

Role of the Unlisted corporate sector in India's economy

Analyzing corporate profits, GVA, debt, taxes, and capex

- India's equity market is at an all-time high. Although real GDP growth has also surprised on the upside for the last three consecutive quarters, ongoing discussions persist regarding the perceived disparity between the equity market and the real economy. However, in this note, we [reiterate](#) that, upon closer inspection, there appears to be no disconnect between the two. The equity market reflects the financial position of the listed corporate sector, while the real economy is a reflection of a wider canvas. In order to further support our arguments, we discuss the role of listed, and thus, unlisted corporate sector, in India's economy.
- It is widely known that the profits of listed corporate sector more than doubled from less than 2% of GDP in FY20 to ~4.5% of GDP in the past two years (FY22-FY23). But what is India's aggregate corporate profit and more importantly, how has it moved over the past decade? We answer this question and many more in this note. Not only do we share our estimates of aggregate corporate profits in India, and thus, the share of the unlisted corporate sector, we also present our estimates of the role of the unlisted corporate sector in India's gross value addition (GVA), national debt, profit before taxes (PBT), corporate income taxes paid, and total investments/capex (called gross capital formation, GCF).
- Since we have aggregate data on corporate GVA, corporate debt, profits (our estimates on PAT and official data on PBT), corporate income taxes paid and corporate investments, one can find out the share of the unlisted corporate sector by deducting the share of listed companies from the aggregate corporate data.
- Overall, our conclusion is very simple. The unlisted corporate sector is much bigger than the listed sector in India in most of these parameters. What is more interesting is that while the financial position of listed sector has improved markedly in the post- COVID period (FY20-FY23), this is clearly not the case for the aggregate corporate sector. It means that the financial position of the unlisted corporate sector has weakened in the post- COVID period. Given below are the key conclusions:
 1. Notwithstanding the >2x rise in profits (profit after tax, PAT) of the listed companies in the last three years, the aggregate corporate profit has been largely stable to only slightly better. It means that the profits of the unlisted sector have actually worsened materially in the post- COVID period.
 2. The corporate (non-financial companies, NFCs) sector accounts for almost 40% of India's nominal GVA. The listed companies, however, contribute only about 30% of the corporate GVA, or only about 11-12% of the national GVA. It means that the unlisted corporate sector is more than 2x the size of the listed sector in terms of GVA. What more, while GVA of listed companies has improved in the post-COVID period (FY20-FY23), it has weakened for the aggregate corporate sector, entirely because of the unlisted corporate sector.
 3. Not only profits and GVA, the listed corporate sector has also seen a remarkable improvement in its financial position, as they have deleveraged. Debt of listed companies has declined to 13.4% of GDP in FY23, down from 16-17% of GDP in the pre-COVID years. While debt of the entire corporate sector has grown at the similar pace in the pre- and post-Covid period, debt of the listed companies has grown much slower, compared to that of the unlisted sector. Debt of the latter has grown faster than in the pre-COVID period. Moreover, the listed companies account for only about a quarter of India's corporate debt, implying that the unlisted sector is almost 3x of the listed universe in terms of debt.
 4. Not only the share of the listed sector has improved in terms of PAT (the aggregate of which is our estimate), but the situation is broadly similar in the case of PBT (which is the official data, published in the Union Budget documents). Like PAT, the unlisted sector accounts for almost half of aggregate corporate PBT in the country. Further, almost the entire improvement in the aggregate corporate PBT (only for profit-making units) during the post-COVID period is on account of the listed companies, as the improvement in PBT growth in the unlisted sector was minimal.
 5. What is very interesting to note is that while the profits (before and after taxes) of the listed companies have improved significantly in the past few years, their share in total corporate income taxes has actually declined in the post-COVID period. Taxes paid by the listed companies (using cash flow statements) grew only 2.8% per annum in the post-COVID period, compared to 13.7% YoY growth in the pre-COVID period. Further, like in profits, the unlisted sector accounts for about 55-60% of total corporate income taxes paid in the country.
 6. Lastly, the corporate sector accounts for roughly about half of the total investments (excluding acquisition of valuables) rate of ~30% of GDP in India. Of this, the listed companies used to account for about a quarter in the pre-COVID years. Post-

Nikhil Gupta – Research analyst (Nikhil.Gupta@MotilalOswal.com)

Tanisha Ladha – Research analyst (Tanisha.Ladha@MotilalOswal.com)

Investors are advised to refer through important disclosures made at the last page of the Research Report.

Motilal Oswal research is available on www.motilaloswal.com/Institutional-Equities, Bloomberg, Thomson Reuters, Factset and S&P Capital.

COVID, the share of the listed companies has increased to 35%, implying that almost two-thirds of the corporate capex (or ~10% of GDP) is accounted for by the unlisted corporate sector.

- Overall, the performance of the equity market is a reflection of the financial position of the listed companies, which has improved tremendously in the post-COVID period (since 2HFY21). It's crucial to note that this improvement has come at the cost of the unlisted corporate sector, which holds greater economic significance.
- Our analysis suggests that not only the unlisted corporate sector accounts for half of the aggregate corporate profits in the country (before and after taxes), but it accounts for 55-60% of total corporate income taxes paid, two-thirds of corporate GVA and corporate capex, and about three-fourths of corporate debt in India.
- Further, in line with the improvement in its financial position, the listed sector has increased its capex substantially in the past two years. Conversely, mirroring its weaker financial condition, the unlisted sector – which is almost 3x larger than that of the listed sector – has experienced a considerable deceleration in capex. This discrepancy is one of the key factors contributing to the declining trend corporate investments across India.
- Before we discuss the role of the listed and the unlisted sector in all these economic parameters with more details, *Exhibit 1* provides a summary of its share in various parameters in FY23 (or FY22) and compares it with what it was in FY12. Barring profits and taxes, the share of the listed companies has fallen in other economic parameters during the past decade or so.
- The exhibit also presents data as a % of GDP, aiming to enhance reader convenience. Notwithstanding higher profits and lower debt, listed sector's GVA has been broadly unchanged and its capex has declined in the past decade. Moreover, direct taxes paid in FY23 were also lower than in FY12.
- To conclude, while we consider the listed companies as a proxy for India's corporate sector, possibly due to lack of timely data, our estimates (using the residual approach) suggest that not only is the unlisted corporate sector much bigger than its listed counterpart, the latter has moved in a different direction vis-à-vis the former.
- This analysis may be the starting point for those who want to dwell further on to the possible factors, and thus, the remedy for the situation.

Exhibit 1: Summary of the share of listed companies in various macroeconomic parameters (%)

	Unit	Profits (PAT) ¹	GVA ^{2,3,4}	Debt ^{3,5}	Profits (PBT) ^{1,5,6}	Direct taxes ¹	Capex ^{3,7}
All listed companies		49.8 (49.4)	30.1 (31.4)	25.4 (27.8)	51.5 (49.7)	41.3 (45.3)	33.5 (30.7)
BSE500		46.5 (45.8)	25.7 (25.3)	18.8 (17.7)	45.4 (44.0)	37.0 (40.5)	31.3 (20.8)
NIFTY50	% of aggregate corporate sector	25.9 (25.9)	14.6 (14.0)	8.6 (6.6)	24.8 (24.8)	21.4 (22.5)	16.5 (6.9)
Sensex		20.8 (18.1)	11.2 (9.4)	7.4 (5.4)	20.6 (17.4)	16.8 (15.8)	14.2 (4.0)
Non-BSE500		3.4 (3.6)	4.4 (6.1)	6.7 (10.2)	6.0 (5.7)	4.3 (4.7)	2.3 (9.9)
Unlisted companies⁹		50.2 (50.6)	69.9 (68.6)	74.6 (72.2)	48.5 (50.3)	58.7 (54.7)	66.5 (69.3)
All listed companies			4.3 (4.2)	12.1 (12.2)	13.4 (19.5)	6.2 (6.3)	1.3 (1.7)
BSE500	% of GVA/GDP	4.0 (3.8)	10.4 (9.8)	9.9 (12.4)	5.5 (5.5)	1.1 (1.5)	4.1 (3.5)
NIFTY50		2.2 (2.2)	5.9 (5.4)	4.6 (4.6)	3.0 (3.1)	0.6 (0.8)	2.2 (1.2)
Sensex		1.8 (1.5)	4.5 (3.7)	3.9 (3.8)	2.4 (2.2)	0.5 (0.6)	1.9 (0.7)
Non-BSE500		0.3 (0.3)	1.8 (2.4)	3.5 (7.1)	0.7 (0.7)	0.1 (0.2)	0.3 (1.7)
Unlisted companies⁸		4.3 (4.2)	28.2 (26.6)	39.4 (50.6)	5.9 (6.3)	1.8 (2.1)	8.8 (11.6)
Aggregate corporate sector	INR tn	23.2 (7.3)	86.6 (31.4)	144.0 (61.2)	33.0 (11.0)	8.3 (3.2)	36.0 (14.7)
	% of GVA/GDP	8.5 (8.4)	40.4 (38.8)	52.9 (70.1)	12.1 (12.6)	3.0 (3.7)	13.2 (16.8)
National/India data	INR tn	n/a	214.4 (81.1)	458.6 (143.0)	n/a	16.3 (4.9)	81.2 (32.1)
	% of GVA/GDP	n/a	100.0 (100.0)	168.2 (163.7)	n/a	6.0 (5.6)	29.8 (36.7)

Data for FY23 (FY12 in parentheses)

¹ For financial and non-financial companies (NFCs)

² Estimated as the sum of factor payments = employee costs, interest paid, depreciation and profits before taxes (PBT)

³ Only for non-financial companies

⁴ Data for FY22 (FY23 not yet available)

⁵ Estimated for FY22/FY23

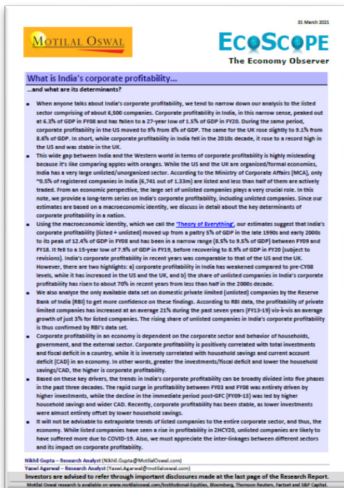
⁶ Only profit-making companies

⁷ Estimated using balance sheet (net block/fixed assets, capital work-in-progress, inventories) and profit & loss statement (depreciation) data

⁸ Estimated as residual (aggregate corporate sector *minus* all listed companies)

Based on listed/BSE500/Nifty50 companies as of Nov'23

Source: CSO, RBI, various other national sources, CEIC, MOFSL



1. Share of listed/unlisted corporate sector in India's corporate profits (profit after tax, PAT), its movements during the past decade and further details:

What is India's aggregate corporate profit? Unlike widely discussed data of ~4.5% of GDP, we have shown in our [earlier research](#) that listed companies are only a portion of India's aggregate corporate sector. Using a modified version of our "Theory of Everything" identity, one can derive aggregate corporate profits (PAT) in an economy using the following equation:

$$\text{Corporate PAT} = \text{Total investments} - \text{CAD} - \text{Household savings} - \text{Government savings} + \text{dividends} - \text{corporate depreciation}$$

Our estimates suggest that India's corporate profits peaked at 12.3% of GDP in FY08 and has been in a narrow range of 8.4% to 9.9% of GDP between FY09 and FY18. Since then, it has weakened further to 8-8.5% of GDP during the past five years (*Exhibit 2*). Although subject to revisions, corporate PAT is estimated to have increased at an average of 21.5% during the last two years, i.e., FY22-FY23. Given below are the key highlights regarding the aggregate corporate profits in India:

- 1) Listed companies' profits increased from its two-decade low of 1.7% of GDP in FY20 to ~4.4% of GDP in the last two years (FY22-FY23). In absolute terms, it means their PAT jumped to INR11.6t in FY23 from INR3.5t in FY20 (*Exhibit 3*),
- 2) As a corollary, it means that the share of listed companies in aggregate PAT fell from its peak of 55% in FY10 its trough of 21% in FY20, before picking up again toward 50% in the last two years (*Exhibit 4*). In other words, the unlisted corporate sector accounted for almost half of the total corporate profits in India in FY23,
- 3) Further, by deducting listed corporate PAT from aggregate profits, we find that PAT of the unlisted companies has averaged 6.5% of GDP in the pre-COVID period (between FY15 and FY20), before falling sharply to just 4.3% of GDP in the last three years (*Exhibit 5*). It is now similar to what it was immediately after the Great Financial Crisis (GFC) of 2008,
- 4) Corporate PAT grew at an average of 10.5% per annum in the post- COVID period (FY2-FY23) better than the average growth of 7% in the pre- COVID years (FY16-FY19). The details show that while the average growth in listed corporate PAT was 24% in the post-COVID period, compared to just 5% in the pre-COVID period, it decelerated remarkably to 2.3% from 8% for the unlisted sector (*Exhibit 6*).
- 5) Details of listed universe suggest that the majority of improvement in PAT is observed within non-Nifty companies. PAT of Nifty50 companies has increased to 2.2% of GDP in FY23 from 1.7% of GDP in FY20. In contrast, PAT of non-Nifty BSE500 companies jumped to 1.8% of GDP (from 0.4% of GDP) and to 0.3% of GDP for non-BSE500 listed companies (*Exhibit 7*).
- 6) Higher contribution of non-NIFTY listed companies is also reflected in the fact that while the average growth in Nifty50 PAT was 15.6% in the post- COVID period (from 8.8% in the pre- COVID years), it increased at a much faster pace for non-Nifty listed companies (*Exhibit 8*).
- 7) A look at industry-wise PAT confirms that the financial sector accounted for more than a third of listed corporate PAT in FY23, compared to 10-15% share

The unlisted corporate sector accounted for almost half of total corporate profits in India in FY23

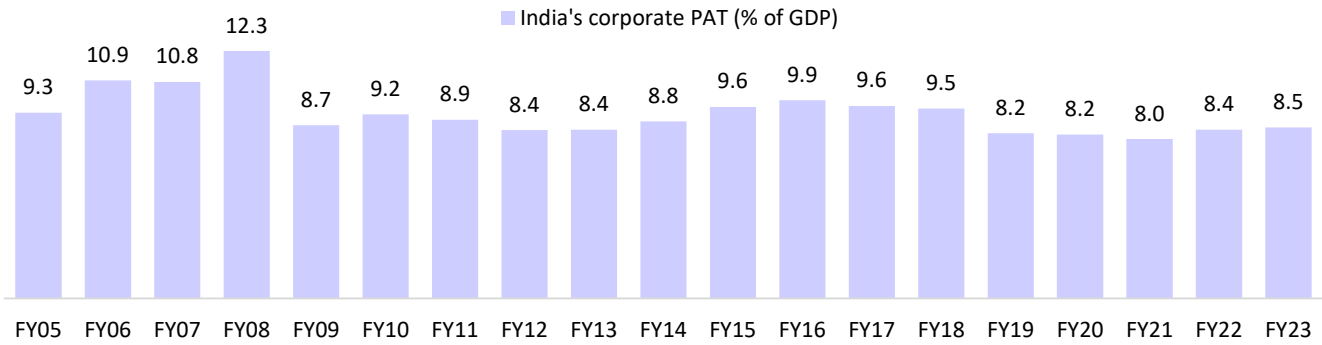
While the average growth in listed corporate PAT was 24% in the post-COVID period, compared to just 5% in the pre-COVID period, it decelerated remarkably to 2.3% from 8% for the unlisted sector

The majority of improvement in PAT accrues to non-Nifty companies

in FY18/FY19 (*Exhibit 9*). In contrast, the share of most other large sectors such as technology, automobiles, consumer, has declined.

