

Enlargement of OECD Database of Business Tendency Surveys to Sectors Outside Manufacturing and Consumer Surveys:

Current status and future plans

**Ronny Nilsson
Statistics Directorate
OECD**

Introduction

The use of qualitative indicators, that is, indicators derived from business and consumer tendency or opinion surveys in international business cycle analysis has a long tradition at the OECD. Survey results for OECD member countries for manufacturing industry have been published in the OECD's "Main Economic Indicators" (MEI) since 1974. Systems of cyclical indicators have been established and published as part of the monthly MEI publication. In these systems, the qualitative data always played an important role from the start. In addition, the OECD has produced and issued methodological information on the conduct and use of this type of qualitative information as a supplement to the MEI publication.

The increased use and availability of business tendency and consumer survey indicators across OECD member countries and non-member countries monitored by the OECD, over recent years have prompted the Statistics Directorate to review the demand for these statistics. A request for enlargement of business tendency survey (BTS) data to include construction, retail trade and other services sectors and consumer surveys (CTS) was sent out to OECD member countries in January 2002 and to selected non-member countries i.e. the Big 6 (Brazil, China, India, Indonesia, Russia and South Africa) in June-2002. A formal response to this request has now been received from almost all institutions covered by the enquiry.

The request listed the target variables already collected by the OECD for the manufacturing industry in most member countries and the minimum list of variables that the OECD would like to include for BTS in the construction and other services sectors, and CTS. The responding institutions were asked to indicate which of these variables they collect and which of them are adjusted for seasonality.

In the following, the results of the enquiry are presented by EU Member countries, EU Candidate countries as country groups with a common set of indicators, OECD Non-EU Member and Candidate countries and the Big 6 Non-OECD Member and with an breakdown by sectors (manufacturing, construction, retail trade, other services) and consumer surveys. The EU Candidate countries considered are only the ones that are as well OECD Member countries i.e. Czech Republic, Hungary, Poland and Slovak Republic. The OECD Non-EU Member and Candidate countries covered are: Canada, United States, Mexico, Australia, New Zealand, Japan, Korea, Norway, Switzerland and Turkey.

The availability of the requested data is presented in the first part and progress with enhancement of the content of the BTS for manufacturing and expansion of the coverage to sectors outside manufacturing and CTS are reported and future developments are discussed in the second part and the Third part covers current and future possibilities for efficient data and meta data transmission.

Availability of target list of BTS/CTS data

EU Member and Candidate countries

The BTS/CTS indicators available for EU member and Candidate countries corresponding to the data requested by the OECD are set out in Table 1. Most of the requested indicators for all sectors are part of the harmonised system of BTS/CTS surveys managed by the European Commission (EC). This means that almost all survey data already collected by the OECD for manufacturing sector and requested by the OECD for other sectors are available from EC. The frequency of the harmonised surveys in all sectors is monthly which means that all requested indicators are available on a monthly basis for sectors outside manufacturing. However, two of the requested indicators for manufacturing industry are only available on a quarterly basis from the EC. These indicators are: orders inflow or demand and , capacity utilisation.

Over 80 % of the BTS data requested for the new sectors (construction, retail trade, other services and consumers) are available from EC. However, the two indicators on future business situation and demand/orders inflow are not included in the harmonised EC survey for construction and the indicator on future business situation is not included in the harmonised EC survey for services. On the other hand, survey data for the new sectors from national sources in EU candidate countries already OECD members cover all requested variables.

For the manufacturing sector, no data are available for EU member countries from the EC for the two questions concerning present and future business situation. However, such questions are asked in the national surveys in some EU member countries as well as in all candidate countries considered here. On the other hand, the OECD publishes a national business climate or composite confidence indicator to reflect the present business situation for some EU member countries. The only indicator requested that is not available from either EU Member or candidate countries, is the one on raw material stocks.

