

# Telecommunication Services

India

Sector View: **Attractive** NIFTY-50: **21,655**

December 28, 2023

## A deep dive into Indian telcos' cost structure and unit metrics

Indian telcos' EBITDA margins improved sharply in FY2019-23, led by 1) tariff hikes, 2) Ind AS 116 implementation, 3) change in the IUC regime, 4) lower SUC charges and 5) operating leverage. Among key expenses, network opex has been on a rising trend and is likely to rise further on 5G rollouts. Customer acquisition costs have risen sharply, despite muted industry net adds. The scope of further margin expansion from lower regulatory levies/access charges appears limited to us. We believe there is a case for sharper tariff hikes in the medium term, given a drag on R-Jio's return ratios from potentially higher depreciation and interest on recently acquired spectrum.

### Network opex likely to increase, customer acquisition costs at alarming levels

Network opex has been on a rising trend for Indian telcos. Bharti and Vi have benefited more than R-Jio from the Ind AS 116 implementation, but even on adjusted basis, R-Jio's network opex has been higher and is growing faster on a sharp increase in fiber usage charges. Network opex per sub has inched up over the past few years and is now similar for Bharti and R-Jio at ~Rs66/month; we expect the rising trend to continue on 5G rollout costs.

Despite muted industry net adds, customer acquisition costs rose sharply for the industry to ~Rs100 bn (or ~Rs265 per gross sub addition). Although there have been some cuts in dealer commissions in FY2024, we expect customer acquisition-driven SG&A cost increases to continue over the next few years.

### Ind AS 116, tariff hikes, IUC change and operating leverage boosted margins

Indian telcos' reported FY2019-23 EBITDA margins have increased sharply, led by wireless market repair (tariff hikes), IUC regime change, lower SUC charges, operating leverage benefits and most importantly, Ind AS 116 implementation. After Ind AS 116 implementation, part of the opex (largely tower rentals) is now reported below EBITDA and adjusted for leases, R-Jio/Bharti India's EBITDA margins at 46%/43% are ~5%/9% lower versus reported margins.

### Bharti's RoCE improved sharply; R-Jio requires tariff hike to maintain RoCE

Driven by wireless tariff hikes, Bharti's RoCE improved sharply over FY2019-23 to ~8%. R-Jio's RoCE has remained stable at ~8%-10%, as the capitalization of network opex and depreciation reduced with rising market share/utilization. With ~37% of assets (including spectrum) under development, R-Jio's annual depreciation and interest could potentially rise ~Rs85-90 bn each over the next few years and could lead to further RoCE/RoE dilution, in the absence of tariff hikes. With pan-India 5G rollouts nearing completion and a potential drag on R-Jio's return ratios, we believe there is a case for sharper tariff hikes in 2024.

### Raise FY2026 EBITDA marginally and FV to Rs1,050 for Bharti; maintain ADD

We raise our FY2026E EBITDA for Bharti by a modest ~2%. Driven by a roll-forward to December 2025 (from September 2025) and marginal EBITDA increase, we raise our FV to Rs1,050 for Bharti (earlier Rs975). Maintain ADD on favorable LT risk-reward. We also raise Indus' FV to Rs200 (earlier 185) and maintain our ADD rating.

### Quick Numbers

Network opex has been on rising trend and it is largely similar at ~Rs65-66/month per subscriber for Bharti and R-Jio in FY2023.

Cumulative customer acquisition cost increased to ~Rs100 bn for the three private telcos, implying ~Rs265 commission per gross subscriber addition.

Ind AS 116 implementations boosted R-Jio and Bharti's India EBITDA margins by ~5-9%. Adjusted margin would be ~46% and 43%, respectively.

Adjusted EBITDA is largely similar for R-Jio and Bharti's India business at ~Rs420 bn (or ~US\$5 bn) in FY2023.

Bharti's RoCE has improved sharply from a loss in FY2019 to ~8% in FY2023, while it has been largely stable at ~8-10% for R-Jio.

### Related Research

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# 1

## Telcos unit metrics comparisons

In this section, we compare the unit metrics for three Indian telcos (R-Jio, Bharti and Vi). For our analysis, we have tried to normalize for differences in the accounting and business segments. We have used Bharti’s India operations (Wireless, Fixed Broadband, DTH and Enterprise), R-Jio standalone (Wireless, FTTH and Enterprise) and Vi consolidated (Wireless and Enterprise/fixed line) for a like-for-like comparison across various metrics.

### Subscriber trends

#### R-Jio and Bharti gaining wireless subscriber market share at Vi’s expense

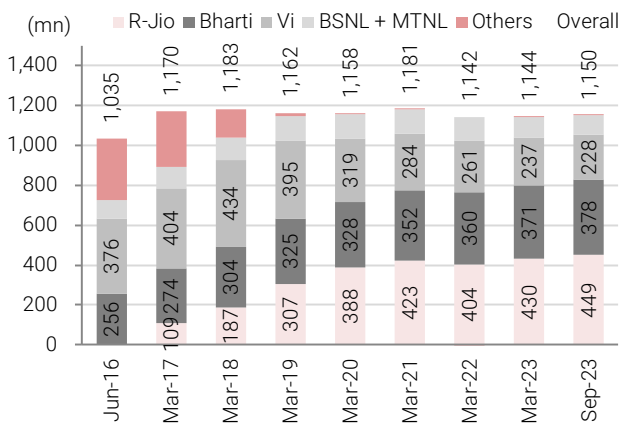
R-Jio is by far the largest telco in terms of its wireless subscriber base, followed by Bharti; Vi is a distant third. In wireless, Bharti and R-Jio have been gaining market share at Vi’s expense (Exhibit 2). Although the overall industry subscriber base (including M2M/IoT devices) has remained muted in the past few years, the quality of the subscriber mix has been improving, with more subscribers opting for data. Based on our estimates, R-Jio has the lowest share of lower-end (non-data or limited data) using customers at ~17%, followed by ~29% for Bharti and ~39% for Vi (Exhibit 4). Bharti is the leader in the consumer postpaid segment, followed by Vi. R-Jio does not report JioPhone or postpaid subscribers separately, but we believe R-Jio has seen market share gains in the consumer postpaid segment over the past few years (Exhibit 3).

#### Bharti leads on non-wireless subscriber base, with more service offerings

We note, Bharti and Vi follow a more conservative definition and report only paying subscribers (Exhibit 5). Bharti is the clear leader in the non-wireless subs segment (Exhibit 7). We note that R-Jio and Vi includes M2M/IoT devices in their wireless subscriber base, whereas Bharti considers M2M/IoT devices under Airtel Business. Furthermore, Bharti is also the #2 player among DTH service providers. Driven by multiple tailwinds in the fixed broadband business since 2020, both Bharti and R-Jio have seen a significant ramp-up in their fixed broadband subscriber bases (Exhibit 8). However, with a big lead on wireless subs, even on overall subs, R-Jio is the market leader, followed by Bharti (Exhibit 6).

### India’s wireless net adds have been muted for past few years, with R-Jio and Bharti gaining at Vi and PSU’s expense

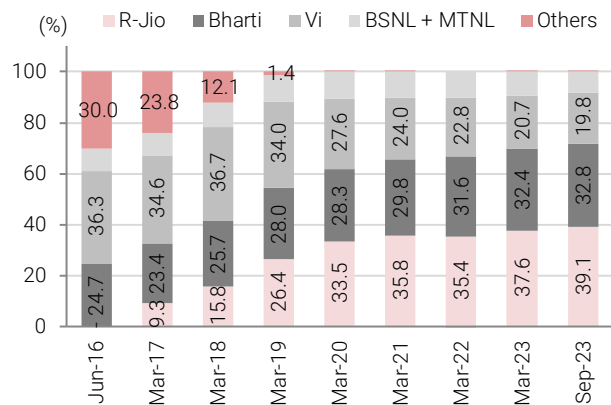
Exhibit 1: Indian wireless subs trends, March fiscal-year ends



Source: TRAI, Kotak Institutional Equities estimates

### R-Jio leads in SMS, with 39% market share, followed by Bharti at ~33% and Vi at ~20%

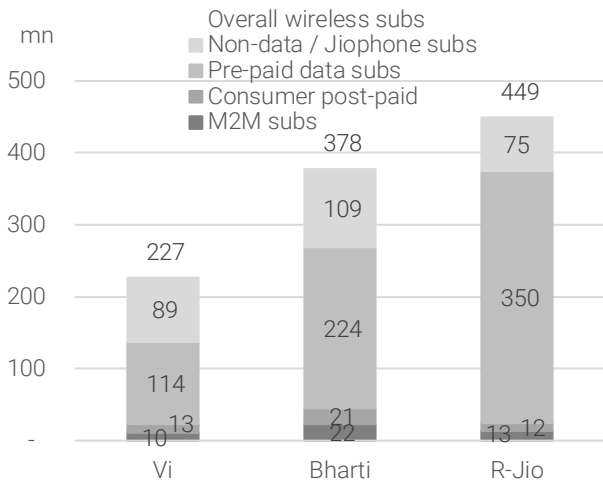
Exhibit 2: Indian wireless subscriber market share (SMS) trends, March fiscal-year ends



Source: TRAI, Kotak Institutional Equities estimates

**R-Jio is by far the leader in terms of overall wireless subs and data subscribers, followed by Bharti; Vi is a distant third**

**Exhibit 3: Wireless subs build-up for three telcos as of Sep 2023, March fiscal year-ends**



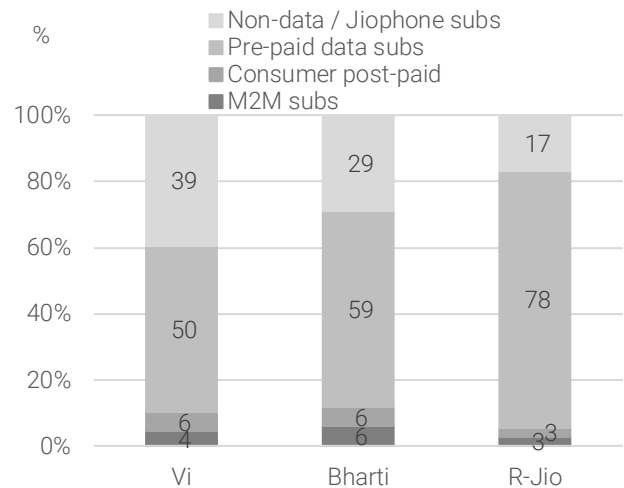
Notes:

- i) Our estimate of R-Jio's M2M, consumer post-paid and JioPhone subs
- ii) Our estimate of split between M2M and consumer post-paid subs for Vi

Source: Companies, Kotak Institutional Equities estimates

**On our estimates, ~80%+ of R-Jio's subscriber base comprises smartphone data users (versus ~56%/~65% for Vi/Bharti)**

**Exhibit 4: Wireless subs mix for three telcos as of Sep 2023, March fiscal year-ends**



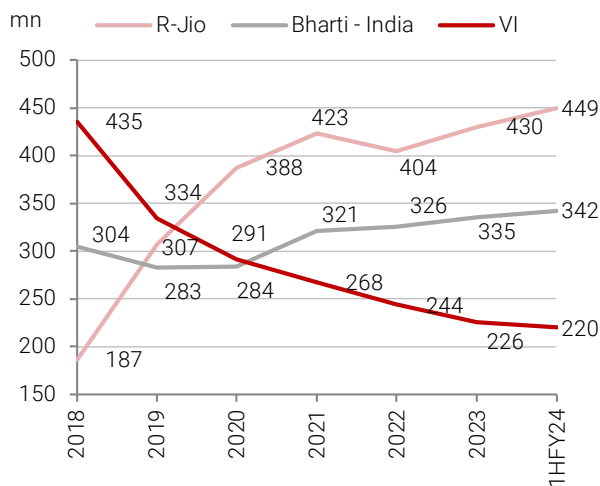
Notes:

- i) Our estimate of R-Jio's M2M, consumer post-paid and JioPhone subs
- ii) Our estimate of split between M2M and consumer post-paid subs for Vi

Source: Companies, Kotak Institutional Equities estimates

**R-Jio leads peers in terms of wireless subscriber base, Bharti and Vi are more conservative in reporting their subscriber bases**

**Exhibit 5: Wireless paying subs trends, March fiscal-year ends**



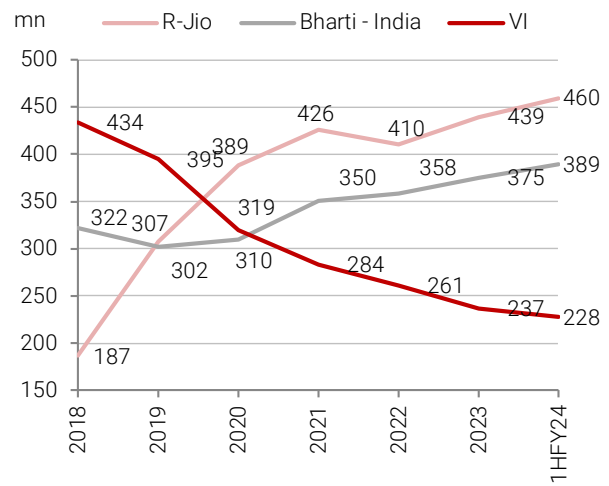
Notes:

- i) Reported paying subs for Bharti and Vi

Source: Companies, Kotak Institutional Equities estimates

**Even on overall subs, R-Jio is the leader among Indian telcos, followed by Bharti**

**Exhibit 6: Overall subscriber trends, March fiscal year-ends**

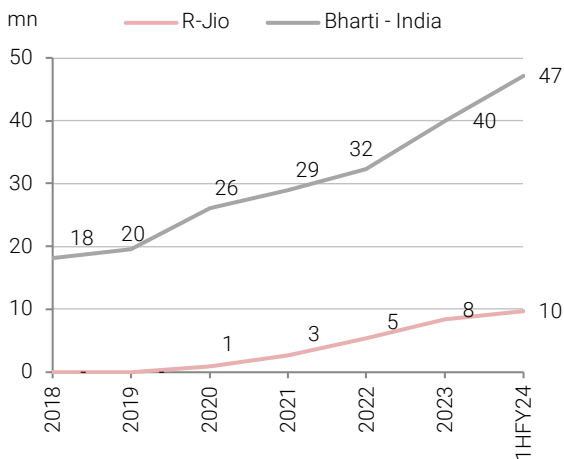


Notes:

- i) Reported paying subs for Bharti's India business
- ii) Overall subs reported to TRAI for Vi and R-Jio

Source: Companies, TRAI, Kotak Institutional Equities estimates

**Exhibit 7: Non-wireless subs trends for Bharti India and R-Jio, March fiscal year-ends**

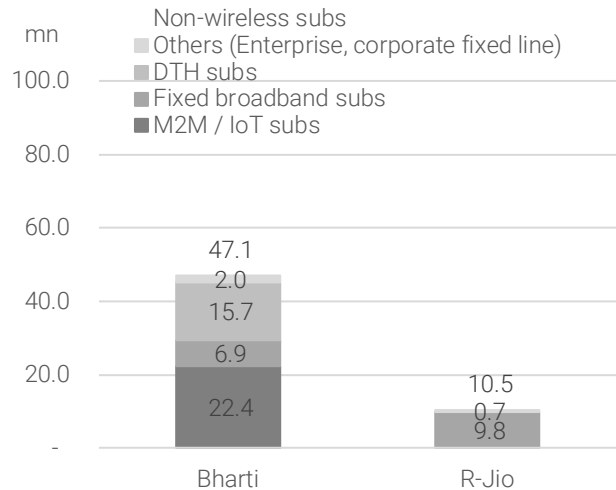


**Notes:**

- i) Includes homes broadband, DTH, M2M/IoT, corporate fixed line and enterprise subs for Bharti India
- ii) Includes JioFiber and fixed line subs for R-Jio

Source: Companies, Kotak Institutional Equities estimates

**Exhibit 8: Non-wireless subs build-up as of September 2023, March fiscal year-ends**



**Notes:**

- i) Includes homes broadband, DTH, M2M/IoT, corporate fixed line and enterprise subs for Bharti India
- ii) Includes JioFiber and fixed line/enterprise subs for R-Jio

Source: Companies, Kotak Institutional Equities estimates

**Average revenue per user (ARPU) trends**

**Bharti leads the Indian telcos on wireless ARPU and overall ARPU**

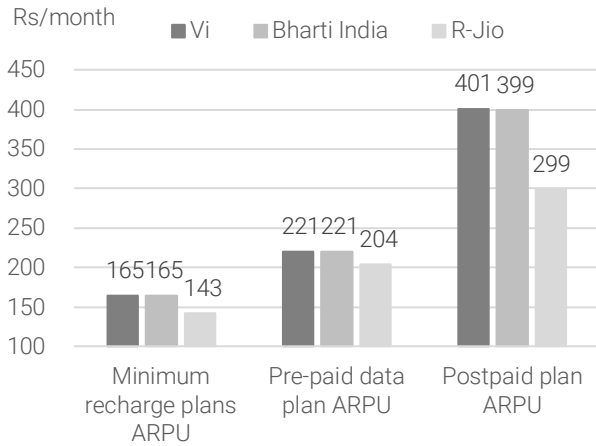
Among Indian telcos, Bharti is the leader on reported wireless ARPU (Exhibit 10). Bharti’s lead on ARPU is driven by 1) benefits of two rounds of smartphone tariff hikes, 2) non-data to data subscriber upgrades, 3) sharp hikes in minimum recharge plans, 4) premium versus R-Jio on similar packs (Exhibit 9) and 5) conservative subscriber accounting. Bharti has been the biggest beneficiary of two rounds of smartphone tariff hikes (in Dec 2019 and Dec 2021). Bharti’s wireless ARPU in the recent quarter at Rs203 is up ~58% compared with Sep 2019 (pre-tariff hike) levels. In comparison, Vi/R-Jio’s wireless ARPUs have increased by relatively lower 33%/38% in the same period (Exhibit 13). Apart from smartphone tariff hikes, Bharti has also benefited from sharp tariff hikes in the minimum recharge plan (from zero initially to ~Rs179 per 28 days currently) over the past few years and non-data to data upgrades.

With the closing gap between non-data and data pack ARPUs (Exhibit 9), we expect the benefit from non-data to data upgrades to be relatively limited and we expect Bharti’s incremental ARPU growth to be largely in line with peers.

R-Jio includes FTTH business in their overall reported ARPU. For a like-for-like comparison, we have used Bharti’s India subscriber base and India revenue to arrive at overall ARPU. With a large share of enterprise revenue, Bharti’s lead on overall ARPU is even higher (Exhibit 12). However, with a rising subscriber base in Fixed Broadband, the contribution of non-wireless business to R-Jio’s overall ARPU has been on a rising trend. Furthermore, with its recent foray in Fixed Wireless Access (FWA) and increasing focus on Enterprise, we expect the contribution of non-wireless services to the overall ARPU to keep rising for R-Jio (Exhibit 11)

**Bharti and Vi's headline plan tariffs are at premium to R-Jio; gap between minimum recharge and pre-paid data plan has declined**

**Exhibit 9: Implied ARPU build-up based on subscriber categories**



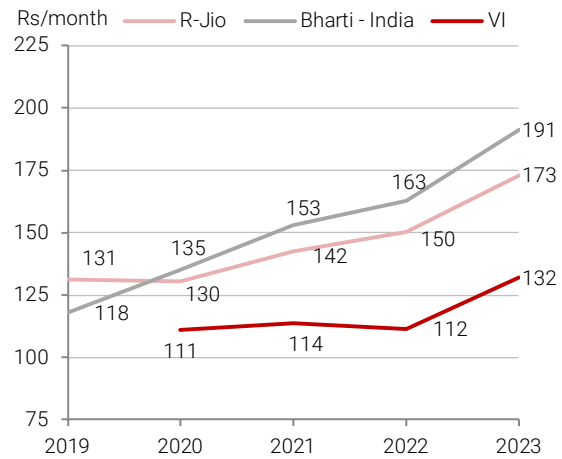
**Notes:**

- i) Minimum recharge plan ARPU based on minimum recharge plan available on company's website
- ii) Implied pre-paid data plan ARPU based on popular 84 days, 1.5 GB/day plan
- iii) Implied post-paid plan ARPU based on entry-level postpaid plan

Source: Companies, Kotak Institutional Equities estimates

**Bharti leads the Indian telcos on wireless ARPU, followed by R-Jio**

**Exhibit 10: Wireless ARPU trends, March fiscal year-ends**



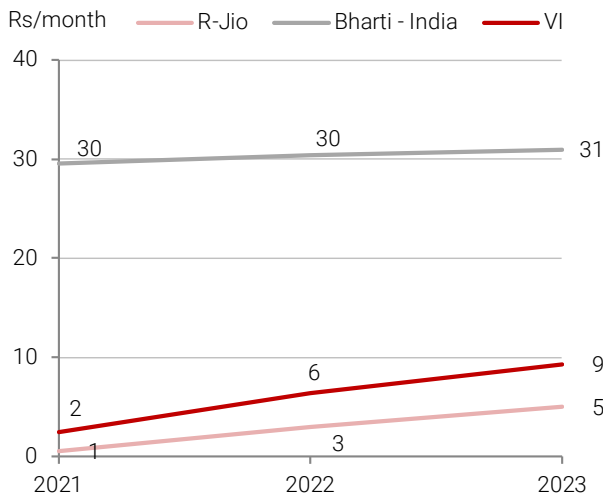
**Notes:**

- i) ARPU based on reported wireless paying subs for Bharti and includes other revenue included under India wireless segment revenue
- ii) Our estimate of R-Jio's wireless revenue assuming ~Rs500/month ARPU for FTTH
- iii) ARPU based on paying wireless subs for Vi

Source: Companies, Kotak Institutional Equities estimates

**Bharti leads the Indian telcos on ARPU contribution from non-wireless services, expect ramp-up for R-Jio in FWA/Enterprise**

**Exhibit 11: ARPU contribution of non-wireless segments, March fiscal year-ends**



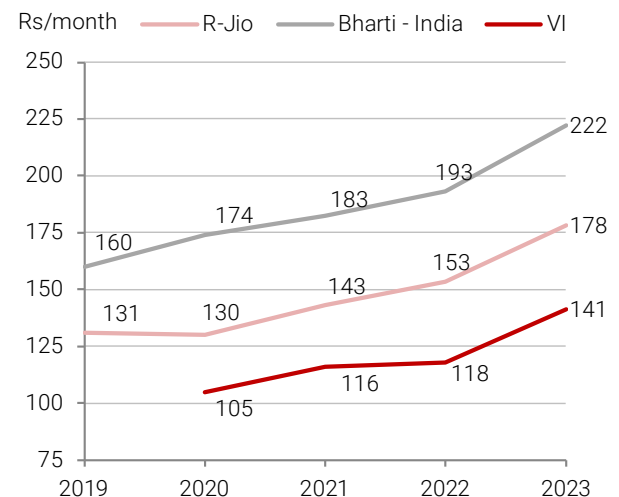
**Notes:**

- i) Bharti's non-wireless revenue includes contribution from India homes, Airtel DTH and Airtel Business
- ii) Our estimate of R-Jio's FTTH contribution assuming ~Rs500/month ARPU for FTTH
- iii) Contribution from Vi's enterprise/fixed line business

Source: Companies, Kotak Institutional Equities estimates

**Bharti's lead is bigger when revenue contributions from other non-wireless businesses are taken into account**

**Exhibit 12: Overall implied ARPU trends, March fiscal year-ends**



**Notes:**

- i) Bharti's non-wireless revenue includes contribution from India homes, Airtel DTH and Airtel Business
- ii) Our estimate of R-Jio's non-wireless revenue assuming ~Rs500/month ARPU for FTTH
- iii) Contribution from Vi's enterprise/fixed line business

Source: Companies, Kotak Institutional Equities estimates

**Bharti has been the biggest beneficiary of two rounds of smartphone tariff hikes and segmented tariff hikes**

**Exhibit 13: Comparison of current wireless ARPU for telcos with Sep 2019 (pre-tariff hikes) ARPU, March fiscal year-ends**

Telcos	Sep-19	Sep-20	Sep-21	Sep-22	Sep-23	Sep-23 vs Sep-19
	ARPU (Rs/month)					Change %
Bharti	128	162	153	190	203	58
R-Jio (i)	128	145	141	172	176	38
Vi (ii)	107	119	109	131	142	33

Notes:

i) Our estimate of R-Jio’s wireless ARPU assuming ~Rs500/month ARPU for FTTH

Source: Companies, Kotak Institutional Equities estimates

**Driven by higher ARPU growth, Bharti has grown ahead of peers on wireless revenue growth**

**Exhibit 14: Comparison of current wireless revenue for telcos with Sep 2019 (pre-tariff hikes) ARPU, March fiscal year-ends**

Telcos	Sep-19	Sep-20	Sep-21	Sep-22	Sep-23	Sep-23 vs Sep-19
	Wireless revenue (Rs bn)					Change %
Bharti	110	138	152	189	210	91
R-Jio (i)	131	175	182	215	234	78
Vi (ii)	101	98	83	93	94	(7)

Notes:

i) Our estimate of R-Jio’s wireless revenue assuming ~Rs500/month ARPU for FTTH

ii) Our estimate of Vi’s wireless revenue, adjusted for enterprise revenue

Source: Companies, Kotak Institutional Equities estimates

**Wireless and overall revenue trends**

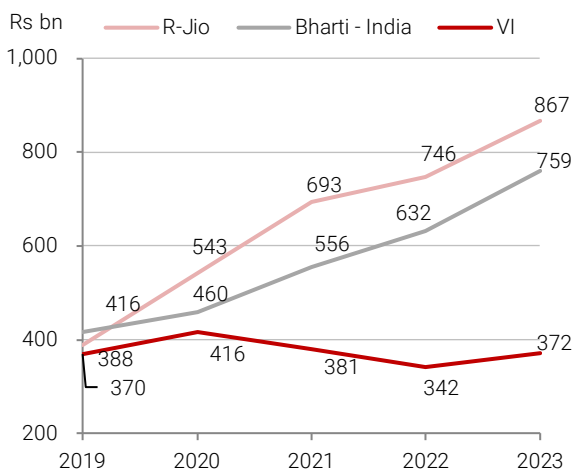
**R-Jio leads in wireless trends, contribution of non-wireless services higher for Bharti**

R-Jio is the market leader on wireless revenue (Exhibit 15), followed by Bharti. Driven by two rounds of smartphone tariff hikes (Exhibit 14), wireless revenue has increased at a rapid pace for Bharti (+91%) and R-Jio (+78%), whereas it has been lower despite sharp tariff hikes for Vi, as the company continued to lose subscribers. Bharti and R-Jio have been gaining wireless revenue market share at Vi’s expense over the past few years (Exhibit 16).

