STATISTICS AUSTRIA

The Information Manager

FINAL REPORT

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Turnover in Other Services

"Reduction of delays and change of reference period from quarterly to monthly for the turnover indicator in Other Services"

Contract No 2004 44401 001

Contents

Summary

In the STS amendment regulation feasibility studies for reduction of delays and change of reference period from quarterly to monthly for turnover indicators in other services (Annex D) are foreseen. The feasibility studies shall be carried out by Member States to prepare the implementation of the amended STS-Regulation. Austria participates in this study to be able to decide if concepts and methods used for compilation of quarterly indicators are applicable for calculating monthly indicators or major changes in methodology will be necessary. Another important task of the study was to prepare technical implementation of monthly turnover indicators.

Presently turnover indicators have been calculated on the basis of VAT advance returns from all enterprises in the population. Missing values are imputed considering development of single enterprises as well as development of relevant NACE categories. Statistics Austria carries out no statistical surveys.

Generally the calculation of monthly turnover indicators for services at t+ 60 will be possible with methods used for calculation of quarterly indicators at t+ 90. As additional personal resources will be needed for producing STS in services with a transmission delay of t+60 a change of our strategy to a sample will be discussed in Austria. Nevertheless additional personal resources will be necessary to fulfil requirements of the amended STS regulation.

After entering into force of the amended STS regulation and the commission regulation regulating the reduction of delays and change of reference period for STS in services the national regulation for short term statistics has to be amended. Normally this takes a certain period of time. Therefore the transition periods granted will be considered.

Introduction

Services become more and more important in economic systems. The growing relevance of services causes an increasing demand for reliable statistical information on services. The European regulations for structural business statistics (SBS-Regulation)[1] and short term statistics (STS-Regulation)[2] provide the legal framework for establishing harmonised service statistics at European level. Structural business statistics for services according to requirements of the SBS - Regulation was introduced with the reference year 1995 in Austria. Since 1998 short term statistics for service sectors of divisions 50, 51, 55, 60 - 64, 72 and 74 of NACE is legally regulated in Annex D of the European STS-Regulation.

In Austria short term statistics for divisions 50 and 51 was already available monthly at t+60 before 1998. So NACE categories 50 and 51 are not included in this feasibility study. According to the requirements of the STS-Regulation the production of quarterly statistics on turnover and persons employed for divisions 55, 60 - 64, 72 and 74 (without 7415) of NACE has been foreseen. As Austria has used the maximum derogation period of five years, quarterly short term statistics for services with a transmission delay of t+90 was implemented and legally regulated with the reference year 2003.

With the implementation of quarterly short term statistics for services an important gap of service statistics was closed in Austria. Recent developments and growing importance of services as well as user needs makes it necessary to produce more timely statistics on the development of services. So the amended STS-Regulation[3] proposes feasibility studies for the reduction of delays and change of reference period from quarterly to monthly for turnover indicators in other services.

[1] Council Regulation (EC, EURATOM) No 58/97 concerning structural business statistics

[2] Council Regulation (EC) Nr. 1165/98 concerning short term statistics

[3] Regulation of the European Parliament and of the Council amending Council Regulation (EC) No 1165/98 concerning short-term statistics

Aims of the project and timetable

The feasibility studies shall be carried out by Member States to prepare implementation of the amended STS-Regulation. Austria participates in this study to be able to decide if strategies and methods used for compilation of quarterly indicators are applicable for calculating monthly indicators or major changes in methodology will be necessary.

Therefore the main objective of this study is to test the feasibility of producing monthly turnover indicators at t+60 for service sectors of NACE divisions 55, 60-64, 72 and 74 (without 7415) on the basis of administrative sources and methods used for calculating quarterly indicators at t+90.

Table 1

Timetable	
March 2004	Start of the project
March 2004 - July 2004	Analysis of the administrative sources (VAT advance return) used for the calculation of turnover indicators
August 2004 - November 2004	Calculation of monthly results on the basis of VAT advance return available at the timetable t+90 and comparison with quarterly results after t+90 for the reference year 2003
December 2004	First analysis of results and interim report
January 2005 - March 2005	Calculation of monthly turnover indicators at t+ 90 for the reference year 2004; examination whether the imputation model used for t+90 is also applicable for t+60 and calculation of monthly results on the basis of VAT advance return available at the timetable t+60; if this is not the case development of calculation methods for change of frequency from quarterly to monthly and reduction of deadlines for data transmission
End of April 2005	Transmission of results
May 2005 - June 2005	Final technical and implementation report

Methodological information

Background

The use of administrative sources in line with reduction of burden on respondents is one of the main goals of the new Austrian Federal Statistics law 2000[4]. The right of access to administrative sources for statistical purposes was regulated with the Statistics law 2000. Because of that the priorities of Statistics Austria were put on examining the contents of administrative sources, analysing these administrative sources as well as the combination of administrative sources with information of enterprises in the Business Register of Statistics Austria. In the case of quarterly short term statistics for services, which is based on a national regulation[5] employment data as well as turnover data are available from administrative sources. So Statistics Austria was able to implement quarterly short term statistics for services on basis of administrative sources. No statistical surveys were carried out in order to produce these statistics. The main goal of this study is to test if the methods used for calculation of quarterly indicators are applicable for production of monthly turnover indicators with a transmission delay of t+60.