OECD Non-EU Member and Candidate countries

The results of our request for BTS data to the ten Non-EU were returned by at least one institution in all countries except Mexico, New Zealand and Korea. In the case of Mexico, we know from the paper prepared by the Central Bank for the OECD meeting of the Short term Economic Statistics Expert Group, that a BTS survey among commercial chain stores exists. The bank has also started a project to widen BTS surveys to other productive sectors and to improve the existing survey in manufacturing. In addition, in a joint project with the National Statistical Institute (INEG), the bank is preparing a consumer survey. For New Zealand we know that the BTS survey conducted by the NZ Institute of Economic Research covers both manufacturing and construction. No surveys are, however, conducted in retail trade and other services sectors. The BTS survey conducted by the Bank of Korea covers all sectors of which the OECD only publishes the results for the manufacturing sector.

Table 2 gives an overview of available business and consumer survey variables as requested by the OECD. The information in the table is based on answers to our request of BTS data and in the case of no answers, the information is obtained as noted above.

In the case of the manufacturing sector, for which we already collect and publish data, the availability of a consistent set of survey series across countries is rather good for most countries. However, the surveys in Canada, Mexico and the United States do not include many of the requested series. This is some times explained by the fact that the variable is only monitored for the present situation and not the future as requested (e.g. Mexico).

For the sectors outside manufacturing the situation is less good. Australia, Mexico, Norway and Turkey do not conduct any surveys outside manufacturing for the time being and New Zealand extends surveys only to the construction sector. Even in the case of Canada, only scattered information is available for the retail trade and other services sector. For the United States only aggregate information for the non-manufacturing sector as a whole is published. On the other hand, consumer surveys are conducted in eight of the countries and all requested indicators are covered by the surveys.

Big 6 Non-Member countries

Table 3 gives an overview of available business and consumer survey variables as requested by the OECD. The information in the table is based on answers to our request of BTS/CTS data and in the case of no answers, the information is obtained from documentation presented at workshops organised by the OECD in Asia with participation of representatives from China, India and Indonesia.

Data for the manufacturing sector is available for all countries and the coverage of the requested indicators is very good with eight or more of the eleven target indicators available for China, India, and Russia and with over half of the requested indicators available for Brazil and South Africa.

The coverage of requested survey variables for sectors outside manufacturing and CTS is higher for this group of countries compared to the group OECD Non-EU countries. All big 6 Non-Member countries with exception of Brazil conduct surveys in the construction and retail trade sector and China, India and Indonesia conduct surveys in other services sectors as well. The good sector coverage in these countries is explained by the fact that most BTS surveys in Asia are designed to include all sectors, this means that no individual surveys are conducted by sector. According to available information, consumer surveys are conducted in all countries except India.

Summary

- The twelve target BTS series for *manufacturing* are available for most OECD Member countries and the Big 6 Non-member countries. The only series with a low representation are export order books and raw material stocks. All target BTS series for manufacturing are available from EC for all EU Member countries with exception of present and future business situation and raw material stocks. For EU Candidate countries, all target indicators are available with exception of raw material stocks.
- The availability of BTS series included in the target list for *construction, retail trade and other services sectors* is very good for EU Member and Candidate countries (19 countries), Four of the six target series are available for construction, all six target series are available for retail trade and three of the four target series are available for other services from the EC.
- For the *OECD Non-EU countries and the Big 6 Non-OECD Member countries* the coverage of the target series for is not as good for sectors outside manufacturing. However, over 60 % of the target series are available from the Big 6 Non OECD Member countries for construction and retail trade sector, but only a third or less among the OECD Non-EU Member countries can supply the requested series. For the sector other services only about 40 % of the countries among both OECD Non-EU Member and Candidate countries and the Big 6 Non-OECD Member countries can supply the target indicators. This is mainly explained by the fact that no surveys are conducted or existing surveys does not cover above sectors. One other problem is that in the case of the United States only aggregate information for the non-manufacturing sector as a whole is available. A break-down by sectors outside manufacturing is also a general problem in many Asian countries and may pose problems for countries like India, Japan and Korea.

