
NEW STATISTICS ON UNFILLED ORDERS IN INDUSTRY

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ABSTRACT

Since January 2014, the variable “stock of unfilled orders” has been included in the monthly report on manufacturing. As a measure of the backlog of orders not yet completed, this allows to better trace the economic momentum. During the economic crisis in 2008 and 2009, it became apparent that, although orders were placed, many of them were cancelled later – reliable data were however not available on the extent of this phenomenon. An indicator on the stock of orders has therefore been added to the existing range of short-term indicators to be able to adequately reflect the economic development. In this article, the new data on unfilled orders are described and the results are presented in the context of the development of new orders received and turnover.

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1

Introduction

The “monthly report on manufacturing”¹ is a survey collecting key figures on the economic development of the German industry every month. The data of the monthly report are used, together with the monthly production statistics, to calculate major short-term indices such as the index of new orders, the production index and the turnover index.

Since January 2014, “the stock of unfilled orders” has been recorded in the monthly report as an additional variable to enable a better assessment of the economic momentum. During the economic crisis in 2008 and 2009, orders often were placed, but many of them were cancelled later. Reliable data on this topic, however, have so far not been available. The purpose of adding the stock of unfilled orders to the existing short-term indicators is to close the data gap and to improve monitoring of short-term economic trends.

In the first three reference months, from January to March 2014, the newly collected data on unfilled orders were still affected by the preparatory work in the statistical offices and the local units obliged to provide information. The response rates stabilised from April 2014 so that results can be published from that reference month onwards. For the time being, they are published on the internet in a volume of tables (Statistisches Bundesamt, 2015a).

This article describes the new data on the stock of unfilled orders and presents them in the context of the development of new orders and turnover. It also draws attention to some outstanding issues that have not yet been addressed by the Federal Statistical Office, which is also due to the short length of the time series available.

The following paragraphs first describe the method for collecting data on the stock of unfilled orders, then present results on the structure of unfilled orders, and examine their development since April 2014. In order

1 The exact name of the statistics is: “Monthly report on local units in manufacturing, mining and quarrying”.

to evaluate the range of the stock of orders, Chapter 5 examines the correlation between unfilled orders and turnover. The final chapter summarises the results and describes further publication plans.

2

Collection of data on unfilled orders

Data for the monthly report on manufacturing are collected from all industrial local units in Germany with at least 50 persons employed. In addition to the stock of unfilled orders, the survey gathers information on the variables new orders, turnover, number of persons employed, hours worked, and remuneration, but not all variables are collected in all branches of economic activity. Information on unfilled orders, just as on new orders, is only collected in selected divisions of the Classification of Economic Activities, 2008 edition (WZ 2008).² Where the term “manufacturing as a whole” is used in the paragraphs below, it refers to the economic branches listed here. [↘ Overview 1](#)

Overview 1

Branches of economic activity where data on unfilled orders are collected

WZ 13	M. of textiles
WZ 14	M. of wearing apparel
WZ 17	M. of paper and paper products
WZ 20	M. of chemicals and chemical products
WZ 21	M. of pharmaceutical products
WZ 24	M. of basic metals
WZ 25	M. of fabricated metal products
WZ 26	M. of computer, electronic and optical products
WZ 27	M. of electrical equipment
WZ 28	M. of machinery and equipment
WZ 29	M. of motor vehicles, trailers and semi-trailers
WZ 30	M. of other transport equipment

M. = Manufacture

Basically, the information relevant for the short-term indicators is collected by means of three tables in the questionnaire, into which the local units enter their figures on turnover, new orders and unfilled orders every

2 The selection was originally based on specifications made for the European Statistical System and has since been retained in Germany.

Overview 2

Input fields for the collection of monthly data for short-term indices relating to industry

Turnover in the reference month	Branch of economic activity (WZ)			
	(WZ class no.)	(WZ class no.)	(WZ class no.)	(WZ class no.)
Domestic turnover				
Non-domestic turnover				
Including: non-euro area				
New orders received in the reference month				
Domestic orders				
Non-domestic orders				
Including: non-euro area				
Unfilled orders at the end of the reference month				
Domestic unfilled orders				
Non-domestic unfilled orders				

month.¹³ The responding local units are required to distinguish between economic branches, domestic and non-domestic data and, partly, to provide information on the non-euro area (foreign countries not including the euro area countries). [↪ Overview 2](#)

In reporting their stocks of unfilled orders, the local units must consider the following definitions:

- › Unfilled orders comprise the total amount of new orders received by the end of the reference month which have not generated any turnover yet and have not been cancelled by that time.
- › Orders should be included only if they were received and definitely accepted, but have not yet been completed.
- › Orders received in previous months and cancelled in the reference month must be deducted from the stock of orders included in the current report.
- › In the case of large-scale orders, the completion of which extends over several reference months, the value not yet produced (that is, the part of the order that has not yet generated any turnover) should be included in the stock of unfilled orders. Where large-

scale orders are invoiced in instalments, the invoiced part of the order can be deducted from the stock of unfilled orders.

- › Turnover tax and directly granted discounts should be deducted.

For the purpose of processing the collected data, local kind-of-activity units are formed as tabulating units. A local kind-of-activity unit incorporates all the activities of a local unit¹⁴ which belong to one homogeneous class of economic activity.¹⁵

3

Structure of unfilled orders

In manufacturing as a whole, the average stock of unfilled orders¹⁶ per local unit amounted to roughly

³ The majority of local units use the IDEV reporting procedure, which enables the local units to enter their data into online forms and to transmit them to the statistical offices in encrypted form. Some local units use the eSTATISTIK.core reporting procedure as part of which the data are extracted automatically from the local unit's accounting system, are checked, also encrypted and then transmitted online.