[4] Federal Statistics Act ("Bundesstatistikgesetz 2000", the Federal Law GAZETTE No. 163/1999, No. 136/2001 and No. 71/2003

[5] National regulation based on the federal statistical law concerning short term statistics in services (Verordnung über die Konjunkturstatistik im Dienstleistungsbereich, BGBl. II Nr. 233/2003 i.d.F BGBl. II Nr. 49/2005)

Administrative sources used

Besides the number of enterprises and self-employed persons from business register of Statistics Austria the following administrative sources have been used for production of short term statistics for services:

- Administrative data of tax authorities: VAT advance return
- Main Association of Austrian Social Insurance: number of employees

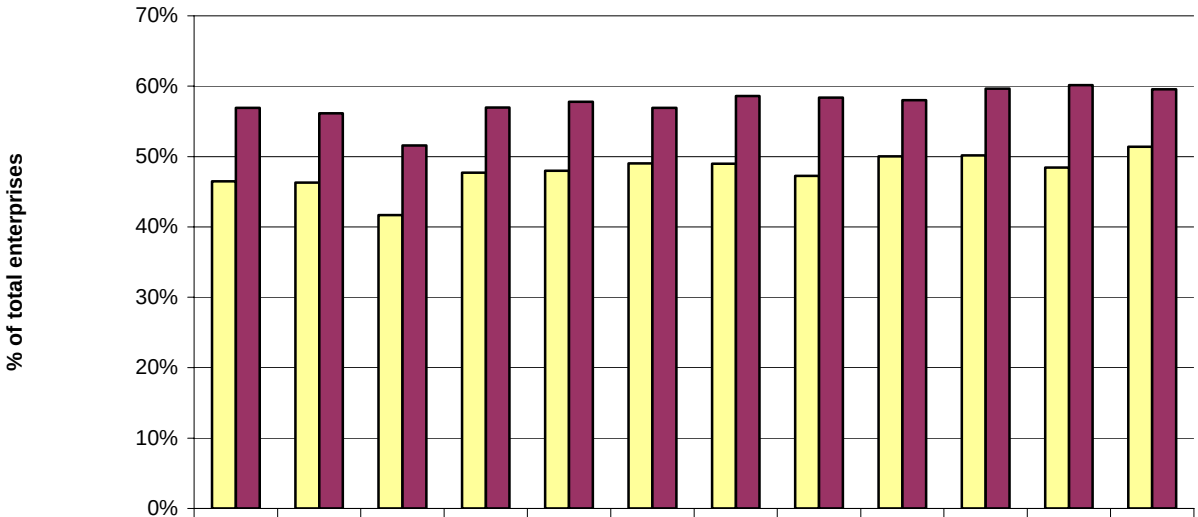
Statistics Austria has fully access to the above mentioned administrative sources for statistical purposes. Data sets with number of employees and turnover are transmitted from national tax and social security authorities on a monthly basis. As the links from enterprises in the enterprise register to administrative sources are on a single enterprise basis the data can be broken down and calculated after the NACE code of the associated enterprises. As the main emphasis of this feasibility study is the turnover indicator, following descriptions refer mainly on VAT advance returns used for compilation of this indicator.

Generally about 90% of active enterprises in business register can be linked with data from tax authorities. Enterprises are obliged to transmit their VAT advance return quarterly and monthly on the 15th of the second month following the reference period to the tax authorities. The VAT advance return is transmitted to Statistics Austria by tax authorities on the 17th of the second month following the reference period. For reasons of higher completeness tax data from the third month following the reference period were used for calculating indicators with a transmission delay of t+90. The following figures illustrate the average availability of VAT advance returns at t+ 60 and t+90 for the reference year 2004.

Figure 1 shows the availability of VAT advance returns measured in terms of number of enterprises for the reference year 2004. Enterprises with a yearly turnover of more than EUR 100,000 are committed to deliver the VAT advance return. Therefore VAT advance returns for calculation of indicators at t+90 are available from 50 to 60% of total enterprises in the population. For the calculation of indicators at t+60 the availability is between 40 and 50%.