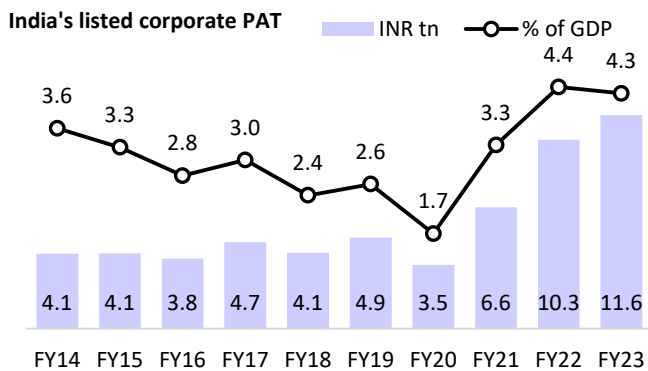
- 8) While PAT of the financial sector declined in the pre- COVID years, it grew by 56% per annum during the post- COVID period (*Exhibit 10*). The growth in PAT of healthcare, oil & gas, technology and utilities sectors also grew faster in the post- COVID period.

Exhibit 2: India's aggregate corporate profits (PAT) during the past two decades



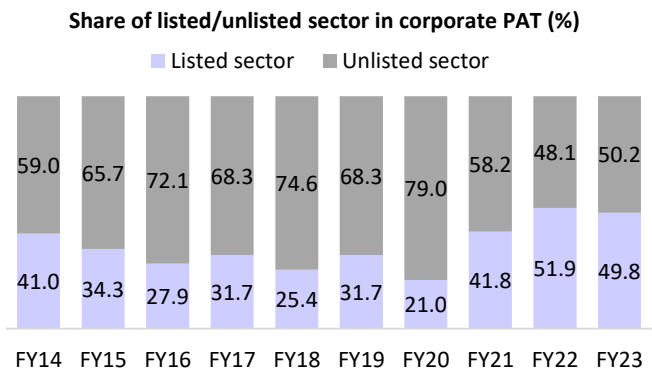
Source: CSO, RBI, CEIC, MOFSL

Exhibit 3: PAT of listed sector increased to INR12t or 4.3% of GDP last year...



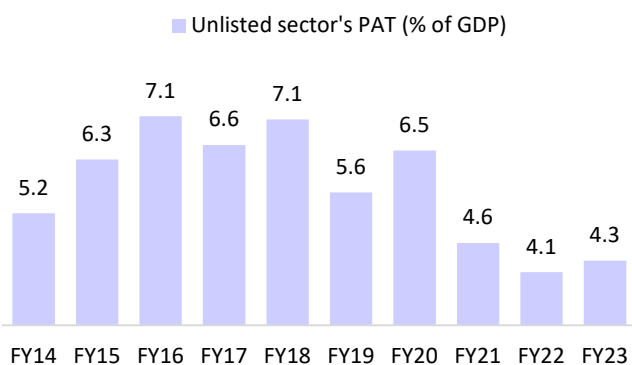
Based on all listed companies' data (not common sample)

Exhibit 4: ...which means that the unlisted sector accounted for about half of India's aggregate corporate PAT



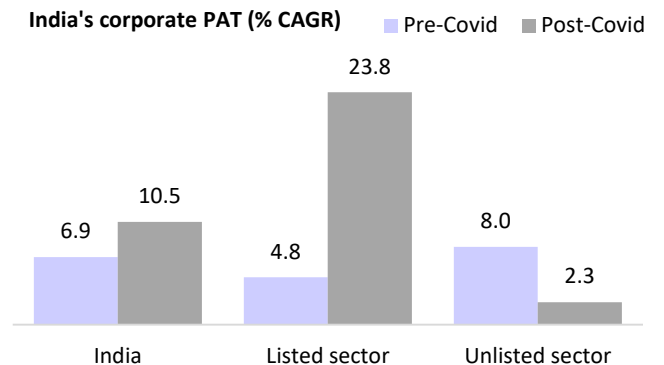
Source: RBI, Capitaline, MOFSL

Exhibit 5: PAT of unlisted sector has dwindled in the post-COVID period...



Estimated as the residual between aggregate and listed sector's PAT

Exhibit 6: ...as it has grown at half the average growth in the post-COVID period (vs Pre-COVID years)



Pre-Covid period = FY16-FY19, Post-Covid period = FY20-FY23

Source: RBI, Capitaline, MOFSL

Exhibit 7: PAT of non-Nifty listed companies has surged faster than Nifty companies ...

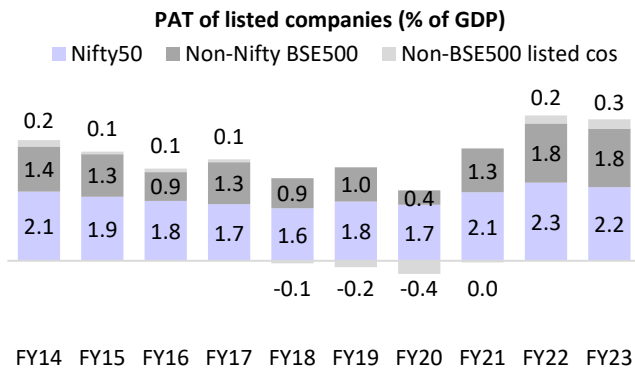
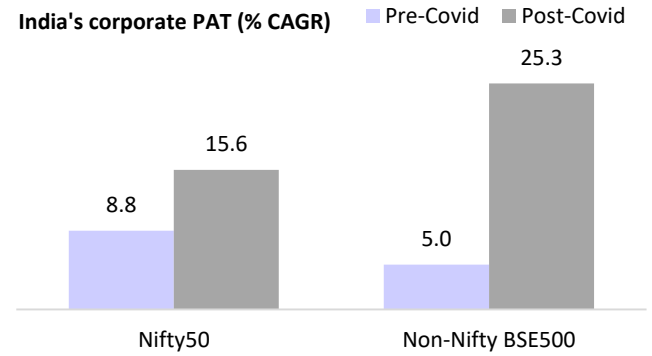
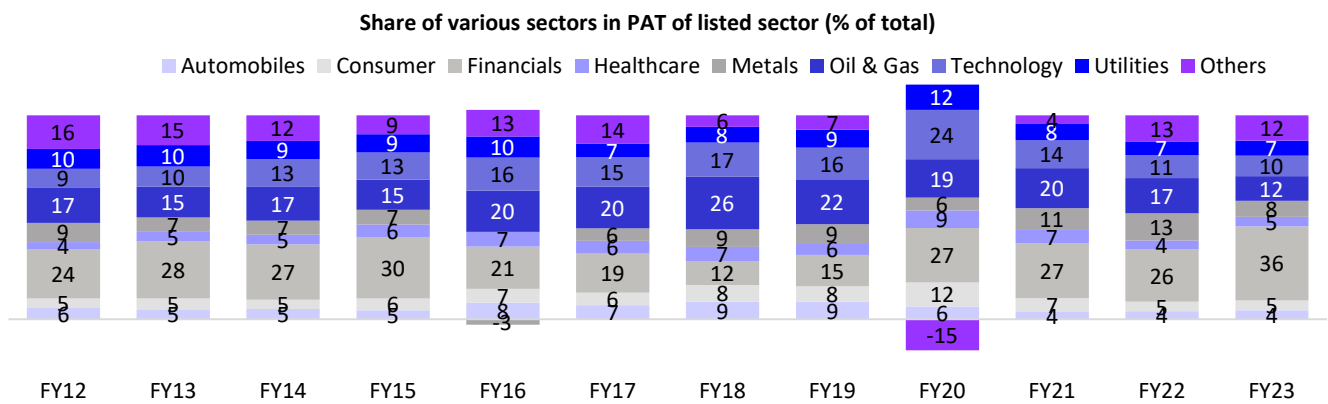


Exhibit 8: ...and non-Nifty PAT growth has also improved markedly in the post-COVID period



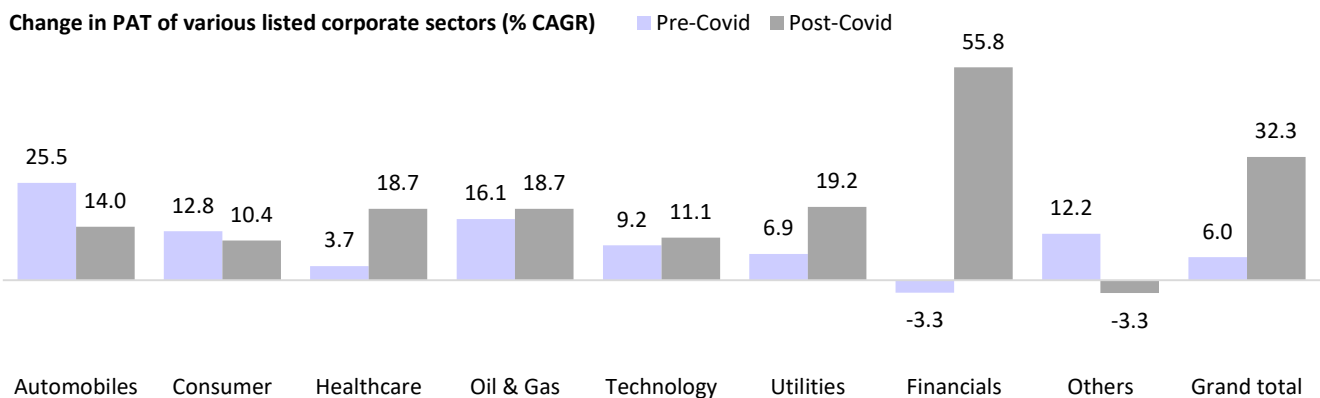
Source: RBI, Capitaline, MOFSL

Exhibit 9: Share of various sectors in listed companies' PAT (%)



Source: Capitaline, MOFSL

Exhibit 10: A comparison of the average change in PAT of various listed sectors in the pre- and post-COVID period (% CAGR)



Source: Capitaline, MOFSL

2. Share of listed/unlisted corporate sector in India's GVA, its movements during the past decade and further details:

Similar to how national GVA encompasses value addition by the three major sectors, namely agriculture, industry and services, it can also be allocated among three domestic economic participants – the corporate sector, government, and households (the official data is available up to FY22, which is subject to revisions). Using data on corporate GVA, we collect data on GVA of the listed corporate sector, after which, we can derive GVA of the unlisted sector using the residual approach. Further, we look at how GVA of the listed and unlisted sectors has behaved during the past decade.

Besides, we delve deeper into two more details: 1) which sectors within the listed universe are driving and lagging GVA growth, and 2) how have the payments to different factors of production – labor, entrepreneur, and capital (interest + depreciation), behaved during the past decade? Given below are the key findings from our analysis:

- 1) The corporate sector accounts for almost 45% of India's nominal GVA, of which non-financial companies (NFCs) contribute about 40% and financial companies make up for the remaining 5%. This share has remained broadly stable during the past decade (*Exhibit 11*). The household sector, including the MSMEs, accounts for another ~45% of GVA.
- 2) Our estimates suggest that GVA of listed NFCs using their data on employee salaries, interest payments, depreciation expenses, and profit before taxes (PBT) stood at INR26t in FY22, or 12% of the national GVA, which increased to INR28t or 11.3% of GVA in FY23 (*Exhibit 12*).
- 3) In other words, the listed companies contribute only about 30% of aggregate corporate GVA (*Exhibit 13*). Their share was similar in FY13 and FY14, which fell to its trough of 24% in FY20, before picking up. As a corollary, it also means that the unlisted corporate sector is more than 2x the size of listed sector in terms of GVA.
- 4) India's corporate GVA has increased at an average of 8% during the past three years (FY20-FY22P), slower than 11% growth in the pre-COVID period (FY16-FY19). This is primarily because of weak GVA growth of the unlisted corporate sector, as listed companies have grown at a much faster pace (*Exhibit 14*).
- 5) Of the total share of 30% of listed corporate sector, Nifty50 companies account for almost half (or 15%) in FY22P, up from 13% in FY19-FY20 (*Exhibit 15*). This was their highest share since FY12 (since when the data is available) and compares with 12.5-13% in the pre-COVID period.
- 6) Interestingly, almost the entire improvement in growth in the listed sector's GVA in the post-COVID period is led by non-BSE500 companies (*Exhibit 16*). While the GVA growth of Nifty50 and non-Nifty BSE500 companies was slower in the pre- and post-COVID period, it improved to 13% per annum for the non-BSE500 listed companies compared to just 1% in the pre-COVID period.
- 7) Details of the listed sector by industries confirm that the 'technology' sector has the highest share, followed by 'oil & gas', 'utilities' and 'metals'. Together, these four industries account for more than half of listed corporate sector's GVA (*Exhibit 17*).

The listed companies contribute only about 30% of aggregate corporate GVA

GVA growth of the unlisted corporate sector has weakened, while listed companies have grown at a much faster pace

The share of laborers (salaries) and capital (interest + depreciation) has come down in listed sector's GVA, while it has increased for the entrepreneurs (PBT)

- 8) A comparison of the post-COVID period (FY20-FY23) growth of various listed sectors shows that it has improved in some sectors, such as capital goods, healthcare, and technology, while GVA growth has weakened in others such as automobile, consumer, metals, oil & gas vs. the pre-COVID period (*Exhibit 18*).
- 9) Lastly, we look at the share of various factors of production in the listed corporate sector. Broadly speaking, the share of laborers and capital (interest + depreciation) has come down in their GVA, while it has increased for the entrepreneurs (*Exhibit 19*).
- 10) Within the listed universe, while the share of entrepreneurs (or PBT) has declined in Nifty50 companies with higher share of capital, the share of laborers and capital has fallen in non-Nifty listed companies, with higher share of entrepreneurs (*Exhibit 20*).
- 11) By industries, it is clear that the share of entrepreneurs has increased in 'the metals' and 'utilities' sectors, while the share of entrepreneurs remains the highest in the 'consumer' sector, with the highest share of laborers in the 'technology' sector (*Exhibit 21*).

Exhibit 11: Aggregate corporate sector accounts for ~45% of India's total GVA...