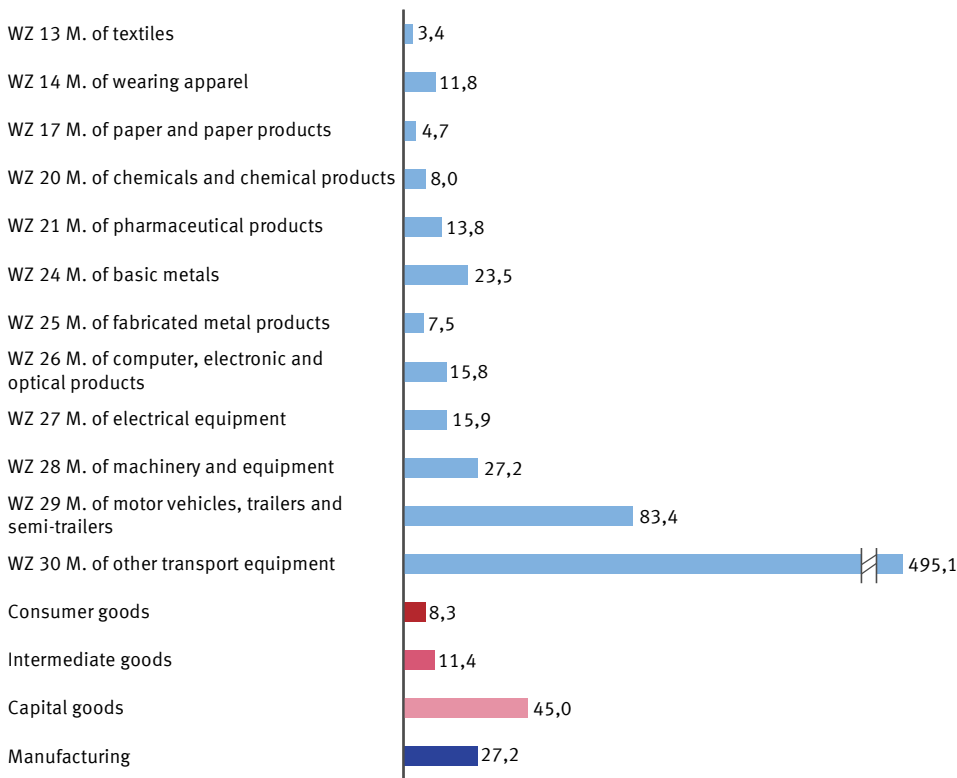
⁴ Local units are enterprises, or parts thereof, situated in a geographically identified place; they comprise associated and nearby administrative, repair, assembly and auxiliary units.

⁵ For more information on the survey of the stocks of unfilled orders please refer to the relevant quality report (Statistisches Bundesamt, 2014, only in German).

⁶ The averages of unfilled orders are only examined for those kind-of-activity units which reported positive figures for their stocks of unfilled orders in December 2014. The data were used following the "annual revision" (as part of the annual revision, provisional data in the monthly report on manufacturing are corrected by incorporating delayed reports of the local units or information from queries). The results relate to December 2014 because an analysis of the individual data was carried out for the 2014 figures in order to check the data on unfilled orders for plausibility.

Figure 1

Average amount of unfilled orders per local unit, by economic activity, in December 2014
Million euros



Classification of Economic Activities, 2008 edition (WZ 2008). – M. = Manufacture

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27 million euros in December 2014. Average unfilled orders per local kind-of-activity unit, however, differed very much between the branches of economic activity. The average stock of unfilled orders in “Manufacture of other transport equipment”, which includes, for example, the manufacture of ships and aircraft, amounted to nearly 500 million euros. The manufacture of motor vehicles, trailers and semi-trailers was another economic activity with large stocks of unfilled orders, averaging approximately 83 million euros. Low stocks of unfilled orders were observed in the manufacture of textiles and the paper industry. [↪ Figure 1](#)

Figure 1 also shows the average stocks of unfilled orders per local kind-of-activity unit in the main industrial groupings of manufacturing. In this context, the branches of economic activity are allocated to the three groups “capital goods”, “intermediate goods” and “con-

sumer goods”.¹⁷ In the capital goods sector, the average stock of unfilled orders is more than five times that of consumer goods manufacturing. The capital goods sector mainly includes the manufacture of machinery and equipment, of motor vehicles, railway rolling stock, ships, air and spacecraft.

There are many local kind-of-activity units in manufacturing with rather small stocks of unfilled orders as well as a small group of local kind-of-activity units which report very high values of unfilled orders. Those local kind-of-activity-units which belong to the one percent of units with the largest stocks of unfilled orders account for roughly 60% of the total amount of unfilled orders. Consequently, the stock of unfilled orders in manu-

facturing is characterised by high concentration.

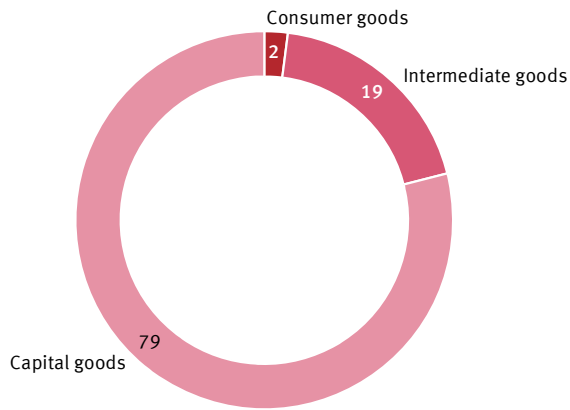
If we consider the distribution of unfilled orders across the main industrial groupings, it is evident that the capital goods sector accounted for 79% of the stock of orders in December 2014, the intermediate goods sector for 19% and the consumer goods sector for just 2%.

