



**Economic and Social
Council**

Distr.
GENERAL

CES/2004/28
3 June 2004

ENGLISH ONLY

STATISTICAL COMMISSION and ECONOMIC COMMISSION FOR EUROPE

CONFERENCE OF EUROPEAN STATISTICIANS

Fifty-second plenary session
(Paris, 8-10 June 2004)

SHORT-TERM STATISTICS ON SERVICE FOR THE EURO AREA

Paper submitted by European Central Bank¹

EXECUTIVE SUMMARY

This paper reviews the current state and identifies priorities for the development of short-term statistics in the service sector for the euro area. The service sector covers 70% of the euro area and EU economy, but statistical information at monthly or quarterly frequency is rare, with the exception of information on retail trade. More data will become available from some EU regulations in the course of the next few years, but, in particular, economic activity and prices are not sufficiently covered yet. As part of the 5th Progress Report of the EFC on EMU statistics, the SPC and CMFB jointly proposed steps to improve service statistics. The proposed priorities for improvements of short-term statistics therefore include new indicators (output, output prices and employment), improvements in coverage in particular in the market sector, as better timeliness for some indicators. The new draft Regulation concerning short-term statistics addresses several of these issues and it therefore welcomed by the ECB. For its implementation a co-ordination approach at European level is highly desirable in order to avoid delays in the release of statistics for the euro area as a whole.

INTRODUCTION

1. In the 1998 report on statistical requirements in EMU², the Monetary Committee

¹ Paper prepared by Henning Ahnert. Paper submitted to the seminar on Price and Volume Measurement in the Service Sector, Conference of European Statisticians, June 2004. The author is Head of the General Economic Statistics Section in the European Central Bank. The views expressed in this paper do not necessarily reflect those of the European Central Bank.

² Monetary Committee/Working Group on Statistics, "Report to the Monetary Committee on information requirements in Economic and Monetary Union" (Brussels, 28 October 1998).

highlighted the need for progress in the development of a sound statistical basis for the service sector, and in particular “the cyclically sensitive service industries”. For the 5th Progress Report on the implementation of the Monetary Committee’s report the Statistical Programme Committee (SPC), in co-operation with the Committee on Monetary, Financial and Balance of Payments Statistics (CMFB) proposed the strategy to improve services statistics.³ Moreover, with the implementation of existing and new statistical regulations in the coming years more statistical data for the service sector will become available. This paper therefore not only compares the current situation with the statistical requirements, but considers also the situation as it is expected to be in about 2-3 years after the full implementation of important statistical regulations in the EU.

2. Moreover, while efforts have also been made to provide an adequate and harmonised legislative framework for the production of structural service statistics at annual frequency or annual national accounts data, this paper is focused on quarterly and monthly short-term service statistics. No attempt is made to identify the requirements for, or possible gaps in, the availability of annual data.

THE SERVICE SECTOR AND SELECTION CRITERIA FOR SHORT-TERM STATISTICS

3. More than 70% of the GDP for both the euro area and EU is produced by activities which are traditionally classified as services. The service sector is formed by a wide and heterogeneous set of activities and it cannot be expected that the statistical requirements are the same for all service industries. Services are often defined as a residual item, i.e. the activity outside the industry sector, or the activity that does not deal directly with the production of goods. The Monetary Committee requested efforts for the cyclically sensitive service industries. Unfortunately, this definition is difficult to use, because it does not rely on generally accepted concepts and, at least at a detailed industry level, is difficult to test in practice due to the scarcity of statistical information.

4. What could be an operational definition of cyclically sensitive service industries? Most statistical data on activity, prices and employment are classified according to the NACE Rev. 1.1. By convention a simplifying split between market and non-market activities is often used. According to this, market services include distributive trade, hotel and restaurant, transport and communication, financial services (banking, insurance, pension funds, financial auxiliary services), other market services (i.e. real estate, renting, computer, research and other business activities). Non-market services include public administration and defence, health, education and other non-market services. However, the non-market group contains several activities which are market activities (e.g. driving schools, cinema, hairdressing, or health services supplied through the market) and the market producer group contains some activities which are non-market (e.g. central banking). Table 2.1 reports the share of market and non-market services. Market services account for about 70% of the total value added of all services, and there are no significant differences between the role of services in the euro area and the EU-25.