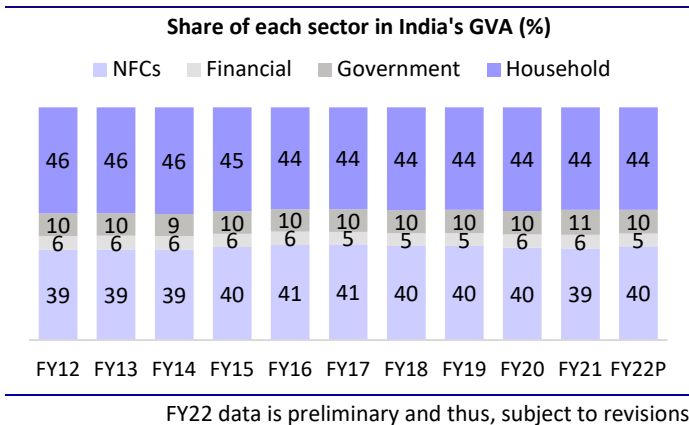


Exhibit 12: ...of which listed companies account for 11-12% of national GVA

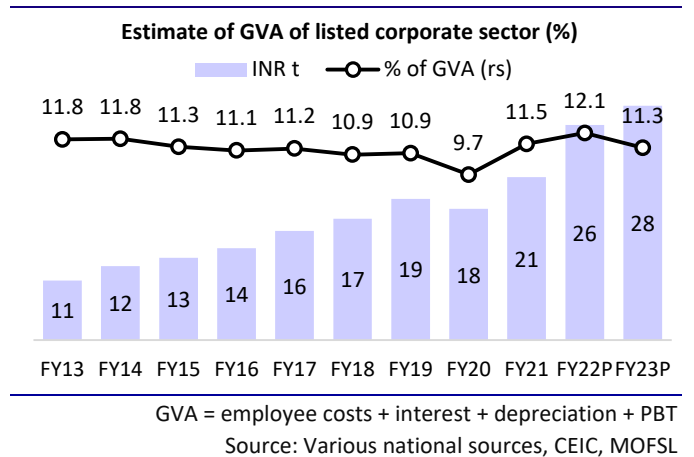


Exhibit 13: Unlisted corporate sector is >2x the size of listed universe in terms of GVA...

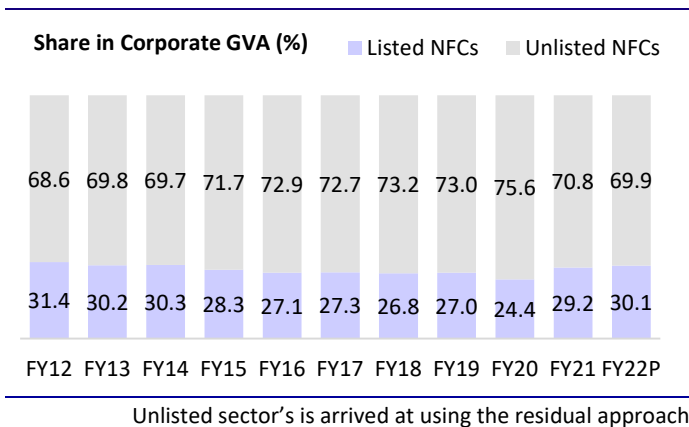


Exhibit 14: ...which has seen much slower growth in its GVA in the post-COVID period vs. listed sector

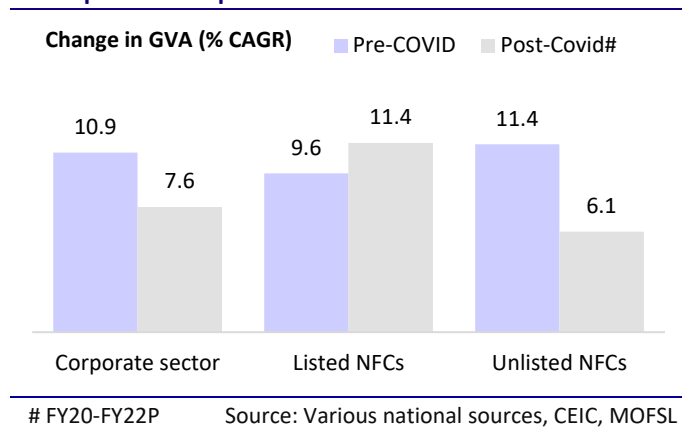


Exhibit 15: Nifty50 companies account for almost half of listed sector's GVA (or ~15% of national GVA)...

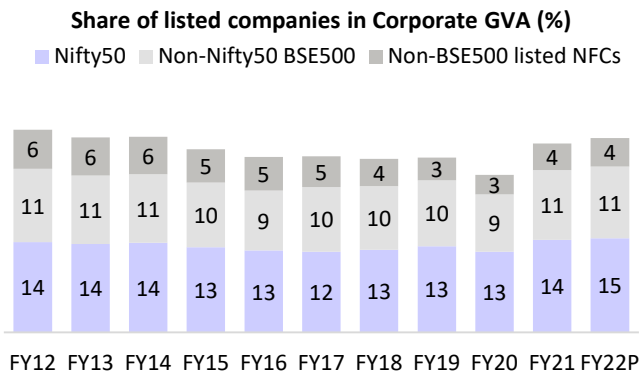
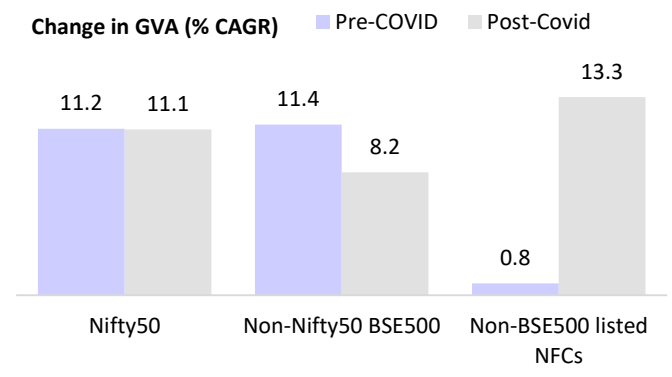
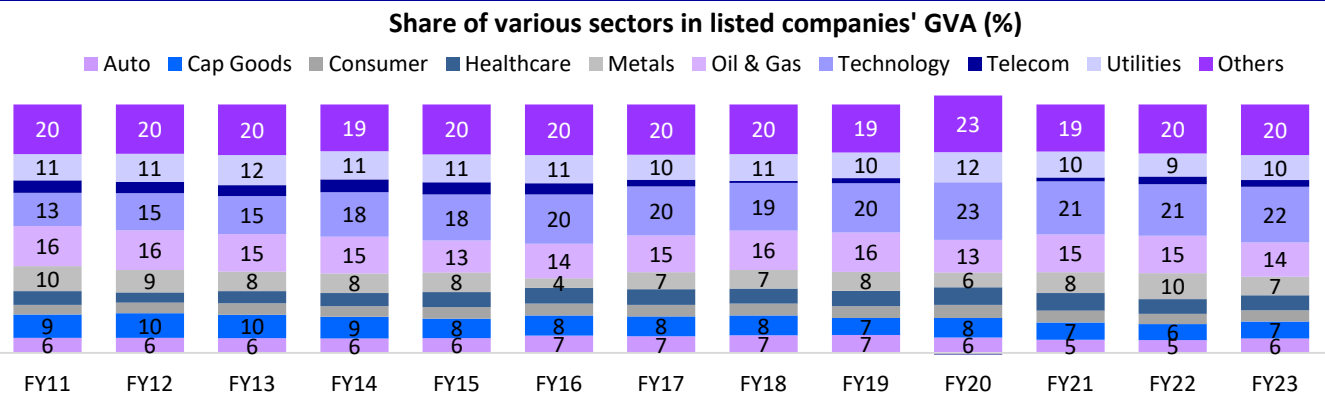


Exhibit 16: ...but the entire improvement in listed sector's GVA was led by non-BSE500 listed companies



Source: Various national sources, CEIC, MOFSL

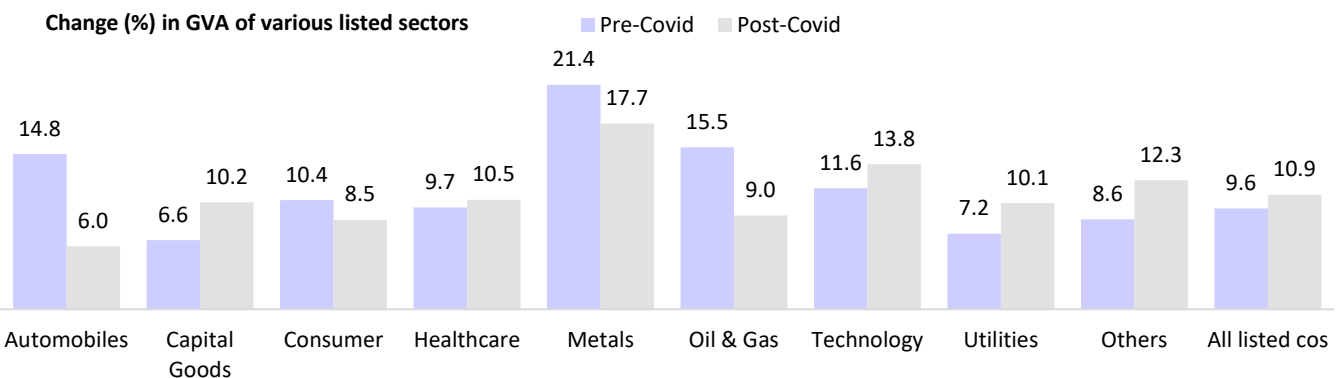
Exhibit 17: Technology and Oil & gas sectors are the largest contributors to listed sector's GVA (%)



GVA = Employee costs + interest paid + depreciation + PBT

Source: Capitaline, MOFSL

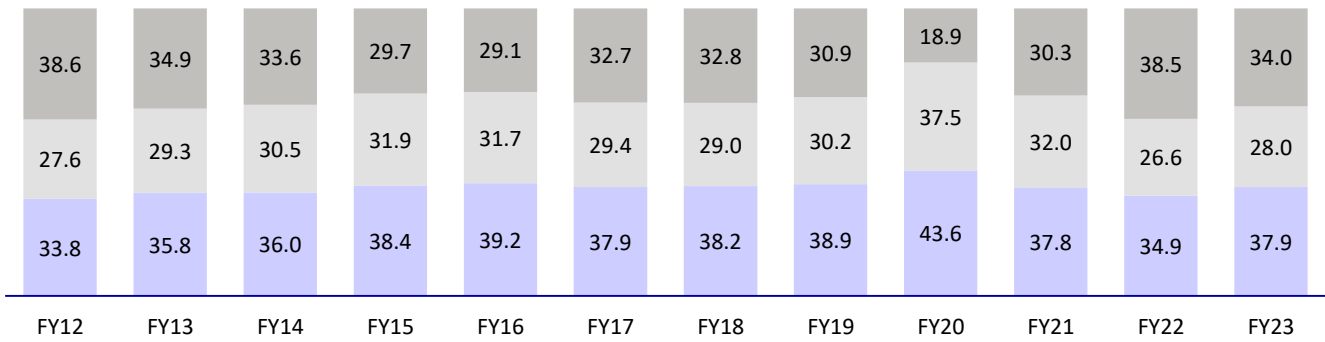
Exhibit 18: Average GVA growth has improved in capital goods/IT, while it weakened in auto/O&G in post- COVID period



Source: Capitaline, MOFSL

Exhibit 19: Share of the entrepreneurs has increased in listed companies' GVA during FY22-FY23

Share (%) of key factor payments in listed companies' GVA Labour Capital Entrepreneur

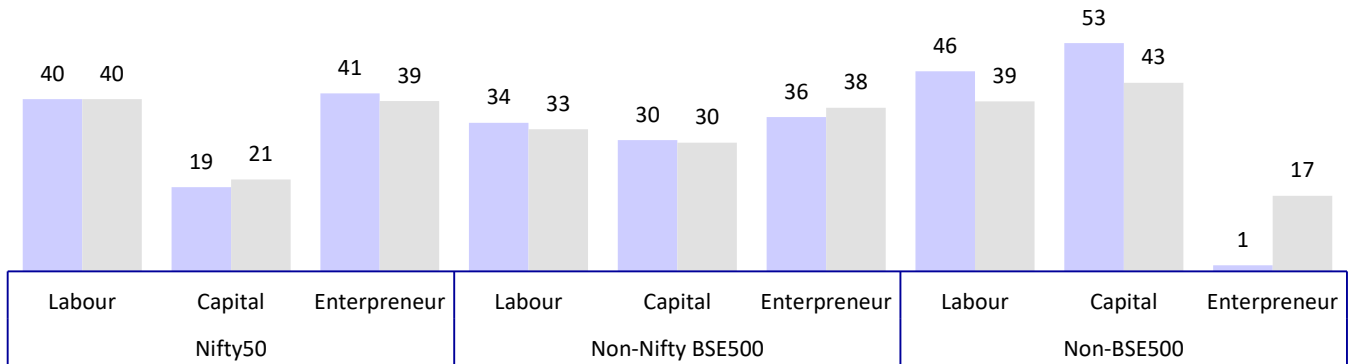


Capital includes both interest payments and depreciation expenses

Source: CSO, Capitaline, MOFSL

Exhibit 20: Share of entrepreneurs down in Nifty50 companies; up in non-Nifty listed companies

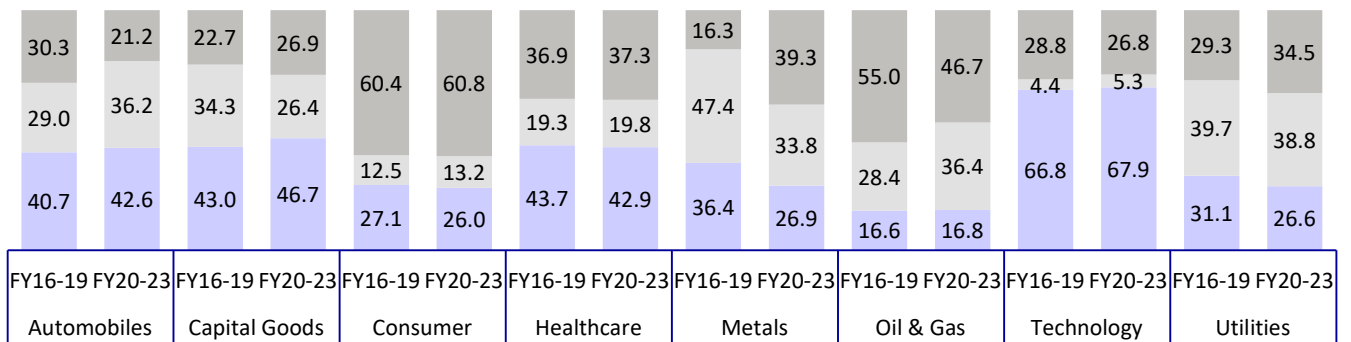
Share of different factors of production in GVA of listed companies (%) Pre-Covid Post-Covid



Source: CSO, Capitaline, MOFSL

Exhibit 21: Share of labor highest in technology sector; share of entrepreneur highest in consumer and O&G sectors

Share (%) of key factors of production in various sector's GVA Labour Capital Entrepreneur



Source: CSO, Capitaline, MOFSL

3. Share of listed/unlisted corporate sector in India's debt and its movements during the past decade

Like GVA, domestic debt can also be distributed among the corporate sector (NFCs), government, and households. The official data on India's annual debt is published by the RBI, which is available up to FY21. The Bank for International Settlements (BIS) provides credit data for numerous major nations in the world, including India on a quarterly basis, which is updated as of 1QFY24 (quarter-ending Jun'23). Thus, we use BIS data to estimate India's debt for FY22 and FY23.