[↪ Figure 2](#)

This is a plausible result, as it can be assumed that fewer consumer goods are “custom-made”. They can

⁷ This allocation was agreed in the European Statistical System: Commission Regulation (EC) No 586/2001 of 26 March 2001 implementing Council Regulation (EC) No 1165/98 concerning short-term statistics as regards the definition of Main Industrial Groupings (MIGS) (Official Journal L 86, p. 11). For the purpose of this article, only those economic activities are included in the main industrial groupings, for which data on unfilled orders are collected. The “consumer goods” grouping comprises the main industrial groupings of “consumer durables” and “consumer non-durables”.

Figure 2
Distribution of the total amount of unfilled orders in December 2014
Percent



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rather be produced for stock and be sold directly so that unfilled orders do not accumulate. Consequently, there are many local units in consumer goods manufacturing where monthly turnover is equivalent to the new orders received in the same month. As far as intermediate goods are concerned, just-in-time production is likely to play an important role, which means that products are delivered on demand and shortly after the receipt of orders. Conversely, the production of capital goods is unlikely to start until a specific order has been received. The capital good is sold only after completion and, depending on the complexity of the product, may not generate turnover until much later. The largest stocks of unfilled orders can therefore be expected in the capital goods sector.

4

Development of unfilled orders

The basis for analysing the development of the total amount of unfilled orders is provided by the figures from the reference month of April 2014 onwards as these show a sufficiently stable response rate. The stock of unfilled orders in manufacturing mostly increased in the period under review, with the average change on the previous month amounting to 0.3%. The largest increase (+2.2%) was recorded for January 2015, the largest decreases (-0.9%) were observed in September 2014 and September 2015. [↘ Figure 3](#)

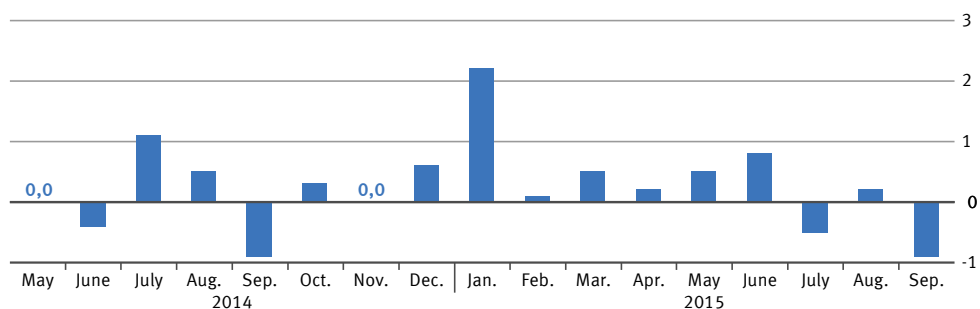
4.1 Change in unfilled orders and excess of unfilled orders

It is basically possible to establish an updating equation (for example, Hüttner, 1973, here: p. 140) to illustrate the relationship between the change in the stock of orders and current figures on new orders and turnover.

[↘ Overview 3](#)

Here, the difference between new orders and turnover in any month is referred to as “excess of unfilled orders”; it is one of the main determinants of the change in the stock of orders compared with the previous month. Cancellations of orders received in earlier months are another important determinant. As it has not been possible to incorporate cancellations of orders into the survey

Figure 3
Month-on-month change in unfilled orders
Percent



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Overview 3

Updating equation for the stock of unfilled orders

Unfilled orders at the end of the previous month	
+ New orders in the current month	} Excess of orders
- Turnover in the current month	
- Orders cancelled in the current month	
= Stock of unfilled orders at the end of the current month	

programme⁸, no data are available on this variable. The two determinants, i.e. the excess of unfilled orders and cancellations of orders, together determine the stock of unfilled orders, which is a central indicator for assessing the orders situation in a branch of economic activity.

Based on the updating equation, cancellations could theoretically be calculated as a residual value and be used to explain the development of the stock of orders. In addition to order cancellations, however, inaccuracies in data collection may cause further deviations between the change in the stock of orders and the excess of orders. It is possible that unfilled orders at the end of the month exceed the stock of orders of the previous month plus the excess of unfilled orders. In the process of implementing the survey of the stock of unfilled orders, in particular the following survey problems were discussed:⁹

- › Enterprises often use price escalator clauses in contracts with other businesses to protect themselves against market risks. For example, the exact selling price of a production facility may partly be linked to the development of an index of steel product prices. Hence, the value of the facility at the time of sale may differ significantly from its value at the time of ordering. Gathering accurate information on such value changes is nearly impossible in terms of survey technique.

8 Discussions with industrial associations and businesses prior to introducing the stock of unfilled orders as a new survey variable showed that collecting data on order cancellations would involve too much effort on the part of the businesses. However, the importance of order cancellations for short-term economic monitoring was recognised as early as in 1952: "It is a certain shortcoming ... that no information is collected as yet on cancellations of orders" (von Roeder, 1952, here: page 317. At that time, the author worked at the Federal Ministry for Economic Affairs).

9 The coherence between new orders, turnover and unfilled orders was already discussed in the context of an earlier survey of unfilled orders (see Erhard, 1971; the stock-of-orders index described there was abandoned again in the 1980ies in order to reduce the burden on respondents). See also Reichling, 1966, for coherence.

- › There is the assumption that, despite the instructions on how to complete the electronic questionnaire, local units sometimes report turnover generated by sales from stock but no corresponding new orders.

There are commonalities and differences in the development of changes in the stock of orders and in the development of excesses of unfilled orders. The reasons for this and the importance of order cancellations can only be studied in more detail when longer time series are available which should cover, if possible, different stages of the business cycle. To this end, makeshift solutions must be found to distinguish order cancellations from other deviations between the change in the stock of orders and the excess of orders that are caused by differing delimitations.

