation on Turnover / Output

**Turnover and Output for  
Veterinary Activities  
in Sweden**

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## 1. Definition of service being collected<sup>1 2</sup>

The statistical classification of NACE 750 *Veterinary activities* in the European Union (NACE Rev. 2) belongs to division 75 within section M *Professional, scientific and technical activities*.

In NACE Rev. 2 veterinary activities has no further breakdown (75.00).

In the Swedish National Classification (SNI2007) there is a possibility to divide the class further into sub-classes. However, in NACE 75.00 no further sub-classes have been made.

For more information on classification, see chapter 4.

## 2. Unit of measure being collected

The unit of measure being collected is turnover in local currency, Swedish krona (SEK). This measure of turnover is excluding VAT and other taxes and subsidies.

## 3. Market conditions and constraints

In 2013, there were 1 269 enterprises with 3 561 employees<sup>3</sup> performing veterinary activities in Sweden. Together these enterprises had a turnover of 3.9 SEK billion (≈0.45 € billion) and a value-added of 2.2 SEK billion (≈0.25 € billion).

**Table 1: Basic data on NACE 75, veterinary activities 2013 (enterprise level)**

Variable	Total
No. of enterprises	1 269
No. of employees	3 561
Net turnover, SEK million	3 909
Value added, SEK million	2 162
Total assets, SEK million	4 470
Net investments, SEK million	111

Veterinary activities is a very small group in the Swedish business sector (excluding financial services), contributing to only 0.06 percent of total turnover and 0.1 percent of value added. In section N, NACE 75 accounts for 1.0 percent of the turnover and 1.2 percent of the value added.

<sup>1</sup> NACE Rev. 2 Statistical classification of economic activities in the European Community

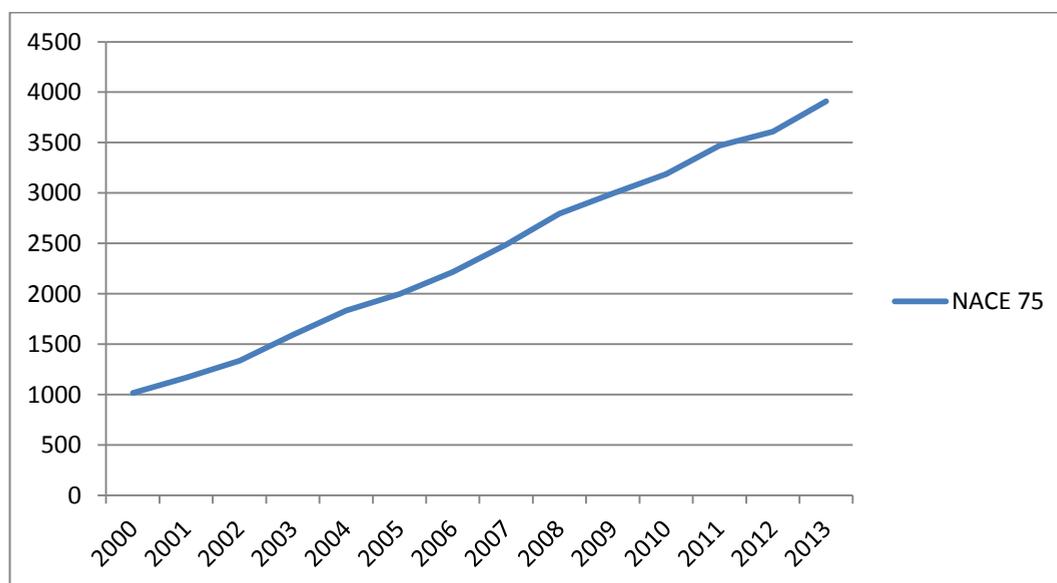
<sup>2</sup> SNI2007 Swedish Standard Industrial Classification 2007

<sup>3</sup> Number of employees in full/time equivalents

**Table 2: Basic data on veterinary activities 2013 (enterprise level)****Size class by no. of employees**

Variable	0-9	10-49	More than 50	Total
No. of enterprises	1 213	48	8	1 269
No. of employees	1 106	946	1 509	3 561
Net turnover, SEK million	1 544	909	1 456	3 909
Value added, SEK million	756	516	890	2 162
Total assets, SEK million	3 334	433	703	4 470
Net investments, SEK million	58	33	21	111

The micro enterprises with less than 10 employees contribute to 40 per cent of net turnover, 35 per cent of value added and employ 31 per cent of the work force within veterinary activities. As in most industries, a small number of large enterprises produce a large part of turnover and value added. 37 percent of net turnover and 41 per cent of value added is generated by the eight enterprises with more than 50 employees. Veterinary activities only has one enterprise with more than 249 employees so this category cannot be shown separately in table 2 above.

