Mini-presentation on
Turnover/Output
for Consumer and Household Goods
Repair and Maintenance
in Poland

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**Introduction**

The services related to repair and maintenance of consumer and household goods are specific segment of services sector. They comprise wide variety of services provided rather to final consumers than to other businesses, such as repair of consumer electronics, household appliances, home and garden equipment, footwear and leather goods, furniture and home furnishings, watches, clocks and jewellery or other personal and household goods.

In Poland activities related to repair and maintenance of consumer and household goods are not regulated by government. Nevertheless, some services classified to repair and maintenance of consumer and household goods are rendered by enterprises united in the Polish Craft Association (ZRP) which represents business’ interests towards government and regulatory bodies, public administration, courts and social-economic organisations in Poland and abroad (especially in the European Union). Moreover, Polish craft is very active in the vocational education. ZRP members offer wide range of training opportunities: from the modern to unique (especially handicraft and artistic) professions.

In recent years in Poland we record the decrease in the value of turnover of enterprises classified to the group 95.2 (by NACE Rev.2) Repair of personal and household goods. In 2010 the turnover of enterprises in question constituted about 0,1% of total turnover produced by services sector. During years 2008-2010 turnover of enterprises in question went down by about 22% and in 2010 it amounted to 1 469 mln PLN (371 mln 371 EUR/ 496 mln USD\(^1\)). In the same period the number of enterprises fell down by 16% to 14 070 and the number of persons employed – by 25% to 20 905.

The most significant decrease in turnover at the level of 76% was recorded in class 95.24 (by NACE Rev.2) Repair of furniture and home furnishings while in class 95.25 (by NACE Rev.2) Repair of watches, clocks and jewellery turnover went up by 54% and in class 95.29 (by NACE Rev.2) Repair of other personal and household goods – by 30% (in class 9529 by ISIC Rev.4 – by 34%).

\(^1\) Exchange rate as of 31.12.2010
**Chart 1: 95.2 by NACE Rev.2/ISIC Rev.4 Repair of personal and household goods**

Turnover in mln PLN in years 2008-2010

Source: Structural Business Statistics for 2008-2010 (statistical surveys)

**Chart 2: 95.2 by NACE Rev.2/ISIC Rev.4 Repair of personal and household goods**

Number of enterprises in years 2008-2010

Source: Structural Business Statistics for 2008-2010 (statistical surveys)
Population of enterprises running the activities related to repair of personal and household goods is dominated by small units with the number of persons employed 9 and less. It concerns also the number of persons employed and turnover. The enterprises in question are mainly run by domestic natural persons (almost 96%) and partnerships of natural persons (about 4%).

Almost 32% of turnover of the group 95.2 (by NACE Rev.2) Repair of personal and household goods comes from enterprises with the core activity within the class 95.29 Repair of other personal and household goods and about 20% from enterprises which deal with repair of household appliances and home and garden equipment (class 95.22). In the structure of number of enterprises the same activities constitute suitably almost 27% and 21% and employ about 27% of number of persons employed in case of 95.29 Repair of other personal and household goods and almost 22% - 95.22 Repair of household appliances and home and garden equipment.

Source: Structural Business Statistics for 2008-2010 (statistical surveys)
Chart 4: Structure of turnover by classes of group 95.2 by NACE Rev.2/ISIC Rev.4* Repair of personal and household goods in 2010

- 95.29 Repair of other personal and household goods 31.7%
- 95.25 Repair of watches, clocks and jewellery 6.4%
- 95.24 Repair of furniture and home furnishings 12.9%
- 95.21 Repair of consumer electronics 16.8%
- 95.22 Repair of household appliances and home and garden equipment 20.2%
- 95.23 Repair of footwear and leather goods 12.0%

*95.25+95.29 by NACE Rev.2 = 9529 by ISIC Rev.4

Source: Structural Business Statistics for 2008-2010 (statistical surveys)

Chart 5: Structure of number of enterprises by classes of group 95.2 by NACE Rev.2/ISIC Rev.4* Repair of personal and household goods in 2010

- 95.29 Repair of other personal and household goods 26.6%
- 95.25 Repair of watches, clocks and jewellery 8.4%
- 95.24 Repair of furniture and home furnishings 11.7%
- 95.21 Repair of consumer electronics 16.8%
- 95.22 Repair of household appliances and home and garden equipment 20.9%
- 95.23 Repair of footwear and leather goods 15.6%