Figure 1

Availability of VAT advance returns for the reference year 2004 (NACE 55, 60-64, 72, 74)



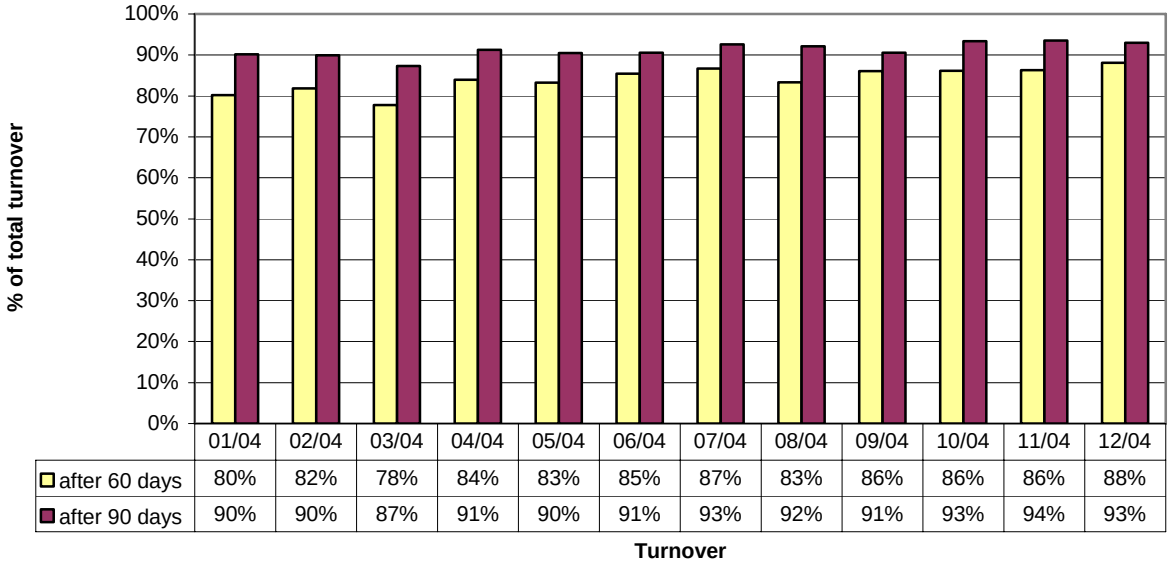
	01/04	02/04	03/04	04/04	05/04	06/04	07/04	08/04	09/04	10/04	11/04	12/04
after 60 days	46%	46%	42%	48%	48%	49%	49%	47%	50%	50%	48%	51%
after 90 days	57%	56%	52%	57%	58%	57%	59%	58%	58%	60%	60%	60%

Number of enterprises

Figure 2 shows the availability of VAT advance return measured in terms of total turnover. The availability for t+ 90 is between 87 and 94%. For t+60 turnover of VAT advance return represents between 78 and 88% of total turnover. So it can be concluded that completeness of VAT advance return is well enough for calculating monthly turnover indicators at t+60.

Figure 2

Availability of VAT advance returns for the reference year 2004 (NACE 55, 60-64, 72, 74)



	01/04	02/04	03/04	04/04	05/04	06/04	07/04	08/04	09/04	10/04	11/04	12/04
after 60 days	80%	82%	78%	84%	83%	85%	87%	83%	86%	86%	86%	88%
after 90 days	90%	90%	87%	91%	90%	91%	93%	92%	91%	93%	94%	93%

Analyses of VAT advance return

As mentioned above a first important step within the framework of this study was to analyse the feasibility of using VAT advance return for calculation of monthly turnover indicators. This analysis was carried out in line with the production process of quarterly turnover indicators, as the information was very important for calculation of both indicators.

In Austria VAT advance return was reintroduced with the reference year 2003. As time series were very short analyses concentrated on evaluating differences to turnover from company accounts, missing values as well as contents of fiscal turnover in turnover advance returns. The main problems were cut off values, missing VAT advance returns, seasonal businesses, complex firm's structures and group company VAT advance returns, differences in definition of turnover in VAT and company accounts or project based invoicing.

This was the reason why turnover of large-scale enterprises has to be verified in the form of further telephone inquiries with the enterprises, in order to be able to guarantee a sufficient quality of results as well as stability of time series for quarterly indicators. Nevertheless these problems affect monthly turnover indicators much more than quarterly turnover indicators.

In the course of the production process for turnover indicators many plausibility checks on micro and macro level were carried out. On micro level development of single enterprises is observed. As our survey strategy foresees a census only the most important enterprises with a very high influence on indicators can be checked. On macro level development of economic activities is taken into consideration and cross checked with other statistics. The most important sources for cross checks are other statistical products of Statistics Austria e.g. foreign trade statistics, price statistics, tourism statistics, transport statistics, studies from research institutes or press releases.

Calculation modalities

Within the first phase of this feasibility study monthly turnover indicators with data available at t+90 were calculated for the reference year 2003. In the second phase of the study the focus was on calculation of monthly turnover indicators at t+60. The calculation and imputation methods used for production of quarterly indicators were adapted and applied for calculation of monthly indicators. The turnover indicators measure the appropriate gross turnover in per cent of the average gross turnover in the base year 2000 per NACE category. The gross turnover at the base year 2000 was calculated from yearly turnover declarations to the tax authorities. For calculation of turnover indicators all available VAT advance return have been used. So every single enterprise active in the relevant reference periods is in the population. The concept can be compared with a census.