- All target list of *consumer opinion indicators* are available for EU Member and Candidate countries and 80 % of them are available for OECD Non-EU Member and candidate countries. However, only four of six of the Big 6 Non-OECD Member countries can supply all requested series.

Table 1 BTS/CTS Data for EU Member and Candidate Countries Disseminated by EC and Data Included in OECD Database

	Number of Series/Countries			
	EU Member Countries*		Candidate Countries**	
	Available from EC	Included in OECD Database	Available from National Source	Included in OECD Database
Manufacturing industry				
Industry confidence indicator	15	15	4	4
Business situation: present (business climate)	No	4	4	4
Business situation: future	No	3	4	4
Production: future tendency	15	15	4	4
Orders inflow or demand: tendency Q	15	15	4	4
Order books: level	15	15	4	4
Export order books: level	15	15	4	4
Finished goods stocks: level	15	15	4	4
Raw material stocks: present situation	No	5	No	No
Rate of capacity utilization Q	15	15	4	4
Employment: future tendency	15	15	4	4
Selling prices: future tendency	15	15	4	4
Construction				
Construction confidence indicator	15	15	4	4
Business (activity) situation: present	15	15	4	4
Business (activity) situation: future	No	No	4	4
Demand/Orders inflow: future tendency	No	No	4	4
Employment: future tendency	15	15	4	4
Selling prices: future tendency	15	15	4	4
Retail trade				
Retail Confidence indicator	15	15	4	4
Business (activity) situation: present	15	15	4	4
Business (activity) situation: future	15	15	4	4
Volume of stocks: level	15	15	4	4
Employment: future tendency	15	15	4	4
Order intentions or demand	15	15	4	4
Other services excluding Retail trade				
Services confidence indicator	15	15	4	4
Business (activity) situation: present	15	15	4	4
Business (activity) situation: future	No	No	4	4
Employment: future tendency	15	15	4	4
Consumer opinions				
Consumer confidence indicator	15	15	4	4
Expected inflation	15	15	4	4
Expected economic situation	15	15	4	4

*Austria, Belgium, Denmark, Finland, France, Germany, Greece, Ireland, Italy, Luxembourg, Netherlands, Portugal, Spain Sweden, United Kingdom