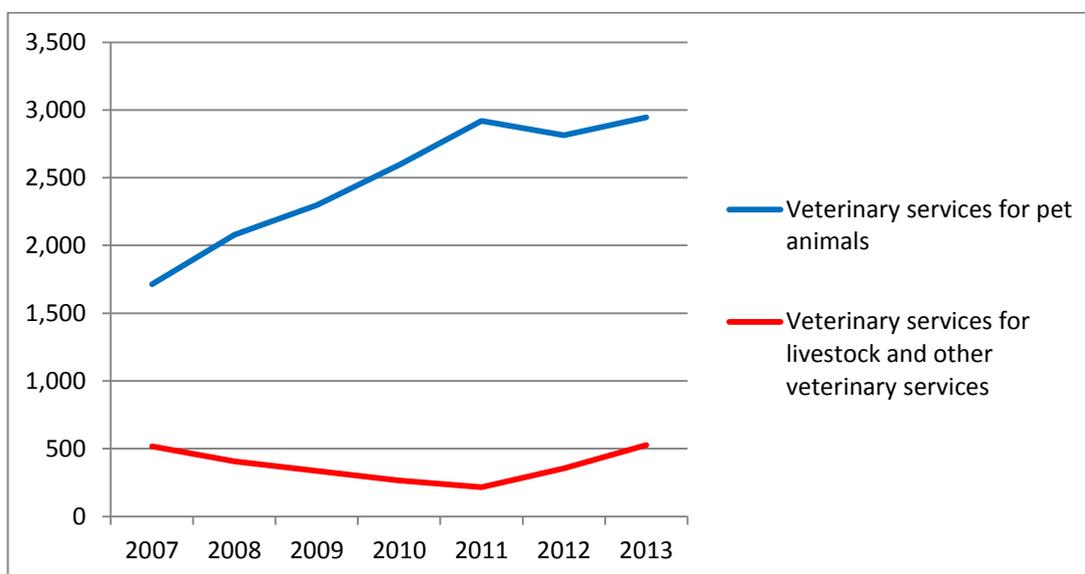
**Figure 1: Turnover in veterinary activities 2000-2013 (KAU), SEK million**

Source: SBS 2000-2013, Statistics Sweden. Values for the period 2000-2006 are back-cast.

Turnover in veterinary activities was almost four times higher in 2013 compared to the turnover in year 2000 (figure 1 above). Growth has primarily been driven by an increased insurance rate for pets, especially dogs and cats. Another explanation to the increase is a higher amount of advanced treatments and greater willingness to pay for more advanced care. Until a few years ago the division consisted of many small enterprises and a few large actors in form of regional animal hospitals. The last two years have been characterized by reorganization and mergers. In 2013 a number of large players and many small veterinarians joined together into a large enterprise group. So the number of enterprises actually went down between 2012 and 2013 while number of employees, turnover and value added increased.

### 3.1 Turnover by product

Figure 2: Turnover by product in veterinary activities 2007-2013 (KAU), SEK million



In figure 2 above we look at turnover by product in veterinary activities between 2007 and 2013. The increase in total turnover in veterinary activities during this period is mostly generated by enterprises offering veterinary services for pet animals. Turnover from this activity has increased by 72 per cent, while turnover from veterinary services for livestock and other veterinary services only increased by 2 per cent during the same period. Turnover from veterinary services for livestock went down between 2007 and 2011 before the curve turned upwards into a more positive development. During the last two years in the time series turnover from livestock and other services rose from 216 to 527 SEK million.

## 4. Standard classification structure and product details/levels

### 4.1 Industrial classification<sup>4 5 6</sup>

The national industrial classification, *Standard för svensk näringsgrensindelning 2007 (SNI2007)*, is based on NACE Rev. 2 but has an additional hierarchical level, the five-digit level. For veterinary activities SNI2007 is equal to the NACE Rev. 2 classification down to four-digit level and is not further divided into subclasses. NACE Rev. 2 and ISIC Rev. 4 are identical for veterinary activities. The complete break-down can be seen in table 3 below:

Table 3: Industrial classification for veterinary activities

NACE Division	NACE Group	NACE Class	SNI 5-digit level	Name	ISIC Rev. 4
75	75.0	75.00	75.000	Veterinary activities	7500

<sup>4</sup> NACE Rev. 2

<sup>5</sup> Swedish Standard Industrial Classification 2007 (SNI 2007)

<sup>6</sup> ISIC Rev. 4

In line with NACE Rev. 2, the national industrial classification replaced the previous version (SNI2002/NACE Rev. 1.1) starting with reference year 2008.