The difference between the indices of new orders and turnover can serve as a simplified indicator of the excesses of unfilled orders in the individual months.¹⁰ This difference is shown in Figure 4 in the lower diagram, while the upper diagram shows the change in unfilled orders compared with the previous month. What is evident is that the difference between the indices of new orders and turnover roughly corresponds to the development of the change in the stock of orders, except for deviations that may be due to order cancellations or inaccuracies in data collection. [↪ Figure 4](#)

4.2 Seasonal effects

The development of new orders and turnover is strongly affected by seasonal fluctuations. There is reason to expect that these patterns are reflected by the development of the stock of unfilled orders. The established indices of new orders and turnover are subjected to seasonal adjustment. The purpose is to eliminate recurrent annual fluctuations of similar intensity which would hamper the assessment of the current development. Examples of such fluctuations are seasonal climatic

10 For reasons of confidentiality, no absolute figures expressed in euros are published on new orders. Therefore, the difference between the value indices of new orders and turnover is used here as an approximation, in each case not calendar or seasonally adjusted. The turnover index only covers those economic branches in which data on new orders are collected (see Overview 1). The approximate value thus calculated for the excess of orders is shown in Figure 4 in the form of index points. For further simplification, this value is compared with the growth rate instead of the absolute, month-on-month change in the stock of orders.

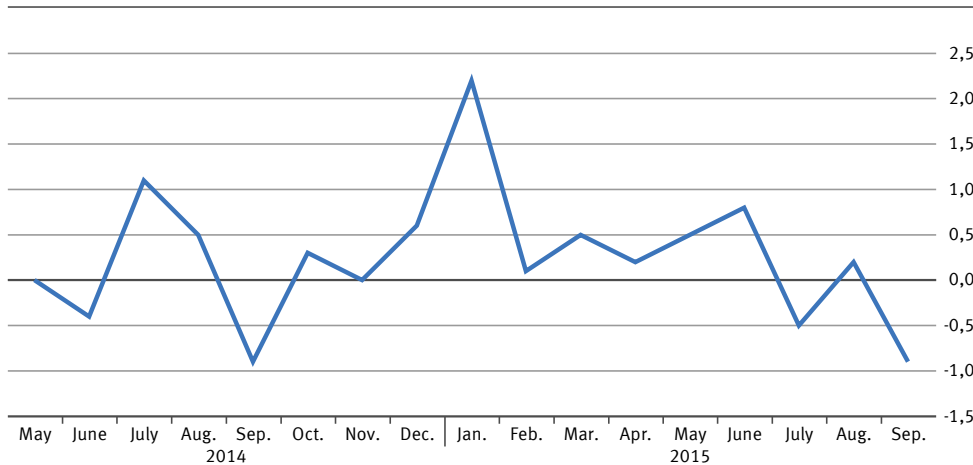
New statistics on unfilled orders in industry

Figure 4

Correlation between the change in unfilled orders and the excess of orders

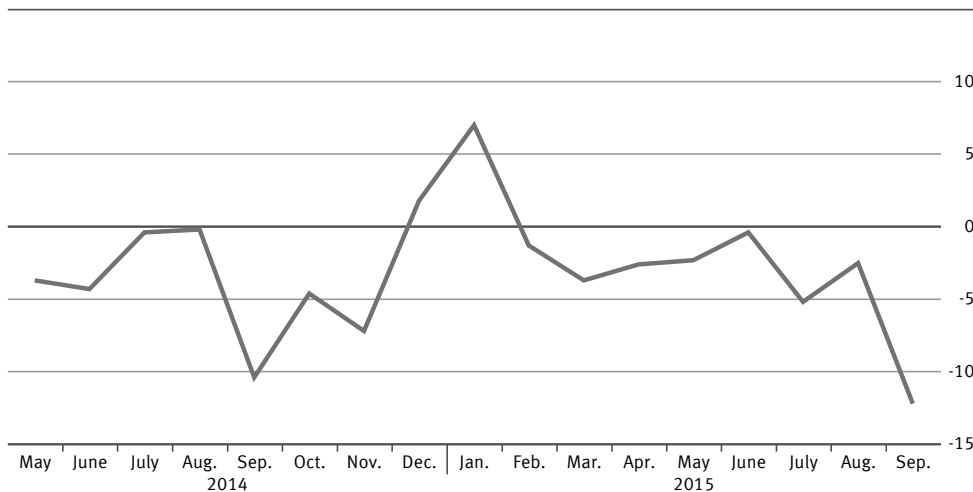
Stock of unfilled orders

Month-on-month percentage change



Difference between the indices of new orders and turnover

Index points



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effects or effects related to typical holiday months. The seasonal adjustment of these indices is based on the assumption that the unadjusted index values consist of different, multiplicative components.

↳ Component decomposition in time series analysis

Calendar and seasonal adjustment is based on the idea that a time series can be decomposed into several components. The **trend component** reflects long-term trends and cyclical movements. The **seasonal component** covers effects which recur with similar intensity each year. The **calendar component** considers calendar-related

effects such as the number of working days in a month. The **irregular component** comprises incidental effects and effects which can be explained in economic terms but are not part of the other components, such as an extraordinarily warm winter or large-scale orders.

