

Box 6

A NEW INDICATOR ON EURO AREA CAPACITY UTILISATION IN SERVICES

Capacity utilisation is a key indicator of slack in the economy, as it quantifies the extent to which the available resources are used.¹ Most measures of slack are based either on surveys of capacity utilisation in manufacturing industries, or on broader measures using estimates of potential growth for the economy as a whole. Services, however, account for around three-quarters of value added for the euro area. This box focuses on capacity utilisation in the euro area services sector on the basis of a new quarterly survey series released by the European Commission. It discusses the methodological issues, presents the indicator on the euro area capacity utilisation rate in services and compares this indicator with other indicators on services as well as indicators on manufacturing.

Methodology

Capacity utilisation is the extent to which a firm actually uses its productive capacity. In its business survey of manufacturing, the European Commission asks enterprises to indicate the percentage rate at which they actually use their available resources. Therefore, the percentage rate of capacity utilisation expresses the relationship between output that is actually produced

¹ For a recent discussion of various measures of economic slack in the euro area, see the box entitled “Slack in the euro area economy” in the April 2014 issue of the Monthly Bulletin; for details on different indicators of capacity utilisation in the euro area, see the box entitled “Capacity utilisation in the euro area: measures and implications” in the October 2007 issue of the Monthly Bulletin.

with the installed equipment and the potential output that could be produced with it, if capacity was fully used (i.e. a capacity utilisation rate of 100%). The concept of capacity utilisation is thus associated with a production process involving mainly equipment and materials and requires a clear idea of what the full capacity of the enterprise is.

Since July 2011 the European Commission has included a similar question in its business survey of the services sector. However, given the diversity and variety of services activities, the measurement of capacity utilisation in services differs from that in manufacturing. The services survey asks: “If the demand addressed to your firm expanded, could you increase your volume of activity with your present resources? Yes-No. If so, by how much (in %)?” The firm’s response to this question provides the percentage increase used in the formula below. The percentage rate of capacity utilisation (CU) thus equals:

$$CU \text{ (in \%)} = \frac{100}{\left(1 + \frac{\text{percentage increase}}{100}\right)}$$

The formulation of this question assumes that the expansion of demand triggers an expansion of output and that the maximum increase in demand that the services firms could satisfy with their existing resources is known. As in the case of the manufacturing survey, the services survey includes the question on capacity utilisation at a three-month frequency (in January, April, July and October each year). Enterprises are drawn from a sample of around 44,000 market service-providing enterprises in the EU and respondents are typically senior managers of the surveyed enterprises. With the first release of the data in July 2014, more than three years of seasonally adjusted data were made available for all EU Member States (except for Ireland and Luxembourg).

In addition to results for the market services sector overall, results for individual services sub-sectors are available, e.g. for accommodation, food and beverage service activities, telecommunications, computer programming and real estate activities.

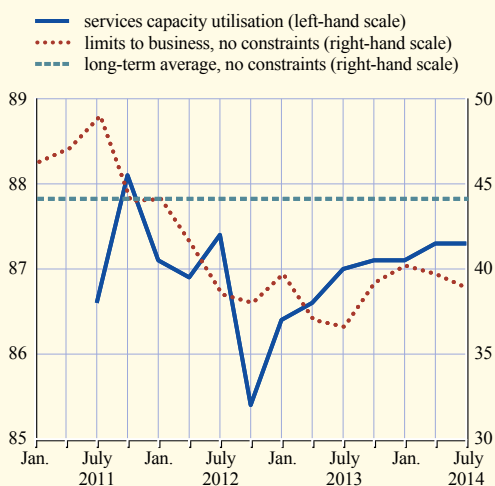
Results and comparison with other indicators

In order to assess the results and their reliability, euro area capacity utilisation in services can be compared with information on the potential limits to services business (see Chart A) and capacity utilisation in manufacturing (see Chart B).