Table 2.1: *Shares of market/non-market services in total economy value added (current prices, year 2002)*

³ See CMFB website (www.cmfb.org).

		Euro area		EU-25	
Breakdown	NACE	Euro billions	%	Euro billions	%
Whole economy	A-Q	6,561.1	100	8,881.9	100
Services	G-Q	4,623.2	70.5	6,282.8	70.7
Market services	G-K	3,196.0	48.7	4,327.3	48.7
Trade, transport and communication	<i>G,H,I</i>	<i>1,385.8</i>	<i>21.1</i>	<i>1,931.2</i>	<i>21.7</i>
Financial intermediation, real estate	<i>J,K</i>	<i>1,810.2</i>	<i>27.6</i>	<i>2,396.1</i>	<i>27.0</i>
Non market services	L-Q	1,427.2	21.8	1,955.6	22.0

Source: Eurostat, National Accounts

5. More details on the shares of activities within the service sector are given in table 2.2 using employment data. Distributive trade has the biggest employment share in services. All main NACE sections (except P and Q) contribute with at least 5% to the total services employment, or, in other words, none of these sections can be disregarded when the aim is to develop representative service sector statistics.

Table 2.2: Employment by service activity (thousands, Q2 2002)

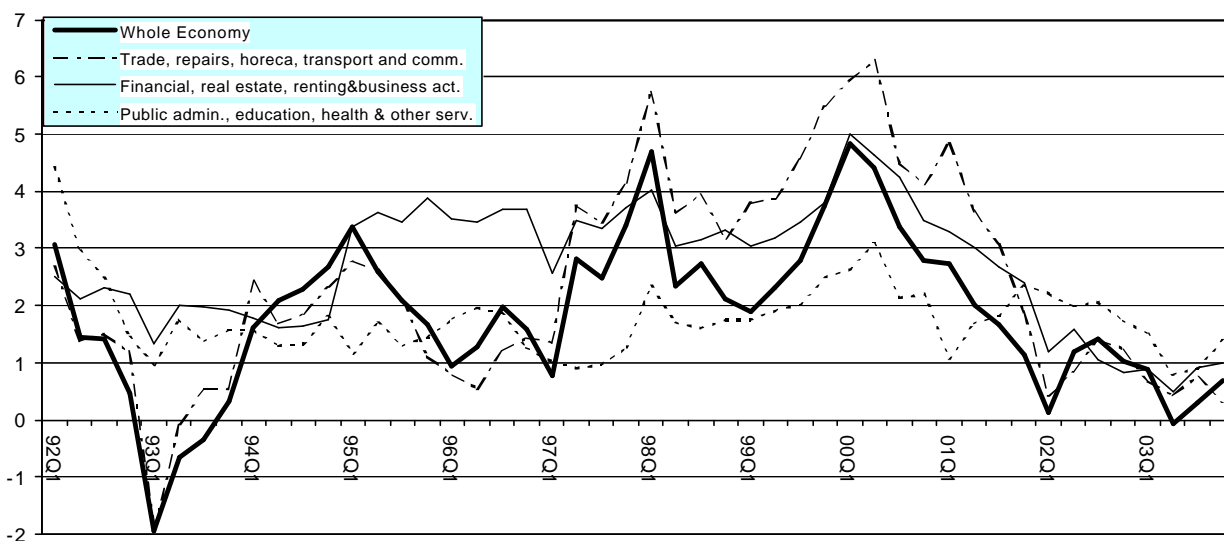
NACE groups		Euro area	%	EU-25	%
G	Wholesale and retail trade	18484.4	22.1	27713.2	22.1
H	Hotels and restaurants	5322.2	6.4	7563.2	6.0
I	Transport, storage, communication	7573.4	9.1	12053.4	9.6
J	Financial intermediation	4004.2	4.8	6095.0	4.9
K	Real estate, renting and business activities	11008.6	13.2	16561.0	13.2
L	Public administr., defence; compulsory soc. Security	10046.7	12.0	14163.9	11.3
M	Education	8246.3	9.9	13199.4	10.5
N	Health and social work	11369.8	13.6	17655.2	14.1
O	Other community, social and pers. service activities	5885.2	7.0	8794.9	7.0
P	Private households with employed persons	1551.4	1.9	1716.9	1.4
Q	Extra-territorial organisations and bodies	87.1	0.1	113.0	0.1
Total services		83579.3	100	125629.1	100