The contribution from non-wireless businesses is significantly higher for Bharti as compared with peers (Exhibit 17). Bulk of R-Jio’s non-wireless revenue is contributed by their foray in Fixed Broadband through JioFiber in Sep 2019. Apart from the fixed broadband (homes) business, Bharti also has a leadership position in the Enterprise and DTH segments. With higher contribution from non-wireless services, Bharti is the leader on overall revenue, followed by R-Jio (Exhibit 18). With likely higher incremental contribution from FWA and Enterprise forays, we expect the gap between Bharti and R-Jio on overall revenue to close in the next few years.

**R-Jio is the leader on wireless revenue among Indian telcos, followed by Bharti**

**Exhibit 15: Wireless revenue trends, March fiscal year-ends**



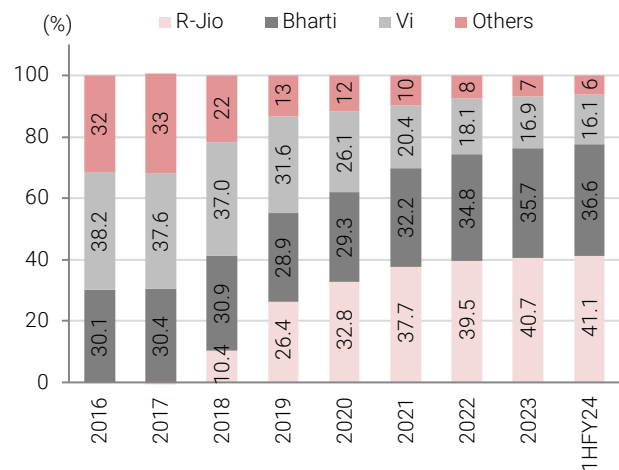
Notes:

i) Our estimate of R-Jio’s wireless revenue assuming ~Rs500/month ARPU for FTTH

Source: Companies, Kotak Institutional Equities estimates

**Bharti and R-Jio gaining revenue market share at Vi’s and others’ expense over past few years**

**Exhibit 16: Wireless revenue market share, March fiscal year-ends**



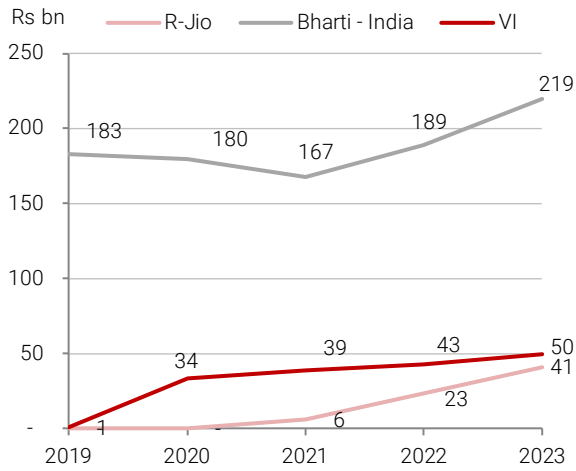
Notes:

i) Implied combined revenue market share for Vodafone India and Idea Cellular pre-merger

Source: TRAI, Kotak Institutional Equities estimates

**Bharti leads the Indian telcos on non-wireless revenue, expect ramp-up in R-Jio's non-wireless revenue from FWA/Enterprise**

Exhibit 17: Non-wireless revenue trends, March fiscal year-ends



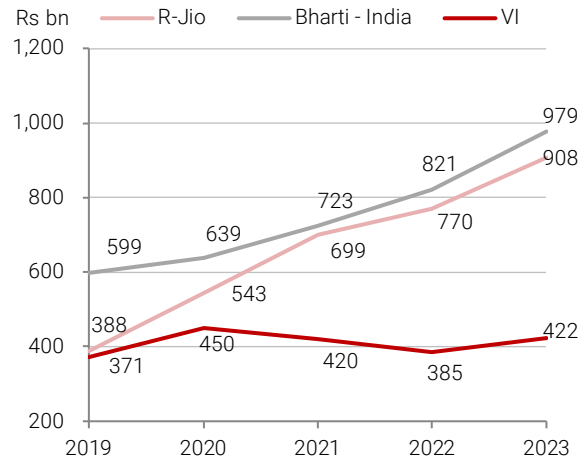
Notes:

- i) Bharti's non-wireless revenue includes contribution from India homes, Airtel DTH and Airtel Business
- ii) Our estimate of R-Jio's non-wireless revenue assuming ~Rs500/month ARPU for FTTH
- iii) Contribution from Vi's enterprise/fixed line business

Source: Companies, Kotak Institutional Equities estimates

**Bharti leads on overall revenue among Indian telcos, followed by R-Jio; Vi remains a distant third**

Exhibit 18: Reported overall revenue trends, March fiscal year-ends



Notes:

- i) Bharti's overall India revenue includes India wireless, homes, Airtel DTH and Airtel Business
- ii) R-Jio's overall revenue includes contribution from wireless, FTTH and Enterprise business
- iii) Vi's overall revenue includes contribution from wireless, enterprise/fixed line business

Source: Companies, Kotak Institutional Equities estimates

**Key operating expense trends**

In this section, we briefly touch upon the key expenses for Indian telcos and unitary EBITDA for the three telcos. For a more detailed analysis of expenses, refer to the respective expense section later in this note.

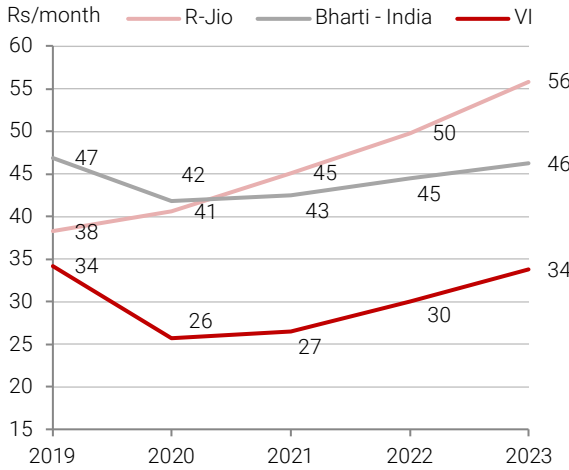
**Network opex rising sharply on Ind AS adjusted basis network opex/sub similar for Bharti and R-Jio**

Driven by accelerated network rollouts (for Bharti and R-Jio), network opex has been on a rising trend, with R-Jio's network opex rising sharply on a steep increase in fiber usage charges. However, reported network opex has been impacted by Ind AS 116 implementation for leases (in FY2020). The benefit of Ind AS 116 has been relatively higher for Vi and Bharti and much lower for R-Jio. Adjusted for the same, network opex per subscriber has been on a rising trend and is now nearly similar at ~Rs65-66/month per sub for Bharti and R-Jio.



**R-Jio has the highest reported network opex per sub per month, followed by Bharti**

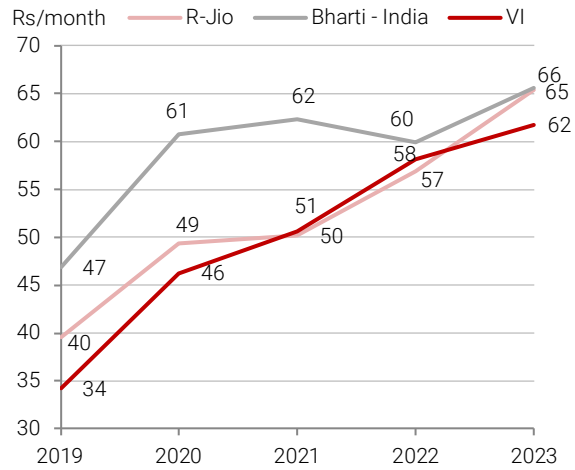
Exhibit 19: Reported network opex per subscriber, March fiscal year-ends



Source: Companies, Kotak Institutional Equities estimates

**Adjusted for leases, R-Jio and Bharti have largely similar network opex per sub at Rs65-66/month**

Exhibit 20: Adjusted network opex per subscriber, March fiscal year-ends



Notes:

- i) Adjusted network opex includes depreciation and interest on leases
- ii) Bharti India includes lease impact for standalone + Hexacom

Source: Companies, Kotak Institutional Equities estimates

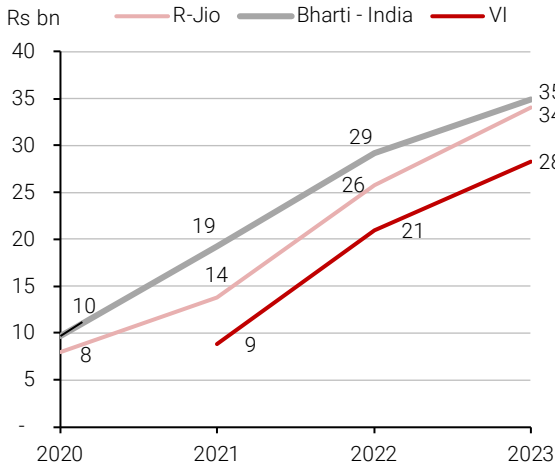
**Customer acquisition cost rising sharply, despite muted industry net adds**

Despite muted industry net adds over the past few years, Indian telcos' cumulatively spend on customer acquisition has increased sharply to ~Rs100 bn in FY2023 (Exhibit 21), driven by high competitive intensity and high incentives for MNP port-ins. Based on our estimate, telcos spend on customer acquisition has increased to ~Rs240-300 per gross subscriber addition (Exhibit 22). We believe telcos' have rationalized incentives for MNP port-ins in FY2024, which should likely lead to lower cash cost on customer acquisition in the coming years. However, with telcos amortizing the cost to acquire a customer, the cost of customer acquisition reported in P/L is likely to increase at least for the next few years.

Sales and marketing costs have been on a rising trend for all three telcos, but the accounting for amortization of customer acquisition cost varies across telcos, depending on expected lifetime value and churn rates. Other expenses account for ~2-3% of overall revenue for all three telcos (Exhibit 24). Overall, R-Jio is the lowest spender on sales/marketing and other expenses among the three telcos.

**Cost incurred (though not fully amortized) has likely increased sharply for three telcos, despite muted industry net adds**

**Exhibit 21: Likely cost incurred on customer acquisitions, March fiscal year-ends**



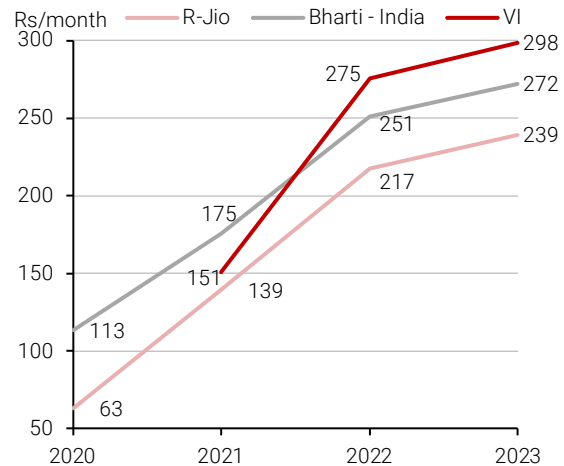
Notes:

i) Bharti India here implies standalone + Hexacom

Source: Companies, Kotak Institutional Equities estimates

**On our estimates, customer acquisition cost per gross subscriber addition has increased sharply for telcos**

**Exhibit 22: Likely customer acquisition cost per gross subscriber addition, March fiscal year-ends**



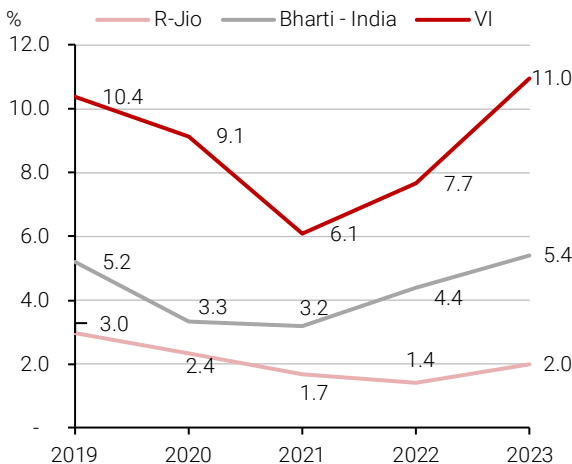
Notes:

i) Bharti India here implies standalone + Hexacom

Source: Companies, Kotak Institutional Equities estimates

**Sales and marketing expense as % of revenue has increased for all telcos, significant ~11% for Vi in FY2023**

**Exhibit 23: Sales and marketing expenses as % of revenue, March fiscal year-ends**



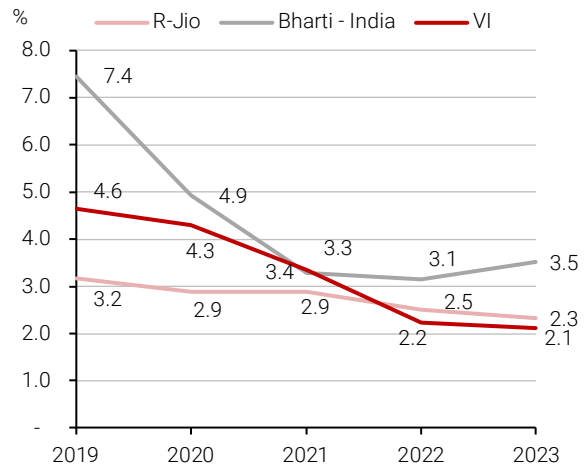
Notes:

i) Bharti India here implies standalone + Hexacom

Source: Companies, Kotak Institutional Equities estimates

**Other expenses as % of revenue has been on a declining trend for all telcos, but remains highest for Bharti at ~3.5% in FY2023**