Missing values were individually substituted with consideration of the seasonal development of the relevant NACE category in the reference period. A multi step mathematical imputation model was introduced for calculation of quarterly indicators. The same model was adapted and used for imputation of monthly missing values as well. The imputation of missing values takes place in the following steps:

Step 1: Calculation of an estimated monthly turnover for missing values of an enterprise

For the estimated value of missing turnover for enterprises with existing VAT advance returns in previous months, the arithmetic means from the values of the single enterprise of the last 12 months were taken as basic value:

$$\hat{U} = \frac{1}{n} \cdot \sum_{i=1}^{n} UVA_i$$

$\hat{U}$ estimated turnover (in order to calculate turnover in the relevant NACE category) for missing monthly VAT advance return of an enterprise)

UVA_i existing monthly VAT advance returns of the enterprise in the last 12 months

i months

Step 2: Calculation of the share of individual months of the gross turnover of a NACE category

The second step was the calculation of prozentual distribution on individual months within the relevant NACE 4-digits in the sliding distribution of the whole year.

$$p_i = \frac{U_i}{\sum_{i=1}^{12} U_i}$$

$$U_i = \sum_k UVA_k \quad \text{bzw. } \hat{U}_k$$

p_i share of monthly turnover (month i) measured at gross turnover of NACE category i in the last 12 months

k enterprises of a NACE category, which delivered a VAT advance return in the last 12 months at least once

Step 3: Calculation of an estimated monthly turnover

Calculation of estimated monthly turnover takes place under usage of prozentual monthly distribution of the relevant NACE category:

$$U_{ks} = \frac{\sum_i UVA_i}{\sum_i p_i} \cdot p_m$$

U_{ks} estimated value for missing monthly turnover of the enterprise

i all months, where VAT advance return of the enterprise was available

m month, where no VAT advance return of the enterprise was available

Step 4: Estimation of monthly turnover of enterprises without VAT advance return

For enterprises without VAT advance return the last available yearly turnover (e.g. last available annual turnover from the tax or a turnover substitute) was extrapolated with the use of NACE-specific factors and distributed to last 12 months with the use of the above mentioned sliding distribution.

$$U_{ks} = UJ_k \cdot p_m$$

UJ_k…. adapted (estimated) annual turnover of the enterprise

The values U_{ks} were taken into account for missing values for calculating monthly turnover indices for services.

Results

Overview

The following table gives an overview about turnover indicators calculated regularly for fulfilment of the STS-Regulation and additional indicators calculated in the course of the feasibility study:

Table 2

Variable: Turnover indicator for services (NACE 55, 60-64, 72, 74)

Periodicity	Timeliness	Reference Period	Legal basis
Q	t+90	From 1st quarter 2003 onwards	STS-Regulation
M	t+90	M1 - M12 2003 M1 - M12 2004	Feasibility study/STS amendment
M	t+60	M1 - M12 2004	Feasibility study/STS amendment

Change of reference period from quarterly to monthly

One of the main goals of the study was to prepare technical infrastructure of short term statistics for services for compiling results on a monthly basis. The data editing system was reorganised to be able to produce monthly indicators. Additionally our methods for plausibility checks and data analysis were changed into a flexible system for producing monthly and quarterly results. First of all monthly indicators were calculated for purposes of the feasibility study on the basis on available VAT advance return data sets at t+90.

Table 1 in Annex shows the results of monthly turnover indicators for NACE divisions 55, 60-64, 72 and 74 for the reference year 2003. In principal the results show that there will be no major problems to calculate monthly turnover indicators from VAT advance returns. As the figures show the developments in some NACE categories are much more erratic than the quarterly indicators.

The calculations made for the reference year 2003 (calculation of a monthly turnover index at t+90) were repeated for the reference year 2004. *Table 2 in Annex* shows the results for monthly turnover indicators with a delay of 90 days after the end of the reference period for the reference year 2004. First analysis of results show plausibility checks have to be intensified to produce regular turnover indicators on a monthly basis. It was recognised that in principal with the delay t+90 the completeness of the VAT advance return is sufficient to calculate monthly turnover indicators.