Source: Eurostat, Labour Force Surveys.

6. Are service activities displaying a cyclical pattern? The assumption that market services and cyclically sensitive industries overlap to a considerable extent is confirmed by a comparison of the short-term movements of the three main service categories available from national accounts. The outputs of the two aggregate market service categories move similarly to the movement of overall GDP (more pronounced for trade, transport and communication than for financial intermediation, real estate, renting and other). In particular, the cyclical weakness since late 2000 is strongly reflected in the market services. The non-market output is much less dynamic with annual growth rates ranging in a narrow band from 1% to 2%. However, the picture may be different for variables other than output, in particular for nominal variables (e.g.

compensation).

Chart 1: Value added for the euro area (constant prices, annual percentage changes)



7. Which short-term statistics should be developed for market and non-market service activities? To answer this question two criteria are used in this paper: relevance and short-term dynamics. Relevance is the degree to which the statistical indicator is expected to reflect economic activity, prices and labour market conditions. Short-term dynamics is the degree to which the statistical indicator is expected to vary with the business cycle or show other significant short-term fluctuations. The indicators examined include value added, turnover, new orders, export/imports (or a breakdown of variables into domestic and external components), business climate, prices, employment and wages for NACE sections. This selection of criteria and indicators is a simplification and could be further refined, but covers the main aspects. Table A.1 in the annex shows the results in more detail.

Relevance

8. Any statistical indicator should be relevant and meaningful. Value added information is a meaningful measure for output in all branches, though difficult to measure for non-market services and some market services (financial intermediation). Most other well known short-term indicators for activity and prices that are relevant for the industrial sector are relevant only for market services (e.g. turnover, business climate, output prices).⁴ New orders may be relevant only in some market branches (e.g. road transport, consulting). The same applies to exports and imports, since most services are produced and consumed domestically. Unlike indicators for activity and prices, information on employment and wages are relevant both for market and for non-market sectors. Hours worked appear to be more relevant for market services, since it is not clear whether and how a change in the actual hours worked affects output (often calculated from input components) and income (often independent from variations in working time) in non-market activities.

⁴ Though not relevant for short-term economic *analysis*, some of these statistics for the non-market sector may be required for the *production* of statistics, such as value added of government output at constant prices.

Short-term dynamics

9. Short-term information is needed when economic activity, prices / costs, hours worked or employment vary with the business cycle or shows other significant short-term dynamics. Most of the relevant activity and price/cost indicators for market services fall under this category; for non-market services the short-term dynamics of activity and price/cost indicators are – if relevant - expected to be generally less pronounced. However, employment, hours worked and wage information varies both in market and non-market services.

10. Summarising this evaluation on relevance and dynamics, short-term information on activity and prices/costs is particularly important for market service sectors, but not all indicators are useful for all market sectors. For non-market sectors, information on employment and wages has the highest priority for short-term analysis. For all service activities a detailed analysis of data requirements for individual branches (NACE Divisions and below) is necessary given the heterogeneous composition of many aggregate activity groupings in the NACE.

EU LEGAL FRAMEWORK AND AVAILABLE DATA

Current coverage of service statistics in EU regulations

11. Data on services are covered in the main statistical domains, namely national accounts, business statistics, labour market statistics, but also consumer price statistics. Precise legal provisions exist for all domains and in some cases new legal initiatives are underway as a follow-up to the EMU Action Plan. Table A.3 (Annex) gives a detailed overview of the existing regulations and envisaged improvements.

