Turnover and output for Motion picture, video and television programme production, sound recording

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The views expressed in this paper are those of the author(s) and do not necessarily reflect the policies of Statistics Netherlands.
1. **Introduction**

This report contains information on the turnover and output of data on SIC 59 (Motion picture, video and television programme production, sound recording and music publishing activities) and the use thereof for the national accounts. Further, the difficulties during the statistical process are discussed as well as the opportunities to improve this process.
2. Definition of service being collected

2.1 Classifications

The Dutch Standard Enterprise Classification (SBI 2008) also called the Standard Industrial Classification (SIC) is based on the activity classification of the European Union (Nomenclature statistique des activités économiques dans la Communauté Européenne, NACE) and on the classification of the United Nations (International Standard Industrial Classification of All Economic Activities, ISIC).

The first four digits of the SBI are the four digits of NACE and the first three digits of the SBI and NACE are the same as the first three digits of ISIC. The fifth digit is a Dutch differentiation.

Table 1 SIC 59 activities according to the different classifications

<table>
<thead>
<tr>
<th>ISIC rev. 4</th>
<th>NACE rev.2</th>
<th>SBI 2008</th>
<th>Description</th>
</tr>
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<tbody>
<tr>
<td>59</td>
<td>59</td>
<td>59</td>
<td>Motion picture, video and television programme production, sound recording and music publishing activities</td>
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<td>591</td>
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<td>Motion picture, video and television programme activities</td>
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<td>5911</td>
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<td>Motion picture, video and television programme production activities</td>
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<td>5912</td>
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<td>5912</td>
<td>Motion picture, video and television programme post-production activities</td>
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<td>5913</td>
<td>5913</td>
<td>5913</td>
<td>Motion picture, video and television programme distribution activities</td>
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<td>5914</td>
<td>5914</td>
<td>5914</td>
<td>Motion picture projection activities</td>
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<tr>
<td>592</td>
<td>592</td>
<td>592</td>
<td>Sound recording and music publishing activities</td>
</tr>
</tbody>
</table>

2.2 SIC 59 activities

59 Motion picture, video and television programme production, sound recording and music publishing activities

This division includes production of theatrical and non-theatrical motion pictures whether on film, videotape or disc for direct projection in theatres or for broadcasting on television; supporting activities such as film editing, cutting, dubbing etc.; distribution of motion pictures and other film productions to other industries; as well as motion picture or other film productions projection. Also included is the buying and selling of distribution rights for motion pictures or other film productions. This division also includes the sound recording activities, i.e. production of original sound master recordings, releasing, promoting and distributing them, publishing of music as well as sound recording service activities in a studio or elsewhere.
591 Motion picture, video and television programme activities
This group includes production of theatrical and non-theatrical motion pictures whether on film, videotape, DVD or other media, including digital distribution, for direct projection in theatres or for broadcasting on television; supporting activities such as film editing, cutting, dubbing etc.; distribution of motion pictures or other film productions (video tapes, DVDs, etc) to other industries; as well as their projection. Buying and selling of motion picture or any other film production distribution rights is also included.

5911 Motion picture, video and television programme production activities
This class includes the production of motion pictures, videos, television programmes or television commercials.

This class excludes:
- film duplicating (except reproduction of motion picture film for theatrical distribution) as well as reproduction of audio and video tapes, CDs or DVDs from master copies, see 1820
- wholesale of recorded video tapes, CDs, DVDs, see 4649
- retail trade of video tapes, CDs, DVDs, see 4762
- post-production activities, see 5912
- reproduction of motion picture film for theatrical distribution, see 5912
- sound recording and recording of books on tape, see 5920
- creating a complete television channel programme, see 6020
- television broadcasting, see 6020
- film processing other than for the motion picture industry, see 7420
- activities of personal theatrical or artistic agents or agencies, see 7490
- real-time (i.e. simultaneous) closed captioning of live television performances, meetings, conferences, etc., see 8299
- activities of own account actors, cartoonists, directors, stage designers and technical specialists

5912 Motion picture, video and television programme post-production activities
This class includes post-production activities such as:
- editing, titling, subtitling, credits
- closed captioning
- computer-produced graphics, animation and special effects
- film/tape transfers

activities of motion picture film laboratories and activities of special laboratories for animated films:
- developing and processing motion picture film
- reproduction of motion picture film for theatrical distribution
This class also includes activities of stock footage film libraries etc.