The European Commission services survey includes the question: “What main factors are currently limiting your business?” Among the several possible answers, the respondents can choose “None”. The share of respondents indicating an absence of constraints on services business can be used as complementary information on services capacity utilisation. The advantage of this indicator is that it is available from October 2003, hence its average over the whole period is referred to as the long-term average in Chart A. The chart shows that capacity utilisation in services has improved since October 2012 and the share of respondents reporting an absence of limits to services business has increased since July 2013, and both series have changed little so far in 2014. The current level of the indicator on the absence of limits to services business is, however, well below its long-term average.

Chart A Capacity utilisation and absence of limits to business in services

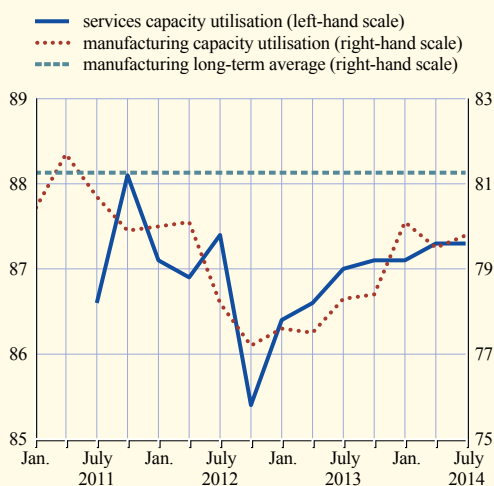
(percentages of full capacity; percentages of responses)



Sources: European Commission Business and Consumer Surveys. Note: The series "limits to business, no constraints" corresponds to the share of respondents who answered "none" to the question about factors limiting their business.

Chart B Capacity utilisation in services and manufacturing

(percentages of full capacity)



Sources: European Commission Business and Consumer Surveys.

These developments suggest that, despite improvements, slack remains in the euro area services sector. The evidence from the indicator on the absence of constraints on business is in line with the evidence from the indicator on insufficient demand as a constraint on services business (not shown in the chart).²

A similar picture emerges when comparing capacity utilisation in services with that in manufacturing (see Chart B). Capacity utilisation in both services and manufacturing has improved since October 2012, but a flattening of both indicators has been observed so far in 2014 and in July 2014 capacity utilisation in manufacturing still stood below its long-term average for the period since 1985. The level of capacity utilisation in services is structurally higher than in manufacturing and exhibits comparatively low variability. Notwithstanding, developments in the two series have been quite similar over the past three years.

In addition to the co-movement with other survey-based measures of slack, the dynamics of capacity utilisation in services over the past three years suggest that developments have also been consistent with those in broader indicators, such as the output gap, as well as data on the growth of value added in the services sector. The decline in the capacity utilisation rate in the period to the end of 2012 followed by a recovery in the course of 2013 is consistent with the estimated broadening of the output gap in 2012 and its narrowing in 2013.

In sum, the new indicator on capacity utilisation in services is potentially very useful, especially given the (increasing) importance of services for the euro area economy. The new indicator for the euro area suggests that capacity utilisation in services provides a reliable

² Over time, the percentage of respondents indicating "none" strongly co-moves with the inverted percentage of respondents indicating "insufficient demand". The other indicator of constraints on business which is relevant for slack ("shortage of space or equipment") has recorded only very low values during the period in which it has been available, suggesting that this is not a major constraining factor.

picture of the amount of slack in the services sector and thus warrants close monitoring. Recent developments suggest that, despite improvements since October 2012, some slack remains in the euro area services sector. A similar picture emerges from other available indicators of slack with a longer series, i.e. the potential limits to services business and capacity utilisation in manufacturing. It is also important to keep in mind that aggregated euro area developments mask differences across euro area countries. Among the largest euro area countries, services capacity utilisation in Germany has been higher than in Italy and Spain over the past three years.³ While the euro area series on capacity utilisation in services is at present short, when observations for a full business cycle become available the data could be combined with data on capacity utilisation in manufacturing in order to give an overview of slack in the euro area economy.

³ The data for France will be published with the next release in October 2014.