12. In general, the requirement for statistical information at an annual frequency is more comprehensive and complete than the requirements for quarterly or monthly data. Short-term information is not covered homogeneously in the different regulations. In particular for the non-market services the coverage is very limited. Quarterly national accounts offer important indicators for all service branches (value added, employment, compensation and, in the future, hours worked), but at very high level of aggregation only (the service sector is split into 3 main subgroups)⁵. In the current short-term statistics regulation the requirements are limited to only two indicators (turnover, employment) and to selected sub-categories of market services, namely a complete coverage of sections G and I and an incomplete coverage of sections H and K. Indicator coverage, frequency and timeliness requirements in the short-term statistics regulation for services are not comparable to the requirements that exist in the same regulation for the industry sector (see table 3.1). A number of pilot studies are foreseen in the regulation to extend the coverage to groups K to O, i.e. into the domain of non-market services, but have not been launched yet.

⁵ Annual national accounts provide information for 11 service groups (as part of the 'A31' breakdown for annual data).

Table 3.1: Short-term statistics requested for industry and services by the STS Regulation

	Industry		Services	
	Frequency	Timeliness	Frequency	Timeliness
<i>Production</i>	Monthly	T+45 (40)	Not required	
<i>Turnover</i>	Monthly	T+60	Quarterly *)	T+90 (60)
<i>New orders received</i>	Monthly	T+50	Not required	
<i>Number of persons employed</i>	Quarterly	T+90 (60)	Quarterly *)	T+90 (60)
<i>Hours worked</i>	Quarterly	T+90	Not required	
<i>Gross wages and salaries</i>	Quarterly	T+90	Not required	
<i>Output prices</i>	Monthly	T+35	Not required (Q *)/T+90)	

In bold: new draft STS Regulation.

*) for selected branches only.

13. The EU labour force survey provides complete quarterly information on household's employment and hours worked on (at least) a NACE Section level. Moreover, the labour cost regulation foresees the complete coverage of the service sector (labour costs per hour worked), though long derogations potentially lasting to 2007 are possible for the coverage of non-market services for NACE sections, and some improvements are subject to the success of pilot studies. Finally, prices for consumer services are exhaustively covered by the HICP, with a considerable degree of detail.

14. Frequency and timeliness are important quality features of short-term statistics. All data mentioned so far are required at a quarterly frequency; only HICP results for service prices are monthly. The required timeliness for national accounts results is 70 days after the reporting quarter. Labour force and employment data are required 90 days after the end of the quarter and the same applies to labour cost statistics (but these are expected to be cut to 70 days under the Regulation) and short-term statistics for the service sector.

15. Not covered by a legal act, but agreed between the European Commission and national statistical institutions, is the European Commission's "Joint Harmonised EU Programme of Business and Consumer Surveys". The monthly qualitative survey, conducted for all 25 EU Member States, consists of five questions (business situation, recent and expected demand, recent and expected employment). The Commission compiles a 'Confidence indicator for the service sector'. The survey covers a sub-set of market-related service activities, mainly from the sections H (Hotels and restaurants), I (Transport, travel agencies, post and telecommunications), K (Real estate activities, renting of machinery and equipment, computer and related activities) and O (Sewage and refuse disposal).

Current data availability

16. While the coverage of service statistics in EU statistical legislation is not complete, the actual availability of data for the euro area as a whole (and the EU) is even more limited due to long implementation times and derogations. As a result, short-term statistical information on the services sector is currently limited to three areas: aggregate information from quarterly national accounts (but not hours worked), partial data from EU labour cost indices, and complete data on HICP for consumer services. Moreover, the European Commission has improved the coverage of the EC Business survey for services. No euro area results are available from the short-term statistics regulation, since the country coverage of these data is still incomplete. The same is currently the case for quarterly EU labour force surveys.