With backcasting, results for both short-term (STS) and structural business statistics (SBS) are available from 2000 in the new classification.

## 4.2 Product classification<sup>7 8 9</sup>

The national product classification, *Standard för svensk produktindelning efter näringsgren 2007 (SPIN2007)*, is in most parts equal to the CPA 2008 classification. The code structure is slightly different (seven-digit code in national classification versus six-digit code in CPA) but most products have a one-to-one relationship. Veterinary activities has the same three products in both SPIN2007 and CPA 2008. However, in the SBS survey the net turnover has only one code for the CPA 75.00.12-19 which means that veterinary services for livestock is collected together with other veterinary services. Regarding the demands from National Accounts (NA) there is at the moment no plans to divide the CPA into more detailed products.

The structure of the European CPA classification differs quite a lot from the structure of the international CPC classification. The products within *Veterinary activities* belongs in CPC to section 8, Business and production services. The products in CPC are different from SPIN and CPA since veterinary services for pet animals are classified together with other veterinary services in CPC. The break-down on products can be seen in Table 4 below.

**Table 4: Classification of products for veterinary activities**

SBS-variable	SPIN 2007	CPA 2008	CPC version 2	Name
v2515	75.000.01	75.00.11	83.590	Veterinary services for pet animals
v2519	75.000.02	75.00.12	83.520	Veterinary services for livestock
	75.000.03	75.00.19	83.590	Other veterinary services

<sup>7</sup> CPA 2008

<sup>8</sup> Swedish Standard Classification of Products 2007

<sup>9</sup> CPC Version 2

## 5. Evaluation of standard vs. definition and market conditions

**Table 5: Turnover by product and total turnover for veterinary activities 2013, SEK million**

Year	2007	2008	2009	2010	2011	2012	2013
<b>Variable</b>							
Veterinary services for pet animals	1 713	2 079	2 299	2 595	2 920	2 815	2 945
Veterinary services for livestock and other veterinary activities	517	406	337	267	216	355	527
Turnover from other activities	259	309	360	326	333	439	438
Total turnover	2 489	2 795	2 995	3 188	3 469	3 608	3 909
Percentage share of turnover from veterinary activities	90	89	88	90	90	88	89

Table 5 above shows that veterinary services for pet animals is the largest product within veterinary activities. The share of total turnover varies during the period from 69 per cent (in 2007) to 84 per cent (in 2011). In 2013 turnover from veterinary services for pet animals contributed to 75 per cent of total turnover in NACE 75.

The industry is very homogeneous, 89 percent of the turnover in NACE 75.0 is classified as veterinary related activities in 2013. There is no other NACE in the business sector reporting turnover from veterinary activities.

## 6. National Accounts Concepts and measurement issues related to GDP measurement<sup>10</sup>

Since the reference year 2008 National Accounts publish results according to the industrial classification SNI2007/NACE Rev. 2.

Since 1997, the main source for annual output calculations has been the SBS, although other sources are used when appropriate. SBS contains detailed information on both income and intermediate consumption. For quarterly GDP, the value is calculated either by extrapolating the value in the NA system using an indicator, using data directly from a source or by using a model. For veterinary activities the STS is used to extrapolate the value in the NA system.

SPPI in Sweden does not cover NACE 75.

<sup>10</sup> ESA95 GNI Inventory, Sweden, Reference Year 2005, Revision 5, October 2009

Apart from principal production the industry's secondary activities are recorded separately. Data on the output of veterinary activities within the business sector is obtained from the SBS. The industry's intermediate consumption is also provided by the SBS. Balancing and plausibility assessment are performed in the supply and use tables. Value added is obtained residually as the difference between output and intermediate consumption.

## **7. Turnover data methods and criteria for choosing different output methods**

Two EU-regulated surveys collect information on turnover in the business part of veterinary activities. Short-Term Statistics collect industry-level turnover monthly/quarterly and Structural Business Statistics collect turnover on industry-level as well as product-level annually.

### **7.1 Short-Term Statistics**

Turnover in the service sector is published quarterly in accordance with Council Regulation of Short Term Statistics, (EC) No. 1165/98 and amended by the regulation (EC) No. 1158/2005. Veterinary activities are covered by the regulation as a part of section M, Professional, scientific and technical activities. They are also covered by the survey for National Accounts (NA) purposes.

The statistical unit as well as the unit of collection is enterprise. Results are only presented as development indices and not as absolute values.

The short-term statistics is a sample survey, with a certain number of large enterprises surveyed monthly, while the remaining enterprises of the sample surveyed quarterly (but with turnover divided into months). The monthly data is used for the service production index. The total number of enterprises surveyed in the service sector is approximately 7 500. The un-weighted response rate is approximately 80 percent while the weighted response rate is approximately 90 percent.