**Exhibit 24: Other expenses as % of revenue, March fiscal year-ends**



Notes:

i) Bharti India here implies standalone + Hexacom

Source: Companies, Kotak Institutional Equities estimates

**Cut in regulatory levies and change in IUC regime boosted Indian telcos' EBITDA**

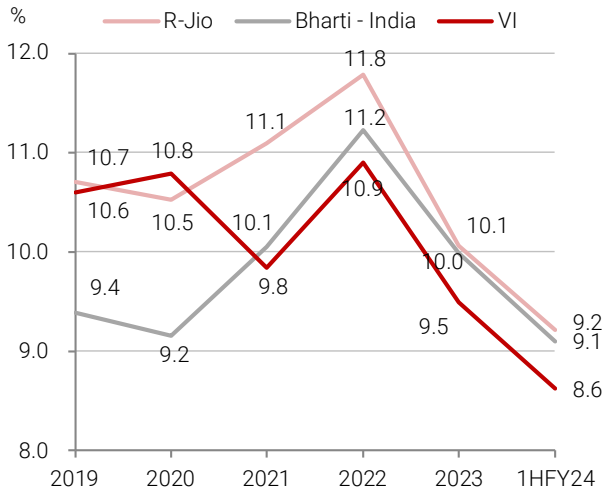
As part of the September 2021 telecom reforms, Gol scrapped Spectrum Usage Charges for new spectrum acquisition from the 2022 spectrum auction and removed the floor rate on SUC. With telcos purchasing significant bandwidths in 2022 spectrum (especially in 26GHz band), the spectrum usage charges have declined sharply for Indian telcos.

With the change in inter-connect usage charges (IUC) to Bill and Keep from January 2021, the access charges for all three telcos have declined sharply. Access charges are higher for Bharti and Vi, likely due to a higher share of enterprise revenue in their revenue mix.

We believe most benefits of lower SUC and the IUC regime change are already in the base and see limited scope of margin expansion unless there is a sharp cut in license fee (currently 8% of AGR).

**Regulatory levies as % of revenue has declined sharply in FY2023 and 1HFY2024 on zero SUC on 2022 spectrum auction**

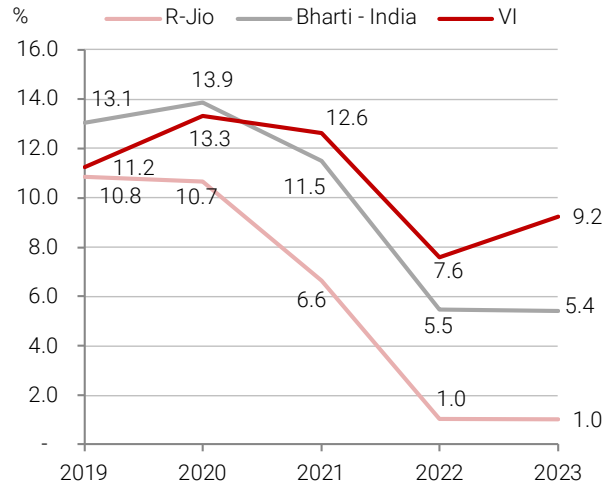
Exhibit 25: Regulatory levies as % of revenue, March fiscal year-ends



Source: Companies, Kotak Institutional Equities estimates

**Access charges as % of revenue declined sharply on shift to Bill and Keep regime, Vi's access charges as % of revenue highest**

Exhibit 26: Access charges as % of revenue, March fiscal year-ends



Source: Companies, Kotak Institutional Equities estimates

**EBITDA and RoCE trends**

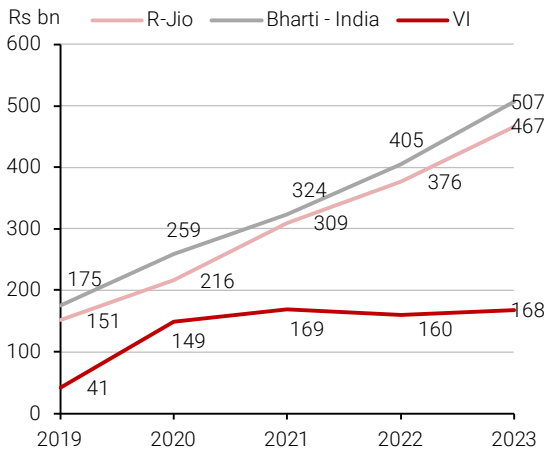
**R-Jio and Bharti's adjusted EBITDAs largely similar at ~Rs420 bn, adjusted margin significantly lower**

Bharti leads the Indian telcos on reported EBITDA, followed by R-Jio and Vi. However, as we noted above Ind AS 116 has benefited Bharti and Vi, more than R-Jio. On adjusted basis, despite more service offerings, we note that R-Jio and Bharti's India EBITDA are largely similar at ~Rs420 bn in FY2023 (Exhibit 28).

Indian telcos' reported EBITDA margins have increased sharply over FY2019-23 (Exhibit 29), driven by wireless market repair (tariff hikes), change in IUC regime, lower SUC charges, operating leverage benefits and most importantly, Ind AS 116 implementation. After the Ind AS 116 implementation, a part of the opex (largely tower rentals) is now reported below EBITDA and adjusted for leases, R-Jio/Bharti India EBITDA margins at 46%/43% are ~5%/9% lower versus reported margins (Exhibit 30).

**Bharti's India operations reported EBITDA slightly ahead of R-Jio, but R-Jio catching up fast, Vi continues to trail peers**

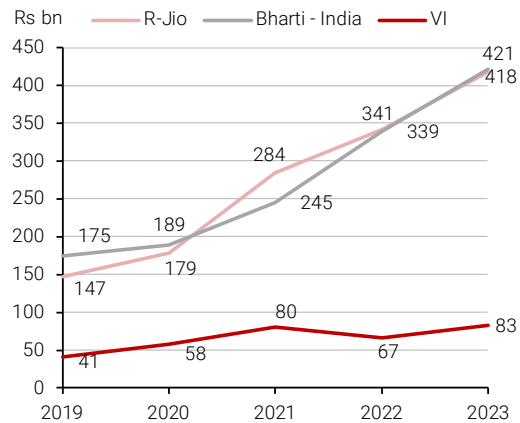
**Exhibit 27: Reported EBITDA trends, March fiscal-year ends**



Source: Companies, Kotak Institutional Equities estimates

**Adjusted EBITDA largely similar for Bharti's India operations and R-Jio, Vi significantly trails both Bharti and R-Jio**

**Exhibit 28: Ind AS-adjusted EBITDA trends, March fiscal year-ends**



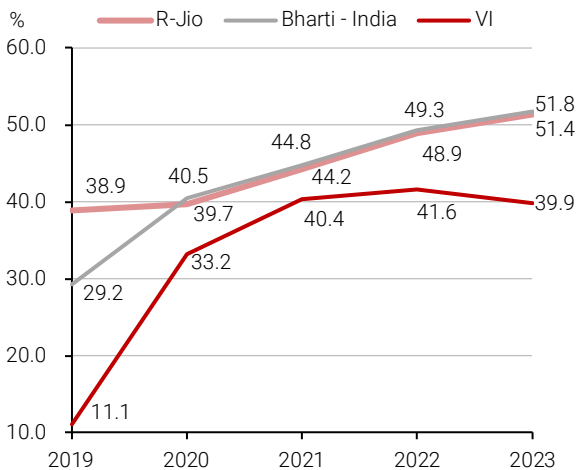
Notes:

- i) Adjusted EBITDA includes impact of depreciation and interest on leases
- ii) Bharti India includes lease impact for standalone + Hexacom

Source: Companies, Kotak Institutional Equities estimates

**Bharti has slight lead versus R-Jio on reported EBITDA margins**

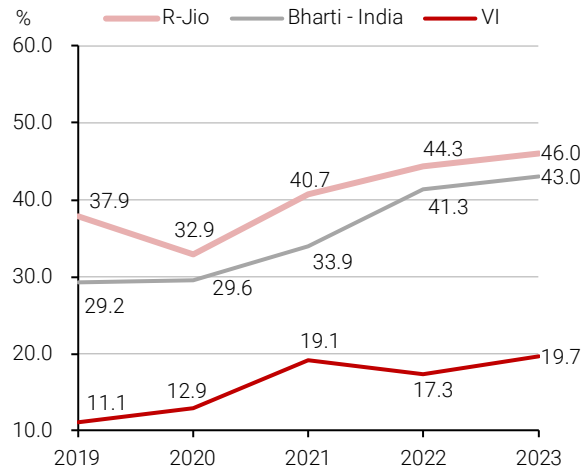
**Exhibit 29: Reported EBITDA margin trends, March fiscal year-ends**



Source: Companies, Kotak Institutional Equities estimates

**However, adjusted for leases, telcos' margins are lower with R-Jio ahead of Bharti on EBITDA margins**

**Exhibit 30: Adjusted EBITDA margin trends, March fiscal year-ends**



Notes:

- i) Adjusted EBITDA includes impact of depreciation and interest on leases
- ii) Bharti India includes lease impact for standalone + Hexacom

Source: Companies, Kotak Institutional Equities estimates

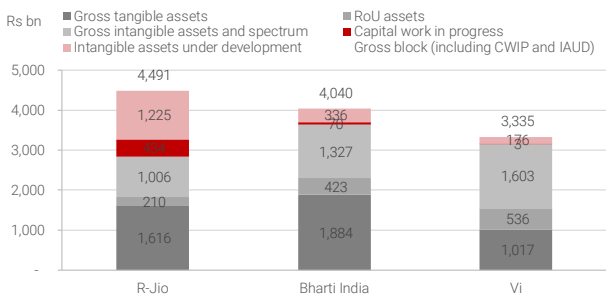
**R-Jio’s incremental depreciation could increase sharply on 5G commercialization**

With the recent spectrum acquisitions of ~Rs1.5 tn (2021 and 2022 spectrum auctions), R-Jio now leads Indian telcos on overall gross block. However, with 5G services not yet “commercialized”, R-Jio has ~37% of overall assets (including spectrum) under development (Exhibit 32). We believe that with the commercialization of 5G services, R-Jio’s D&A cost could potentially increase ~Rs90 bn annually.

Furthermore, R-Jio’s reported and lease adjusted depreciation and amortization rates (as % of gross block) have been on a rising trend with higher utilization, but it still remains low (Exhibit 34) at ~6% (versus 6.5-7.0% for peers). We expect R-Jio’s depreciation rate to continue increasing at a faster pace versus peers.

**With recent spectrum investments, R-Jio has highest overall gross block, followed by Bharti and Vi**

**Exhibit 31: Gross block (including CWIP and IAUD) build-up for three telcos for 2023, March fiscal year-ends**



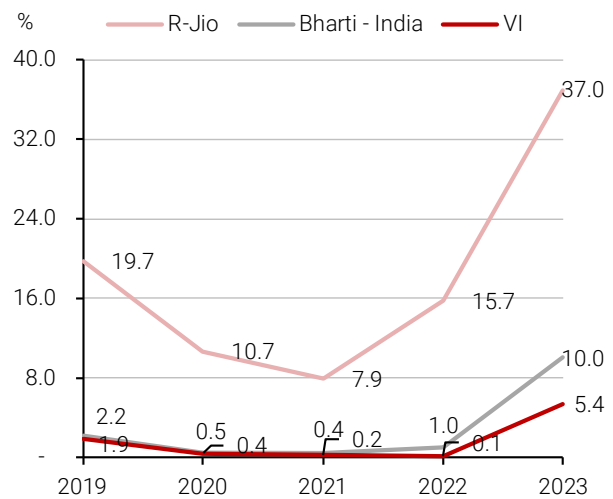
Notes:

i) Bharti India here implies standalone + Hexacom

Source: Companies, Kotak Institutional Equities estimates

**R-Jio’s asset under development as % of gross block has remained significantly higher than Bharti and Vi**

**Exhibit 32: CWIP and IAUD as % of overall gross block, March fiscal year-ends**



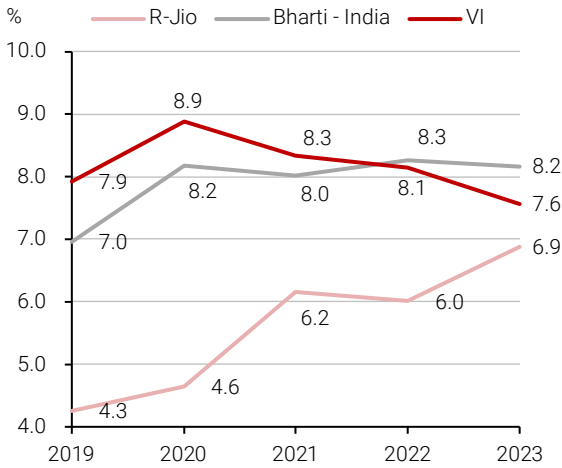
Notes:

i) Bharti India here implies standalone + Hexacom

Source: Companies, Kotak Institutional Equities estimates

**Bharti and Vi's reported D&A significantly higher due to more conservative depreciation policy on tangible assets**

**Exhibit 33: Reported D&A as % of gross block, March fiscal year-ends**



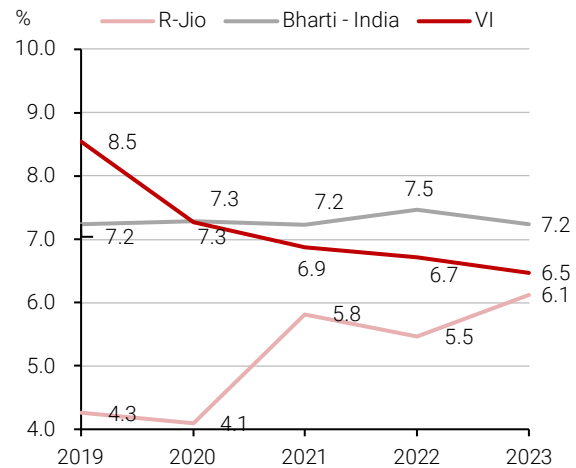
Notes:

i) Bharti India here implies standalone + Hexacom

Source: Companies, Kotak Institutional Equities estimates

**Even adjusted for depreciation on RoU assets, Bharti's depreciation rate significantly higher versus Vi and R-Jio**

**Exhibit 34: Adjusted D&A as % of gross block, March fiscal year-ends**



Notes:

i) Adjusted D&A excludes depreciation on RoU assets

ii) Bharti India here implies standalone + Hexacom

Source: Companies, Kotak Institutional Equities estimates

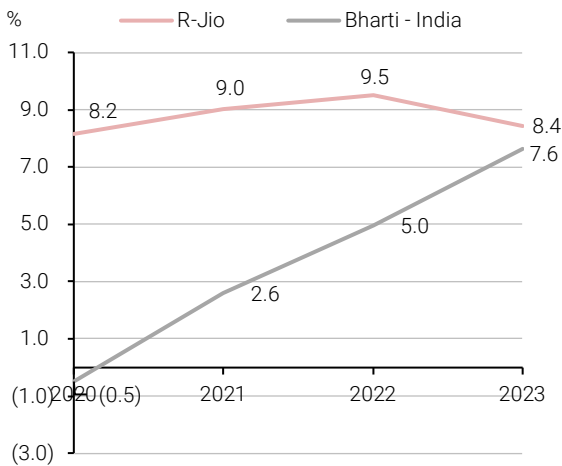
**Bharti's RoCE improve sharply, R-Jio requires sharp tariff hike for RoCE improvements**

Driven by wireless tariff hikes, Bharti's RoCE improved sharply over FY2019-23 to ~8%. Though R-Jio's RoCE has remained stable ~8%-10% as the capitalization of network opex and depreciation reduced with rising market share/utilization.

With ~37% of assets (including spectrum) under development, R-Jio's annual depreciation and interest could potentially rise ~Rs85-90 bn each over the next few years and could lead to further RoCE/RoE dilution, in absence of tariff hikes. With pan-India 5G rollouts nearing completion and a potential drag on R-Jio's return ratios, we believe there is a case for sharper tariff hikes in 2024.

**Bharti's RoCE has improved significantly over past few years on India's wireless market repair, R-Jio's largely stable**

**Exhibit 35: Pre-tax RoCE, March fiscal year-ends**



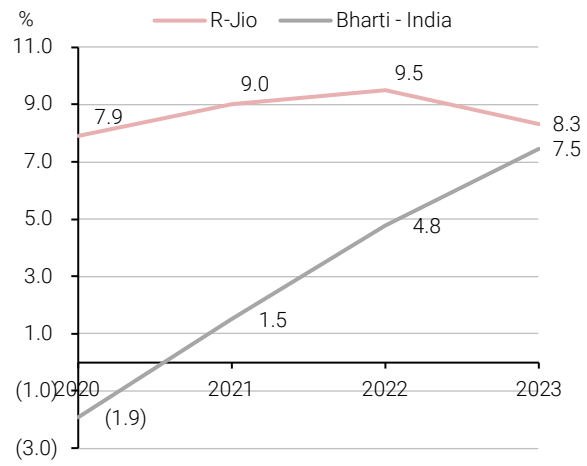
Notes:

i) Bharti India here implies standalone + Hexacom

Source: Companies, Kotak Institutional Equities estimates

**Even on lease adjusted basis, Bharti's RoCE has improved sharply over past few years**

**Exhibit 36: Adjusted pre-tax RoCE, March fiscal year-ends**



Notes:

i) Adjusted EBIT includes impact of interest on leases

ii) Bharti India here implies standalone + Hexacom

Source: Companies, Kotak Institutional Equities estimates

**Telcos’ debt rose on spectrum acquisitions, bulk of the debt is Gol dues**

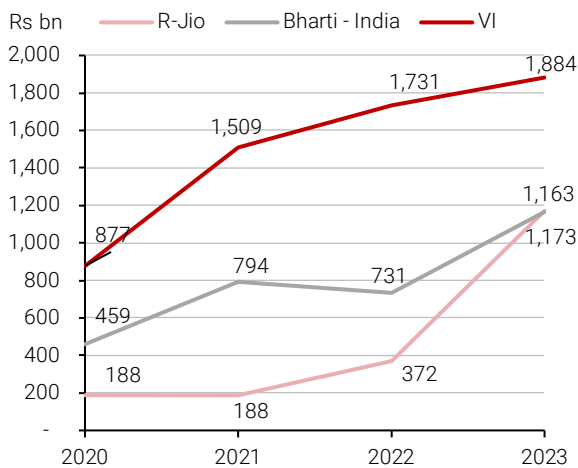
Indian telcos’ overall gross debt has risen sharply over the past few years, driven by significant spectrum acquisition and deferred spectrum liabilities. Bharti and Vi have also been impacted by adverse judgment on the long-standing AGR dispute (Exhibit 37). However, we note that bulk of the Indian telcos’ debt is due to the Government of India (Gol). Among Indian telcos, R-Jio is marginally ahead of Bharti on external borrowings. Vi has been very prompt in repaying its external borrowings and as a result, Vi had the least external borrowings (Exhibit 38).

**Reported interest cost significantly lower for R-Jio, interest capitalization increased in FY2023**

On reported basis, R-Jio’s interest cost is the lowest among peers. However, on adjusted basis, the gap in interest cost between R-Jio and peers is not that big (Exhibit 40). The difference is driven by R-Jio capitalizing the interest cost on yet to be deployed/commercialized spectrum (Exhibit 41). Furthermore, we note that the spectrum under development (including interest accrued) has still been on a rising trend for R-Jio, while it has decreased for Bharti with the 5G rollouts (Exhibit 42). We believe R-Jio’s interest cost in P/L could also increase sharply, as it commercialized 5G spectrum and would require much sharper tariff hike to maintain RoEs over the next few years.

**Vi has the largest debt due toward Gol, while R-Jio’s Gol debt has increased sharply in past two years on spectrum purchases**

**Exhibit 37: Deferred payment liabilities on spectrum and AGR trends, March fiscal year-ends**



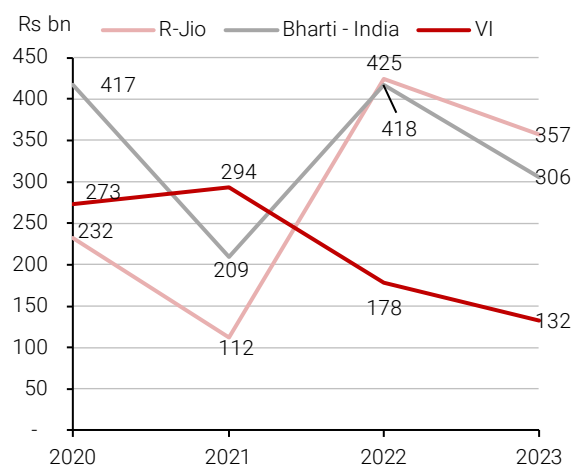
Notes:

i) Bharti India here implies standalone + Hexacom

Source: Companies, Kotak Institutional Equities estimates

**Vi has the lowest non-Gol debt, whereas R-Jio has the highest non-Gol debt in FY2023**

**Exhibit 38: Gross debt excluding Gol debt trends, March fiscal year-ends**



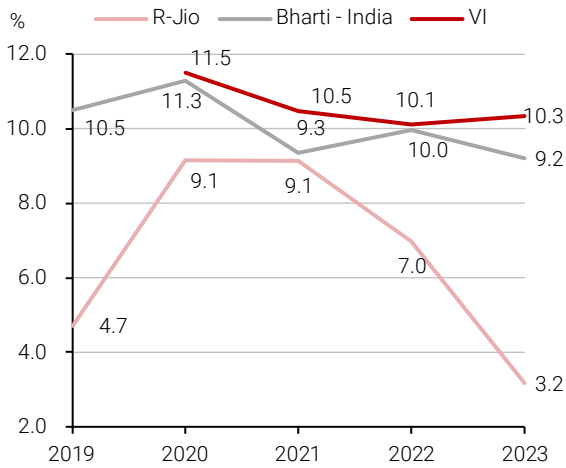
Notes:

i) Bharti India here implies standalone + Hexacom

Source: Companies, Kotak Institutional Equities estimates

**R-Jio's blended interest cost based on reported finance cost in P/L is significantly lower as significant part is being capitalized**

**Exhibit 39: Blended interest rate based on reported finance cost, March fiscal year-ends**



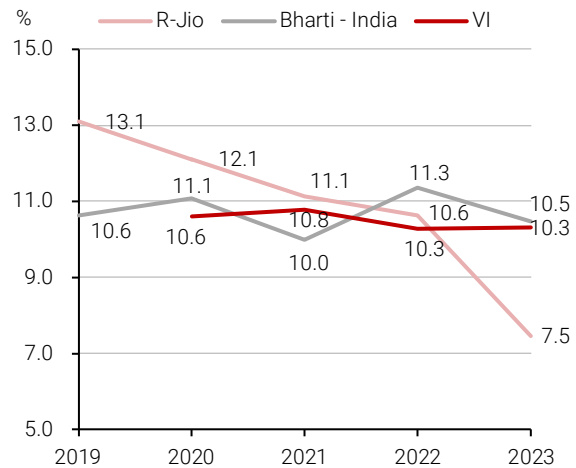
Notes:

i) Bharti India here implies standalone + Hexacom

Source: Companies, Kotak Institutional Equities estimates

**Adjusted for leases, Bharti's actual interest rate highest at ~10.5% (versus 10.3% for Vi and ~7.5% for R-Jio) in FY2023**

**Exhibit 40: Actual interest rate, including interest capitalized but excluding leases, March fiscal year-ends**



Notes:

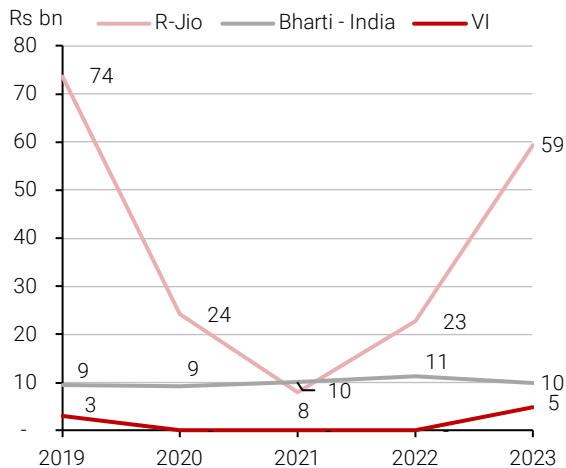
i) Adjusted finance cost excludes interest on leases

ii) Bharti India here implies standalone + Hexacom

Source: Companies, Kotak Institutional Equities estimates

**R-Jio's capitalized finance cost much higher versus peers and increased sharply in FY2023 on 5G spectrum purchases**

**Exhibit 41: Capitalized finance cost, March fiscal year-ends**



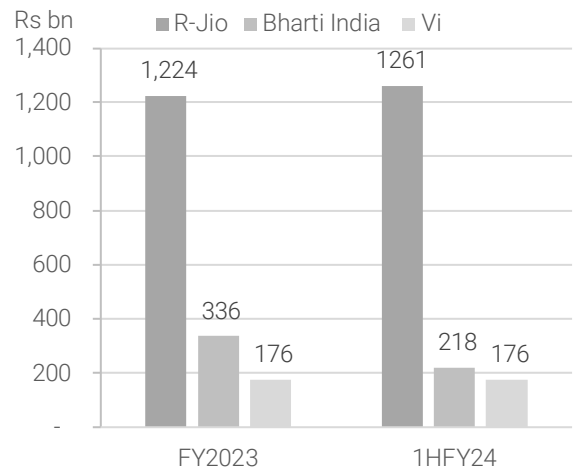
Notes:

i) Bharti India here implies standalone + Hexacom

Source: Companies, Kotak Institutional Equities estimates

**Bharti's capitalized interest cost to decline in FY2024, with drop in spectrum yet to be deployed, but likely to stay high for R-Jio**

**Exhibit 42: Spectrum yet to be deployed, March fiscal year-ends**



Notes:

i) Bharti India here implies standalone operations

Source: Companies, Kotak Institutional Equities estimates



### Unit metrics snapshot

In Exhibit 43 and Exhibit 44, we show a like-for-like comparison of three telcos' key P/L items on absolute basis, on % of revenue terms per subscriber.