Like earlier, we estimate the outstanding debt of the listed corporate sector, after which we can derive leverage of the unlisted sector using the residual approach. Further, we look at how debt-to-GDP ratio of the listed and unlisted sectors has behaved during the past decade. Besides, we also delve deeper into which sectors within the listed universe are adding more leverage and de-leveraging. Given below are the key findings from our analysis:

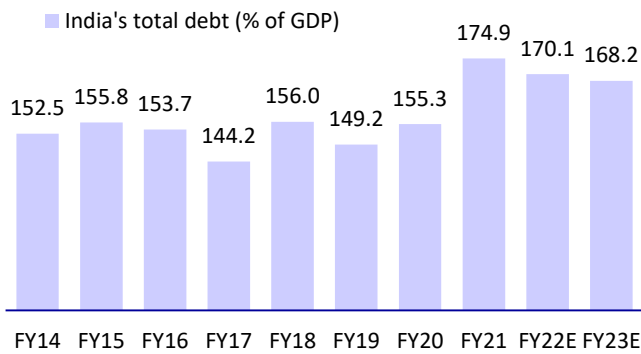
- 1) India's total debt, as per the official RBI data, stood at 175% of GDP in FY21, up from 155% in FY20. Based on BIS data, it appears to have eased to 168% of GDP in FY23 (*Exhibit 22*).
- 2) India's corporate debt is estimated at 61% of GDP in FY21, compared to 58.3% in FY20 and 70% in FY12 (*Exhibit 23*). Using BIS data, it seems to have declined faster to just 53% of GDP in FY23, down from 70% in FY12.
- 3) Our estimates of listed corporate sector's debt confirm that their outstanding debt was INR36.6t in FY23, compared to INR34.5t in FY20 (*Exhibit 24*). Thus, aggregate debt of listed companies stood at 13.4% of GDP last year, compared to 16-17% of GDP in the pre-COVID period.
- 4) It also means that not only listed companies account for about half of aggregate corporate profits in India and less than a third of corporate GVA, they also account for only about a quarter of India's corporate debt. The unlisted corporate sector, thus, owes almost 3x debt compared to the listed companies (*Exhibit 25*).
- 5) Although the listed sector has deleveraged by almost a fifth to 13.4% of GDP last year, the de-leveraging of the unlisted sector was more modest, as it is estimated at 39.4% of GDP in FY23, down from 41% in the pre-COVID years (*Exhibit 26*).
- 6) India's corporate debt has risen at an average of 7.4% in the post-COVID period (FY20-FY23), almost the same as in the pre-COVID period (FY16-FY19). However, debt has grown slowly for the listed companies and increased faster for the unlisted sector (*Exhibit 27*).
- 7) Within the listed sector, Nifty50 companies account for about a third of their total debt, with 35-40% share of non-Nifty BSE500 companies and the remaining 25-30% share of non-BSE500 listed companies (*Exhibit 28*).
- 8) Notably though, the share of BSE500 companies has increased in total debt, while it has fallen for the non-BSE500 listed companies. This is because while the average growth in debt of Nifty50 companies has less than halved to 6% in the post-COVID period from 13.1% in the pre-COVID period, it was only 1.6% for the non-BSE500 listed companies vs. just 0.8% average growth in the pre-COVID period (*Exhibit 29*).

Aggregate debt of listed companies stood at 13.4% of GDP last year, compared to 16-17% of GDP in the pre-COVID period

The unlisted corporate sector owes almost 3x debt compared to the listed companies

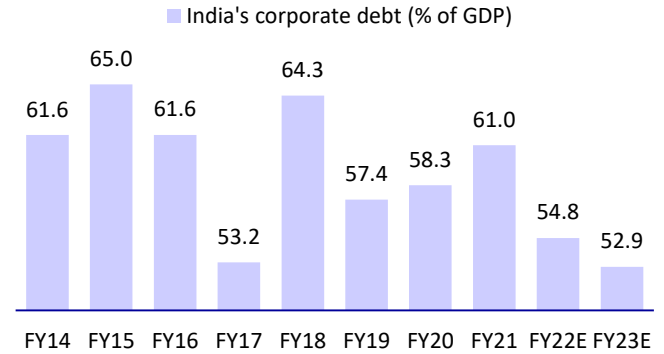
- 9) A look at various industries reveals that ‘utilities’ accounts for almost a fifth of total listed sector’s debt, followed by ‘oil & gas’ (~15%) and ‘telecom’ (~10%). On the other hand, the share of ‘capital goods’, ‘healthcare’ and ‘metals’ has declined (*Exhibit 30*).
- 10) Lastly, ‘automobiles’, ‘infrastructure’, and ‘oil & gas’ are the three major sectors, which have seen higher growth in debt in the post-COVID period vs. the pre-COVID period. In contrast, ‘capital goods’, ‘healthcare’ and ‘metals’ saw a decline or marginal growth in debt after FY19 (*Exhibit 31*).

Exhibit 22: India’s total debt is estimated at 168% of GDP in FY23E, up from 155% in FY20



RBI’s data available up to FY21; FY22-FY23 estimates using BIS data

Exhibit 23: Corporate debt has declined to just ~53% of GDP in FY23E, from ~70% in FY12



Source: RBI, BIS, MOFSL

Exhibit 24: Listed corporate sector has deleveraged sharply to 13.4% of GDP in FY23, from 16-17% before FY20...

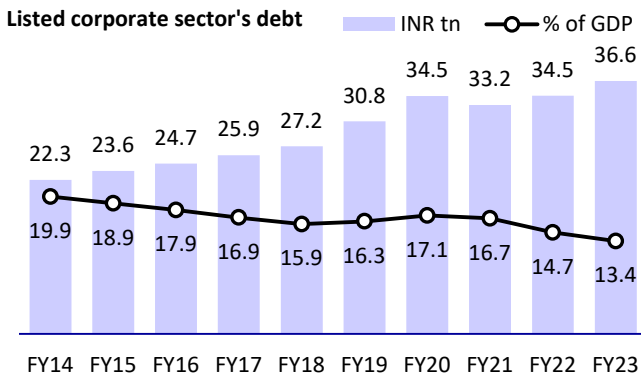
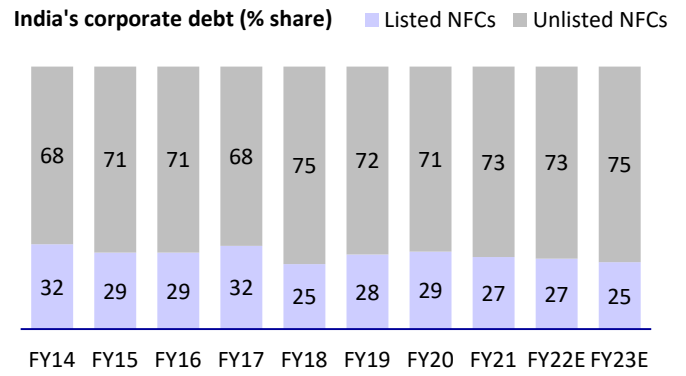
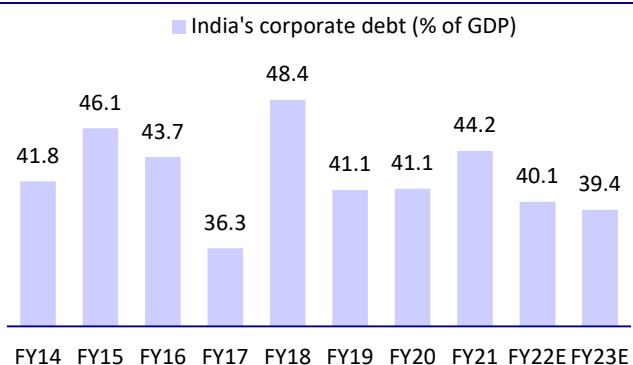


Exhibit 25: ...which means that the unlisted sector accounts for about three-fourths of corporate debt in India



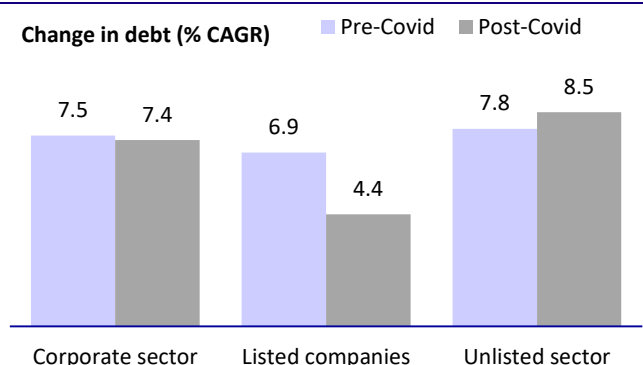
Source: RBI, Capitaline, BIS, MOFSL

Exhibit 26: Debt of the unlisted corporate sector is estimated at 39.4% of GDP in FY23E...



Unlisted sector debt estimated using the residual approach

Exhibit 27: ...as their debt has grown at a faster pace vs. pre-COVID period and that of listed companies



Source: RBI, Capitaline, BIS, MOFSL

Exhibit 28: Nifty50 companies account for almost a third of listed sector's debt...

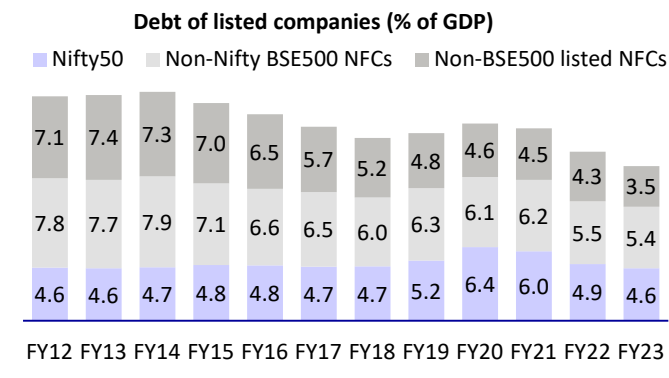
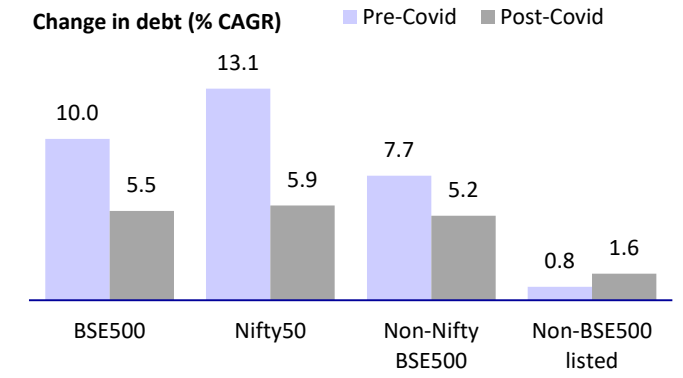
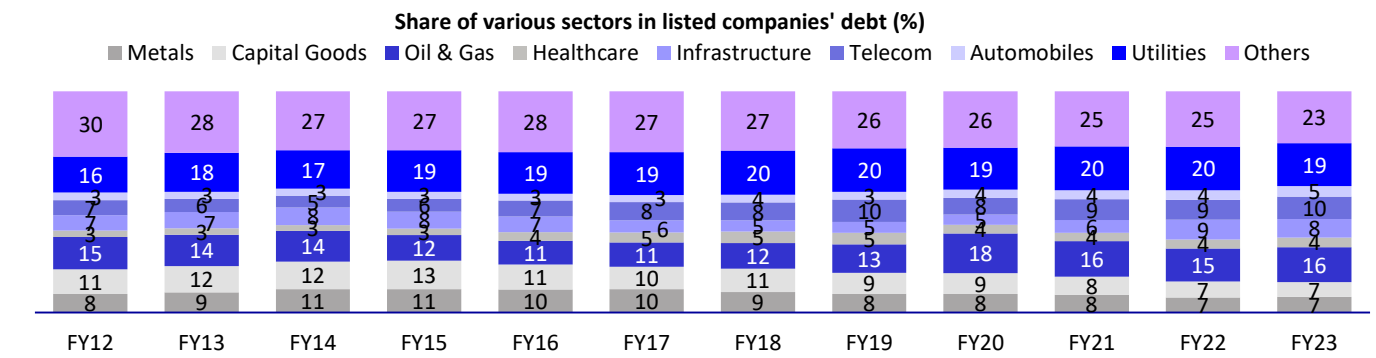


Exhibit 29: ...and still continues to grow faster than other listed companies



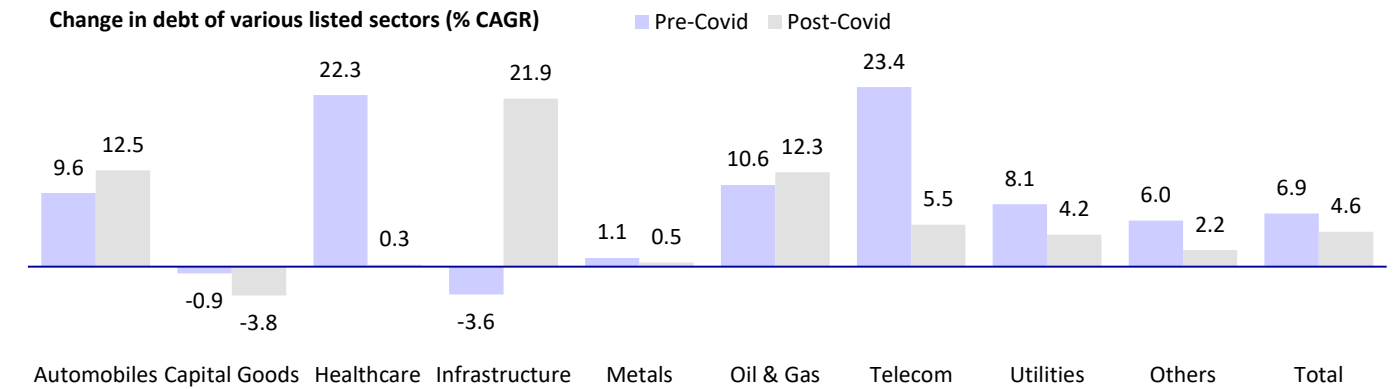
Source: RBI, Capitaline, BIS, MOFSL

Exhibit 30: Share of various sectors in listed companies' debt (%)



Source: Capitaline, MOFSL

Exhibit 31: A comparison of the change in debt of various listed sectors in the pre- and post-COVID period (% CAGR)



Source: Capitaline, MOFSL

4. Share of listed/unlisted corporate sector in India's corporate profit before taxes (PBT) and its movements during the past decade

The Union Budget documents provide data on the aggregate PBT of India's corporate sector, since all companies are required to e-file their income taxes. We prepare an estimate of PBT of the unlisted corporate sector by deducting PBT of profit-making listed companies from the aggregate data shared by the Budget documents. If the share of the unlisted corporate sector in India's PBT is similar to that discussed earlier, it will provide credence to our PAT analysis.

