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The capacity utilization picture in FY24

Data on capacity utilization is not readily available on a regular basis as companies do not disclose the same in their annual reports. The only official source is RBI. RBI provides quarterly data on capacity utilization for a set of companies that are surveyed. While the ballpark number provided is useful at the aggregate level, it does not provide insights on how this has moved across industries. Also quarterly data does reveal that there is always a case of utilization rates peaking in the March ending quarter and then ebbing. This is natural as companies ostensibly spruce up production towards the end of the year to meet their targets. Hence interpreting yearend numbers is difficult as it invariably is followed by a lower number in Q1 of the year.

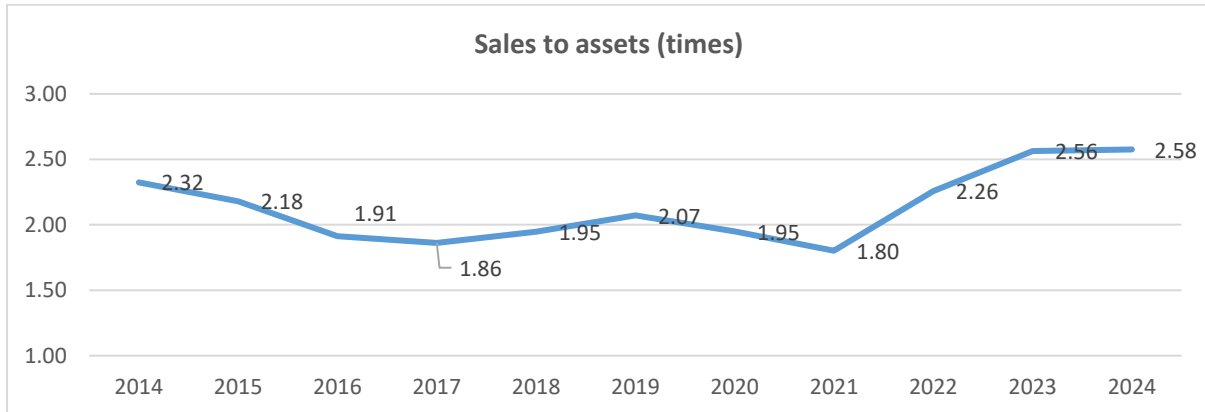
Typically a thumb rule is that capacity utilization ratio needs to be close to 78-80% to induce fresh investment. Up to this level of utilization it would be possible for companies to spruce up production within the existing available capital to meet temporary bursts in demand. But once this level is crossed, there is a tendency to invest more in machinery to meet future demand as firms make their forecasts on growth in market. Building capacity without commensurate demand may not be an economical proposition for any company given the accompanying costs such as interest paid on loans.

A proxy variable which indicates capacity utilization is the asset-turnover ratio (ATO) which is broadly defined as the multiple of net sales to gross fixed assets including capital work in progress. Intuitively it can be visualized that once a peak ratio is reached, any number less than it would mean that the company still has space to increase production without new capacity. This ratio, ATO, has to however be used with caution to comment on the capacity utilization trends. If the ratio is lower than the peak attained in the past, it is possible to conclude that there is still spare capacity. However, an increasing trend is open to interpretation as it will not be known if a peak has been attained or not. Yet, looking at this ratio is instructive as it gives some idea of developments taking place on this front at the industry level.

The foregoing analysis looks at trends in the last 10 years or so to ascertain how the ATO has moved for an aggregate sample of 2984 companies. The sample companies are divided into manufacturing and services to get a slightly more disaggregated view of these movements. While the analysis is for around 10 years, for the purpose of evaluating the ATO from the point of view of capacity utilization ratio, the last five years starting pre-covid (FY19) is considered for ascertaining benchmark peaks as numbers have been quite volatile subsequently.

The pattern of the line can be seen as undulating for the sample companies where it declined from 2.32 in FY14 to 1.86 in the next three years before rising to 2.07 in the subsequent two years. The decline was contemporaneous with the period when banks undertook the Asset Quality review when NPAs increased due to failure in some infra related industries. This was the time when capital formation also slowed down in the economy. The sharp fall was seen to 1.80 in the covid year. From FY22 there was an increase to 2.56 in FY23 which was maintained at 2.58 for FY24. There is evidence to show that at the aggregate level, the corporate sector is not just back to normal but gone ahead. The last two ratios were the highest in this period.