** Czech Republic, Hungary, Poland and Slovak Republic

Table 2 Sources for Available BTS/CTS Data for OECD Non-EU Member Countries

	Canada	US	Mexico	Australia	New Zealand	Japan	Korea	Norway	Switzer-land	Turkey
Manufacturing industry										
Industry confidence indicator		ISM	BM						KOF	
Business situation: present (business climate)						BOJ	BOK			
Business situation: future			BM	ACC	NZIER	BOJ	BOK	SN	KOF	
Production: future tendency	BCS			ACC	NZIER		BOK	SN	KOF	SIS
Orders inflow or demand: tendency	BCS	ISM		ACC	NZIER		BOK	SN	KOF	SIS
Order books: level	BCS	ISM		ACC				SN	KOF	SIS
Export order books: level		ISM							KOF	SIS
Finished goods stocks: level	BCS	ISM	BM	ACC	NZIER	BOJ	BOK	SN	KOF	SIS
Raw material stocks: present situation		ISM	BM	ACC	NZIER			SN	KOF	SIS
Rate of capacity utilisation			BM	ACC	NZIER	BOJ	BOK	SN	KOF	SIS
Employment: future tendency	BCS	ISM	BM	ACC	NZIER	BOJ	BOK	SN	KOF	SIS
Selling prices: future tendency				ACC	NZIER	BOJ	BOK	SN	KOF	SIS
Construction										
Construction confidence indicator										
Business (activity) situation: present		ISM*				BOJ	BOK		KOF	
Business (activity) situation: future					NZIER	BOJ	BOK			
Demand/Orders inflow: future tendency		ISM*							KOF	
Employment: future tendency	CB				NZIER	BOJ	BOK		KOF	
Selling prices: future tendency	CB				NZIER	BOJ			KOF	
Retail trade										
Retail confidence indicator										
Business (activity) situation: present		ISM*				BOJ	BOK		KOF	
Business (activity) situation: future						BOJ	BOK		KOF	
Volume of stocks: level		ISM*				BOJ			KOF	
Employment: future tendency						BOJ	BOK		KOF	
Order intentions or demand		ISM*							KOF	
Other services excluding Retail trade*										
Services confidence indicator										
Business (activity) situation: present		ISM*				BOJ	BOK		KOF	
Business (activity) situation: future						BOJ	BOK		KOF	
Employment: future tendency	CB					BOJ	BOK		KOF	
Consumer opinions										
Consumer confidence indicator	CB	M	INEGI	MIAESR	WPMM	ESRI	KNSO		OFQC	
Expected inflation	CB	M		MIAESR	WPMM				OFQC	
Expected economic situation	CB	M	INEGI	MIAESR	WPMM	ESRI	KNSO		OFQC	
BCS	BTS in manufacturing		Statistics Canada							
CB	BTS in construction/service and consumers		Conference Board Canada							
ISM	BTS in manufacturing		Institute for Supply Management United States							
ISM*	BTS in <u>non-manufacturing</u>		Institute for Supply Management United States							
M	Consumer survey		University of Michigan United States							
BM	BTS in manufacturing		Bank of Mexico							
INEGI	Consumer survey		Institute National de Estadistica Geografica e Informatica							
ACC	BTS in manufacturing		Australian Chamber of Commerce and WestPac Banking							
MIAESR	Consumer survey		Melbourne Institute of applied Economic and Social Research							
NZIER	BTS in manufacturing/construction		New Zealand Institute of Economic Research							
WPMM	Consumer survey		Westpac Banking Corporation/McDermot-Miller Limited							
BOJ	TANKAN		Bank of Japan							
ESRI	Consumer survey		Economic and Social Research Institute, Cabinet Office							
BOK	BTS in all sectors		Bank of Korea							
KNSO	Consumer survey		National Statistical Office							
SN	BTS in manufacturing		Statistics Norway							
KOF	BTS in all sectors and consumers		KOF/ETH Switzerland							
OFQC	Consumer survey		Office Federal des Questions Conjoncturelles							
SIS	BTS in manufacturing		State Institute of Statistics Turkey							

Table 3 Sources for Available BTS/CYTS Data for Big 6 Non-OECD Member Countries

	Brazil	China	India	Indonesia	Russia	South Africa
Manufacturing industry						
Industry confidence indicator		NBS			CEA	BER
Business situation: present (business climate)		NBS		BI/BPS		BER
Business situation: future	FGV	NBS	NCAER	BI/BPS		BER
Production: future tendency	FGV	NBS	NCAER	BI/BPS	CEA	BER
Orders inflow or demand: tendency					CEA	BER
Order books: level	FGV	NBS	NCAER	BI/BPS		
Export order books: level	FGV			BI/BPS		
Finished goods stocks: level	FGV	NBS	NCAER	BI/BPS	CEA	
Raw material stocks: present situation						
Rate of capacity utilisation	FGV	NBS	NCAER	BI/BPS	CEA	
Employment: future tendency	FGV	NBS	NCAER	BI/BPS	CEA	BER
Selling prices: future tendency		NBS	NCAER	BI/BPS	CEA	BER
Construction						
Construction confidence indicator		NBS			CEA	BER
Business (activity) situation: present		NBS		BI/BPS	CEA	BER
Business (activity) situation: future		NBS	NCAER	BI/BPS		
Demand/Orders inflow: future tendency					CEA	BER
Employment: future tendency		NBS	NCAER	BI/BPS	CEA	BER
Selling prices: future tendency		NBS	NCAER	BI/BPS	CEA	BER
Retail trade						
Retail confidence indicator		NBS			CEA	BER
Business (activity) situation: present		NBS		BI/BPS	CEA	BER
Business (activity) situation: future		NBS	NCAER	BI/BPS	CEA	
Volume of stocks: level		NBS	NCAER		CEA	BER
Employment: future tendency		NBS	NCAER	BI/BPS	CEA	BER
Order intentions or demand		NBS				BER
Other services excluding Retail trade*						
Services confidence indicator		NBS				
Business (activity) situation: present		NBS		BI/BPS		
Business (activity) situation: future		NBS	NCAER	BI/BPS		
Employment: future tendency		NBS	NCAER	BI/BPS		
Consumer opinions						
Consumer confidence indicator		NBS		BI/BPS	GS	BER
Expected inflation					GS	
Expected economic situation		NBS		BI/BPS	GS	BER