Besides, we look at further details of listed corporate sector in terms of Nifty50, non-Nifty BSE500, and non-BSE500 listed companies and by industries to get a better understanding of India's corporate sector. We analyze the profit-making and loss-making companies separately. Given below are the key details:

- 1) India's total PBT (of only profit-making units) was about INR24t in FY21 (the latest data available), which is likely to have increased to INR33t (based on taxes collected) by FY23 (*Exhibit 32*). It means that it stood at 12.1% of GDP each in FY22 and FY23, the highest level in a decade, but lower than its peak of 16.3% of GDP in FY08.
- 2) Notably, aggregate corporate PBT is expected to have increased sharply for the third consecutive years in FY23, averaging 18.6% in FY21-FY23, compared to an average of ~8% in the previous decade (*Exhibit 33*).
- 3) We find that PBT of only profit-making listed companies was INR17t in FY23, up from INR9.8t in FY19 and INR5.5t in FY12. It, thus, stood at INR6.5t in FY23, better than 5.2% of GDP in FY19, but similar to 6.3% of GDP in FY12 (*Exhibit 34*).
- 4) It also implies that the unlisted corporate sector accounted for 48.5% of total PBT in FY23, lower than >50% share in the pre-COVID period and FY12 (*Exhibit 35*). This was the lowest share in the past 15 years (except FY22, when it was 46%).
- 5) It is, thus, clear that PBT of the unlisted corporate sector was 5.9% of GDP in FY23, the second highest in the past decade, but much lower than the average of ~7% of GDP in the pre-FY14 period (*Exhibit 36*).
- 6) In the post-COVID period (FY20-FY23), the average growth in the corporate PBT improved to 13.4% per annum, which was entirely driven by the listed sector. There was no meaningful improvement in the growth of PBT of the unlisted corporate sector in the post-COVID period, compared to the pre-COVID years (*Exhibit 37*).
- 7) Within the listed universe, BSE500 companies account for about 90% of PBT and Nifty50 companies contribute almost half of the listed sector's PBT. In other words, profit-making companies in Nifty50 make PBT worth 3% of GDP, the best since FY15 (*Exhibit 38*).
- 8) Notably, though a comparison of the growth in PBT of Nifty50, non-Nifty50 BSE500 companies, and non-BSE500 listed companies in the pre- and post-COVID period confirms that while Nifty50 companies have seen strong improvement in their PBT, non-BSE500 listed companies have also seen an equally marked improvement in their PBT (*Exhibit 39*).
- 9) By industries, the financial sector has the highest PBT, with its share at 34.5% of aggregate PBT in FY23, up from ~21% in the pre-COVID years. Together with

India's total PBT (of only profit-making units) is estimated at 12.1% of GDP each in FY22 and FY23, the highest level in a decade but lower than its peak of 16.3% of GDP in FY08

In the post-COVID period (FY20-FY23), the average growth in the corporate PBT improved to 13.4% per annum, which was entirely driven by the listed sector

‘oil & gas’, ‘technology’, ‘metals’ and ‘utilities’, these sectors account or about two-thirds of total PBT of the listed sector (*Exhibit 40*).

10) Moreover, while aggregate PBT has increased at a faster pace in the post-COVID period, the PBT of ‘automobiles’, ‘capital goods’, ‘consumer’ and ‘oil & gas’ has grown slowly than in the pre-COVID period (*Exhibit 41*).

Exhibit 32: India’s aggregate PBT is likely to have increased to a decade high of 12.1% of GDP in FY22/FY23...

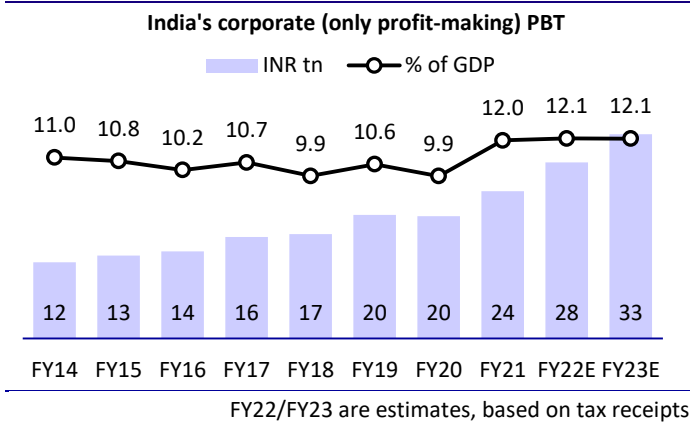


Exhibit 33: ...as it likely increased strongly for the third consecutive year

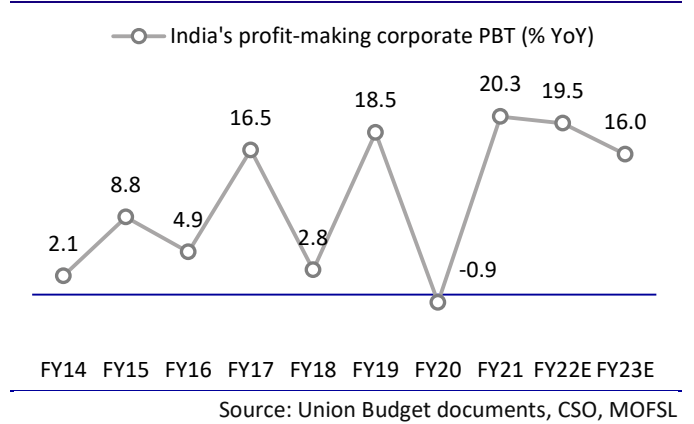


Exhibit 34: PBT of profit-making listed sector was 6.2% of GDP in FY23...

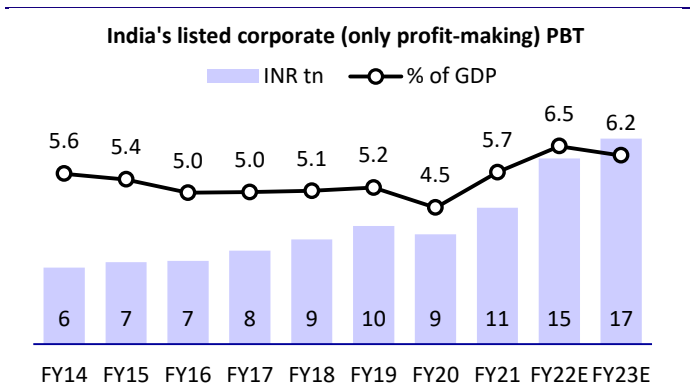


Exhibit 35: ...implying that the unlisted corporate sector accounted for 48.5% of aggregate PBT last year

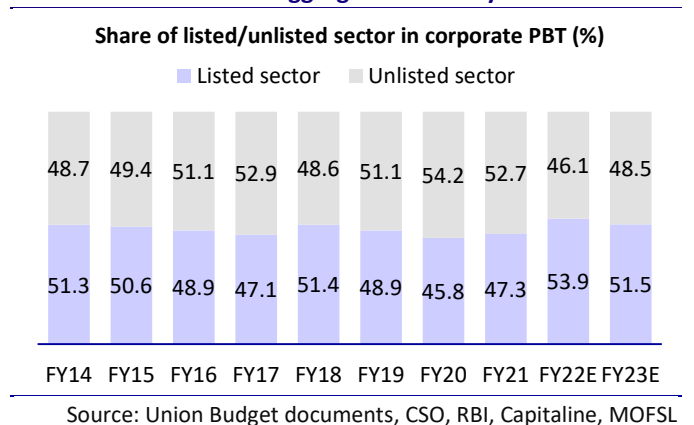


Exhibit 36: PBT of the unlisted sector was 5.9% of GDP in FY23, the second-highest in a decade...

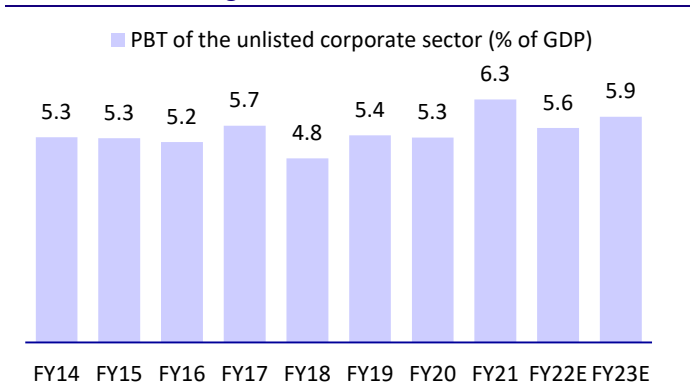


Exhibit 37: ...but the growth of listed sector’s PBT improved sharply in the post-COVID period

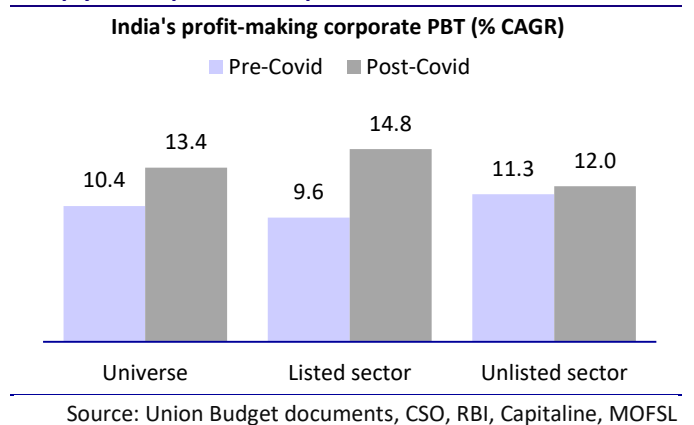


Exhibit 38: Nifty50 companies account for half of total PBT of the listed companies...

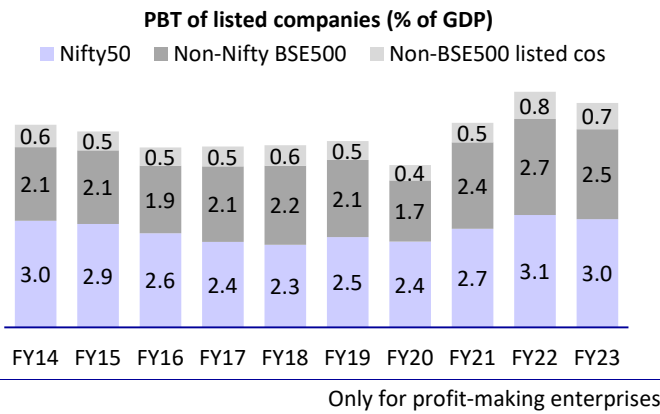


Exhibit 39: ...and they have seen marked improvement in PBT, along with non-BSE500 listed companies

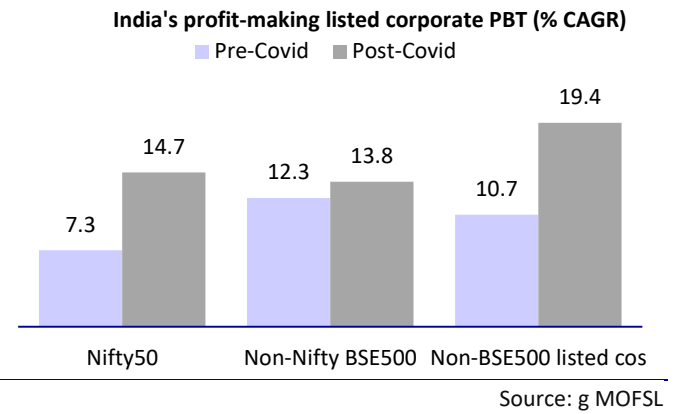


Exhibit 40: Share of various sectors in listed companies' PBT (%)

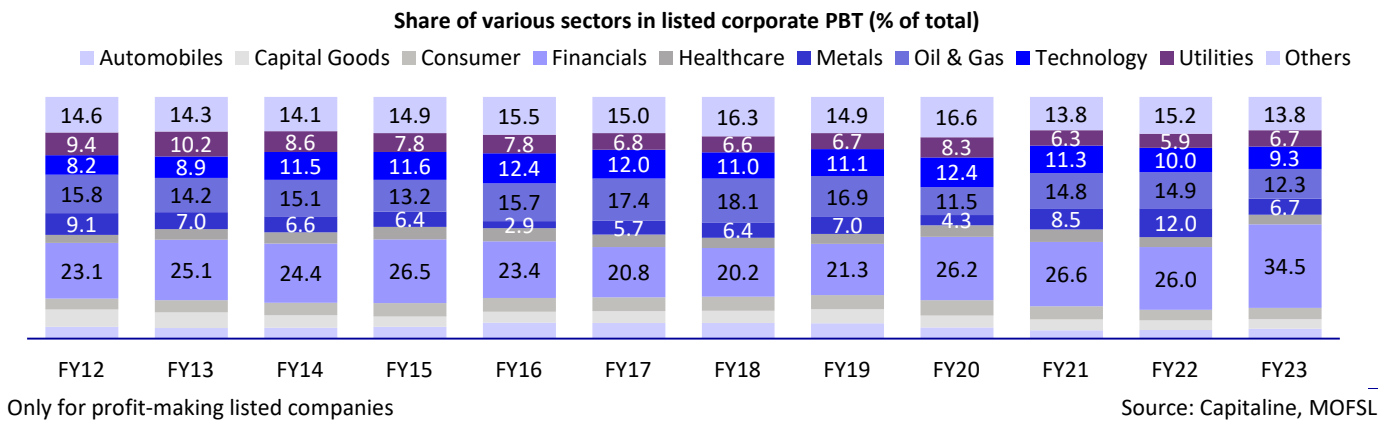
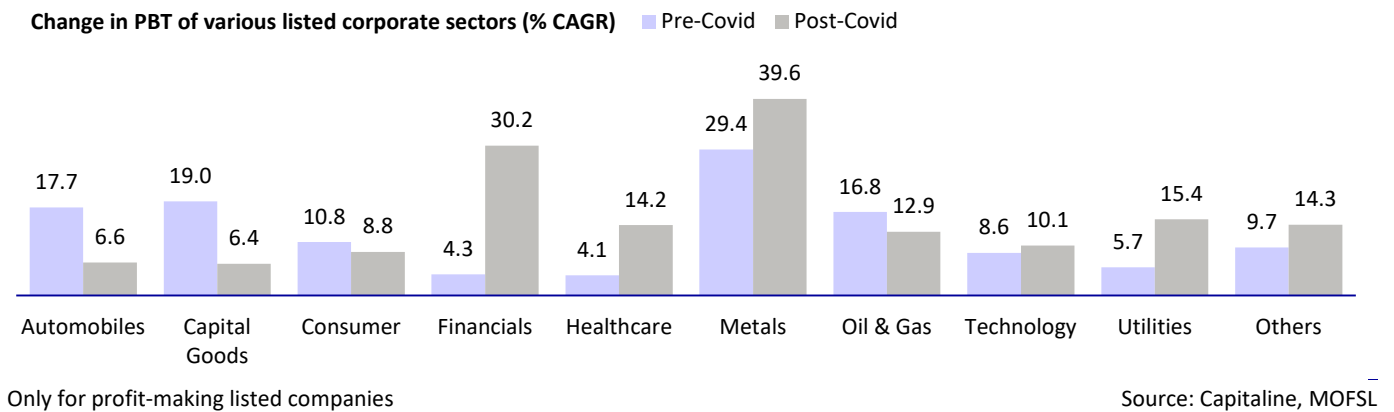


Exhibit 41: A comparison of the change in PBT of various listed sectors in the pre- and post-COVID period (% CAGR)



5. Share of listed/unlisted corporate sector in India's corporate taxes and its movements during the past decade

It may be really hard to believe that the unlisted corporate sector may be so large in India. They account for half of estimated corporate PAT and about half of the reported corporate PBT, more than two-thirds of corporate GVA, and about three-fourths of corporate debt in the country. Are there any actual high-frequency data to justify these estimates? Fortunately, the Government of India (GoI) publishes data on the corporate income taxes collected in the country every month. Using the residual approach, we estimate the share of the unlisted corporate sector in total corporate income taxes paid by deducting taxes paid by the listed companies.