Results are published 35 days after the end of the time period in question. The results are mainly used by the NA in their calculations of private consumption and Gross Domestic Product (GDP). In theory, NA would need the turnover divided into product groups, but due to the response burden only total turnover is collected. This turnover is then divided into product groups with various keys to meet the requirements of short-term NA calculations.

Administrative VAT data is used as input in the calculations since August 2015. The cause to the change in method was mainly to reduce response burden.

### **7.2 Structural Business Statistics**

Structural Business Statistics is a survey carried out annually in accordance to "Regulation (EC) No. 295/2008 [...] concerning structural business statistics" (the regulation consists of a number of annexes and the description below is valid for annexes I-IV and VIII, or NACE

05-82 (excluding 64-66) and 95). Furthermore, detailed results (much more detailed than demanded in the above mentioned regulation) of the survey are delivered to National Accounts. The SBS has been produced in its current format since 2003.

Information is collected on enterprise level or in some cases KAU level. The statistical unit for NA purposes is KAU. Results are published on enterprise (institutional) level as well as KAU (functional) level and for some variables local KAU (regional) level. The regional information is produced via a model-based approach.

The survey is based on administrative data, more precisely on income statements and balance sheets from the Swedish Tax Agency (Skatteverket). Three separate sample surveys (specification of income statement, specification of investments and specification of shares) are carried out to provide more detailed information. In addition to this, the 600 largest enterprises in the business sector are surveyed separately.

The administrative data is, at least in theory, available for the entire population of around 1 000 000 enterprises. Non-response in administrative data (15 percent un-weighted, 3 percent weighted) are dealt with through mean value imputations based on industry and size class. This material is used for what is called the common variables within the income statement and balance sheet, such as turnover, other operating income, depreciation costs, personnel costs and total assets. Tax material was used for 1 182 enterprises in veterinary activities in 2013.

The 600 largest enterprises in the business sector are surveyed independently of the tax data. This is due to their importance to the business sector (roughly one-third of value added) and their often complex organisations. These enterprises are asked to complete a questionnaire consisting of a detailed income statement (including turnover by product but also for example more detailed costs), a balance sheet, a specification of investments and a specification of shares. The response rate for these enterprises has been 100 percent in recent years. Two enterprises within veterinary activities were surveyed this way in 2013.

The specification of income statement is used to get more detailed information, e.g. turnover by product, for the remaining enterprises. A sample of approximately 17 000 enterprises is used for this part of the survey, allocated in 300 strata based on the demands of NA. 99 enterprises in one stratum were sampled in veterinary activities 2013. The sample method used is  $\pi$ ps, i.e. probability proportional to size. The response rate in this survey is usually around 80-85 percent un-weighted and 88-90 percent weighted. The response rate within veterinary activities was 87 percent un-weighted and 92 percent weighted for the reference year 2013.

Besides being an important input in the NA calculations, the collection of turnover by product is also an important input to the Business Register. The detailed information makes it possible to detect any change in activity within the enterprises, and thus keep the Business Register as updated and correct as possible.

The surveys regarding specification of investments and specification of shares are similar to the specification of the income statement. They are however less detailed and thus demand lower sample sizes.

Preliminary results are compared with STS and other short-term indicators for consistency. Preliminary results are transmitted to Eurostat 10 months and definitive results 18 months after the end of the reference period. Definitive detailed results are transmitted to NA 15 months after the end of the reference period. Preliminary and definitive results are also published in on-line databases, 11 months and 16 months after the end of the reference period respectively.

## **8. Evaluation of comparability of turnover data with price index practices<sup>11</sup>**

The product groups within the veterinary activity division are not covered by service producer price indices.

## **9. Summary**

In 2013, there were 1 269 enterprises with 3 561 employees<sup>12</sup> performing veterinary activities in Sweden. Together these enterprises had a turnover of 0.45 € billion and a value-added of 0.25 € billion. Veterinary activities is a very small group in the Swedish economy, contributing to only 0.06 percent of total turnover and 0.1 percent of value added. The industry is very homogeneous, 89 percent of the turnover in NACE 75 is classified as Veterinary activities. There is no other NACE in the business sector reporting turnover from veterinary activities. Turnover in veterinary activities has increased by 300 per cent between 2000 and 2013. Growth has primarily been driven by an increased insurance rate for pets. In 2013 turnover from veterinary services for pet animals contributed to 75 per cent of total turnover in NACE 75.

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<sup>11</sup> Tjänsteprisindex 2013

<sup>12</sup> Number of employees in full/time equivalents