Figure 5

Seasonal components of the indices of new orders and turnover

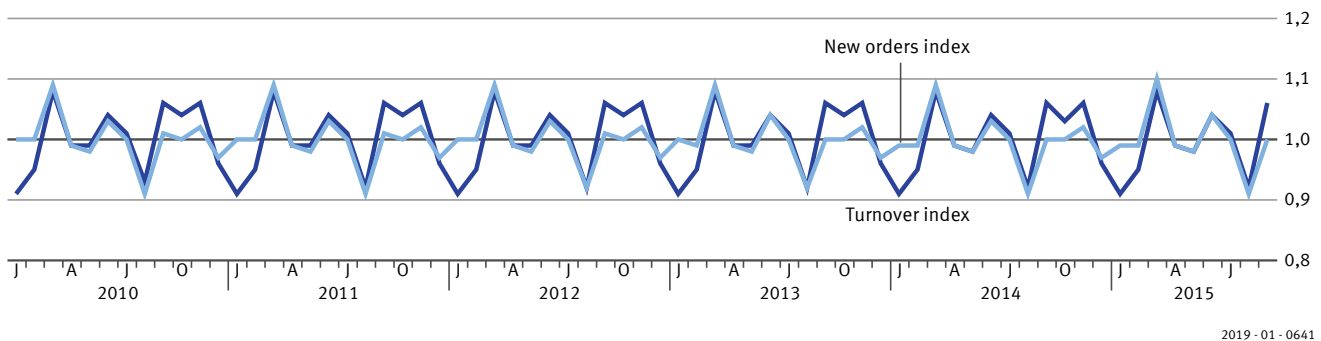


Figure 5 shows the seasonal components of the indices of new orders and turnover in manufacturing.¹¹ They reflect the typical seasonal variations of the indices over the course of the year. A value of 1.1 for orders received in March 2015 means, for example, that a seasonal increase in new orders of 10 % can be expected for that month because of the previous seasonal pattern. To eliminate the seasonal effect, the index value is divided by 1.1. Values below 1 show that lower seasonal values can be expected for new orders or turnover in that month. [↘ Figure 5](#)

Typically, new orders received at the beginning of a year exceed turnover, whereas turnover exceeds new orders in autumn. Consequently, an increase in unfilled orders should be expected in the first months of a year, which will then be reduced in autumn. This seasonal pattern, however, can vary between the individual branches of economic activity. In the manufacture of wearing apparel, for example, there are peaks in new orders in February and in the summer months because of new clothing collections.

Since information on unfilled orders has only been available for 18 months, no seasonal pattern can be identified as yet. The month-on-month rates of change shown in Figure 3 reflect seasonal as well as cyclical

and other effects. The largest decrease in the stock of orders, however, is recorded for September 2014, while the largest increase is shown for January 2015. To some extent, these changes are also likely to be due to seasonal effects on new orders and turnover. Nevertheless, July 2014 (+1.1 %) and June 2015 (+0.8 %), for example, saw marked increases in unfilled orders which were not attributable to seasonal effects. Due to large-scale orders, especially high volumes of new orders were observed in the manufacture of ships in both months and additionally in the manufacture of air and spacecraft in July 2014.

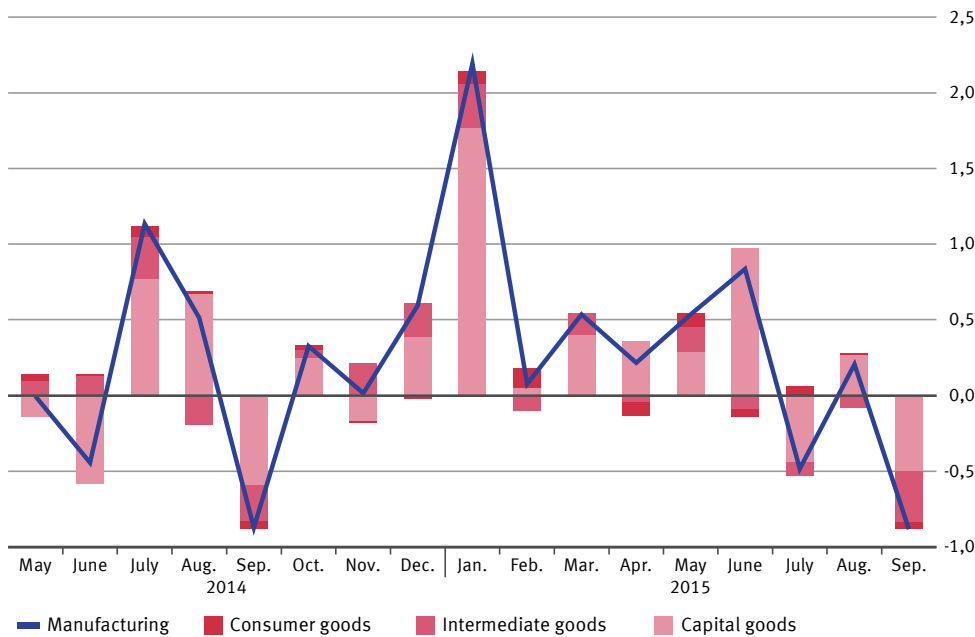
4.3 Relevance of the main industrial groupings for the development of unfilled orders

The influence of capital goods is also reflected by Figure 6, which does not only depict the change in unfilled orders in manufacturing as a whole but also the main industrial groupings' contributions to the total change. The rate of change in manufacturing as a whole is the sum of the individual contributions to change by the main industrial groupings. The contributions are determined by the development of unfilled orders in the relevant main industrial grouping and by the current amount of unfilled orders in the main industrial grouping. [↘ Figure 6](#)

11 Figure 5 shows the implicit seasonal component which is calculated by dividing the purely calendar adjusted indices by the calendar and seasonally adjusted indices for 2010 to 2015 (in each case indirectly adjusted using the X-12-ARIMA method). The turnover index includes all branches of manufacturing because this is the only way possible to isolate the seasonal component. The index of new orders, however, only relates to the selected branches of economic activity listed in Overview 1, for which information on the stock of unfilled orders is collected.