Besides, like earlier, we look at further details of listed corporate sector in terms of Nifty50, non-Nifty BSE500, and non-BSE500 listed companies and by industries to get a better understanding of India's corporate sector. Given below are the key details:

- 1) India's total corporate income taxes stood at 3% of GDP in FY23, better than 2.3% of GDP in FY21, but much lower than 3.3% of GDP in the pre-COVID years and 3.7% of GDP in FY12 (*Exhibit 42*).
- 2) Notably, the share of the corporate income taxes has declined in total direct (or income) taxes collected by the Government of India (GoI). From almost two-thirds in FY12, the share of corporate income taxes fell to ~60% between FY14 and FY19, which dropped further to ~51% in recent years (*Exhibit 43*). The reduction in the corporate income tax rate in Sep'19 and the shift of the dividend distribution tax to the shareholders from the companies may have contributed to these trends.
- 3) Using the cash flow statements (since fiscal accounts are prepared on cash basis), we find that total direct taxes paid by the listed corporate sector was INR3.4t in FY23, compared to INR3.1t in FY19 (*Exhibit 44*). In other words, income taxes paid by listed companies were 1.3% of GDP each in FY22 and FY23, lower than ~1.5% of GDP in the pre-COVID years.
- 4) At 42.8% in FY22 and 41.3% in FY23, the share of listed companies in corporate income taxes was the lowest in more than a decade. It also means that the unlisted corporate sector accounted for ~60% of corporate income taxes paid in the last two years (*Exhibit 45*).
- 5) The unlisted corporate sector, thus, paid income taxes totaling 1.7-1.8% of GDP in the last two years, slightly lower than 1.9% of GDP in the pre-COVID years (*Exhibit 46*).
- 6) Notwithstanding sharp rise in profits, the growth in taxes paid by the listed sector was only 2.8% in the post-COVID period vs. 13.7% in the pre-COVID period. Taxes paid by the unlisted sector also grew slowly, but much faster than the listed sector (*Exhibit 47*).
- 7) Within listed universe, total taxes paid by Nifty50 companies dropped to 0.6% of GDP in the recent years, compared to 0.7-0.8% of GDP in the pre-COVID years (*Exhibit 48*).
- 8) Not surprisingly then, while the growth in taxes paid by BSE500 companies weakened in the post-COVID period, it accelerated for non-BSE500 listed companies (*Exhibit 49*).

The share of the corporate income taxes has declined in total direct (or income) taxes collected to ~51% in recent years

The unlisted corporate sector accounted for ~60% of corporate income taxes paid in the last two years

Notwithstanding sharp rise in profits, the growth in taxes paid by the listed sector was only 2.8% in the post-COVID period vs. 13.7% in the pre-COVID period

- 9) By industries, the financial sector pays the highest share of income taxes, accounting for more than a third of total corporate income taxes paid in the country (*Exhibit 50*). In contrast, the share of ‘automobiles’, ‘capital goods’, and ‘technology’ has declined.
- 10) Lastly, although total taxes have grown at a slower pace, income taxes paid by ‘chemicals’, ‘metals’, ‘retail’, and ‘technology’ have increased at a faster pace in the post- COVID period (*Exhibit 51*).

Exhibit 42: India’s corporate income taxes were INR8.3t or 3% of GDP in FY23, lower than pre- COVID levels...

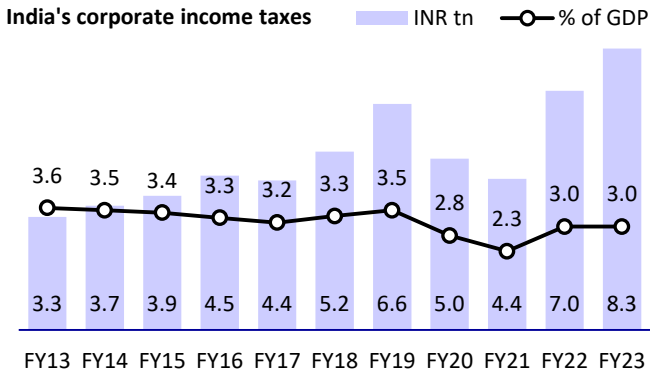
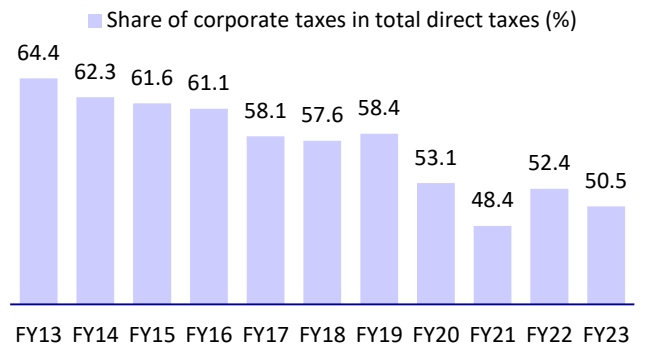


Exhibit 43: ...accounting for ~50% of total direct tax receipts in the country



Source: Union Budget documents, CSO, MOFSL

Exhibit 44: Total income taxes paid by the listed companies were lower in the post-COVID period...

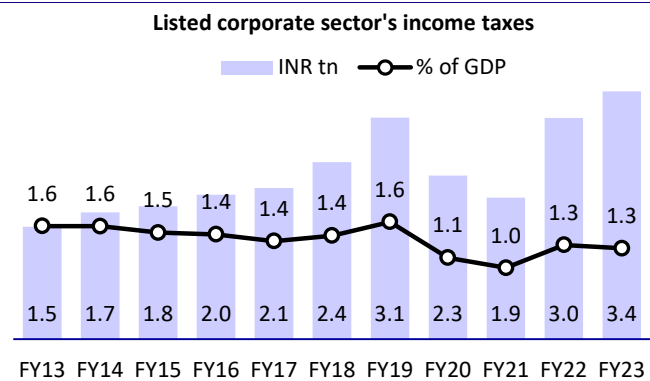
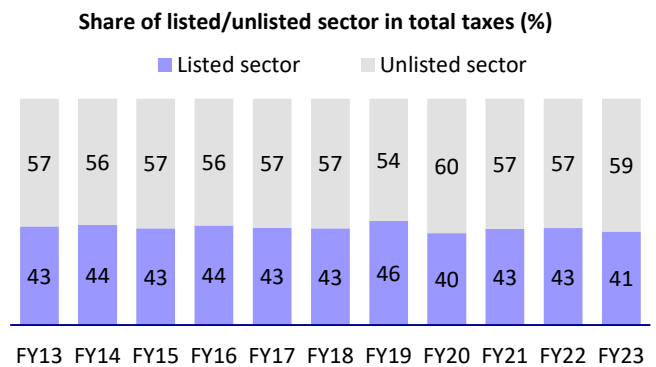


Exhibit 45: ...and the unlisted sector accounts for more than half of total corporate income taxes paid



Source: RBI, Capitaline, MOFSL

Exhibit 46: Total taxes paid by the unlisted corporate sector have fallen in the post-COVID period...

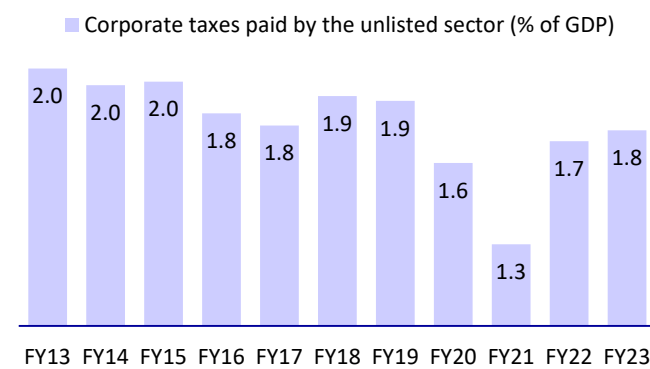
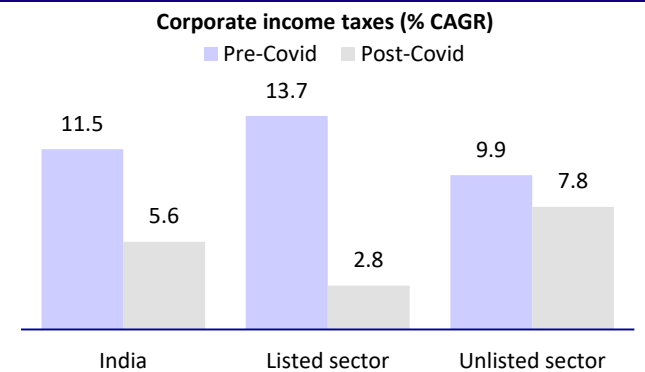


Exhibit 47: ...since their taxes grew at a slower pace vis-à-vis pre-COVID period



Source: RBI, Capitaline, MOFSL

Exhibit 48: Nifty50 companies account for half of total taxes paid by the listed companies...

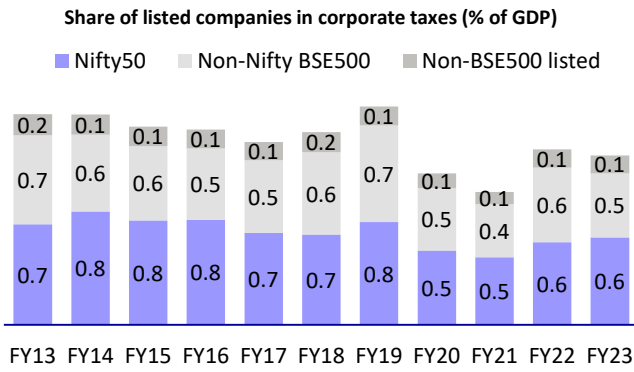
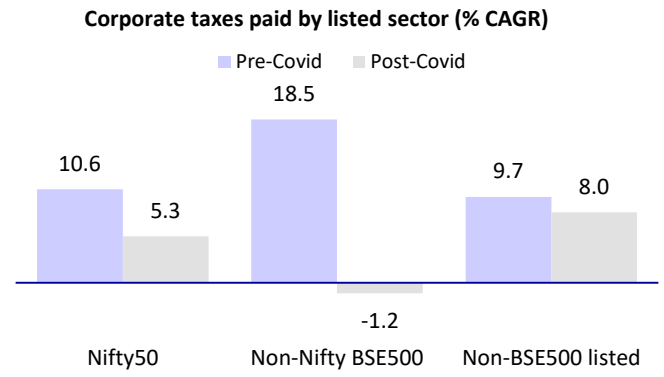
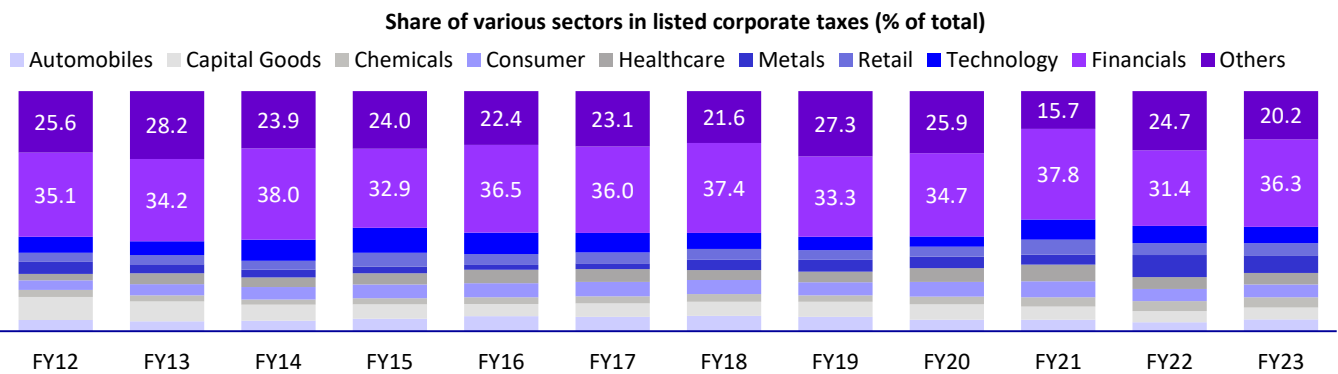


Exhibit 49: ...but taxes paid by non-BSE500 companies has increased at the fastest pace in the post-COVID period



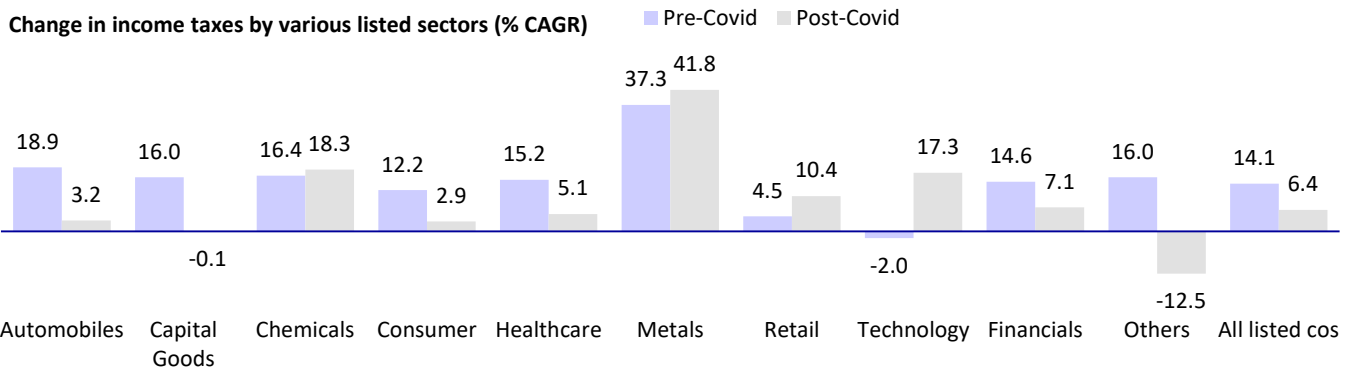
Source: RBI, Capitaline, MOFSL

Exhibit 50: Share of various sectors in listed companies' income taxes paid (%)



Source: Capitaline, MOFSL

Exhibit 51: A comparison of the change in taxes paid by various listed sectors in the pre- and post-COVID period (% CAGR)



Source: Capitaline, MOFSL

6. Share of listed/unlisted corporate sector in India's corporate investments (capex) and its movements during the past decade

India's corporate investments are set to revive and lead the next round of higher economic growth – this narrative ruled for many years before the pandemic. As COVID interrupted these thoughts, the narrative made a comeback during the last 24-30 months. This narrative was powerful, considering the improvement in the financial position of the listed corporate sector. With higher profits, lower debt, and higher market share, it is just a matter of time that the listed companies drive higher corporate investments. A look at the listed companies reveals that their capex has actually increased sharply in the last two years. Still, the revival in corporate investments continue to be evasive.