Reduction of delays from t+90 to t+60

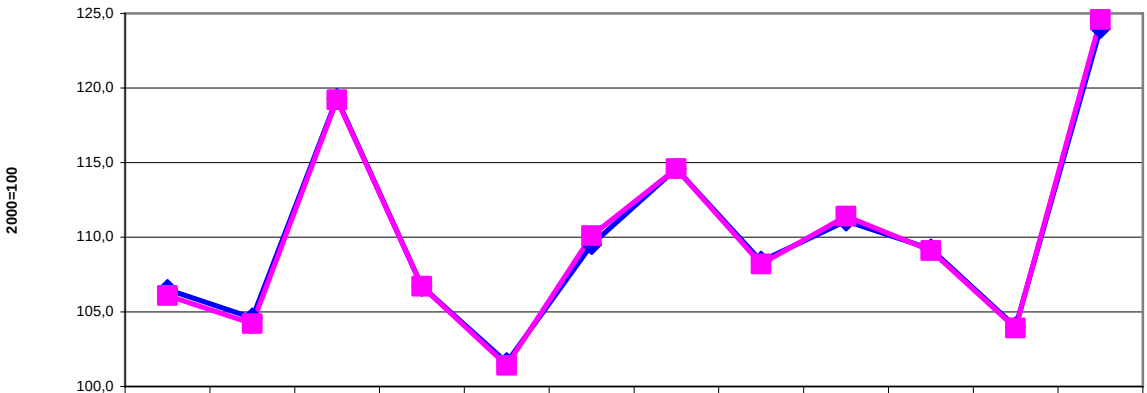
Another main goal of the study was the reduction of transmission delays from t+90 to t+60. Additionally a decision concerning the usability of the imputation model has to be reached. If this is not the case the development of alternative methods for change of frequency from quarterly to monthly and reduction of deadlines for data transmission will be necessary.

Within the second phase of the feasibility study turnover indicators with all available VAT advance returns at t+60 were calculated and compared with the results of t+90 for the reference year 2004 (*Tables 3 and 4 in Annex*). Therefore data sets from financial authorities with VAT advance returns at t+ 60 were taken into account. These data sets were the basis for our calculations. Generally we didn't have enough resources for a separate data editing in the course of the feasibility study. So it was necessary to transfer corrections made in the data sets with t+90 to data sets with t+60 data automatically. This was necessary because these corrections made in the course of plausibility checks refer mainly to enterprises with great influence on indicators. Afterwards the imputation model and calculation methods were applied to the data sets.

Figure 3 shows the monthly turnover indicators for services total at t+60 and t+90 for every single month of the reference year 2004. The results show differences from -0.4 for January and February 2004 to +0.6 for June and December 2004. As it can be seen from detailed results in *Tables 3 and 4 of Annex* the differences are much higher in some NACE categories or some months. As our analysis of the data show the most important reason for differences are missing enterprises with a great influence on indicators. If this is the case results are influenced by the imputation model. On the other hand transfer of the corrections may have some influence on the results. Generally speaking the results are very encouraging. So it can be concluded that it will be no major problem for Statistics Austria to calculate monthly turnover indicators for services at t+ 60 on the basis of the available VAT advance return. From our point of view the strategy as well as the imputation model is applicable.

Figure 3

Monthly turnover indicators for services total at t+60 and t+90 for 2004



	M 1	M 2	M 3	M 4	M 5	M 6	M 7	M 8	M 9	M 10	M 11	M 12
t+60	106,5	104,6	119,3	106,7	101,6	109,5	114,6	108,4	111,1	109,2	104,0	124,0
t+90	106,1	104,2	119,2	106,7	101,4	110,1	114,6	108,2	111,4	109,1	103,9	124,6

Conclusions and further steps

The calculation of monthly turnover indicators for services at t+ 60 will be possible with methods used for calculation of quarterly indicators at t+ 90 provided that personal resources will be available. The period of time for quality checks for producing indices with a transmission delay of t+60 is very short. There will be less than one week for plausibility checks and data analyses. So there will be a trade off between timeliness and quality of results. After entering into force of the amended STS regulation as well as the commission regulation regulating the reduction of delay and change of reference period for turnover indicator in other services the national regulation for

short term statistics in services has to be amended. Normally this takes a certain period of time. Therefore derogation periods will be considered.

Additionally we think about a change in our strategy. Presently we have a strategy were we use all enterprises in the population for index calculation. So we have to check about 115.000 enterprises quarterly. As one of our main problems is the lack of personal resources a change of our strategy to a sample is in mind. Nevertheless additional personal resources will be necessary. Otherwise the fulfilment of requirements of the amended STS regulation will be not possible.

As short term statistics of services has been introduced with the reference year 2003 in Austria development of working day adjusted turnover indicators will be one of the main goals. Therefore longer time series will be needed. Another important issue will be the production of regional results on behalf of national users.

Resources

During the first phase from April to November 2004 345,75 hours were worked from the persons involved. Totally 1.046,25 hours were needed for carrying out the feasibility study. Total eligible costs of the feasibility study were EUR 52.316.--. The contribution of the applicant is EUR 5.232.--.

In general all persons were involved in every phase which was necessary since the individual tasks and the project phases were tightly linked with each other. Nevertheless everyone had individual central tasks.