*95.25+95.29 by NACE Rev.2 = 9529 by ISIC Rev.4

Source: Structural Business Statistics for 2008-2010 (statistical surveys)
Classification

The Polish Classification of Activities (PKD2007) is fully methodologically, conceptually, in the scope and coding system (up to fourth digit) coherent and comparable with the classification the NACE Rev. 2. Comparing NACE Rev.2 and ISIC Rev.4 it turns out that NACE Rev.2 presents more detailed breakdown than ISIC Rev.4 at the class level. The classes 95.25 Repair of watches, clocks and jewellery and 95.29 Repair of other personal and household goods corresponds to the class 95.29 Repair of other personal and household goods of the ISIC Rev.4.

Source: Structural Business Statistics for 2008-2010 (statistical surveys)
### Table 1: Repair of personal and household goods in PKD2007/NACE Rev.2 and ISIC Rev.4

<table>
<thead>
<tr>
<th>PKD2007/NACE Rev.2</th>
<th>ISIC Rev.4</th>
</tr>
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<tbody>
<tr>
<td>Code</td>
<td>Description</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>S</td>
<td>Other service activities</td>
</tr>
<tr>
<td>95</td>
<td>Repair of computers and personal and household goods</td>
</tr>
<tr>
<td>95.2</td>
<td>Repair of personal and household goods</td>
</tr>
<tr>
<td>95.21</td>
<td>Repair of consumer electronics</td>
</tr>
<tr>
<td>95.22</td>
<td>Repair of household appliances and home and garden equipment</td>
</tr>
<tr>
<td>95.23</td>
<td>Repair of footwear and leather goods</td>
</tr>
<tr>
<td>95.24</td>
<td>Repair of furniture and home furnishings</td>
</tr>
<tr>
<td>95.25</td>
<td>Repair of watches, clocks and jewellery</td>
</tr>
<tr>
<td>95.29</td>
<td>Repair of other personal and household goods</td>
</tr>
</tbody>
</table>

In the Polish Classification of Goods and Services (PKWiU2008) repair and maintenance services of consumer and household goods are classified in division 95 Repair services of computers and personal and household goods under the code 95.2 Repair services of personal and household goods. Polish national classification is compliant with the CPA2008. In CPC Ver.2 repair and maintenance services of consumer and household goods are classified in division 87 Maintenance, repair and installation (except construction) services. The differences between the CPA2008 and the CPC Ver. 2 are presented in Table 2.
Table 2: Repair of personal and household goods in PKWiU2008/CPA2008 and CPC Ver.2

<table>
<thead>
<tr>
<th>PKWiU2008/ CPA2008</th>
<th>Code</th>
<th>Description</th>
<th>CPC Ver.2</th>
<th>Code</th>
<th>Description</th>
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</thead>
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<tr>
<td>8</td>
<td>S</td>
<td>Other services</td>
<td>8</td>
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<td>95</td>
<td>87</td>
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<td>95.2</td>
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<td>95.21</td>
<td>87155</td>
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<td>95.22</td>
<td>87151</td>
<td>Repair services of household appliances and home and garden equipment</td>
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<td>Repair services of footwear and leather goods</td>
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<tr>
<td>95.23</td>
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<td>95.24</td>
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<td>95.29.1</td>
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<td>Repair services of alteration services of garment and household textile articles</td>
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<td>Maintenance and repair services of other goods n.e.c.</td>
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<td>95.29.11</td>
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<td>Repair services of bicycles</td>
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<td>Maintenance and repair services of other goods n.e.c.</td>
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<td>95.29.13</td>
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<td>Repair and maintenance services of musical instruments</td>
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<td>Maintenance and repair services of other goods n.e.c.</td>
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<td>95.29.14</td>
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<td>Repair and maintenance services of sports equipment</td>
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<td>Maintenance and repair services of other goods n.e.c.</td>
<td></td>
</tr>
<tr>
<td>95.29.19</td>
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<td>Repair and maintenance services of other personal and household goods</td>
<td>87290</td>
<td>Maintenance and repair services of other goods n.e.c.</td>
<td></td>
</tr>
</tbody>
</table>
Surveys on turnover

In case of repair and maintenance services of consumer and household goods there are few variable which are useful when describing functioning the market of these services such as turnover, revenues from various types of business activity (e.g. operational or financial revenues), number of enterprises or number of person employed.

