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Capacity Utilization in Industry

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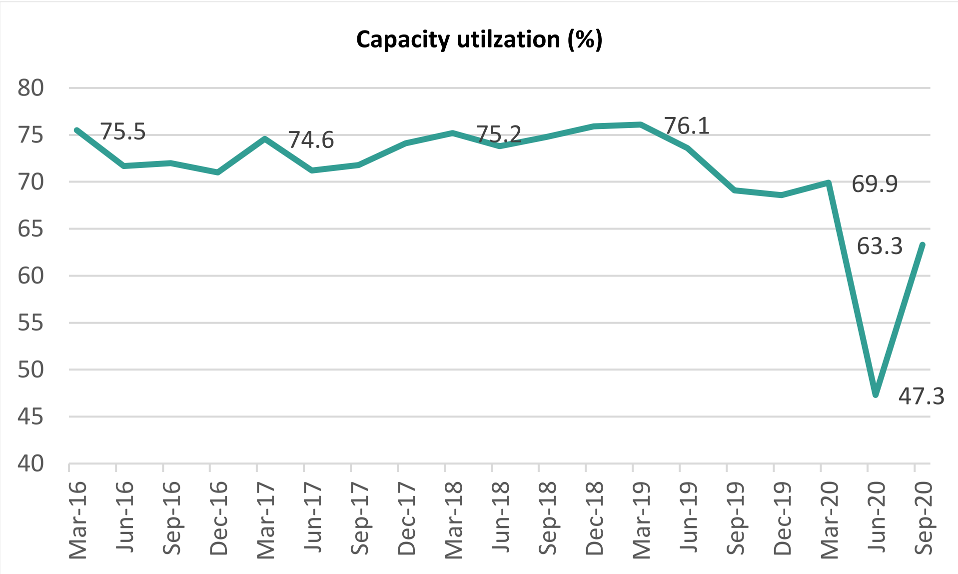
Non-government investment is driven by two forces. The first is infrastructure which is dependent more on the funding availability and the risk appetite of the company. The other is manufacturing which is driven mainly on demand conditions. As long as demand is buoyant, and companies are able to make optimal use of their machinery there are positive views taken on future prospects and investment is undertaken. On the other if demand is low and there is surplus capacity with companies there is less incentive to invest in new machinery. Therefore, the concept of capacity utilization is important as it is a leading indicator of investment prospects.

The trend in capacity utilization in the last 10 years or so, which is provided by RBI, indicates that the peak level reached was 78% in March 2013 after which is has varied between 71-73% with yearly peaks being witnessed in March. 76.1% was the highest achieved subsequently in March 2019 followed by 75.9% in December 2018.

The chart below gives quarterly trends in the last five years.



Source: RBI

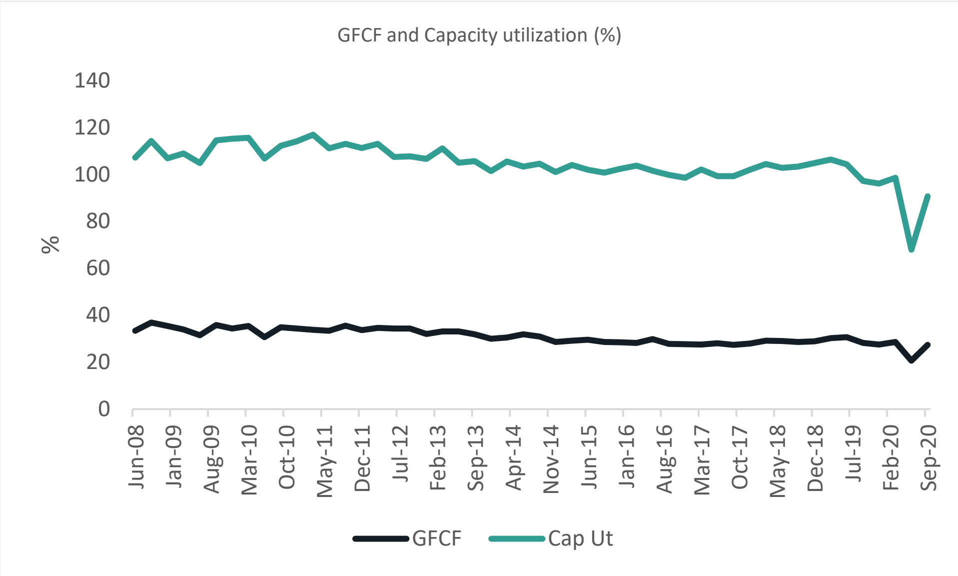
As can be seen the chart follows a fixed pattern where an increase in March is followed by lower rates in the next three quarters. The seasonal increase can be attributed to the yearend phenomenon where companies work harder to meet targets. 2018-19 was probably the best year where the average capacity utilization rate was 75.2%.

In 2020-21 the rate had fallen to an all-time low of 47.3% in June mainly due to the lockdown. For the second quarter ending September there has been a recovery to 63.3%. This may be expected to improve towards the 68-70% mark by March.

The RBI sample is indicative of the trends though is based on a sample size which can vary between 350 to 900 companies over time. Also, it does not speak of how these rates vary across industries which is pertinent today as they are at different stages of getting back on the path of normal resumption of business given the myriad problems that came with the lockdown. There are industries like steel which have reported much higher capacity utilization rates and are going in for expansion. But this is not universal. Further the picture obtained is for manufacturing and not services where the utilization rates are much lower due to the current restrictions imposed by local authorities.

While these rates will improve for sure in Q3 and Q4 and could come closer to the 68-70% mark, as can be seen in the graph, the sector as a whole has not witnessed increased utilization rates on a continuous basis in most of the years. Normally a rate of 78-80% could be the ballpark number after which companies do go in for expansion. These numbers would be attained provided there is sustained pick-up and growth in consumption of not just consumer goods but also activities like construction, urban development, infrastructure related which entails growth in demand for products like steel, cement, aluminium, chemicals, electricals, among others.

Relation between gross fixed capital formation and capacity utilization



Source: RBI and MOSPI

The graph shows a very proportionate relationship between the two variables for the 12 year period which is expected. While capacity utilization rates are reflective of production in the manufacturing sector and does not indicate directly investment in the infrastructure space, there is a strong relationship between gross fixed capital formation and capacity utilization (both on a quarterly basis). A regression analysis for the two from June 2008 to September 2020 reveals the following:

Coefficient of correlation: 0.72

Coefficient of determination: R-square: 0.51

Intercept: -1.79

Coefficient for capacity utilization: 0.44

Standard error of estimate: 2.25

With capacity utilization rate touching 68% by yearend, the gross fixed capital formation rate could move to 28.3% with an error of 2.25%.

Going forward in FY22 these numbers will be crucial. As the economy rebounds sharply on the back of negative base effects, there would be a spike in the utilization rates too which should result in a smart recovery in capital formation.

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