ANNEX

Table 1: Turnover index, quarterly and monthly, nominal (unadjusted) by NACE Rev. 1.1 for the reference year 2003, t+90

Table 2: Turnover index, monthly, nominal (unadjusted) by NACE Rev. 1.1 for the reference year 2004, t+90

Table 3: Turnover index, monthly, nominal (unadjusted) by NACE Rev. 1.1 for the reference year 2004, t+60

Table 4: Turnover index, monthly, nominal (unadjusted) by NACE Rev. 1.1 for the reference year 2004, absolute difference compared with t+90

Turnover index, quarterly and monthly, nominal (unadjusted) by NACE Rev. 1.1 for the reference year 2003
t+90

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Table 1

Reference Period	Services	55 Hotels and restaurants	60 Land transport; transport via pipelines	61 Water transport	62 Air transport	63 Auxiliary transport activities; travel agencies	64 Post and telecommunications	641 Post and courier activities	642 Telecommunications	72 Computer and related services	74 Other business activities	7411-7414 Legal, accounting, book-keeping and auditing activities; tax consultancy; market research; business and management consultancy;	742, 743 Architectural and engineering activities and related technical consultancy; technical testing and analysis	744 Advertising	745 Labour recruitment and provision of personnel	746 Investigation and security activities	747 Industrial cleaning	748 Miscellaneous business activities n.e.c.
	Ø 2000 = 100																	
Quarterly turnover index, nominal (unadjusted)[1]																		
2003 Q 1	**105,8**	123,2	114,8	69,7	91,5	103,1	104,3	95,8	107,2	107,9	94,0	106,8	76,6	81,8	87,9	109,4	104,9	117,6
Q 2	**104,6**	96,2	109,3	112,7	90,0	112,4	103,1	97,3	105,1	103,1	104,7	108,9	93,1	95,6	106,0	121,7	118,1	123,9
Q 3	**109,9**	111,2	109,0	113,5	122,2	119,8	106,4	99,6	108,7	110,7	104,1	110,3	99,6	79,4	130,3	122,3	116,5	117,9
Q 4	**109,9**	93,7	121,1	82,4	99,5	103,9	115,5	111,4	116,9	113,5	114,9	120,4	107,9	99,4	136,6	124,3	132,5	122,3
Monthly turnover index, nominal (unadjusted)[2]																		
2003 M 1	**103,7**	124,0	100,2	61,7	77,3	105,3	108,4	98,8	111,7	115,9	89,7	112,9	76,1	65,5	76,9	112,0	103,6	108,0
M 2	**101,0**	120,6	118,0	69,0	63,6	98,9	100,5	89,1	98,9	93,3	89,6	100,0	70,4	80,4	88,4	102,4	100,1	114,4
M 3	**112,6**	125,0	126,1	78,4	133,5	105,1	108,1	99,6	110,9	114,6	102,7	107,4	83,4	99,5	98,3	113,9	110,9	130,4
M 4	**105,5**	97,1	111,2	98,6	110,6	110,1	107,4	101,9	109,2	97,4	106,0	109,7	102,3	95,8	102,2	115,6	111,5	119,0
M 5	**102,0**	92,0	108,4	115,1	66,9	109,6	102,2	92,3	105,6	99,4	103,5	107,3	87,7	98,1	105,5	126,9	116,5	125,1
M 6	**106,3**	99,5	108,4	124,4	92,6	117,6	99,7	97,6	100,4	112,6	104,6	109,6	89,3	92,8	110,4	122,6	126,3	127,8
M 7	**113,7**	106,0	117,4	108,7	153,2	127,7	106,9	93,7	111,4	113,1	108,0	124,8	98,6	80,7	128,0	124,8	121,6	119,6
M 8	**104,9**	123,0	99,2	124,7	111,4	114,5	103,9	83,9	110,7	98,1	93,6	98,1	87,4	61,8	130,3	115,1	110,6	116,2
M 9	**111,0**	104,7	110,4	106,9	102,1	117,1	108,3	121,1	103,9	120,8	110,6	107,9	112,7	95,6	132,7	127,0	117,5	118,0
M 10	**109,7**	92,1	120,7	97,2	106,3	109,7	118,7	115,7	119,8	99,5	113,9	118,0	103,4	100,9	141,9	123,9	127,4	124,3
M 11	**100,4**	77,0	105,9	65,3	95,9	98,2	109,6	101,5	112,5	106,7	107,7	110,6	100,1	91,6	134,0	114,0	126,2	118,2
M 12	**119,7**	112,0	136,6	84,6	96,2	103,7	118,1	117,0	118,4	134,5	123,1	132,5	120,1	105,5	133,8	135,0	144,0	124,4

Q: STATISTIK AUSTRIA; 1) excluding value added tax; 2) calculated on the basis of available VAT advance return at t+ 80

Turnover index, nominal (unadjusted) by NACE Rev. 1.1 for the reference year 2004
t+90