FGV	BTS in all sectors	Fundacao Getulio Vargas Brazil
NBS	BTS in all sectors and consumers	National Bureau of Statistics China
NCAER	BTS in all sectors	National Council of Applied Economic Research India
BI/BPS	BTS in all sectors	Bank of Indonesia/Statistics Indonesia
CEA	BTS in mfg/construction/trade	Centre for Economic Analysis Russia
GS		Goskomstat Russia
BER	BTS in mfg/construction/trade/consumers	Bureau for Economic Research South Africa

Progress with enhancement and enlargement of OECD database of BTS/CTS

Current situation

EU Member and Candidate countries

All BTS/CTS indicators available from EC for EU Member and candidate countries are already included in the OECD's MEI database. In addition to the indicators available from EC, the database also includes some of the requested indicators not available from EC, but available from national sources in some EU Member countries and in all candidate countries. The indicators included in the database are set out in Table 1.

OECD Non-EU Member and Candidate countries

The coverage of requested indicators available from national sources in OECD Non-EU Member and Candidate countries is very different across both countries and sectors in the OECD database at present. For manufacturing industry, seven of the eleven target indicators are included in the database for five or more of the countries. No indicators are included for construction retail trade and other services sector at present. Only three of the countries in this group: Japan, Korea and Switzerland, conduct surveys which cover these sectors and discussions concerning data transmissions are already in progress with these countries. The requested consumer opinion indicators are, however included in the database for six of the eight countries which conduct consumer surveys.

Big 6 Non-OECD Member countries

The OECD database already includes all available BTS data corresponding to the target indicators requested for Brazil, Russia and South Africa. The coverage of available indicators is very good for these three countries in manufacturing industry with six of the eleven target indicators included in the database for Brazil and South Africa and nine of eleven indicators included for Russia. For construction and retail sector only data from Russia and South Africa are available and included in the database. The coverage is rather good in these sectors for both countries with four of five target indicators included. Consumer survey indicators are at present only included for South Africa. The availability of BTS/CTS data for China, India and Indonesia is also very good and discussions concerning transmission of data is well advanced with China and contact have been established with India and Indonesia to discuss exchange of data.

Future Plans

The future development of OECD database of BTS/CTS is discussed in the following from two perspectives. First, a set of indicators needs to be identified for publication and use for monitoring individual country performance. Second, a set of indicators need to be identified and selected for publication and use for monitoring cross-country performance and for aggregation to zone total such as OECD total area, Big 7 countries etc.

The target list of indicators proposed as a basis for the enlargement of the OECD database is of course a first attempt to establish a comprehensive list of indicators available for as many countries as possible.. However, the result presented above on the availability of these indicators in OECD Member and selected Non-Member countries suggests that some enhancement could be made to this selection.

Proposal for enhanced set of indicators for monitoring individual country performance

The sub-set of BTS/CTS series to be used for monitoring individual country performance and for dissemination in the country part of the MEI paper publication is set out in Table 4. The availability of series by country and source, national source or European Commission (EC), is indicated in the table. The sub-set of series corresponds to the target list of key BTS/CTS series identified by STES to be included in the MEI database with one exception. The series on *raw material stocks for manufacturing* is not included in the list because it is only available for a few countries and was suggested to be excluded from the MEI database in a previous section of this note. However, some other series are also available for a few countries only and are suggested to be excluded from the presentation in the country part of MEI.