In Poland the variable most often used for analyzing the output of repair and maintenance of consumer and household goods is turnover. Information on turnover for 95.2 Repair of personal and household goods is compiled within the annual (structural) business statistics. As far as short-term statistics is concerned data on turnover at this level of detail is not available. However, the works aiming at the usage of VAT data for estimating short-term data on turnover are in progress.

Annual data on turnover


In Poland the official statistics collects data for structural business statistics within two questionnaires Annual survey on enterprises (SP) and the Survey of small enterprises (SP-3). However, other available data, for example VAT data, and information collected from other surveys, are also used for imputation or estimation of data.

In case of enterprises with the number of persons employed 10 and more data are collected within the Annual survey on enterprises (SP). It collects information included in financial statements: balance sheet and the profits and losses account. Moreover, enterprises report also additional information, for example number of persons employed, type of book-keeping system etc.

The population of enterprises with the number of persons employed 9 and less is surveyed within the Survey of small enterprises (SP-3). Information are collected from the sample of enterprises (about 5%) which are selected randomly within the settled strata (groupings required by SBS Regulation with the regional breakdown). For 95.2 Repair of personal and household goods this is the class level. Information on turnover are estimated on the basis of
data from the Section 4 Revenues and costs from total activity questionnaire \textit{SP-3} (in full PLN).

The enterprises obliged to fill in the above mentioned two questionnaires report their data electronically via statistical reporting website. It concerns vast majority of data obtained by official statistics. The paper version of questionnaires are very rarely used and are acceptable only in case of enterprises with the number of persons employed 5 and less or in other very special situations. Each respondent has their own statistical reporting account and can fill in questionnaires in on-line version.

The questionnaires: \textit{Annual survey on enterprises (SP)} and \textit{Survey of small enterprises (SP-3)} are filled in once a year with the deadlines: 15$^{th}$ of March in case of SP-3 and 30$^{th}$ of April in case of SP. Information inserted by respondents via reporting website passes automatically logical and book-keeping control procedures. It improves data quality and, undoubtedy, shortens timeliness for data dissemination. Then the sets of individual data are analyzed by statisticians and if any doubts arise they are explained with reporting units via mail or phone calls. There are also made imputation and estimation procedure with the usage of accessible information. Finally data sets are accepted and can be used for any statistical compilations, for example for purpose of national accounts.

The preliminary data on turnover for classes of group 95.2 Repair of personal and household goods are available 10 months after the end of the reporting year and final data – 18 months after the end of the reporting year.

\textbf{Short-term data on turnover}

In Poland the primary data source for the short-term information on turnover of enterprises is the questionnaire \textit{Monthly report on activity (DG-1)}. All enterprises with the number of persons employed 50 and more and the 10\% sample of enterprises with the number of persons employed between 10 and 49 are surveyed.

The sample is selected randomly within the settled strata and in case of 95.2 Repair of personal and household goods this is the division level 95 Repair of computers and personal and household goods. As a result information on monthly turnover are available only at the level of division 95.

The works on using the VAT data for estimating short-term data on total turnover, especially turnover of the smallest units, are in progress. The practical results of these works can be used
for estimating short-term data on turnover for the most of economic activities, among others for 95.2 Repair of personal and household goods.

However, it has to be taken into account that the timeliness in which official statistics is provided with the VAT data (about 110 days after end of reference quarter) makes it difficult to use data by statistics.

As for turnover of repair of personal and household goods structural business statistics and VAT data on turnover for 2010 were compared. It turned out that the value of turnover registered in the VAT source constituted about 70% value recorded in the statistical surveys. More depth analysis allows to state that in case of large and medium enterprises with the number of persons employed 10 and more the difference in value of turnover amounted to 3% while in population of enterprises with the number of persons employed 9 and less VAT value is by 60% lower than in the statistical surveys.