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Table 2

Reference Period	Services	55 Hotels and restaurants	60 Land transport; transport via pipelines	61 Water transport	62 Air transport	63 Auxiliary transport activities; travel agencies	64 Post and telecommunications	641 Post and courier activities	642 Telecommunications	72 Computer and related services	74 Other business activities	7411-7414 Legal, accounting, book-keeping and auditing activities; tax consultancy; market research; business and management consultancy;	742, 743 Architectural and engineering activities and related technical consultancy; technical testing and analysis	744 Advertising	745 Labour recruitment and provision of personnel	746 Investigation and security activities	747 Industrial cleaning	748 Miscellaneous business activities n.e.c.
	Ø 2000 = 100																	
Monthly turnover index, nominal (unadjusted)[2)]																		
2004 M 1	**106,1**	124,9	107,7	78,1	86,9	98,9	115,5	101,6	120,3	126,9	89,4	110,3	77,3	70,1	82,8	122,3	109,3	95,9
M 2	**104,2**	126,3	120,9	81,5	74,7	102,1	100,5	95,8	102,1	94,8	90,4	100,0	80,9	73,5	99,3	115,8	106,6	102,0
M 3	**119,2**	118,7	123,8	98,5	148,4	139,6	112,0	116,6	110,5	115,6	107,5	117,5	89,5	100,3	118,4	129,3	118,9	119,9
M 4	**106,7**	94,6	112,0	97,0	117,2	115,9	113,0	107,3	114,9	98,7	104,9	109,9	93,7	97,0	119,2	124,5	117,5	113,8
M 5	**101,4**	91,0	104,7	115,0	84,2	115,1	103,5	94,7	106,6	98,3	99,8	103,5	84,4	94,1	124,9	123,4	118,1	107,1
M 6	**110,1**	97,9	112,0	130,3	111,0	129,9	104,9	104,3	105,1	109,7	107,7	115,6	94,0	94,9	135,0	140,4	133,6	111,2
M 7	**114,6**	107,6	111,5	122,0	160,4	139,4	111,1	99,0	115,3	109,8	105,6	119,5	97,4	74,4	153,0	132,4	125,5	109,4
M 8	**108,2**	119,7	103,0	139,6	115,0	125,6	104,7	93,0	108,7	98,6	97,8	104,8	93,3	64,7	152,0	119,9	116,0	106,3
M 9	**111,4**	104,3	110,2	112,7	108,5	125,5	110,2	114,2	108,9	114,2	108,5	106,8	104,4	91,2	157,3	136,2	123,2	112,1
M 10	**109,1**	93,8	116,7	98,5	118,2	117,2	116,6	117,1	116,5	98,1	109,1	109,1	97,9	100,2	151,3	134,7	125,0	113,1
M 11	**103,9**	78,3	111,2	72,0	105,9	108,9	111,8	104,0	114,5	106,3	108,6	111,0	97,0	95,8	149,0	124,6	128,6	114,5
M 12	**124,6**	113,1	141,6	90,4	103,5	117,9	126,9	120,2	129,3	134,3	124,7	134,3	120,8	102,2	148,7	135,3	148,0	127,0

Q: STATISTIK AUSTRIA; 1) excluding value added tax; calculated on the basis of available VAT advance return at t+ 80

Turnover index, nominal (unadjusted) by NACE Rev. 1.1 for the reference year 2004
t+60

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Table 3

Reference Period	Services	55 Hotels and restaurants	60 Land transport; transport via pipelines	61 Water transport	62 Air transport	63 Auxiliary transport activities; travel agencies	64 Post and telecommunications	641 Post and courier activities	642 Telecommunications	72 Computer and related services	74 Other business activities	7411-7414 Legal, accounting, book-keeping and auditing activities; tax consultancy; market research; business and management consultancy;	742, 743 Architectural and engineering activities and related technical consultancy; technical testing and analysis	744 Advertising	745 Labour recruitment and provision of personnel	746 Investigation and security activities	747 Industrial cleaning	748 Miscellaneous business activities n.e.c.
	Ø 2000 = 100																	
	Monthly turnover index, nominal (unadjusted)[1)]																	
2004 M 1	**106,5**	124,1	108,1	74,4	85,5	100,5	119,1	101,5	125,1	124,9	89,2	108,9	76,3	70,0	85,1	123,0	111,4	96,7
M 2	**104,6**	125,5	121,3	82,5	75,0	102,5	100,5	95,8	102,1	96,2	91,3	100,4	81,4	76,1	100,8	117,2	107,0	101,7
M 3	**119,3**	117,7	123,6	99,7	147,8	145,5	112,0	116,8	110,3	115,0	105,6	114,2	89,2	96,5	117,9	129,5	118,9	119,2
M 4	**106,7**	94,3	111,2	96,5	117,0	115,6	115,4	107,2	118,2	99,5	104,5	107,7	93,9	96,8	121,6	124,9	116,9	113,5
M 5	**101,6**	90,6	104,0	115,2	84,4	115,9	103,5	94,7	106,6	100,3	99,9	102,5	84,5	93,9	125,0	123,6	117,9	109,5
M 6	**109,5**	97,3	111,3	130,1	110,9	128,2	104,9	104,5	105,1	108,0	107,7	115,1	93,7	95,5	135,9	137,7	133,2	111,6
M 7	**114,6**	106,4	110,8	125,4	160,5	138,4	111,2	99,1	115,3	110,7	106,8	119,5	97,5	74,3	155,9	132,3	126,2	115,2
M 8	**108,4**	118,8	103,0	138,6	115,1	125,5	106,1	92,8	110,8	98,1	98,4	105,7	93,8	65,6	149,4	120,1	117,1	107,8
M 9	**111,1**	103,4	109,7	112,8	108,3	125,5	110,3	114,2	108,9	114,4	108,2	106,8	105,0	90,3	153,8	135,1	122,8	112,5
M 10	**109,2**	94,3	116,6	98,4	114,0	116,9	117,8	117,2	118,0	98,1	109,3	109,2	98,9	100,4	149,7	135,2	124,7	113,3
M 11	**104,0**	79,2	111,4	72,2	106,0	108,3	111,8	103,9	114,6	106,4	108,6	111,7	97,3	95,2	148,0	125,9	128,6	114,5
M 12	**124,0**	112,5	140,8	89,3	100,6	117,5	126,9	120,2	129,2	132,9	124,0	133,9	120,1	101,5	148,3	134,4	146,7	126,1