The three series suggested to be excluded are *future business situation* for the construction and other services sector and *demand/order inflow* for construction. These three series are not available from the EC for EU member countries and only available for some Non-EU countries. However, the series on demand/order inflow in construction could be replaced by a series on *order books* available from EC for EU member and candidate countries. In the services sector, the series on future business situation could be replaced by *future demand situation* also available from EC for EU member and candidate countries.

Proposal for changes to sub-set of series for country part of MEI publication

Manufacturing

- Exclude the two series on *present and future business situation* (series not available from EC for EU member countries)
- Exclude the series on *order books for exports* (series not available most countries at present)

Construction

- Exclude the series on *future business activity* (series not available from EC for EU member countries)
- Replace the series on *demand/orders inflow* with a series on *order books* (series available from EC for EU member and EU candidate countries)

Other services

- Replace the series on *future business situation* with a series on *future demand situation* (available from EC for EU member and EU candidate countries)

Table 4 Sub-set of BTS/CTS series for Publication in Country Part of MEI

Manufacturing industry	Number of series/countries		
	EC	Available from National sources	EC + National sources
Business situation: present (business climate)		14	14
Business situation: future		15	15
Production: future tendency	19	11	30
Orders inflow or demand: tendency	19	10	29
Order books: level	19	11	30
Export order books: level	19	3	22
Finished goods stocks: level	19	16	35
Rate of capacity utilisation	19	10	29
Employment: future tendency	19	11	30
Selling prices: future tendency	19	9	28
Construction			
Business (activity) situation: present	19	6	25
Business (activity) situation: future		5	5
Demand/Orders inflow: future tendency		3	3
Employment: future tendency	19	8	27
Selling prices: future tendency	19	7	26
Retail trade			
Business (activity) situation: present	19	6	25
Business (activity) situation: future	19	6	25
Volume of stocks: level	19	5	24
Employment: future tendency	19	7	26
Order intentions or demand	19	4	23
Other services excluding Retail trade*			
Business (activity) situation: present	19	4	23
Business (activity) situation: future		5	5
Employment: future tendency	19	5	24
Consumer opinions			
Consumer confidence indicator	19	10	29
Expected inflation	19	7	26
Expected economic situation	19	7	26

Proposal for a set of indicators for monitoring cross country performance and aggregation to zone totals

OECD Member Countries

The sub-set of BTS/CTS series to be used for monitoring cross country performance and for dissemination in the subject part of the MEI paper publication is set out in Table 5. The frequency of the surveys are in most cases monthly (25 countries), quarterly surveys are in all cases conducted in Non-EU countries (see table 5). The availability of series by country and source, national source (NS) or European Commission (EC), is indicated in the table. The series proposed for inclusion in subject part summarise the current economic situation in the different sectors and represent the main series of interest for current economic analysis. For each sector, a series on current or future *business or economic situation* and a composite *confidence indicator* are proposed as alternative options. A series on business situation may not be available for all countries and all sectors so the alternative would be to calculate an OECD composite confidence indicator for each sector based on a selection of series within each sector.

For the *manufacturing sector*, a series on current or future *business situation* is not available from EC for EU member countries and this makes the country coverage relatively low for this series. On the other hand a *confidence indicator* is available from EC for all EU member and candidate countries. In addition, a confidence indicator could be calculated by the OECD for Non-EU countries and this would increase the country coverage to include all OECD countries except Iceland.

In addition to the proposed series for the manufacturing sector, a series on *capacity utilisation* could be selected as well because of its value for current economic analysis. However, for four Non-EU countries this series is not collected by the BTS surveys and is measured in index form in the case of Japan and Korea and not as a rate as for most other countries. Capacity utilisation is a measure available from all OECD member countries except Iceland and measured in the form of a judgement in the case of Australia and Norway. However a series on capacity utilisation is only available on a quarterly basis from EU member and EU candidate countries.