Could the worse financial position of the unlisted corporate sector explain this situation? Unlike the listed sector, their profits have dwindled, debt has come down only marginally and they have lost market share. Further, the unlisted sector has a high share in India's corporate capex.

We also look at the industry-wise allocation of listed companies' capex and discussed their behavior during the past decade. Given below are the key highlights:

Our estimates suggest that corporate investments amounted to 13.2% of GDP in FY23, lower than >15% of GDP in the pre-COVID years

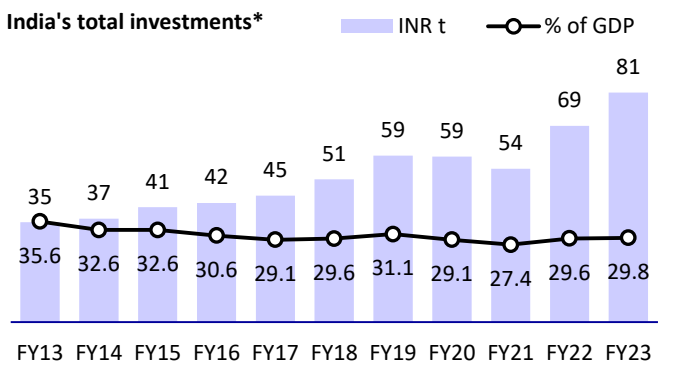
- 1) India's total investments (gross fixed capital formation [GFCF] + change in inventories) were 29.8% of GDP in FY23, marginally up from 29.6% of GDP in FY22 and similar to ~30% of GDP in the pre-COVID years (*Exhibit 52*).
- 2) Of total investments, the share of the corporate (NFCs) sector is estimated to have fallen from 50% in the pre-COVID years to almost two-decade low of 44% in FY23. Our estimates suggest that corporate investments amounted to 13.2% of GDP in FY23, better than 12.5% of GDP in FY21, but much lower than >15% of GDP in the pre-COVID years (*Exhibit 53*).
- 3) An analysis of listed companies reveals that their total capex (estimated using the balance sheet and P&L data) totaled INR12.1t in FY23, more than double of INR5.7t in FY18. As % of GDP, thus, listed sector's capex remains unchanged at 4.4% of GDP in FY22 and FY23, compared to 4% of GDP in the pre-COVID period (*Exhibit 54*).
- 4) It also means that the share of listed companies in total corporate investments increased to 33.5% in FY23. As a corollary, the unlisted corporate sector accounts for about two-thirds of corporate investments, down from three-fourths in the pre-COVID years (*Exhibit 55*).
- 5) Total capex by the unlisted corporate sector, thus, have fallen from 11% of GDP in the pre-COVID years to just 8.8% of GDP in FY23 (*Exhibit 56*). Thus, in line with the improved financial position, the listed sector has increased their investments in the last two years. However, since the financial position of the unlisted corporate sector has deteriorated, their capex has weakened. Since the latter is much bigger than the former, total corporate investments growth has been weak in the post-COVID period.
- 6) Our calculations also suggest that total investments registered a CAGR of 6% in the post-COVID period, slower than 9% in the pre-COVID period. Within that, listed companies' capex grew at a faster pace of 11.2% (compared to 100.2% in

The unlisted corporate sector accounts for about two-thirds of corporate investments, down from three-fourths in the pre-COVID years

The unlisted sector's capex registered a CAGR of just 3.8%, less than half of 8.1% before COVID

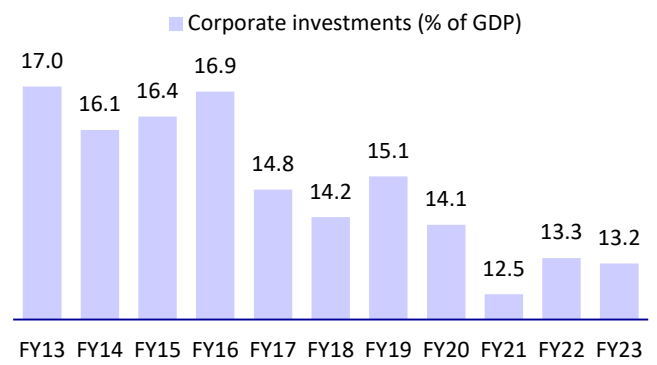
- the pre-COVID period), implying that the unlisted sector's capex registered a CAGR of just 3.8%, less than half of 8.1% before COVID (*Exhibit 57*).
- 7) Nifty50 companies account for almost half of the total capex by the listed corporate sector, while non-BSE500 listed companies continued less than 10% of listed sector's capex (*Exhibit 58*). Their share was broadly similar in the pre-COVID years as well.
- 8) In the post-pandemic period, capex of Nifty50 companies witnessed a CAGR of 17.6% over FY20-FY23, vis-à-vis only 1.3% growth in the pre-COVID period. Capex by the non-BSE500 listed companies also posted a growth compared to a decline in the pre-COVID period (*Exhibit 59*).
- 9) Details by industries confirm that 'Oil & gas', 'telecom', and 'utilities' together account for more than 50% of the total capex by listed companies, with falling share of 'metals' to high single-digit in recent years from low double-digit almost a decade ago (*Exhibit 60*).
- 10) Although listed companies' capex growth has weakened in the post-COVID period, capex by 'healthcare', 'metals', 'oil & gas', and 'technology' sectors have actually grown at faster pace (*Exhibit 61*).

Exhibit 52: India's total investments remained below 30% of GDP in FY23...



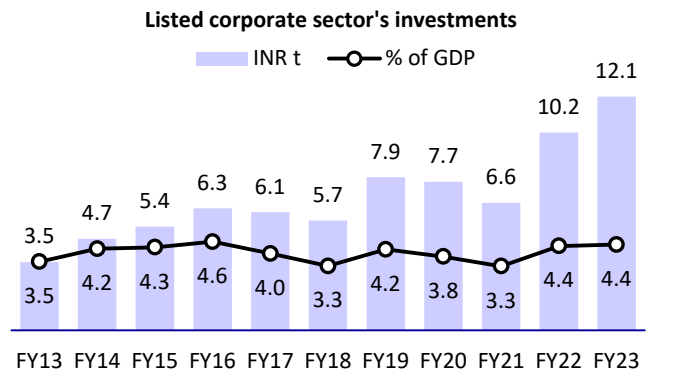
* GFCF + Change in stocks (excluding acquisition of valuables)

Exhibit 53: ...and corporate investments are estimated at 13.2% of GDP



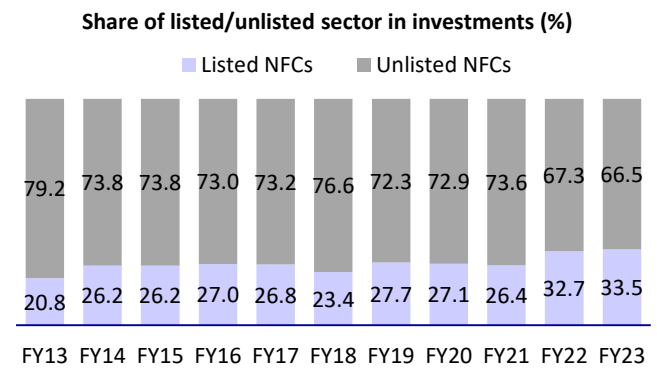
FY23 data is MOFSL estimates
Source: CSO, various national sources, MOFSL

Exhibit 54: Listed companies' capex was at 4.4% of GDP each in FY22 and FY23...



Estimated using Balance sheet (net fixed assets, inventories and capital work-in-progress) and P&L data (depreciation)

Exhibit 55: ...implying that it increased to 33.5% of India's corporate investments



Source: Capitaline, CSO, MOFSL

Exhibit 56: Capex of unlisted corporate sector down to <9% of GDP in FY23...

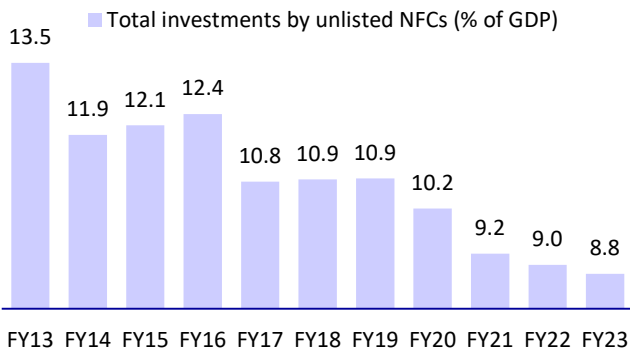
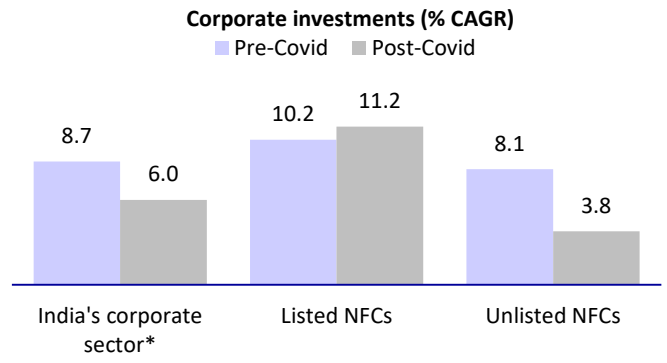


Exhibit 57: ...as it grew at a much slower pace in the post-COVID period



Source: RBI, Capitaline, BIS, MOFSL

Exhibit 58: Nifty50 companies account for almost half of listed sector's capex...

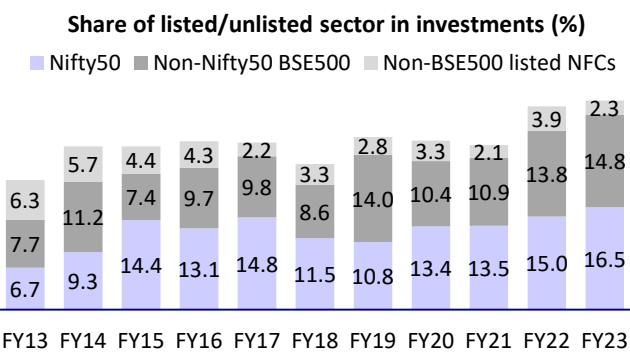
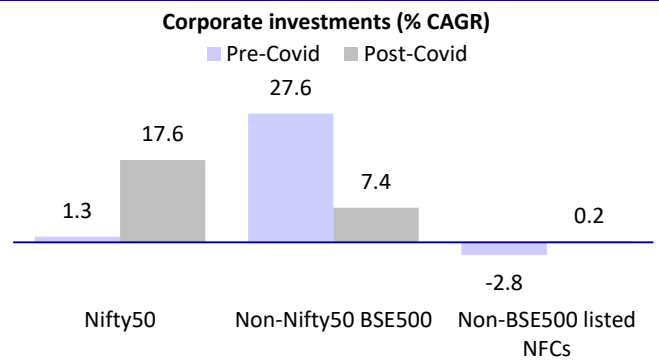
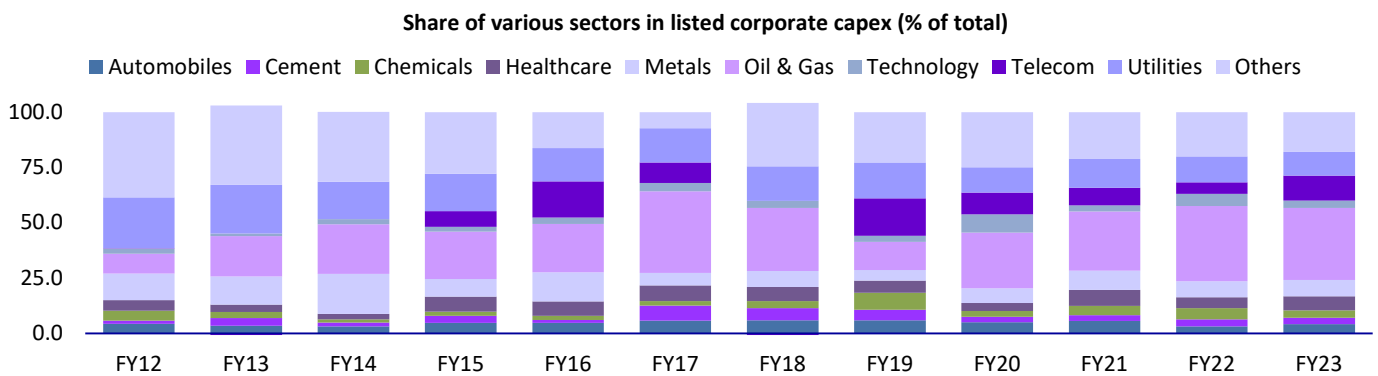


Exhibit 59: ...which has grown strongly in the post-COVID period



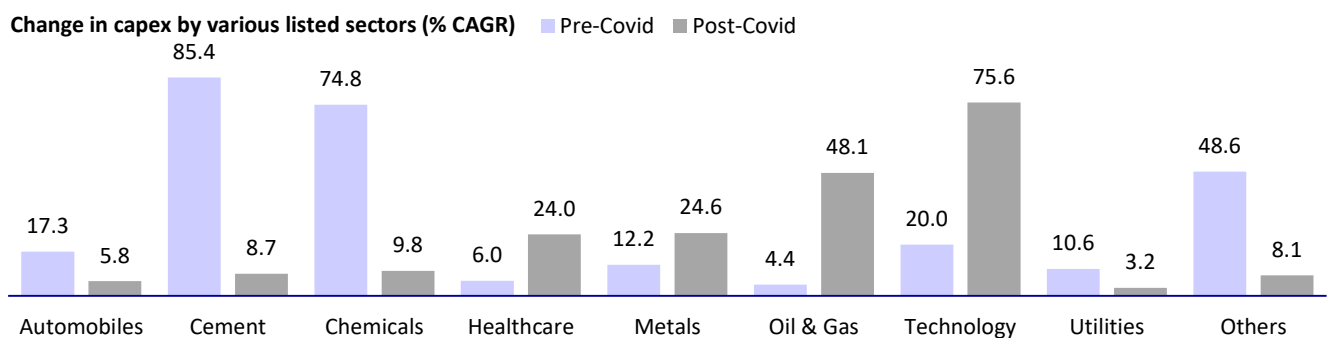
Source: RBI, Capitaline, BIS, MOFSL

Exhibit 60: Share of various sectors in listed companies' capex (%)



Source: Capitaline, MOFSL

Exhibit 61: A comparison of the change in capex of various listed sectors in the pre- and post-COVID period (% CAGR)



Source: Capitaline, MOFSL

Investment in securities market are subject to market risks. Read all the related documents carefully before investing

NOTES

Explanation of Investment Rating	
Investment Rating	Expected return (over 12-month)
BUY	>=15%
SELL	< - 10%
NEUTRAL	< - 10 % to 15%
UNDER REVIEW	Rating may undergo a change
NOT RATED	We have forward looking estimates for the stock but we refrain from assigning recommendation

*In case the recommendation given by the Research Analyst is inconsistent with the investment rating legend for a continuous period of 30 days, the Research Analyst shall be within following 30 days take appropriate measures to make the recommendation consistent with the investment rating legend.

Disclosures

The following Disclosures are being made in compliance with the SEBI Research Analyst Regulations 2014 (herein after referred to as the Regulations).