This class excludes:
- film duplicating (except reproduction of motion picture film for theatrical distribution) as well as reproduction of audio and video tapes, CDs or DVDs from master copies, see 1820
- wholesale of recorded video tapes, CDs, DVDs, see 4649
- retail trade of video tapes, CDs, DVDs, see 4762
- film processing other than for the motion picture industry, see 7420
- renting of video tapes, DVDs to the general public, see 7722
- activities of own account actors, cartoonists, directors, stage designers and technical specialists,

5913 Motion picture, video and television programme distribution activities

This class includes the distributing of film, video tapes, DVDs and similar productions to motion picture theatres, television networks and stations and exhibitors, acquiring film, video tape and DVD distribution rights.

This class excludes film duplicating (except reproduction of motion picture film for theatrical distribution) as well as reproduction of audio and video tapes, CDs or DVDs from master copies, reproduction of motion picture film for theatrical distribution.

5914 Motion picture projection activities

This class includes motion picture or videotape projection in cinemas, in the open air or in other projection facilities and activities of cine-clubs.

5920 Sound recording and music publishing activities

This class includes the production of original (sound) master recordings, such as tapes, CDs, sound recording service activities in a studio or elsewhere, including the production of taped (i.e. non-live) radio programming, audio for film, television etc.

Music publishing, i.e. activities of:

™. acquiring and registering copyrights for musical compositions
™. promoting, authorizing and using these compositions in recordings, radio, television, motion pictures, live performances, print and other media
™. distributing sound recordings to wholesalers, retailers or directly to the public

Units engaged in these activities may own the copyright or act as administrator of the music copyrights on behalf of the copyright owners.

This class also includes the publishing of music and sheet books

This class excludes the reproduction from master copies of music or other sound recordings and the wholesale of recorded audio tapes and disks, see 4649
The Dutch division SIC 59 motion pictures etcetera employs almost 32 thousand people in more than 15 thousand enterprises and has an annual turnover of almost 3 billion euros. The SIC 59 is broken down into subcategories but figures are only published at a 2-digit level.

Table 2 Overview of Motion picture etcetera in the Netherlands

<table>
<thead>
<tr>
<th>Period</th>
<th>2014</th>
</tr>
</thead>
<tbody>
<tr>
<td>Subject</td>
<td></td>
</tr>
<tr>
<td>Enterprises</td>
<td></td>
</tr>
<tr>
<td>Employees</td>
<td></td>
</tr>
<tr>
<td>FTE</td>
<td></td>
</tr>
<tr>
<td>Turnover</td>
<td></td>
</tr>
<tr>
<td>Sector/division (SIC 2008)</td>
<td>x 1 000</td>
</tr>
<tr>
<td>59</td>
<td>15</td>
</tr>
</tbody>
</table>

Source: Structural Business Statistics, NACE rev. 2, 2014

Figure 1 Turnover Motion picture etcetera

Source: Structural Business Statistics, NACE rev. 2, 2014
3. **Unit of measure to be collected**

Turnover is measured as net turnover, proceeds from sales, excluding value-added tax (VAT), deducting discounts, premiums, deposits and freight charges. The enterprise, employing at least one person for 15 hours work or more, is used as the statistical unit.

STS turnover is measured by using VAT-data. Besides VAT-data as a data source a rather small sample survey is being used. A combination of a sample survey and a census (large size classes) is being used for the data collection for the SBS.
4. Market conditions and constraints

4.1 Available statistics

In Table 3 the statistical information which is available regarding motion picture activities is shown.

Table 3 Available statistical information SIC 75

<table>
<thead>
<tr>
<th>Statistic</th>
<th>Turnover STS</th>
<th>Operating returns/costs SBS</th>
<th>PPI/SPPI/CPI</th>
<th>Sentiment survey</th>
</tr>
</thead>
<tbody>
<tr>
<td>SIC 59 Motion picture etcetera</td>
<td>Y</td>
<td>Y</td>
<td>N</td>
<td>Y</td>
</tr>
</tbody>
</table>

**Structural Business Statistics (SBS)**
These are annual statistics on employment, operating returns and costs. The most recent year is 2014. The information is collected at a 2-digit level and also published at a 2-digit level. The sample size of this particular statistic was about 200 enterprises.