For the other sectors (*construction, retail trade and other services*), a series on current or future *business situation* as well as a *confidence indicator* series is available from EC for EU member and EU candidate countries. However, business tendency surveys are only conducted by a few Non-EU countries in these sectors. For the construction sector five of the ten Non-EU countries conduct surveys and a series on *business situation* is available for these countries. The corresponding numbers for retail trade and other services sectors are four of them respectively. Non-EU countries with no surveys in the construction sector include Canada, Mexico, Australia, Norway and Turkey. The same countries including New Zealand do not conduct surveys in retail trade and other services sectors as well. In addition, data for the United States is only available for the aggregate *non-manufacturing*.

A series on economic situation and a confidence indicator is available from the *consumer surveys* in 28 OECD countries. Such series are available from all EC for EU member and EU candidate countries and all Non-EU countries except Norway. And Turkey

Big 6 Non-OECD Member Countries

At present no subject table is presented in the MEI publication for the *Big 6 Non-member countries*. However, a subject table could be introduced with the same indicators as presented for OECD member countries outlined above. Such indicators would be available for four or five of these countries for all sectors except other services.

Proposal for BTS/CTS subject tables in the MEI publication

- Introduce two subject tables in the MEI publication for the *manufacturing sector*, one with data on *capacity utilisation* and the other with data on business situation or confidence indicator data. A subject table with *confidence indicators* is the best option because such indicators are available from EC for all EU and EU candidate countries;
- Introduce three subject tables in the MEI publication, one for each of the sectors *construction, retail trade and other services*. One option could be to introduce only one subject table with data for non-manufacturing. Such tables would include data on business situation or *confidence indicator* data. Depending on the option chosen for manufacturing data, the same series should be selected for other sectors for reason of consistency between sectors;
- Introduce one subject table in the MEI publication with *consumer confidence indicators*;
- Introduce one subject table in the MEI publication for the *Big 6 Non-member countries* with data for all sectors and with the same selection of indicators as chosen for OECD member countries.

Seasonal adjustment and aggregation

All EC data are supplied seasonally adjusted using the DAINITIES method. Data from national sources are supplied both not and seasonally adjusted. OECD examines unadjusted series using the X12-ARIMA package and creates and stores adjusted series in the database when seasonality is present. An assessment of availability of seasonally adjusted series will be made before their inclusion in MEI published products.

As soon as national data availability permits, regional totals (OECD area, G7 and others) will be constructed by aggregation of national series for the *manufacturing confidence indicator* and the *consumer confidence indicator*.