ECB PRIORITIES FOR IMPROVEMENTS

17. The ECB has repeatedly stressed the importance for the purposes of economic and monetary policy to have a methodologically sound and consistent information system that produces relevant information in a timely fashion. Detailed requirements for general economic statistics including service statistics have been endorsed by the Governing Council of the ECB and published for indicators, level of detail, frequency and timeliness⁶.

18. First priority for the ECB in the field of services statistics is the implementation of existing statistical regulations, in particular the STS regulation (with quarterly data on turnover and employment), the labour cost index (including a positive outcome to the relevant pilot study), the labour force survey and, as regards hours worked, for quarterly national accounts.

19. Second, the ECB very much welcomes the new draft STS regulation which puts particular emphasis on developing output price statistics for the services sector, and on improving frequency and timeliness. The services output prices may also be used as a deflator for the part of the output sold by service businesses to business, or more generally, the deflation of services turnover and the calculation of output.

20. Third, following the current phase of implementation of service statistics, service statistics will have to be made 'fit for use' for short-term analysis. This means in particular to aim a set of monthly key indicators and publication timetables which are close to the dates for current industrial statistics.

21. In addition, it is expected that the first release of services statistics at a euro area level will be the starting point of a further exchange of experience between producers and users. There are a number of important questions which can only be addressed by users after statistical information will have become available. One of it is a possible distinction of turnover according to customer groups (business to business, business to consumer, other). A second issue is the possible usefulness of leading indicator information as an equivalent to new order statistics in the industry sector.

CONCLUSIONS

22. For the ECB the development of short-term statistics for the service sector in the euro area is very important. The ECB fully acknowledges the major conceptual work needed to develop some of the new statistics, as well as the significant efforts needed to implement them. The planned implementation of producer prices, turnover and labour market statistics at a quarterly frequency are major steps forward. The ECB also welcomes that service statistics form a part of the new Principal European Economic Indicators which are targeted for 2005. Given the current lack of most of these indicators at euro area level, and the experiences gained with existing EU statistical regulation, attention must be paid to a co-ordinated implementation of the new statistics which ensure the best progress possible at euro area aggregate level. From the ECB's perspective, new statistics can be used only if euro area aggregates can be compiled. This requires that a sufficiently high coverage of the new statistics by national data.

⁶ See European Central Bank (August 2000), "Statistical Requirements of the European Central Bank in the field of General Economic Statistics".

For most of the existing euro area statistics, the time period needed to achieve a sufficient coverage of euro area aggregates has taken very long, and for several indicators it is not yet finished. For the future implementation of new statistics in the service sector a close co-ordination of the implementation is therefore recommended.

Table A1: Relevance and short-term dynamics of short-term service statistics

	Activity indicators										Prices		Labour market indicators			
	Value added		<u>Turnover</u>		New Orders		Ex/Import (or dom./ext. market)		Business climate		Output Prices		Employment (& hours worked)		Wages	
	Rel	Dyn	Rel	Dyn	Rel	Dyn	Rel	Dyn	Rel	Dyn	Rel	Dyn	Rel	Dyn	Rel	Dyn
G – Trade and Repair	++	++	++	++	++	-	+ 3)	++3)	++	++	++	+	++	+	++	+
H – Hotels and restaurants	++	++	++	+	+	++	-	-	++	++	++	+	++	++	++	+
I – Transport, storage and communication	++	++	++	+ 2)	++ 2)	++	+ 2)	++ 2)	++	++	++	+	++	+	++	+
J – Financial intermediation	++	+	-	+	-	-	-	-	++	++	+	+	++	+	++	+
K – Real estate, renting and business activities	++	+	+	+	+	+	-	-	++	++	++	+	++	+	++	+
L – Public administration and defence, compulsory social security	++	-	-	-	-	-	-	-	-	-	-	-	++	+	++	+
M – Education	++	-	-	-	-	-	-	-	-	-	-	-	++	+	++	+
N – Health and social work	++	+	-	-	-	-	-	-	-	-	-	-	++	+	++	+
O – Other community, social and personal service activities	++	+ 1)	+ 1)	-	-	-	+ 1)	+ 1)	+ 1)	+ 1)	+ 1)	+ 1)	++	+	++	+

1) for market activities; 2) for some transport and storage activities; 3) for wholesale trade.