**Short Term Statistics (STS)**
These are quarterly statistics on turnover and prices, both available as NACE rev. 2 (index 2010 = 100). The information is collected and the figures from the first quarter of 2006 and on are published at a 2-digit level.

**Business Sentiment Survey**
This statistic is set-up to provide current information on the opinions of Dutch producers, about performance and expectations concerning their enterprises. The Business sentiment survey makes it possible to identify turning points in business sentiment at an early stage. In this way a change in the trend of economic activity of Dutch companies is available at an early stage. The questions that are asked to the companies relate to production, sales, prices, orders, stocks, investment, competitiveness, economic climate, workforce and the factors limiting production.

**National Accounts**
The National Accounts provide information on production, intermediate consumption and value added for the SIC 59.
4.2  Motion pictures etcetera: current market situation

The expectations of the Dutch entrepreneurs changed the last few quarters. For instance, in the first quarter more than 15 percent (balance % positive and negative answers) expected that the prices would decrease. In the second quarter the expectation was levelled to zero. On the other hand, 24 percent expects an increase of turnover in the next period versus 18 percent who expects an increase. The balance score therefore is plus 6 percent as shown in figure 2.

Figure 2 Expectations second quarter 2016

![Figure 2 Expectations second quarter 2016]

Source: Statistics Netherlands

Workforce: the last one and a half year companies negative about the (the balance between positive and negative answers was negative, except the plus 1.2 percent in the fourth quarter of 2015. The expectations in the second quarter were negative (-7.2 percent). More than 86 percent expects that the workforce will remain unchanged, 3 percent thinks the workforce will increase and 10 percent is pessimistic about the development of the workforce.

More than 82 percent expects that the economic climate will remain unchanged. Nevertheless 10 percent still thinks that the economic climate will decline. Also seven percent expects an improvement of the economic climate. Therefore the balance is 3 percent negative.

Turnover changes
Declining growth in turnover is what the current market situation describes as best.

Figure 3 Turnover changes motion pictures

![Figure 3 Turnover changes motion pictures]

Source: Statistics Netherlands
Bankruptcies

In the year 2015 28 companies went into liquidation as shown in figure 4. The peak in the number of bankruptcies was in the crisis year 2009: 49 companies went bankrupt.

Figure 4 Number of bankruptcies

![Bar chart showing the number of bankruptcies from 2009 to 2015 for Sound recording and music publishing activities and Motion picture, video and television programme activities.]
5. **Standard classification structure and product detail/levels**

Regarding to the STS and SBS statistics there is no further breakdown into product categories as shown in table 3.
6. Evaluation of standard vs. definition and market conditions

To find out which type of enterprises dominate, the number of companies as well as the turnover are divided into size classes. As shown in figure 5 the small companies which has a share of more than 99 percent generate almost 50 percent of the total turnover. The medium companies, with a share of 0.8 percent in the number of companies generate more than 21 percent of the total market.

Figure 5 Number of companies & turnover: share in order of size class

Table 4 shows, amongst others, the share of turnover per size class at the level of SIC 59.

Table 4 SIC 59: shares in order of size class

<table>
<thead>
<tr>
<th>Motion pictures activities</th>
<th>Enterprises</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Small</td>
</tr>
<tr>
<td>2014</td>
<td>%</td>
</tr>
<tr>
<td>Business turnover, net</td>
<td>45,3</td>
</tr>
<tr>
<td>Persons employed, annual average</td>
<td>38,5</td>
</tr>
<tr>
<td>Persons employed, annual average in FTE</td>
<td>62,5</td>
</tr>
<tr>
<td>Personnel costs</td>
<td>68,7</td>
</tr>
<tr>
<td>Operating costs</td>
<td>28,1</td>
</tr>
</tbody>
</table>

Table 5 shows the figures of the turnover per person employed in FTE and the personnel costs per person in FTE. With an average number of 23 thousand euro personnel costs per person employed in FTE and a turnover ratio of 95 thousand euro per person employed in FTE.
Table 5 Financial indicators per branch