Table 5 Sub-set of BTS/CTS Series for Publication in Subject Part of MEI

		Number of Series/Countries/Source									
		Manufacturing		Construction		Retail trade		Services		Consumers	
Quarterly Surveys (Q)		Business Situation	Confidence Indicator	Business Situation	Confidence Indicator	Business Situation	Confidence Indicator	Business Situation	Confidence Indicator	Confidence Indicator	
Canada (Q)		NS*								NS	
Mexico			NS							NS	
United States		NS	NS	NS*		NS*		NS*		NS	
Australia (Q)		NS**								NS	
Japan (Q)		NS		NS		NS		NS		NS	
Korea (Q)		NS		NS		NS		NS		NS	
New Zealand (Q)		NS**		NS**						NS	
Austria			EC	EC	EC	EC	EC	EC	EC	EC	
Belgium			EC	EC	EC	EC	EC	EC	EC	EC	
Czech Republic	NS		EC	EC	EC	EC	EC	EC	EC	EC	
Denmark			EC	EC	EC	EC	EC	EC	EC	EC	
Finland			EC	EC	EC	EC	EC	EC	EC	EC	
France	NS**		EC	EC	EC	EC	EC	EC	EC	EC	
Germany	NS		EC	EC	EC	EC	EC	EC	EC	EC	
Greece			EC	EC	EC	EC	EC	EC	EC	EC	
Hungary	NS		EC	EC	EC	EC	EC	EC	EC	EC	
Ireland			EC	EC	EC	EC	EC	EC	EC	EC	
Italy			EC	EC	EC	EC	EC	EC	EC	EC	
Luxembourg			EC	EC	EC	EC	EC	EC	EC	EC	
Netherlands			EC	EC	EC	EC	EC	EC	EC	EC	
Norway (Q)	NS**										
Poland	NS		EC	EC	EC	EC	EC	EC	EC	EC	
Portugal			EC	EC	EC	EC	EC	EC	EC	EC	
Slovak Republic	NS		EC	EC	EC	EC	EC	EC	EC	EC	
Spain			EC	EC	EC	EC	EC	EC	EC	EC	
Sweden			EC	EC	EC	EC	EC	EC	EC	EC	
Switzerland	NS**			NS		NS		NS		NS	
Turkey (Q)											
United Kingdom			EC	EC	EC	EC	EC	EC	EC	EC	
OECD Total		14	21	24	19	23	19	22	19	28	
Major seven		5	5	6	4	6	4	6	4	7	
OECD Europe		8	19	20	19	20	19	19	19	20	
EU15			EC	EC	EC	EC	EC	EC	EC	EC	
Brazil	Q									NS	
China	Q	NS	NS	NS	NS	NS	NS	NS	NS	NS	
India	Q	NS**s		NS**		NS**		NS**		NS	
Indonesia		NS**		NS**		NS**		NS**		NS	
Russia	M/Q		NS	NS	NS	NS	NS			NS	
South Africa		NS	NS	NS	NS	NS	NS			NS	
Big 6 Non-Members		4	3	5	3	5	3	3	1	5	
NS	National Source	EC	European Commission	(I)	Index	*	Non-manufacturing	**	Future tendency	***	Judgement

Data collection

Data collection for BTS/CTS data is at present performed at the OECD using the following extraction and collection methods:

- Web database, using automatic webquery procedures where possible (EC, Mexico, Korea, Japan, Brazil, South Africa)
- Online database (Canada, USA)
- Download of PDF file from Internet (Australia – BTS, New Zealand – CTS, Norway)
- File sent by e-mail (Australia – CTS, New Zealand – BTS , Switzerland, Turkey, China)

The collection procedures are designed to minimise the burden on source agencies, while maintaining contact with suppliers.

EU Member and Candidate countries' data collection

Data for EU member and selected Candidate countries and also OECD member countries i.e. Czech Republic, Hungary, Poland and Slovak Republic will not be collected directly from national sources because most of the requested data are already available from the European Commission.

Metadata collection

Construction of good metadata is seen as essential within the OECD's Statistical Quality framework. Compilation of BTS/CTS metadata in the OECD MEI database is (at mid-November) at a preliminary stage, but will from now take a higher profile given that data integration is advancing well.

Metadata information is currently being researched from readily available national and international sources: compiler agency websites, the EU websites, the IMF's SDDS and GDDS websites, paper publications issued by these agencies and recent papers prepared for international meetings, workshops, etc. At a second stage, compiler agencies are contacted directly for information that has not been located. A specific target is to establish a catalogue of questionnaires used by the compiler agencies.

Metadata have been sourced to date for: (from websites) Canada, USA, Mexico, Australia (BTS), Japan, Norway, Switzerland; (from documentation) Korea, Brazil, China, India, Indonesia, Russia, South Africa; (via email) Australia (CTS) and Turkey.

Collected metadata are analysed for content within two target frameworks: general survey information to enable quality assessment, and variable information to determine cross-country comparability and harmonisation needs. These are respectively referred to as "Level 1" and "Level 4" content metadata, reflecting their storage position in the OECD MEI database. Level 1 metadata will contain general information such as sample size while Level 4 metadata will include the precise formulation of the questions as they appear in the national questionnaires.