Motilal Oswal Financial Services Ltd. (MOFSL) is a SEBI Registered Research Analyst having registration no. INH000000412. MOFSL, the Research Entity (RE) as defined in the Regulations, is engaged in the business of providing Stock broking services, Depository participant services & distribution of various financial products. MOFSL is a listed public company, the details in respect of which are available on www.motilaloswal.com. MOFSL (erstwhile Motilal Oswal Securities Limited - MOSL) is registered with the Securities & Exchange Board of India (SEBI) and is a registered Trading Member with National Stock Exchange of India Ltd. (NSE) and Bombay Stock Exchange Limited (BSE), Multi Commodity Exchange of India Limited (MCX) and National Commodity & Derivatives Exchange Limited (NCDEX) for its stock broking activities & is Depository participant with Central Depository Services Limited (CDSL) National Securities Depository Limited (NSDL), NERL, COMRIS and CCRL and is member of Association of Mutual Funds of India (AMFI) for distribution of financial products and Insurance Regulatory & Development Authority of India (IRDA) as Corporate Agent for insurance products. Details of associate entities of Motilal Oswal Financial Services Limited are available on the website at

<http://onlinereports.motilaloswal.com/Dormant/documents/List%20of%20Associate%20companies.pdf>

MOFSL and its associate company(ies), their directors and Research Analyst and their relatives may; (a) from time to time, have a long or short position in, act as principal in, and buy or sell the securities or derivatives thereof of companies mentioned herein. (b) be engaged in any other transaction involving such securities and earn brokerage or other compensation or act as a market maker in the financial instruments of the company(ies) discussed herein or act as an advisor or lender/borrower to such company(ies) or may have any other potential conflict of interests with respect to any recommendation and other related information and opinions.; however the same shall have no bearing whatsoever on the specific recommendations made by the analyst(s), as the recommendations made by the analyst(s) are completely independent of the views of the associates of MOFSL even though there might exist an inherent conflict of interest in some of the stocks mentioned in the research report.

MOFSL and / or its affiliates do and seek to do business including investment banking with companies covered in its research reports. As a result, the recipients of this report should be aware that MOFSL may have a potential conflict of interest that may affect the objectivity of this report. Compensation of Research Analysts is not based on any specific merchant banking, investment banking or brokerage service transactions. Details of pending Enquiry Proceedings of Motilal Oswal Financial Services Limited are available on the website at <https://galaxy.motilaloswal.com/ResearchAnalyst/PublishViewLitigation.aspx>

A graph of daily closing prices of securities is available at www.nseindia.com, www.bseindia.com. Research Analyst views on Subject Company may vary based on Fundamental research and Technical Research. Proprietary trading desk of MOFSL or its associates maintains arm's length distance with Research Team as all the activities are segregated from MOFSL research activity and therefore it can have an independent view with regards to Subject Company for which Research Team have expressed their views.

Regional Disclosures (outside India)

This report is not directed or intended for distribution to or use by any person or entity resident in a state, country or any jurisdiction, where such distribution, publication, availability or use would be contrary to law, regulation or which would subject MOFSL & its group companies to registration or licensing requirements within such jurisdictions.

For Hong Kong:

This report is distributed in Hong Kong by Motilal Oswal capital Markets (Hong Kong) Private Limited, a licensed corporation (CE AYY-301) licensed and regulated by the Hong Kong Securities and Futures Commission (SFC) pursuant to the Securities and Futures Ordinance (Chapter 571 of the Laws of Hong Kong) "SFO". As per SEBI (Research Analyst Regulations) 2014 Motilal Oswal Securities (SEBI Reg. No. INH000000412) has an agreement with Motilal Oswal capital Markets (Hong Kong) Private Limited for distribution of research report in Hong Kong. This report is intended for distribution only to "Professional Investors" as defined in Part I of Schedule 1 to SFO. Any investment or investment activity to which this document relates is only available to professional investor and will be engaged only with professional investors." Nothing here is an offer or solicitation of these securities, products and services in any jurisdiction where their offer or sale is not qualified or exempt from registration. The Indian Analyst(s) who compile this report is/are not located in Hong Kong & are not conducting Research Analysis in Hong Kong.

For U.S.

Motilal Oswal Financial Services Limited (MOFSL) is not a registered broker - dealer under the U.S. Securities Exchange Act of 1934, as amended (the "1934 act") and under applicable state laws in the United States. In addition MOFSL is not a registered investment adviser under the U.S. Investment Advisers Act of 1940, as amended (the "Advisers Act" and together with the 1934 Act, the "Acts"), and under applicable state laws in the United States. Accordingly, in the absence of specific exemption under the Acts, any brokerage and investment services provided by MOFSL, including the products and services described herein are not available to or intended for U.S. persons. This report is intended for distribution only to "Major Institutional Investors" as defined by Rule 15a-6(b)(4) of the Exchange Act and interpretations thereof by SEC (henceforth referred to as "major institutional investors"). This document must not be acted on or relied on by persons who are not major institutional investors. Any investment or investment activity to which this document relates is only available to major institutional investors and will be engaged in only with major institutional investors. In reliance on the exemption from registration provided by Rule 15a-6 of the U.S. Securities Exchange Act of 1934, as amended (the "Exchange Act") and interpretations thereof by the U.S. Securities and Exchange Commission ("SEC") in order to conduct business with Institutional Investors based in the U.S., MOFSL has entered into a chaperoning agreement with a U.S. registered broker-dealer, Motilal Oswal Securities International Private Limited. ("MOSIPL"). Any business interaction pursuant to this report will have to be executed within the provisions of this chaperoning agreement.

The Research Analysts contributing to the report may not be registered /qualified as research analyst with FINRA. Such research analyst may not be associated persons of the U.S. registered broker-dealer, MOSIPL, and therefore, may not be subject to NASD rule 2711 and NYSE Rule 472 restrictions on communication with a subject company, public appearances and trading securities held by a research analyst account.

For Singapore

In Singapore, this report is being distributed by Motilal Oswal Capital Markets Singapore Pte Ltd ("MOCMSPL") (Co. Reg. NO. 201129401Z) which is a holder of a capital markets services license and an exempt financial adviser in Singapore. As per the approved agreement under Paragraph 9 of Third Schedule of Securities and Futures Act (CAP 289) and Paragraph 11 of First Schedule of Financial Advisors Act (CAP 110) provided to MOCMSPL by Monetary Authority of Singapore. Persons in Singapore should contact MOCMSPL in respect of any matter arising from, or in connection with this report/publication/communication. This report is distributed solely to persons who qualify as "Institutional Investors", of which some of whom may consist of "accredited" institutional investors as defined in section 4A(1) of the Securities and Futures Act, Chapter 289 of Singapore ("the SFA"). Accordingly, if a Singapore person is not or ceases to be such an institutional investor, such Singapore Person must immediately discontinue any use of this Report and inform MOCMSPL.

Specific Disclosures

- 1 MOFSL, Research Analyst and/or his relatives does not have financial interest in the subject company, as they do not have equity holdings in the subject company.
- 2 MOFSL, Research Analyst and/or his relatives do not have actual/beneficial ownership of 1% or more securities in the subject company
- 3 MOFSL, Research Analyst and/or his relatives have not received compensation/other benefits from the subject company in the past 12 months
- 4 MOFSL, Research Analyst and/or his relatives do not have material conflict of interest in the subject company at the time of publication of research report
- 5 Research Analyst has not served as director/officer/employee in the subject company
- 6 MOFSL has not acted as a manager or co-manager of public offering of securities of the subject company in past 12 months
- 7 MOFSL has not received compensation for investment banking/ merchant banking/brokerage services from the subject company in the past 12 months
- 8 MOFSL has not received compensation for other than investment banking/merchant banking/brokerage services from the subject company in the past 12 months
- 9 MOFSL has not received any compensation or other benefits from third party in connection with the research report
- 10 MOFSL has not engaged in market making activity for the subject company

The associates of MOFSL may have:

- financial interest in the subject company
- actual/beneficial ownership of 1% or more securities in the subject company at the end of the month immediately preceding the date of publication of the Research Report or date of the public appearance.
- received compensation/other benefits from the subject company in the past 12 months
- any other potential conflict of interests with respect to any recommendation and other related information and opinions.; however the same shall have no bearing whatsoever on the specific recommendations made by the analyst(s), as the recommendations made by the analyst(s) are completely independent of the views of the associates of MOFSL even though there might exist an inherent conflict of interest in some of the stocks mentioned in the research report.
- acted as a manager or co-manager of public offering of securities of the subject company in past 12 months
- be engaged in any other transaction involving such securities and earn brokerage or other compensation or act as a market maker in the financial instruments of the company(ies) discussed herein or act as an advisor or lender/borrower to such company(ies)
- received compensation from the subject company in the past 12 months for investment banking / merchant banking / brokerage services or from other than said services.
- Served subject company as its clients during twelve months preceding the date of distribution of the research report.

The associates of MOFSL has not received any compensation or other benefits from third party in connection with the research report

Above disclosures include beneficial holdings lying in demat account of MOFSL which are opened for proprietary investments only. While calculating beneficial holdings, It does not consider demat accounts which are opened in name of MOFSL for other purposes (i.e holding client securities, collaterals, error trades etc.). MOFSL also earns DP income from clients which are not considered in above disclosures.

Analyst Certification

The views expressed in this research report accurately reflect the personal views of the analyst(s) about the subject securities or issues, and no part of the compensation of the research analyst(s) was, is, or will be directly or indirectly related to the specific recommendations and views expressed by research analyst(s) in this report.

Terms & Conditions:

This report has been prepared by MOFSL and is meant for sole use by the recipient and not for circulation. The report and information contained herein is strictly confidential and may not be altered in any way, transmitted to, copied or distributed, in part or in whole, to any other person or to the media or reproduced in any form, without prior written consent of MOFSL. The report is based on the facts, figures and information that are considered true, correct, reliable and accurate. The intent of this report is not recommendatory in nature. The information is obtained from publicly available media or other sources believed to be reliable. Such information has not been independently verified and no guaranty, representation of warranty, express or implied, is made as to its accuracy, completeness or correctness. All such information and opinions are subject to change without notice. The report is prepared solely for informational purpose and does not constitute an offer document or solicitation of offer to buy or sell or subscribe for securities or other financial instruments for the clients. Though disseminated to all the customers simultaneously, not all customers may receive this report at the same time. MOFSL will not treat recipients as customers by virtue of their receiving this report.

Disclaimer:

The report and information contained herein is strictly confidential and meant solely for the selected recipient and may not be altered in any way, transmitted to, copied or distributed, in part or in whole, to any other person or to the media or reproduced in any form, without prior written consent. This report and information herein is solely for informational purpose and may not be used or considered as an offer document or solicitation of offer to buy or sell or subscribe for securities or other financial instruments. Nothing in this report constitutes investment, legal, accounting and tax advice or a representation that any investment or strategy is suitable or appropriate to your specific circumstances.

The securities discussed and opinions expressed in this report may not be suitable for all investors, who must make their own investment decisions, based on their own investment objectives, financial positions and needs of specific recipient. This may not be taken in substitution for the exercise of independent judgment by any recipient. Each recipient of this document should make such investigations as it deems necessary to arrive at an independent evaluation of an investment in the securities of companies referred to in this document (including the merits and risks involved), and should consult its own advisors to determine the merits and risks of such an investment. The investment discussed or views expressed may not be suitable for all investors. Certain transactions -including those involving futures, options, another derivative products as well as non-investment grade securities - involve substantial risk and are not suitable for all investors. No representation or warranty, express or implied, is made as to the accuracy, completeness or fairness of the information and opinions contained in this document. The Disclosures of Interest Statement incorporated in this document is provided solely to enhance the transparency and should not be treated as endorsement of the views expressed in the report. This information is subject to change without any prior notice. The Company reserves the right to make modifications and alternations to this statement as may be required from time to time without any prior approval. MOFSL, its associates, their directors and the employees may from time to time, effect or have effected an own account transaction in, or deal as principal or agent in or for the securities mentioned in this document. They may perform or seek to perform investment banking or other services for, or solicit investment banking or other business from, any company referred to in this report. Each of these entities functions as a separate, distinct and independent of each other. The recipient should take this into account before interpreting the document. This report has been prepared on the basis of information that is already available in publicly accessible media or developed through analysis of MOFSL. The views expressed are those of the analyst, and the Company may or may not subscribe to all the views expressed therein. This document is being supplied to you solely for your information and may not be reproduced, redistributed or passed on, directly or indirectly, to any other person or published, copied, in whole or in part, for any purpose. This report is not directed or intended for distribution to, or use by, any person or entity who is a citizen or resident of or located in any locality, state, country or other jurisdiction, where such distribution, publication, availability or use would be contrary to law, regulation or which would subject MOFSL to any registration or licensing requirement within such jurisdiction. The securities described herein may or may not be eligible for sale in all jurisdictions or to certain category of investors. Persons in whose possession this document may come are required to inform themselves of and to observe such restriction.

Neither the Firm, not its directors, employees, agents or representatives shall be liable for any damages whether direct or indirect, incidental, special or consequential including lost revenue or lost profits that may arise from or in connection with the use of the information. The person accessing this information specifically agrees to exempt MOFSL or any of its affiliates or employees from, any and all responsibility/liability arising from such misuse and agrees not to hold MOFSL or any of its affiliates or employees responsible for any such misuse and further agrees to hold MOFSL or any of its affiliates or employees free and harmless from all losses, costs, damages, expenses that may be suffered by the person accessing this information due to any errors and delays.

Investment in securities market are subject to market risks. Read all the related documents carefully before investing.

Registration granted by SEBI and certification from NISM in no way guarantee performance of the intermediary or provide any assurance of returns to investors.

Registered Office Address: Motilal Oswal Tower, Rahimtullah Sayani Road, Opposite Parel ST Depot, Prabhadevi, Mumbai-400025; Tel No.: 022 - 71934200 / 71934263;

www.motilaloswal.com. Correspondence Address: Palm Spring Centre, 2nd Floor, Palm Court Complex, New Link Road, Malad (West), Mumbai- 400 064. Tel No: 022 71881000.

Details of Compliance Officer: Neeraj Agarwal, Email Id: na@motilaloswal.com, Contact No.:022-40548085.

Grievance Redressal Cell:

Contact Person	Contact No.	Email ID
Ms. Hemangi Date	022 40548000 / 022 67490600	query@motilaloswal.com
Ms. Kumud Upadhyay	022 40548082	servicehead@motilaloswal.com
Mr. Ajay Menon	022 40548083	am@motilaloswal.com

Registration details of group entities.: Motilal Oswal Financial Services Ltd. (MOFSL): INZ000158836 (BSE/NSE/MCX/NCDEX); CDSL and NSDL: IN-DP-16-2015; Research Analyst: INH000000412 . AMFI: ARN : 146822. IRDA Corporate Agent – CA0579. Motilal Oswal Financial Services Ltd. is a distributor of Mutual Funds, PMS, Fixed Deposit, Insurance, Bond, NCDs and IPO products.

Customer having any query/feedback/clarification may write to query@motilaloswal.com. In case of grievances for any of the services rendered by Motilal Oswal Financial Services Limited (MOFSL) write to grievances@motilaloswal.com, for DP to dpgrievances@motilaloswal.com.