<table>
<thead>
<tr>
<th>SIC 59</th>
<th>Turnover per person employed in FTE</th>
<th>Personnel costs per person employed in FTE</th>
<th>Operating result as % of operating returns</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>x 1000 euro</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>95</td>
<td>23</td>
<td>12</td>
</tr>
<tr>
<td>Small</td>
<td>62</td>
<td>9</td>
<td>26</td>
</tr>
<tr>
<td>Medium</td>
<td>168</td>
<td>48</td>
<td>-2</td>
</tr>
<tr>
<td>Large</td>
<td>164</td>
<td>55</td>
<td>3</td>
</tr>
</tbody>
</table>

Operating result as % of operating returns
7. NA concepts and measurement issues

The National Accounts provide statistical information on production, intermediate consumption and value added for rental and leasing activities as shown in table 6. The National Accounts use source statistics like the STS turnover figures to compile macro figures. The methodology used in source statistics may differ from the concepts used in the National Accounts. Some items, which are not covered by source statistics, are estimated and adjusted so everything will perfectly fit. That’s why the figures of source statistics and the National Account may differ.

Table 6 Production, intermediate consumption and value added 59-60 Movies, TV and radio

<table>
<thead>
<tr>
<th>Year</th>
<th>Production basic prices (mln euro)</th>
<th>Intermediate consumption (-) (mln euro)</th>
<th>Gross value added basic prices (mln euro)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2010</td>
<td>4253</td>
<td>2346</td>
<td>1907</td>
</tr>
<tr>
<td>2011</td>
<td>4296</td>
<td>2385</td>
<td>1911</td>
</tr>
<tr>
<td>2012</td>
<td>4227</td>
<td>2308</td>
<td>1920</td>
</tr>
<tr>
<td>2013</td>
<td>4178</td>
<td>2273</td>
<td>1905</td>
</tr>
<tr>
<td>2014</td>
<td>4423</td>
<td>2385</td>
<td>2040</td>
</tr>
<tr>
<td>2015*</td>
<td>4432</td>
<td>2405</td>
<td>2028</td>
</tr>
</tbody>
</table>

* provisional figures

As indicated before, the STS figures are published. The information is also used on a quarterly basis by the National Accounts to calculate volumes. A well-known issue is the lack of reliable price information. Also the SBS figures are published and used as an input variable to calculate volumes.

As an alternative for the SPPI to calculate the quarterly volume changes of the SIC 59-60 the National Accounts uses a few different CPI series as a deflator. For example the CPI magazines, CPI movie tickets, CPI downloading music, CPI TV subscribers, CPI pay TV.

In this case a similar methodology for the STS and SBS statistics is used and therefor the difference in turnover level is marginal. The solution for reducing different outcomes is the use of VAT to estimate a quarterly turnover level. This can be used to calculate the growth rate per quarter and four quarters of a year added up means that the turnover level is already known. This information is used as a constraint in SBS. Meaning that the STS turnover is equal to the SBS turnover and the structural information will fit without major adjustments.

This methodology is already implemented for certain statistics, for example the Wholesale trade and the commercial services. To improve the methodology even more a more innovative and reliable service production price indices are required on the same level as the turnover aggregates to improve the quality of the volume-indicators.
8. Turnover/output data method(s) and criteria for choosing various output methods

Statistics Netherlands doesn’t have a survey to collect ‘volume changes’ for the SIC 59 activities. The National Accounts approximates volumes by using the available consumer price data combined with turnover data. Volume figures are published at a combined 2-digit level (SIC 59 + 60) and on an annual bases.
9. Comparability of turnover/output data with price index practices

See chapter 8.
10. Summary

STS turnover is measured by using VAT-data. Besides VAT-data as a data source a rather small sample survey is being used. A combination of a sample survey and a census (large size classes) is being used for the data collection for the SBS.

The STS figures are published at a 2-digit level. The information is also used on a quarterly basis by the National Accounts to calculate volumes. A well-known issue is the lack of reliable (CPI, SPPI) price information. Also the SBS figures are published and used as an input variable to calculate volumes. As an alternative for the SPPI to calculate the quarterly volume changes of the SIC 59 the National Accounts uses the CPI as a deflator.

A similar methodology for the STS and SBS statistics is used and therefore the difference in turnover level is marginal. The solution for reducing different outcomes is the use of VAT to estimate a quarterly turnover level. This can be used to calculate the growth rate per quarter and four quarters of a year added up means that the turnover level is already known. This information is used as a constraint in SBS. Meaning that the STS turnover is equal to the SBS turnover and the structural information will fit without major adjustments.

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