Figure 6

Month-on-month change in unfilled orders and contributions to change by the main industrial groupings
Percent



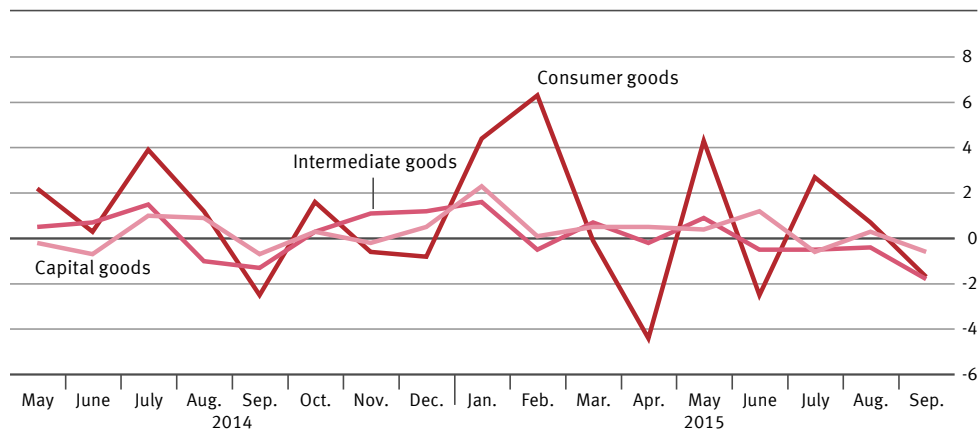
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Compared with intermediate goods and capital goods, consumer goods show much more change in the stock of unfilled orders, as can be seen from Figure 7. However, capital goods have the strongest influence on unfilled orders in manufacturing: they account for just under

80% of the total stock of unfilled orders and therefore determine its development. A small change in the stocks of unfilled orders in this main industrial grouping can have a big impact on the total change because of the grouping's weight. [↪ Figure 7](#)

Figure 7

Month-on-month change in unfilled orders, by main industrial grouping
Percent



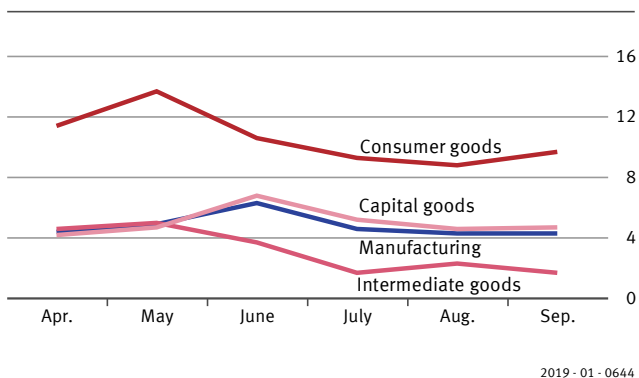
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4.4 Year-on-year change in unfilled orders

The following paragraphs examine the development of the stock of orders based on year-on-year changes. As long as a time series is too short to carry out seasonal adjustment, year-on-year rates of change can be used as an interim solution to reduce seasonal fluctuations in the results. The year-on-year rates of change in unfilled orders are shown from April 2015 onwards because this rate of change relates to April 2014, the first value available. [↪ Figure 8](#)

Figure 8

Year-on-year change in unfilled orders, by main industrial grouping, 2015
Percent



The stocks of unfilled orders increased significantly in 2015 from the previous year and actually recorded a two-digit increase in the consumer goods sector. However, the growth rates of both consumer goods and intermediate goods started to decline in May 2015. Capital goods and manufacturing as a whole followed suit in June 2015. To some extent, this development can again be explained by the development of the excesses of unfilled orders. In this context, the volume of the excesses of orders and order cancellations in all of the twelve previous months are relevant for the change in unfilled orders compared with the same month of the previous year. When applied to the change in unfilled orders compared with the same month a year earlier, the updating formula is:

$$(1) AB_0 - AB_{-12} = \sum_{t=-11}^0 AE_t - UM_t - ST_t$$

with

- AB_0 unfilled orders at the end of the current month
- AB_{-12} unfilled orders at the end of the same month a year earlier
- AE_t new orders received in month t
- UM_t turnover in month t
- ST_t orders cancelled in month t

5

Ranges of the stock of unfilled orders

The following paragraphs examine the relation between the stock of unfilled orders and turnover with regard to the range of unfilled orders. The quotient of the stock of orders and turnover can be interpreted as the “range of the stock of orders, expressed in months”. The range indicates the number of months for which local units can or must produce goods to fill all orders on hand, while turnover remains constant and no new orders are received.

The range depends not least on the arithmetically estimated capacity utilisation of the local unit and thus on the approximation of turnover applied. The higher the turnover, the smaller the range. As part of the introduction of the variable “stock of unfilled orders”, discussions were held with representatives of industrial associations about what approximation of turnover should be used for calculating the ranges. It is possible to use, for example, the average turnover generated in a certain number of preceding months or the maximum value attained in the most recent months.