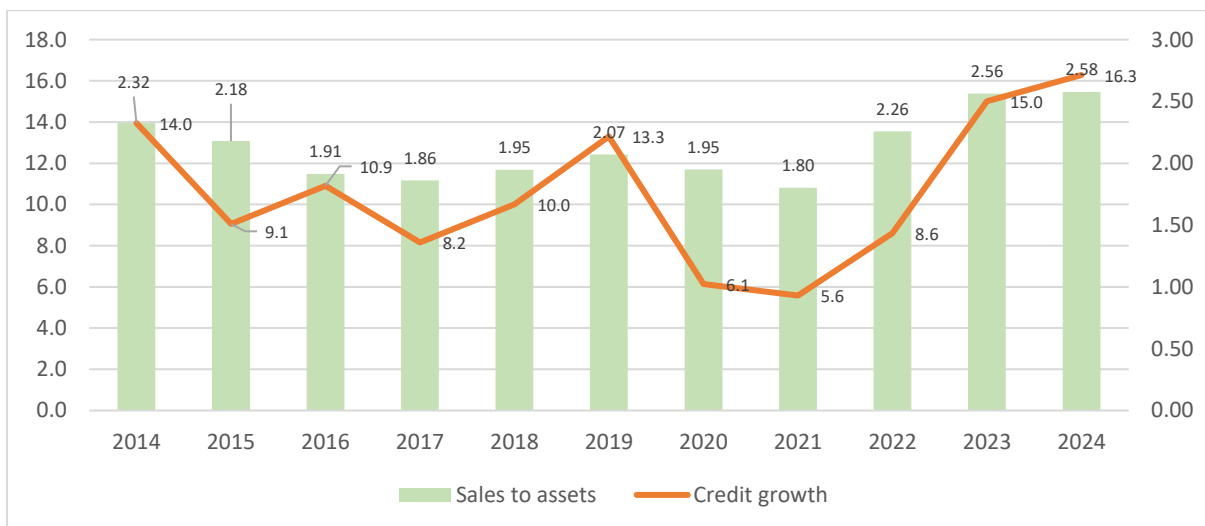
Chart 1: Movement in asset turnover ratio (FY14 to FY24)



Source: BoB Economic Research

Chart 2 below juxtaposes the ATO movements with growth in credit. As can be seen there is a strong relation between the two variables with the coefficient of correlation being 0.80. Whenever low growth in credit was observed, there was also a tendency for the ATO to decline. Therefore, it is possible to conclude that when there is high growth in bank credit, there is also good activity levels in industry which is associated with better capacity utilization. It can be taken to be an early indicator of ATO.