Rel : Relevance for measuring economic activity, or prices, or labour market conditions

Dyn : Short-term dynamics

++ : highly relevant / high short-term dynamics

+ : some relevance / some short-term dynamics

- : not relevant / no short-term dynamics

Not mentioned are consumer price statistics which are available for all relevant consumer services.

Table A.2: Coverage of annual, quarterly and monthly service sector statistics in existing EU regulations

Domains	Legal references	Variables	Coverage and level of detail	Frequency	Timeliness
<i>National Accounts</i>	Council Regulation (EC) No 2223/96 of 25 June 1996 (ESA 95).	<u>value added:</u> - output by industry - intermediate consumption - gross value added at basic prices - consumption of fixed capital <u>capital formation</u> <u>employment and compensation.</u>	A31 (sections G to Q of NACE Rev.1)	Annual	9 months after the reference year.
		<u>Value added, compensation, employment, hours worked.</u>	A6 (G+H+I, J+K and L to P)	Quarterly	70 days after the reference quarter
<i>Structural Business Statistics</i>	Council Regulation (EC, EURATOM) No 59/97 of 20 December 1996, amended by Council Regulation (EC, EURATOM) No 410/98 of 16 February 1998. Specific Commission Regulations exist for insurance service and tourism statistics.	<u>demographic:</u> number of enterprises/local units; <u>enterprise characteristics:</u> turnover, production value, value added, personal costs, total purchases of goods and services, gross investments in tangible goods, number of persons employed, number of employees; <u>regional characteristics:</u> wages and salaries, number of persons employed.	Sections G, H, I, J, K Non-market services and public services are not covered.	Annual	18 months after the end of the reference year. Preliminary national results within 10 months for turnover and number of persons employed.
<i>Short-term Business Statistics (revision planned)</i>	Council Regulation (EC) No 1165/98 of 19 May 1998.	<u>turnover and employment.</u>	Sections G, I, K (only computer and related activities, other business activities). Non-market services, public services and financial intermediation are not covered Pilot studies are planned on sections K (complete) and J, M, N, O.	Quarterly	90 days after the reference quarter.
<i>Labour Force Survey</i>	Council Regulation (EC) No 577/98 of 9 March 1998.	<u>Labour force, employment, hours worked.</u>	Section G-Q, possibly also Divisions.	Quarterly	12 weeks after the end of the reference period (quarterly surveys).
				Annual	9 months (annual survey).

<u>Domains</u>	<u>Legal references</u>	<u>Variables</u>	<u>Sectors and level of detail</u>	<u>Frequency</u>	<u>Timeliness</u>
<i>Labour Cost Indices</i>	Council and Parliament Regulation (EC) No 450/2003 of 27 February 2003	Total labour costs; labour costs excluding bonuses; wages and salaries; employers' social contributions.	Sections G to O (dependant on pilot studies)	Quarterly	70 days.
<i>HICP</i>	Commission Regulation No 2214/96 of 20 November 1996, amended by Commission Regulation No 1749/99 of 23 July 1999.	Consumer service price indices, accounting for around 38% of the overall index for the euro area.	The main branches covered and published at 3 digit COICOP level are: - rents - health (hospital and out-patient services); - transport; - telecommunications; - recreation and culture; - education; - restaurants and hotels.	Monthly	15 days after the reference month.
<i>EC business survey in the service sector</i>	European Commission decision on the 'Joint Harmonised EU Programme of Business and Consumer Surveys' and the Communication from the Commission to the European Parliament and the Social and Economic Committee, Nov.2000, COM (2000) 770.	5 questions: <ul style="list-style-type: none"> • assessment of the business situation • evolution of demand (in recent months and in the months ahead) • evolution of employment (in recent months and in the months ahead) 	NACE Rev.1 Section H (division 55), I (divisions 60-6); Section K (divisions 70-72, 74); Section O (division 90)	Monthly	Last working day of the reference month