Source: Structural Business Statistics (statistical surveys) and VAT data in 2010

Chart 7: 952 by ISIC Rev.4 Repair of personal and household goods
Comparison of turnover in mln PLN basing on surveys’ data and VAT data in 2010
Deflator for output/turnover

According to the international recommendations included in the *Compilation Manual for an Index of Service Production* the best variable for measuring the output of repair of personal and household goods (by ISIC Rev.4 952) is the gross turnover deflated by appropriate quality adjusted price index. Generally the consumer price indices are recommended to be used. The preferred deflators are the weighted appropriate price indices, for example: consumer prices indices for repair of household appliances, repair of leather goods or repair of clocks and watches. The partially representative consumer price indices or general price index are mentioned as the alternative deflators.

As in Poland output data for repair of personal and household goods (by NACE Rev.2 95.2/ISIC Rev.4 952) are not disseminated at the group level at the constant prices so far. However, the output data for repair of personal and household goods are used to compile the national accounts for the division level 95 Repair of computers and personal and household goods. In order to deflate the production account for division in question annual consumer price index for group 09.1.5 Repair of audio-visual, photographic and information processing equipment by COICOP (Classification of Individual Consumption According to Purpose) is applied.

In Poland consumer price indices are produced basing on the results of surveys: the consumer price survey and household budget survey. In years 2010-2012 the consumer price survey covers about 1,4 thous. of representatives for goods and services recorded in 209 price survey areas of quotations all over the country. The representatives are selected purposively and the sample has to ensure coverage for all elementary groups of COICOP. The system of weights for consumption price index bases on the structure of average expenditures of households on consumer goods and services per capita (without natural consumption) for year preceding the reference year (data derive from the household budget survey).

The price index of a given representative in a region is calculated as a reference of its monthly price to the price in base period. At the country level the price index for a given representative is compiled as geometric mean of price indices for that representative in all regions. Then the nationwide price indices for each representative are used to produce the price indices for groups of goods and services at the lowest level of aggregation for weights system (about 320 elementary groups). The consumer price indices are compiled according to the Laspeyres’ formula.
The prices of repair services of personal and household goods (by CPA2008 95.2) are observed in 6 divisions and 12 groups of COICOP:

- 03 Clothing and footwear: 03.1 Clothing
  03.2 Footwear
- 05 Furnishings, household equipment and routine household maintenance:
  05.1 Furniture and furnishings, carpets and other floor coverings
  05.2 Household textiles
  05.3 Household appliances
  05.4 Glassware, tableware and household utensils
  05.5 Tools and equipment for house and garden
- 06 Health: 06.1 Medical products, appliances and equipment
- 08 Communication: 08.2 Telephone and telefax equipment
- 09 Recreation and culture: 09.1 Audio-visual, photographic and information processing equipment
  09.2 Other major durables for recreation and culture
  09.3 Other recreational items and equipment, gardens and pets
- 12 Miscellaneous goods and services:
  12.1 Personal care
  12.3 Personal effects n.e.c.

In 2012 representatives of repair services of personal and household goods constituted approximately 2.2% of total number of representatives selected for survey.

Due to fact that some repair services of personal and household goods are very rarely purchased there are two main constraints in compilation of consumption price indices for groups of services specified above:

- the accessibility of weights unstable during years, for example: in 2012 there is the lack of weights for 3 elementary groups.
- the difficulties in designating commonly purchased repair services of personal and household goods in order to ensure representativeness for elementary groups in all regions.
**Summing up:**

1. Annual information on turnover are available at the class level of group 95.2 by NACE Rev.2 Repair and maintenance of consumer and household goods while short-term data only at the level of division 95 Repair of computers and personal and household goods.

2. As far as the short-term statistics (the questionnaire *Monthly report on activity (DG-1)*) is concerned it is recommended to consider the possibility for compiling more detailed data on turnover (at the group level 95.2 by NACE Rev.2 Repair of personal and household goods).

3. It is suggested to analyze VAT data on the account of their usage in order to obtain source for short-term data on turnover and decrease the response burden.

4. For national accounts’ purpose the output of division 95 by NACE Rev.2 Repair of computers and personal and household goods is deflated by annual consumer price index for group 09.1.5 Repair of audio-visual, photographic and information processing equipment by COICOP (Classification of Individual Consumption According to Purpose).

5. The fact that some repair services of personal and household goods are very rarely purchased causes difficulties in compilation of consumption price indices for repair and maintenance of consumer and household goods.