The range can be calculated as the quotient of the stock of unfilled orders and a moving average of turnover. The advantage of this approach is that short-term fluctuations of turnover have a lesser impact on the development of the range over time than if the quotient of the stock of orders and turnover in the same month was used. In addition, a range calculated that way can be interpreted more easily than a range calculated on the basis of the maximum turnover of a previous period. After all, this definition of range is also suggested as a marketing and distribution indicator in the field of controlling (e.g. Controlling Portal, 2014). For that reason, the ranges are calculated by dividing the total amount of unfilled orders

in the branch of economic activity concerned (i) in the current month (t) by the moving average of the amount of turnover in the same branch in the last twelve months:

$$(2) \quad Range_{it} = \frac{Unfilled\ orders_{it}}{\frac{1}{12} \sum_{t-11}^t Turnover_{it}}$$

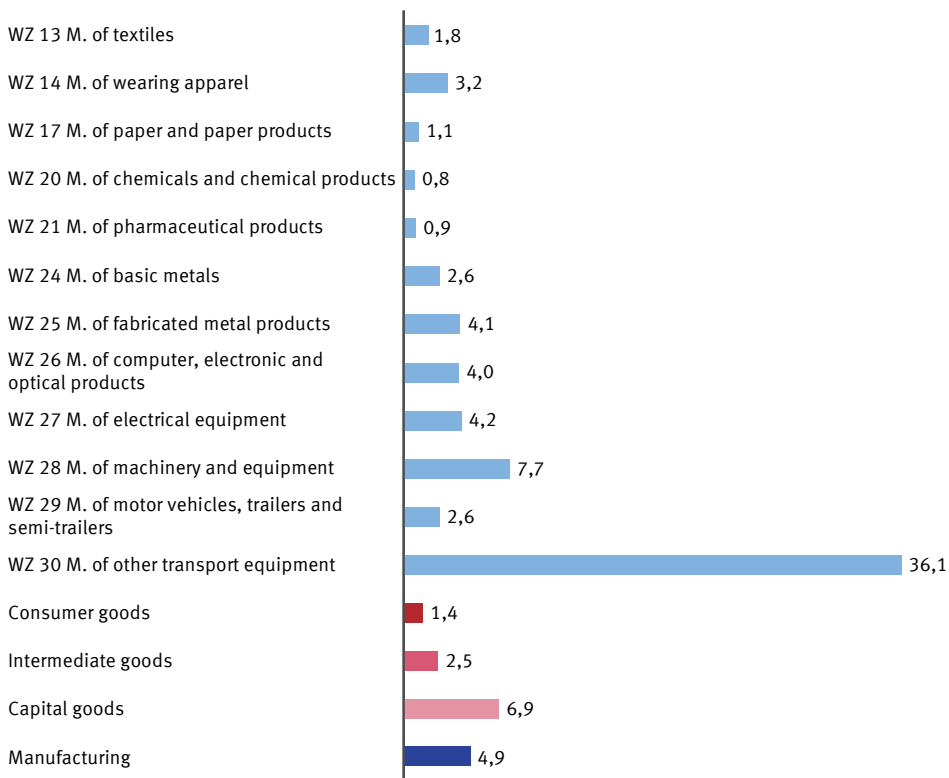
Figure 9 shows the ranges of the stocks of orders by branch of economic activity in September 2015. As regards manufacturing as a whole, the calculated range is just under five months. The range in the capital goods sector is markedly higher than for intermediate or consumer goods. Very large ranges can be observed in the “Manufacture of other transport equipment”, which includes the manufacture of railway rolling stock, ships or aircraft. Here, the range of the stocks of unfilled orders is three years. In contrast, the ranges amount to less than a month in the manufacture of chemicals and pharmaceutical products. [↘ Figure 9](#)

The ranges calculated for official statistics can be compared with those published by the ifo Institute (Leibniz Institute for Economic Research), which are collected by means of business surveys. The ifo Institute survey includes a question about the range of the stock of unfilled orders every month (ifo, 2014). [↘ Overview 4](#)

The results are weighted using the size of the business and, among other things, are aggregated to the two-digit level of WZ 2008. Figure 10 provides a comparison of the ranges calculated by the ifo Institute with the results of official statistics for the month of October 2014.¹² [↘ Figure 10](#)

12 In contrast to the ranges shown in the official publication of the Federal Statistical Office, the ranges recorded by official statistics for October 2014 were calculated for the purpose of this Figure as the quotient of the stock of unfilled orders in October 2014 and turnover in the whole year of 2014. See Seiler et al, 2014, for the ifo Institute results.

Figure 9
Ranges of the stocks of unfilled orders in September 2015
Months



Classification of Economic Activities, 2008 edition (WZ 2008). – M. = Manufacture

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Overview 4

Question concerning the range of the stocks of unfilled orders in the monthly survey conducted by the ifo Institute for Economic Research

Our stocks of unfilled orders for XY currently correspond to a production period: up to roughly month(s)												
No unfilled orders	1/2	1	2	3	4	5	6	7	8	9	10	If more than 10, please enter the number of months:

intermediate goods, the ranges determined by both surveys are equal at 2.5 months. Deviations between the results are due to the different survey methods and are likely to be attributable to both sampling and question-related effects.