Exhibit 43: Comparison snapshot of Indian telcos as of FY2023, March fiscal year-ends (Rs bn, %, Rs/month)

	Rs bn			% of revenue			Rs/month per sub		
	R-Jio	Bharti India	Vi	R-Jio	Bharti India	Vi	R-Jio	Bharti India	Vi
<b>Revenue</b>	<b>908</b>	<b>979</b>	<b>422</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>178</b>	<b>222</b>	<b>141</b>
Network Opex	285	203	101	31.4	20.8	23.9	56	46	34
Employee expenses	16	25	19	1.8	2.5	4.4	3	6	6
Regulatory levies	91	98	40	10.1	10.0	9.5	18	22	13
Access charges	9	53	39	1.0	5.4	9.2	2	12	13
SG&A and other expenses	39	93	55	4.3	9.5	13.1	8	21	18
<b>Overall reported expenses</b>	<b>441</b>	<b>472</b>	<b>254</b>	<b>48.6</b>	<b>48.2</b>	<b>60.1</b>	<b>87</b>	<b>107</b>	<b>85</b>
<b>EBITDA</b>	<b>467</b>	<b>507</b>	<b>168</b>	<b>51.4</b>	<b>51.8</b>	<b>39.9</b>	<b>92</b>	<b>115</b>	<b>56</b>
Reported D&A	185	297	230	20.4	30.4	54.6	36	68	77
<b>EBIT</b>	<b>281</b>	<b>209</b>	<b>(62)</b>	<b>31.0</b>	<b>21.4</b>	<b>(14.8)</b>	<b>55</b>	<b>48</b>	<b>(21)</b>
<b>Adjusted for leases</b>									
Network opex	333	289	184	36.7	29.5	43.7	65	66	62
<b>Overall expenses</b>	<b>490</b>	<b>557</b>	<b>339</b>	<b>54.0</b>	<b>57.0</b>	<b>80.3</b>	<b>96</b>	<b>127</b>	<b>113</b>
<b>Adjusted EBITDA</b>	<b>418</b>	<b>421</b>	<b>83</b>	<b>46.0</b>	<b>43.0</b>	<b>19.7</b>	<b>82</b>	<b>96</b>	<b>28</b>
Adjusted D&A	155	241	168	17.0	24.7	39.9	30	55	56
<b>Adjusted EBIT</b>	<b>263</b>	<b>180</b>	<b>(85)</b>	<b>29.0</b>	<b>18.4</b>	<b>(20.2)</b>	<b>52</b>	<b>41</b>	<b>(29)</b>

Notes:

i) Bharti India includes Bharti India wireless, India homes broadband, Airtel DTH and Airtel Business, ii) R-Jio includes R-Jio's mobility, FTTH and B2B core connectivity businesses, iii) Vi includes Vi's mobility and Enterprise/fixed line businesses, iv) adjusted network opex includes depreciation and interest on leases, v) Bharti India includes lease impact for standalone + Hexacom

Source: Companies, Kotak Institutional Equities estimates

Exhibit 44: Comparison snapshot of Indian telcos as of 1HFY24, March fiscal year-ends (Rs bn, %, Rs/month)

	Rs bn			% of revenue			Rs/month per sub		
	R-Jio	Bharti India	Vi	R-Jio	Bharti India	Vi	R-Jio	Bharti India	Vi
<b>Revenue</b>	<b>488</b>	<b>534</b>	<b>214</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>181</b>	<b>233</b>	<b>153</b>
Network Opex	150	108	50	30.7	20.2	23.6	56	47	36
Employee expenses	9	14	10	1.9	2.6	4.8	3	6	7
Regulatory levies	45	49	18	9.2	9.1	8.6	17	21	13
Access charges	6	29	21	1.3	5.4	9.7	2	13	15
SG&A and other expenses	23	50	29	4.6	9.4	13.7	8	22	21
<b>Overall reported expenses</b>	<b>233</b>	<b>249</b>	<b>129</b>	<b>47.7</b>	<b>46.6</b>	<b>60.5</b>	<b>86</b>	<b>108</b>	<b>93</b>
<b>EBITDA</b>	<b>255</b>	<b>285</b>	<b>84</b>	<b>52.3</b>	<b>53.4</b>	<b>39.5</b>	<b>95</b>	<b>124</b>	<b>61</b>
Reported D&A	104	159	113	21.3	29.7	52.8	39	69	81
<b>EBIT</b>	<b>151</b>	<b>126</b>	<b>(28)</b>	<b>31.0</b>	<b>23.7</b>	<b>(13.3)</b>	<b>56</b>	<b>55</b>	<b>(20)</b>

Notes:

i) Bharti India includes Bharti India wireless, India homes broadband, Airtel DTH and Airtel Business, ii) R-Jio includes R-Jio's mobility, FTTH and B2B core connectivity businesses, iii) Vi includes Vi's mobility and enterprise/fixed line businesses

Source: Companies, Kotak Institutional Equities estimates

# 2

## Telcos cost structure granular comparisons

In this section, we compare the cost structure for the three telcos. Given the difference in reporting standards and segment reporting across the three telcos, we have compared cost structure for R-Jio's standalone (wireless + FTTH + Enterprise) business, Bharti's India operations and Vi's consolidated financials for headline cost items. We have also used Bharti's standalone + Hexacom business financials for a more granular comparison across various expense categories.

### Network expenses

The most significant expense for a telco is network running expenses, this includes passive infrastructure charges (tower rentals), power and fuel costs, repairs and maintenance, internet, bandwidth and lease line charges, and other network expenses such as fiber usage charges.

### Reported network opex significantly higher and fastest rising for R-Jio

R-Jio has by far the highest reported network opex among the three telcos (Exhibit 45). Furthermore, the growth in network opex has also been the sharpest for R-Jio, with a ~14% yoy increase in FY2023 (versus ~7.5%/2% yoy growth for Bharti's India operations and Vi). For R-Jio, reported network opex accounts for ~31% of the revenue (versus ~21%/24% for Bharti India/Vi) in FY2023 (Exhibit 47) and even on per subscriber basis (Exhibit 49), R-Jio's reported network opex is the highest at Rs56 per sub monthly (versus Rs34/46 per month for Vi/Bharti India).

### Ind AS 116 implementation has led to significant differences in network opex across telcos

After the implementation of Ind AS 116, a portion of telcos' network opex, i.e., passive infrastructure charges have been reclassified as lease expenses and appear below EBITDA as depreciation on RoU assets and interest on lease liabilities. The impact of Ind AS 116 on reported network opex varies across the three telcos. We have tried to normalize the network opex for three telcos for the impact of Ind AS 116 implementations by adding depreciation on RoU assets and interest on lease liabilities to reported network opex to arrive at adjusted network opex for a more like-for-like comparison across telcos.

### Bharti and Vi's EBITDA significantly boosted by Ind AS 116 implementation, lower boost for R-Jio

Adjusted for leases, Bharti and Vi's network opex would be significantly higher. In FY2023, Vi's network opex would be ~Rs83 bn higher and Bharti's (standalone + Hexacom) higher by ~Rs86 bn. The impact on R-Jio's network opex would be relatively modest at ~Rs49 bn. Adjusted for leases, R-Jio still has the highest and fastest rising network opex, but the delta with Bharti is not as significant (Exhibit 46). As a % of revenue (Exhibit 48), adjusted network opex would be significantly higher for Vi at ~44% (versus ~30%/35% of revenue for Bharti/R-Jio). Interestingly, Bharti and R-Jio had largely similar network opex per subscriber per month at ~Rs66/month (Exhibit 50). However, we believe adjusted network opex would continue to inch up over the next few years for Bharti and R-Jio, driven by 5G network rollout costs.

### Sharp increase in fiber usage charges impacting R-Jio, per tower cost higher for Bharti versus Vi

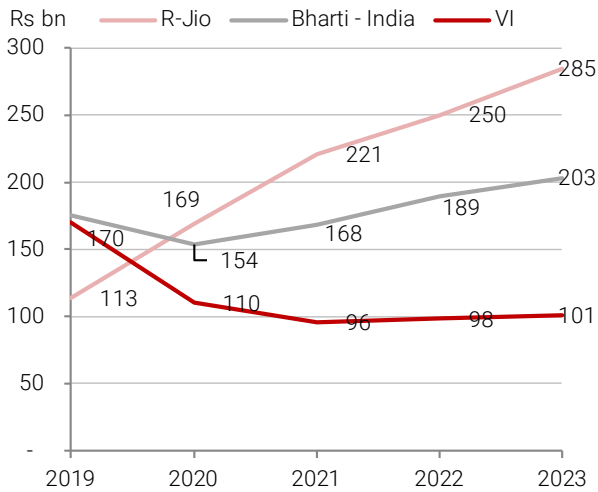
Among the three telcos, R-Jio is the highest spender on power and fuel costs (Exhibit 53) and spends the highest on passive infra charges as well (or network rentals including lease impact, Exhibit 54), which could be likely due to its lead on network coverage. We believe the key reason behind R-Jio's sharp increase in network opex are fiber-related expenses (part of other expense), which has seen a sharp increase over the past few years (Exhibit 62) and is by far the highest among the three telcos (3-4X of Bharti/Vi).

However, repairs and maintenance expenses are highest for Bharti among three telcos, likely due to greater presence of sub-sea cables in its portfolio (Exhibit 61). Per tower, Bharti's network expense is higher than Vi on a reported and lease adjusted basis; according to our estimates, Bharti's adjusted network opex per tower stood at ~Rs94k/month as compared with ~Rs83k/month for Vi (Exhibit 52). In our view, Vi has been rationalizing its tower count over the past few years and would likely have exited higher cost towers, whereas Bharti with its accelerated tower rollouts, would have been a single tenant on several new towers, which would likely entail higher network rentals (Exhibit 60). We note that Bharti's management has stepped up focus on reducing network opex over the past few quarters and have

identified high-cost sites (50k sites with network opex of over Rs100k/month) for cost reduction initiatives by 1) putting in place solutions that include either solar or better batteries, 2) renegotiation of rentals, 3) reconfiguration of sites and 4) even relocation of sites (if required).

**R-Jio has the highest reported network opex and has seen sharpest increase over past few years**

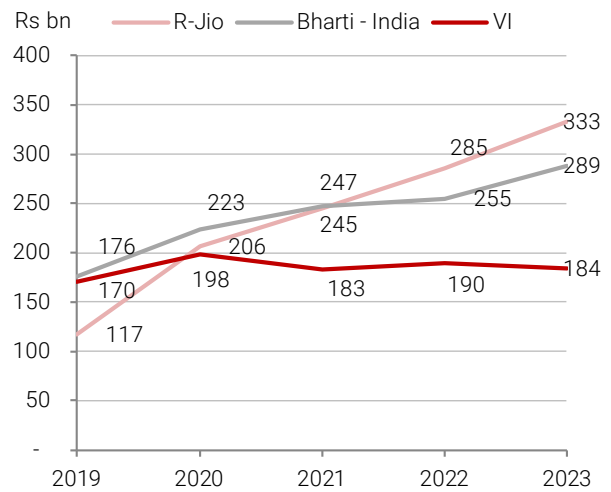
Exhibit 45: Reported network opex trends, March fiscal-year-ends



Source: Companies, Kotak Institutional Equities estimates

**Adjusted for leases, Bharti and Vi's network opex would be much higher, but still below R-Jio's adjusted network opex**

Exhibit 46: Network opex trends adjusted for Ind AS 116, March fiscal year-ends



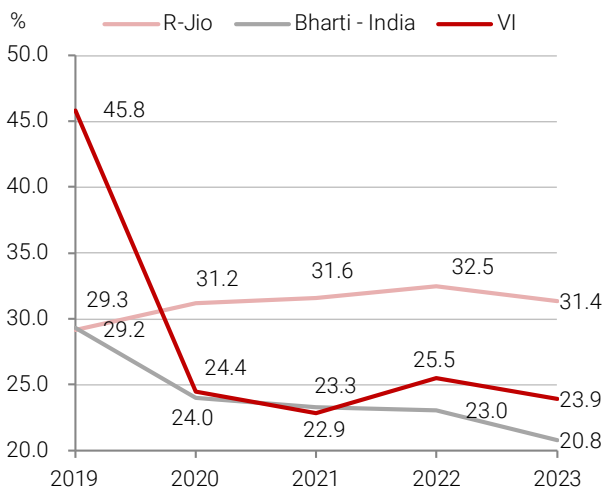
Notes:

- i) Adjusted network opex includes depreciation and interest on leases
- ii) Bharti India includes lease impact for standalone + Hexacom

Source: Companies, Kotak Institutional Equities estimates

**Bharti and Vi's reported EBITDA margin significantly boosted by impact of Ind AS 116 on network opex**

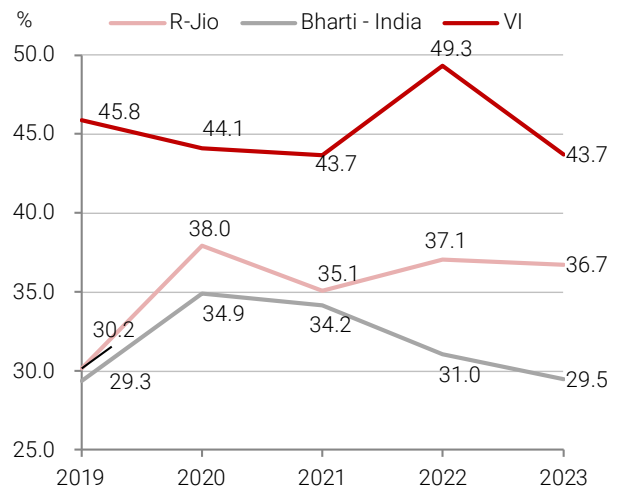
Exhibit 47: Reported network opex as % of revenue, March fiscal year-ends