Chart 2: Growth in bank credit and ATO

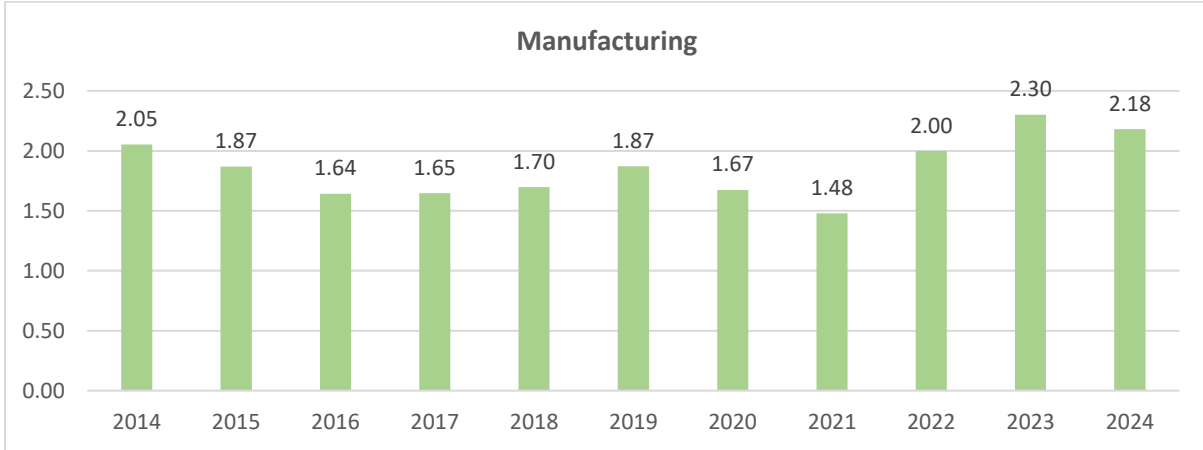


Source: BoB Economic Research

Chart 3 traces the movement of the ATO in the manufacturing sector. A consistent observation is that the ATO is lower than that of the sample indicating that manufacturing is more capital intensive and generates relatively less output on investment compared with services (discussed subsequently). Here it can be observed that post covid there was a peak ATO attained of 2.30 which came down subsequently to 2.18 in FY24. The fructifying of the pent-up demand phenomenon witnessed in both manufacturing and services post the lockdowns did help to bolster ATO. Therefore, while a decline to 2.18 in FY24 does indicate surplus capacity for sure, it can be considered more of a normal when

compared to the previous high of 2.05 in FY14. It is also indicative of the fact that at the aggregate level there is spare capacity which can slowdown the pace of future investment.

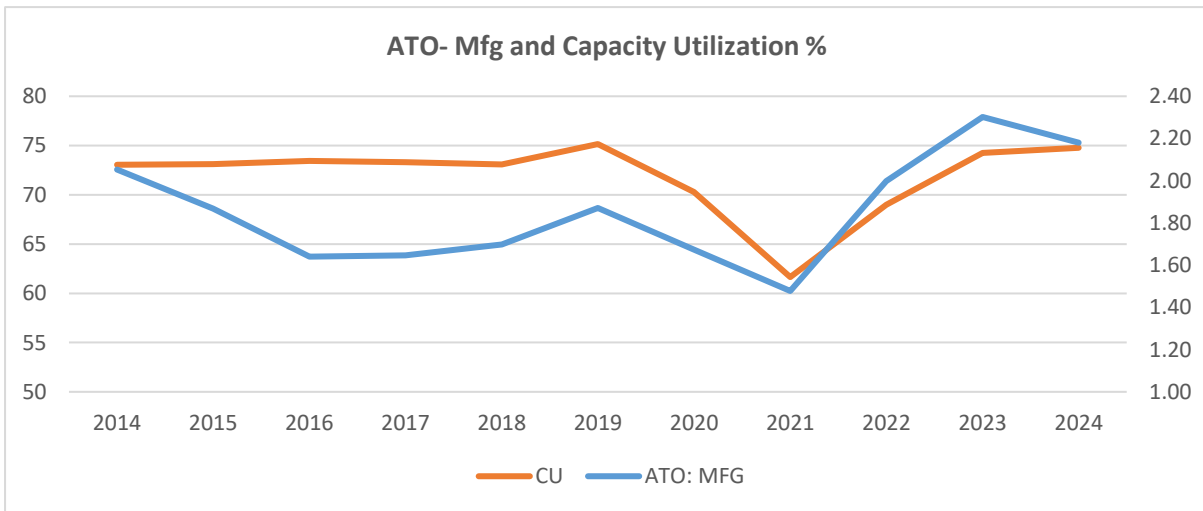
Chart 3: ATO in Manufacturing



Source: BoB Economic Research

Chart 4 gives the movement of ATO for manufacturing along with that in capacity utilization based on RBI data. The four quarters data for a year have been averaged for this purpose. The coefficient of correlation is at 0.52, which is not very high compared to that seen for credit growth. But the graphs do show that both the variables moves in a similar direction which is what the ATO is supposed to connote.

Chart 4: Movement in ATO-M and capacity utilization



Source: BoB Economic Research

Industry-wise data over the period shows varying trends, with several ATO ratios coming down sharply in FY21 and then reviving, subsequently there have been continuation in improvements or dips. The terminal numbers can be compared with the FY19 position as well as subsequent years to categorize them under different headings, which is done in the table below.