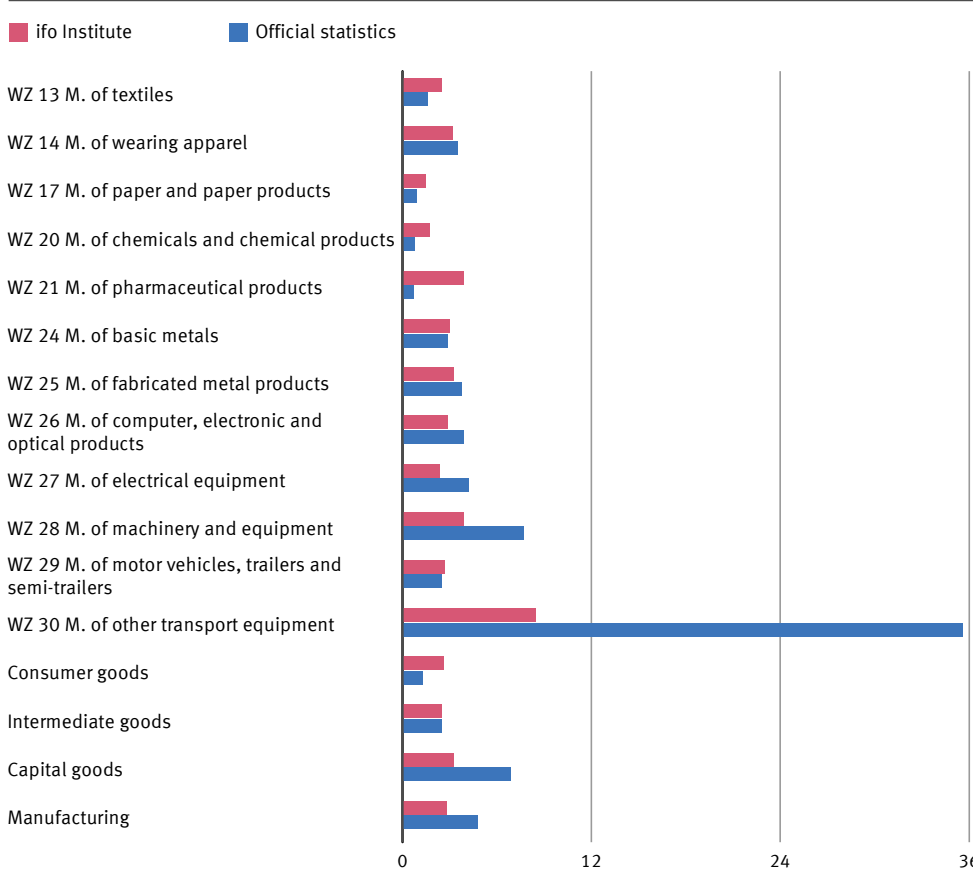
[Overview 5](#)

The ranges calculated by the ifo Institute are more homogeneous across the various branches of economic activity than those recorded by official statistics. The ifo ranges are significantly smaller in the upper part of the distribution, while they are somewhat larger in the lower part. The middle part of the ifo ranges, however, tallies fairly well with the official statistics results. As regards

The variable “stock of unfilled orders” in the monthly report on manufacturing could be a good area of survey methodology research, not least because of the possibility of comparing results with the survey data of the ifo Institute.

Figure 10

Comparison of the ranges of the stocks of unfilled orders in October 2014
Months



Classification of Economic Activities, 2008 edition (WZ 2008). – M. = Manufacture.

Overview 5

Comparison of basic parameters for the collection of data on the range of unfilled orders, as used in official statistics and the ifo Institute

	Official statistics	ifo Institute
Sampling method	Complete enumeration with a cut-off limit (see Chapter 2).	Quota sample with purposive selection and panel structure.
Survey units, total	Roughly 23,000 local units in manufacturing, mining and quarrying.	Roughly 7,000 enterprises in manufacturing, the main construction industry, wholesale and retail trade.
Construction of the tabulation variable	Derived from the survey variables of unfilled orders and turnover: the range is calculated as the quotient of the aggregated stock of unfilled orders and the aggregated turnover in the last 12 months.	Direct survey of the range, expressed in months.
Type of question	Open-ended value questions about unfilled orders and turnover, requiring the entry of euro amounts.	Closed question with pre-defined answer categories for the range, expressed in months, and open-ended value question for ranges of more than 10 months.

6

Conclusion and outlook

The new data on unfilled orders reveal a strong concentration of the stocks of orders. In manufacturing, 1% of the local kind-of-activity units account for roughly 60% of the total volume of orders. Most of them are capital goods producers. Against the background of long production times in the branches concerned, the dominance of capital goods is plausible since the new orders received are only gradually completed and converted into turnover. In contrast, a synchronisation of new orders and turnover can often be observed for consumer goods producers, which indicates that orders are executed quickly, possibly directly from warehouses.

The development of the stock of unfilled orders is similar to the development of the difference between new orders and turnover; this is a sign that there is no significant movement in order cancellations at present. It will however not be possible to evaluate the correlations between the stocks of unfilled orders and the flow data on excesses of orders and order cancellations until data from different stages of the business cycle are available.

The large stocks of orders in capital goods production are also reflected by the ranges. In the “Other transport equipment” branch, such as the manufacture of ships or aircraft, the ranges can extend to several years. They are less than a month for the manufacture of chemical or pharmaceutical products. The results obtained from the survey of the ifo Institute for Economic Research

show similar magnitudes in some branches, but also significant deviations in others. The deviations can be explained by the different data collection approach of the ifo Institute.

As soon as a time series of sufficient length is available, the data on unfilled orders will be integrated into a stock-of-orders index for Germany. This index will generally be calculated according to the same methodology and breakdown as the existing indices of new orders and turnover. Those indices are value and volume indices, with a base year fixed for five years, for which seasonally and working day adjusted monthly results are available (Statistisches Bundesamt, 2015b). Since seasonal adjustment requires a data history, such a stock-of-orders index can be calculated no earlier than from mid-2017 onwards.

Until then, year-on-year rates of change of the total amount of unfilled orders will be calculated every month for the German industry at division level of the economic activity classification and will be published in a volume of tables (Statistisches Bundesamt, 2015a). The tables also show the ranges of the stocks of unfilled orders for the same level of breakdown. [TU](#)

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Abbreviations

WISTA	=	Wirtschaft und Statistik
JD	=	annual average
D	=	average (for values which cannot be added up)
Vj	=	quarter of a year
Hj	=	half-year
a. n. g.	=	not elsewhere classified
o. a. S.	=	no main economic activity
St	=	piece
Mill.	=	million
Mrd.	=	billion

Explanation of symbols

–	=	no figures or magnitude zero
0	=	less than half of 1 in the last digit occupied, but more than zero
.	=	numerical value unknown or not to be disclosed
...	=	data will be available later
X	=	cell blocked for logical reasons
I or —	=	fundamental change within a series affecting comparisons over time
/	=	no data because the numerical value is not sufficiently reliable
()	=	limited informational value because numerical value is of limited statistical reliability