Q: STATISTIK AUSTRIA; 1) excluding value added tax; calculated on the basis of available VAT advance return at t+ 50

Turnover index, nominal (unadjusted) by NACE Rev. 1.1 for the reference year 2004
absolute difference compared with t+90

STATISTIK AUSTRIA
Die Informationsmanager

Table 4

Reference Period	Services	55 Hotels and restaurants	60 Land transport; transport via pipelines	61 Water transport	62 Air transport	63 Auxiliary transport activities; travel agencies	64 Post and telecommunications	641 Post and courier activities	642 Telecommunications	72 Computer and related services	74 Other business activities	7411-7414 Legal, accounting, book-keeping and auditing activities; tax consultancy; market research; business and management consultancy;	742, 743 Architectural and engineering activities and related technical consultancy; technical testing and analysis	744 Advertising	745 Labour recruitment and provision of personnel	746 Investigation and security activities	747 Industrial cleaning	748 Miscellaneous business activities n.e.c.
	Ø 2000 = 100																	
	Monthly turnover index, nominal (unadjusted), +/- t+90/t+60 [1]																	
2004 M 1	**-0,4**	0,8	-0,4	3,7	1,4	-1,6	-3,6	0,1	-4,8	2,0	0,2	1,4	1,0	0,1	-2,3	-0,7	-2,1	-0,8
M 2	**-0,4**	0,8	-0,4	-1,0	-0,3	-0,4	0,0	0,0	0,0	-1,4	-0,9	-0,4	-0,5	-2,6	-1,5	-1,4	-0,4	0,3
M 3	**-0,1**	1,0	0,2	-1,2	0,6	-5,9	0,0	-0,2	0,2	0,6	1,9	3,3	0,3	3,8	0,5	-0,2	0,0	0,7
M 4	**0,0**	0,3	0,8	0,5	0,2	0,3	-2,4	0,1	-3,3	-0,8	0,4	2,2	-0,2	0,2	-2,4	-0,4	0,6	0,3
M 5	**-0,2**	0,4	0,7	-0,2	-0,2	-0,8	0,0	0,0	0,0	-2,0	-0,1	1,0	-0,1	0,2	-0,1	-0,2	0,2	-2,4
M 6	**0,6**	0,6	0,7	0,2	0,1	1,7	0,0	-0,2	0,0	1,7	0,0	0,5	0,3	-0,6	-0,9	2,7	0,4	-0,4
M 7	**0,0**	1,2	0,7	-3,4	-0,1	1,0	-0,1	-0,1	0,0	-0,9	-1,2	0,0	-0,1	0,1	-2,9	0,1	-0,7	-5,8
M 8	**-0,2**	0,9	0,0	1,0	-0,1	0,1	-1,4	0,2	-2,1	0,5	-0,6	-0,9	-0,5	-0,9	2,6	-0,2	-1,1	-1,5
M 9	**0,3**	0,9	0,5	-0,1	0,2	0,0	-0,1	0,0	0,0	-0,2	0,3	0,0	-0,6	0,9	3,5	1,1	0,4	-0,4
M 10	**-0,1**	-0,5	0,1	0,1	4,2	0,3	-1,2	-0,1	-1,5	0,0	-0,2	-0,1	-1,0	-0,2	1,6	-0,5	0,3	-0,2
M 11	**-0,1**	-0,9	-0,2	-0,2	-0,1	0,6	0,0	0,1	-0,1	-0,1	0,0	-0,7	-0,3	0,6	1,0	-1,3	0,0	0,0
M 12	**0,6**	0,6	0,8	1,1	2,9	0,4	0,0	0,0	0,1	1,4	0,7	0,4	0,7	0,7	0,4	0,9	1,3	0,9

Q: STATISTIK AUSTRIA; 1) excluding value added tax; calculated on the basis of available VAT advance return at t+ 50