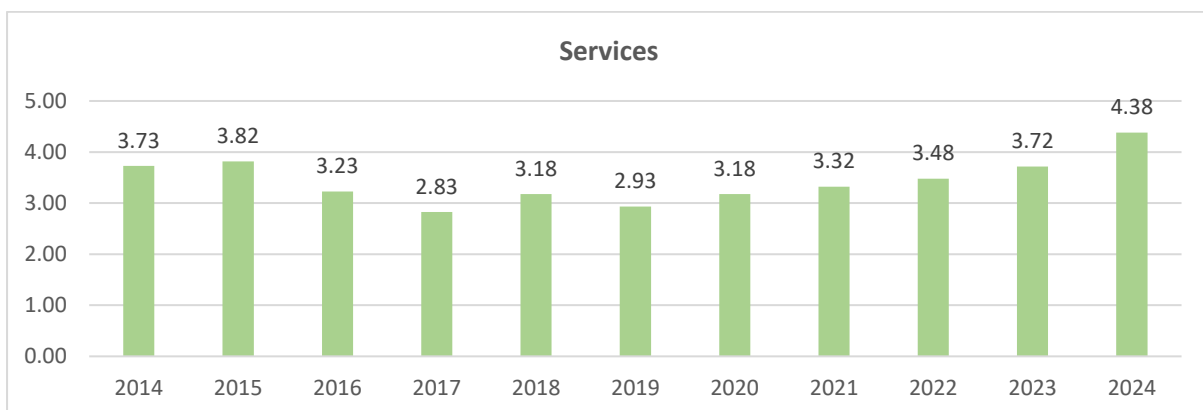
Industries which show potential for potential investment in coming years	Industries which recovered post covid but will be in wait and watch mode	Industries that can be deduced to have excess capacity
Realty	Textiles	Alcohol
Power	Crude oil	Chemicals
Iron and Steel	Industrial gases	Consumer durable goods
Healthcare	Plastic products	FMCG
Electricals		Diversified
Construction material		Diamonds and jewelry
Capital goods		
Automobile and ancillaries		
Agriculture		
Non-ferrous metals		

Source: BoB Economic Research

As can be seen in the table above, the consumer goods industries do tend to have spare capacity which also fits into the narrative that they have faced challenges of demand slowing down both in the urban and rural areas.

The ATO ratio for the services sector is presented in Chart 5 below. Two things stand out. First the ratios are higher than those for manufacturing which can be explained by the fact that services industry is less capital intensive and that there is higher value added. Second the trend in movements in quite different from that in manufacturing. Interestingly during the covid years, the ATO continued to rise as business was not dependent on capital investment. For the record, it can be stated that services had a share of a little under 20% in total gross fixed assets of the sample companies.

Chart 5: ATO for services industries



Source: BoB Economic Research

ATO for services should be looked at from a different prism. In case of services, the channels for distribution have changed with technology being an integral part of the business. Hence with several businesses like banking, finance, IT, business services, trade etc. being carried out in the virtual mode, capital expansion will have a secondary role to play. Hence the ATO ratios can be misleading as they keep increasing at a rapid pace over the years.

One industry which stands out within services is media, where the ratios have come down significantly from the past. Telecom industry has witnessed low ATO ratios in the last 5 years, but the case is very different. New investments come as new technologies come into the fray and hence cannot be compared with manufacturing companies in this respect.

Concluding remarks

If the asset turnover ratio is taken to be surrogate for capacity utilization, then the picture emerging is that at the aggregate level, there has been an improvement in this ratio in the last two years compared with all years in the 11-year period. In case of manufacturing, while it peaked at 2.30 in FY23, there was a dip in FY24. Hence there can be some laggards in terms of industries that would be investing more in machinery. With the exception of a handful of sectors like those in the consumer goods space, there does appear to be scope for capacity expansion in several industries.

In case of services, the ATO has been high and rising since FY18. Here it is hard to pinpoint industries that could be expanding capacity as the factors driving these decisions could be external. A new spectrum auction can trigger a fresh wave of investment even if the ATO is below the peak.

Appendix 1: ATO Manufacturing

Sector	Number	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024
Agri	89	1.85	1.82	1.56	1.74	1.81	1.79	1.64	1.75	1.82	2.02	2.00
Alcohol	13	3.23	3.12	7.38	7.91	8.98	9.53	9.76	8.90	10.33	9.85	9.99
Automobile & Ancillaries	146	3.05	3.14	3.39	3.41	3.55	3.57	2.71	2.48	3.34	4.10	4.32
Capital Goods	179	4.61	4.25	4.30	4.23	4.02	4.65	3.83	3.72	4.71	5.15	5.22
Chemicals	180	2.76	2.85	2.60	2.43	2.41	2.54	2.33	2.28	2.86	3.36	2.79
Construction Materials	76	1.25	1.27	1.31	1.31	1.09	1.11	1.08	1.11	1.25	1.28	1.28
Consumer Durables	28	8.25	8.64	9.22	9.40	9.84	10.07	8.55	8.00	8.60	8.89	8.42
Crude Oil	21	3.46	2.74	2.07	2.05	2.16	2.47	2.13	1.75	2.64	3.00	2.62
Diamond & Jewellery	24	37.80	47.08	45.00	50.12	41.78	47.33	46.54	19.03	27.40	32.36	29.00
Diversified	13	1.69	1.72	1.88	1.95	1.61	1.93	1.57	1.40	1.81	1.90	1.57
Electricals	35	2.41	2.88	2.81	2.81	3.32	3.59	3.56	3.30	4.68	5.79	5.44
FMCG	132	4.40	4.54	4.38	3.89	3.37	3.46	3.46	2.02	2.36	2.64	2.56
Healthcare	150	2.16	2.10	2.11	1.90	1.73	1.87	1.94	1.89	1.97	1.99	2.20
Inds. Gases & Fuels	12	2.46	2.40	1.97	1.81	1.99	2.36	2.10	1.52	2.32	3.24	2.69
Infrastructure	75	3.35	3.28	5.24	5.78	5.84	6.15	6.24	6.07	7.40	8.81	10.27
Iron & Steel	99	0.93	0.87	0.68	0.80	0.92	1.08	0.93	0.99	1.52	1.61	1.57
Mining	10	1.67	1.37	0.66	0.75	0.89	0.84	0.69	0.80	4.04	2.79	2.42
Non - Ferrous Metals	32	0.89	1.01	0.94	1.00	1.15	1.08	0.97	1.05	1.62	1.69	1.63
Paper	38	1.27	1.20	1.13	1.12	1.15	1.32	1.18	0.82	1.17	1.60	1.36
Plastic Products	94	2.26	2.48	2.43	2.24	2.20	2.26	1.93	2.00	2.44	2.42	2.20
Power	33	0.42	0.41	0.38	0.36	0.36	0.36	0.37	0.37	0.42	0.54	0.55
Realty	118	1.89	1.97	2.70	4.61	4.38	5.55	5.25	4.97	5.92	5.39	5.64
Textile	254	2.48	2.43	2.34	2.32	2.32	2.44	2.27	2.05	3.15	2.94	2.84
Grand		2.05	1.87	1.64	1.65	1.70	1.87	1.67	1.48	2.00	2.30	2.18

Appendix 2: ATO: Services

Sector	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024
Bank	10.64	11.17	8.54	6.23	6.87	7.38	7.88	7.75	7.50	8.59	10.51
Business Services	2.00	2.22	1.65	2.11	2.45	2.81	2.82	2.85	3.15	3.58	4.00
Finance	12.74	14.90	16.22	17.20	17.79	25.94	24.28	31.07	30.42	21.16	21.01
Hospitality	0.50	0.55	0.65	0.66	0.65	0.86	0.90	0.37	0.69	1.12	1.15
IT	6.31	6.35	7.21	7.37	7.31	8.12	8.37	8.65	9.74	11.79	13.20
Logistics	0.78	0.78	0.86	0.73	0.81	0.87	0.83	0.77	0.94	1.18	1.16
Media & Entertainment	2.43	2.79	2.48	2.48	2.28	2.42	2.43	1.90	2.25	1.70	1.95
Realty	1.89	1.97	2.70	4.61	4.38	5.55	5.25	4.97	5.92	5.39	5.64
Retailing	2.49	2.81	3.43	3.68	3.68	3.98	4.26	2.73	4.04	5.04	5.36
Telecom	0.74	0.73	0.56	0.47	0.45	0.33	0.37	0.42	0.46	0.44	0.48
Trading	24.87	21.41	15.77	17.04	21.48	26.13	23.00	21.61	27.35	36.13	30.12
Grand	3.73	3.82	3.23	2.83	3.18	2.93	3.18	3.32	3.48	3.72	4.38

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