Source: Companies, Kotak Institutional Equities estimates

**Adjusted for leases, Vi's network opex as % of revenue significantly higher, though Bharti would still trail R-Jio's opex**

Exhibit 48: Adjusted network opex as % of revenue, March fiscal year-ends



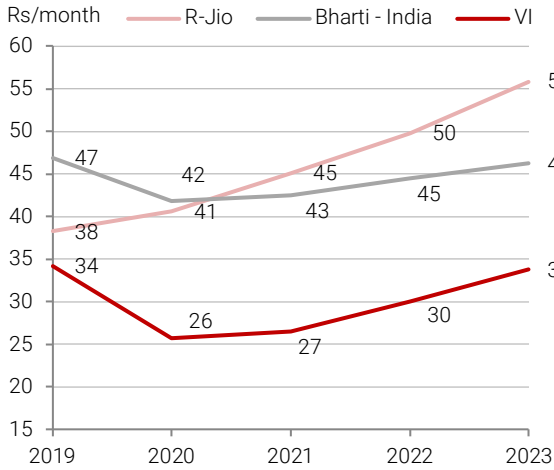
Notes:

- i) Adjusted network opex includes depreciation and interest on leases
- ii) Bharti India includes lease impact for standalone + Hexacom

Source: Companies, Kotak Institutional Equities estimates

**R-Jio has the highest reported network opex per sub per month, followed by Bharti**

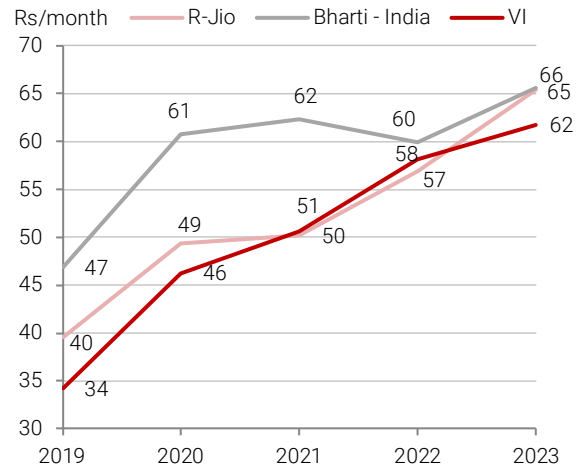
Exhibit 49: Reported network opex per subscriber, March fiscal year-ends



Source: Companies, Kotak Institutional Equities estimates

**Adjusted for leases, R-Jio and Bharti have largely similar network opex per sub at Rs65-66/month**

Exhibit 50: Adjusted network opex per subscriber, March fiscal year-ends



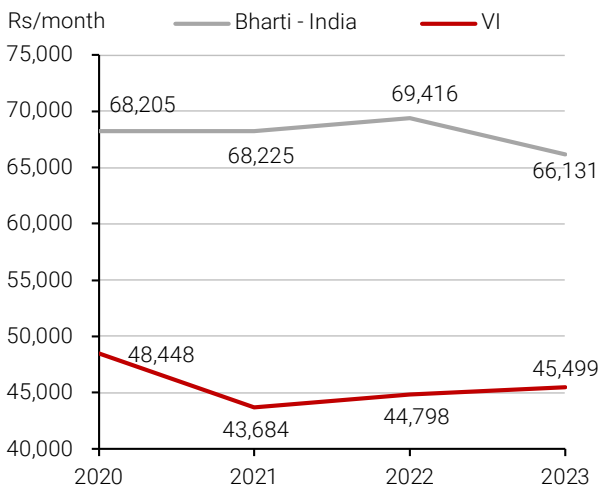
Notes:

- i) Adjusted network opex includes depreciation and interest on leases
- ii) Bharti India includes lease impact for standalone + Hexacom

Source: Companies, Kotak Institutional Equities estimates

**Bharti's reported network opex per tower significantly higher as compared with Vi**

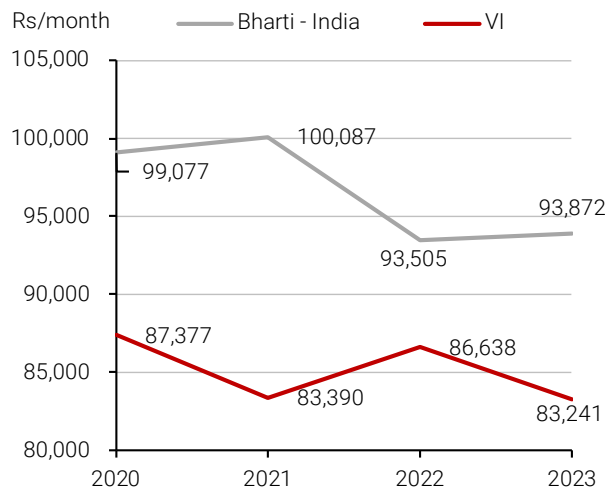
Exhibit 51: Reported network opex per tower, March fiscal year-ends



Source: Companies, Kotak Institutional Equities estimates

**Adjusted for leases, the gap between Bharti and Vi on per tower network opex is lower, but Bharti still significantly higher**

Exhibit 52: Adjusted network opex per tower, March fiscal year-ends



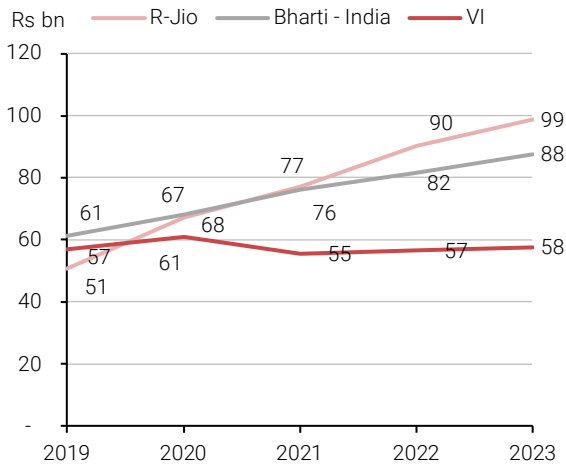
Notes:

- i) Adjusted network opex includes depreciation and interest on leases
- ii) Bharti India includes lease impact for standalone + Hexacom

Source: Companies, Kotak Institutional Equities estimates

**R-Jio and Bharti's power and fuel expenses have been on a rising trend**

**Exhibit 53: Power and fuel expenses, March fiscal-year ends**



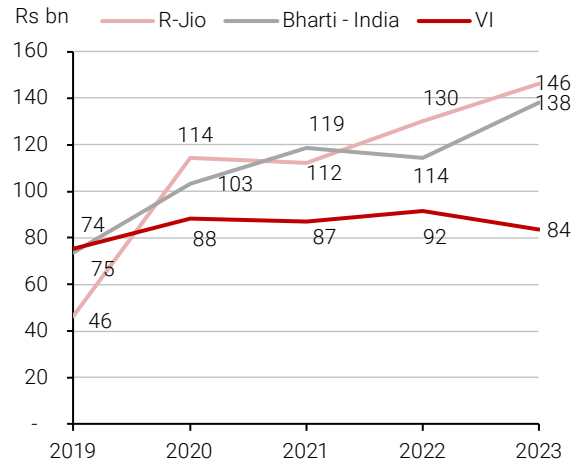
Notes:

i) Bharti India here implies standalone + Hexacom

Source: Companies, Kotak Institutional Equities estimates

**Driven by likely higher tower footprint, R-Jio has higher network rentals (including leases) as compared with Bharti and Vi**

**Exhibit 54: Passive infra charges adjusted for Ind AS 116, March fiscal year-ends**



Notes:

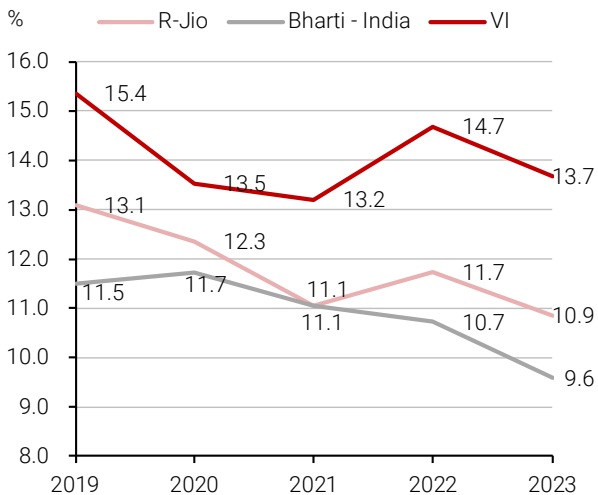
i) Adjusted network opex includes depreciation and interest on leases

ii) Bharti India here implies standalone + Hexacom

Source: Companies, Kotak Institutional Equities estimates

**As % of revenue, Vi's power and fuel expense is the highest, followed by R-Jio and Bharti**

**Exhibit 55: Power and fuel expenses as % of revenue, March fiscal year-ends**



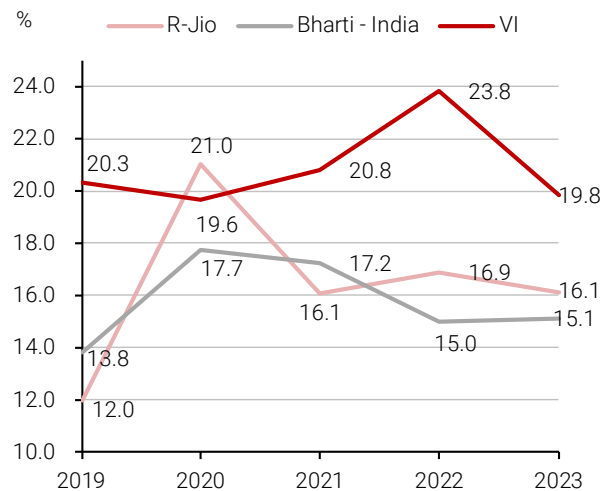
Notes:

i) Bharti India here implies standalone + Hexacom

Source: Companies, Kotak Institutional Equities estimates

**Adjusted for leases, Vi's network rentals as % of revenue much higher, R-Jio has leapfrogged Bharti in past two years**

**Exhibit 56: Passive infra charges, including lease expenses as % of revenue, March fiscal year-ends**



Notes:

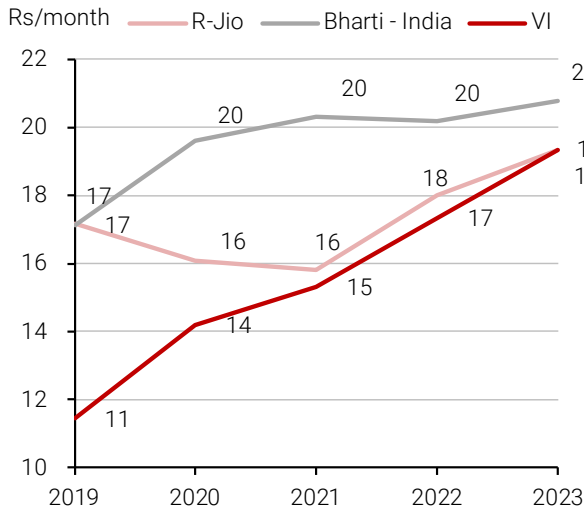
i) Adjusted network opex includes depreciation and interest on leases

ii) Bharti India here implies standalone + Hexacom

Source: Companies, Kotak Institutional Equities estimates

**Bharti's power and fuel expenses per subscriber ahead of Vi and R-Jio, Vi's sharp rise driven by subs decline in past few years**

**Exhibit 57: Power and fuel expenses per subscriber, March fiscal year-ends**



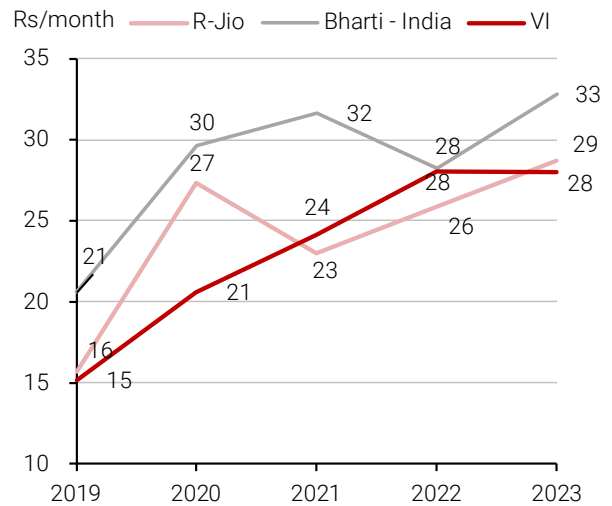
Notes:

i) Bharti India here implies standalone + Hexacom

Source: Companies, Kotak Institutional Equities estimates

**Adjusted for leases, Bharti's network rentals per sub highest among three telcos, R-Jio's inched up over past few years**

**Exhibit 58: Passive infra charges, including lease expenses per subscriber, March fiscal year-ends**



Notes:

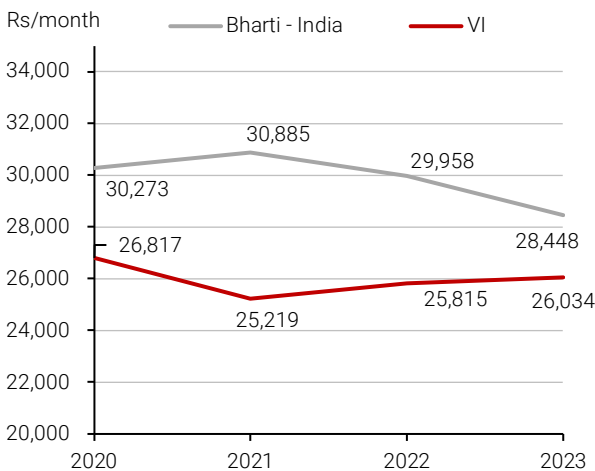
i) Adjusted network opex includes depreciation and interest on leases

ii) Bharti India here implies standalone + Hexacom

Source: Companies, Kotak Institutional Equities estimates

**Bharti's power and fuel expenses per tower ~9% ahead of Vi's in FY2023**

**Exhibit 59: Power and fuel expenses per tower, March fiscal year-ends**



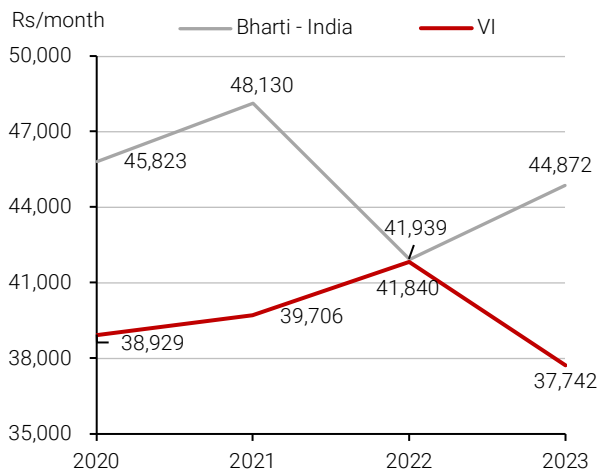
Notes:

i) Bharti India here implies standalone + Hexacom

Source: Companies, Kotak Institutional Equities estimates

**Adjusted for leases, Bharti's network rentals significantly higher as compared with Vi**

**Exhibit 60: Passive infra charges, including lease expenses per tower, March fiscal year-ends**



Notes:

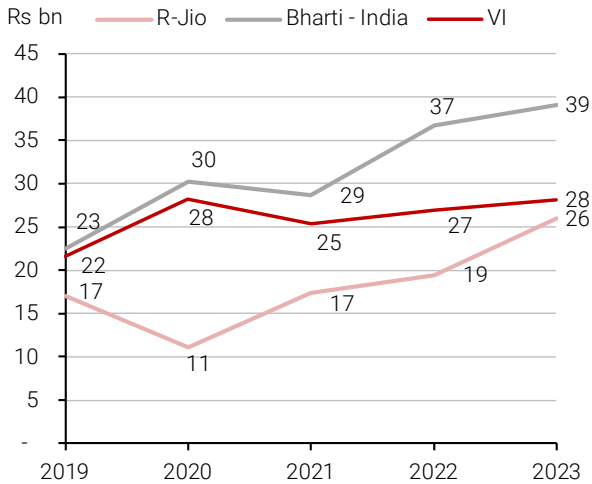
i) Adjusted network opex includes depreciation and interest on leases

ii) Bharti India here implies standalone + Hexacom

Source: Companies, Kotak Institutional Equities estimates

**Repairs and maintenance significantly higher for Bharti as compared with Vi and R-Jio likely on higher sub-sea cables**

**Exhibit 61: Repairs and maintenance expenses, March fiscal year ends**



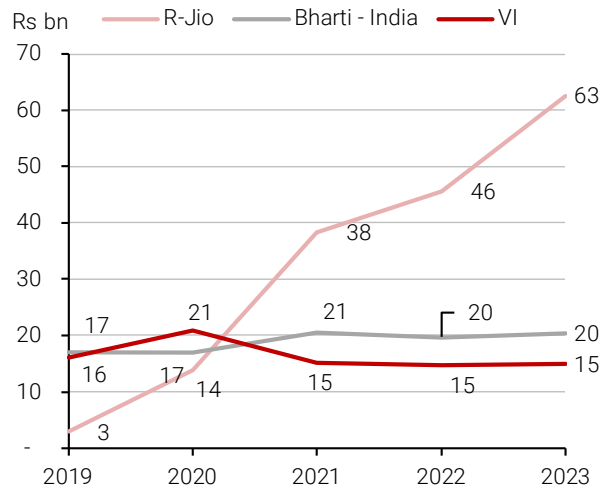
Notes:

i) Bharti India here implies standalone + Hexacom

Source: Companies, Kotak Institutional Equities estimates

**Other network expenses significantly higher for R-Jio due to higher and sharp increase in fiber usage charges**

**Exhibit 62: Other network expenses, March fiscal year ends**



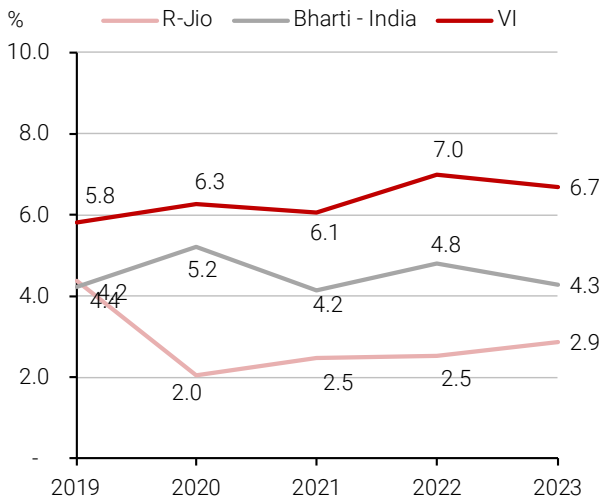
Notes:

i) Bharti India here implies standalone + Hexacom

Source: Companies, Kotak Institutional Equities estimates

**As % of revenue, Vi's repair and maintenance expenses are the highest, followed by Bharti and R-Jio**

**Exhibit 63: Repairs and maintenance expenses as % of revenue, March fiscal year ends**



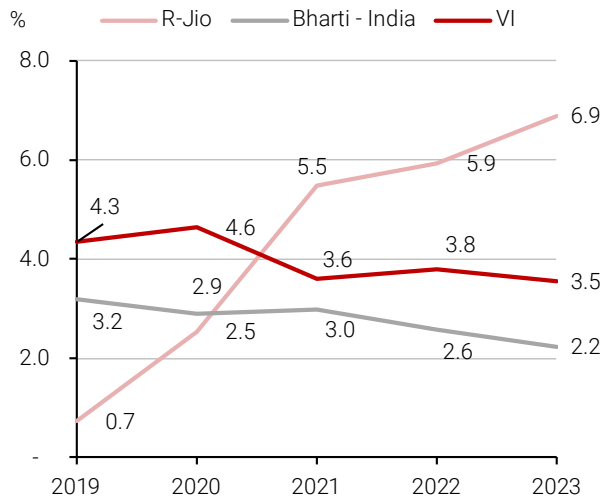
Notes:

i) Bharti India here implies standalone + Hexacom

Source: Companies, Kotak Institutional Equities estimates

**Other network expenses as % of revenue significantly higher for R-Jio and growing at sharp pace as compared with Bharti and Vi**

**Exhibit 64: Other network expenses as % of revenue, March fiscal year ends**



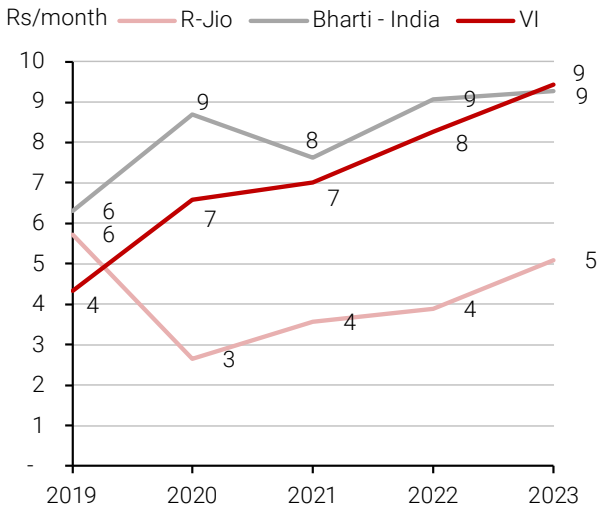
Notes:

i) Bharti India here implies standalone + Hexacom

Source: Companies, Kotak Institutional Equities estimates

**On a per subs basis, repairs and maintenance was similar for Bharti and Vi, but was lower for R-Jio in FY2023**

**Exhibit 65: Repairs and maintenance expenses per subscriber, March fiscal year-ends**



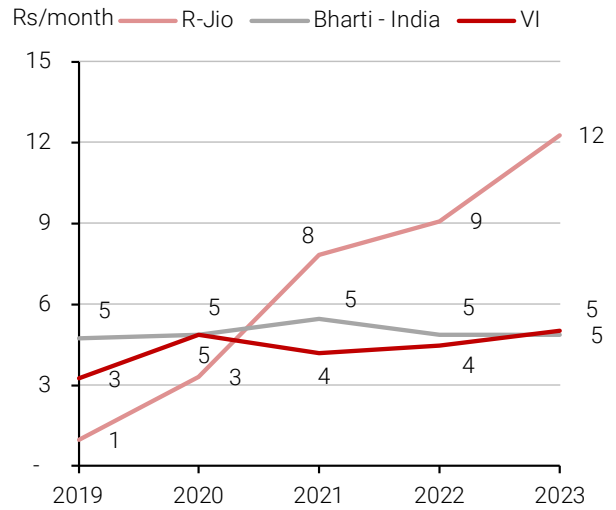
Notes:

i) Bharti India here implies standalone + Hexacom

Source: Companies, Kotak Institutional Equities estimates

**R-Jio's other network expenses per subscriber much higher at Rs12/month as compared with ~Rs5/month for Bharti and Vi**

**Exhibit 66: Other network expenses per subscriber, March fiscal year-ends**



Notes:

i) Bharti India here implies standalone + Hexacom

Source: Companies, Kotak Institutional Equities estimates

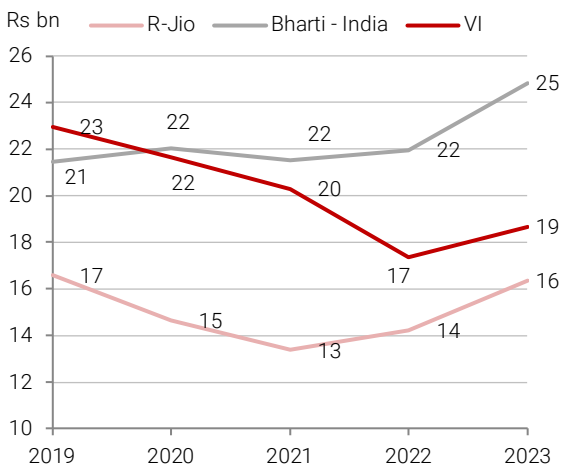


### Employee expenses

Employee expenses form a minor part of the telco’s expenses. Among the three, R-Jio has the lowest employee expenses, followed by Vi and Bharti. Employee expenses account for <2% of revenue for R-Jio, ~2.5% for Bharti’s India operations and higher ~4.5% for Vi. Furthermore, with market repair, while telcos’ revenues have inched up sharply over the past few years, employee expenses have largely remained stable (decline for Vi) driving operating leverage benefits. On our estimates, Vi has the highest cost per employee at ~Rs2.1 mn per annum, followed by Bharti at ~Rs1.5 mn per annum. Cost per employee seems abysmally low for R-Jio at Rs0.18 mn, but we believe this could be likely due to R-Jio including even indirect employees in their employee count.

#### Bharti leads peers on employee costs, overall employee costs have been largely stable over past few years (declined for Vi)

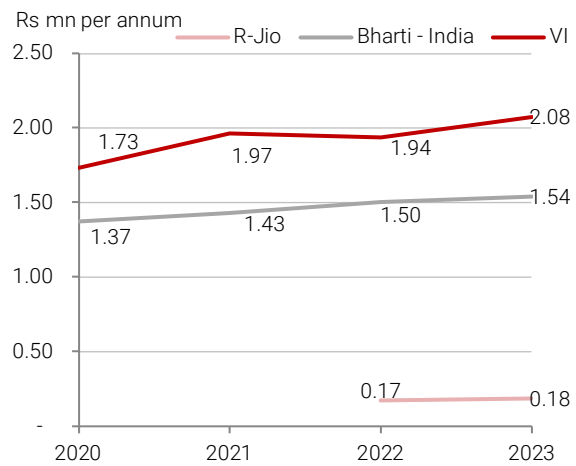
Exhibit 67: Employee expenses trends, March fiscal-year ends



Source: Companies, Kotak Institutional Equities estimates

#### Vi has the highest cost per employee, followed by Bharti, implied cost significantly lower for R-Jio

Exhibit 68: Implied per employee cost, March fiscal year-ends



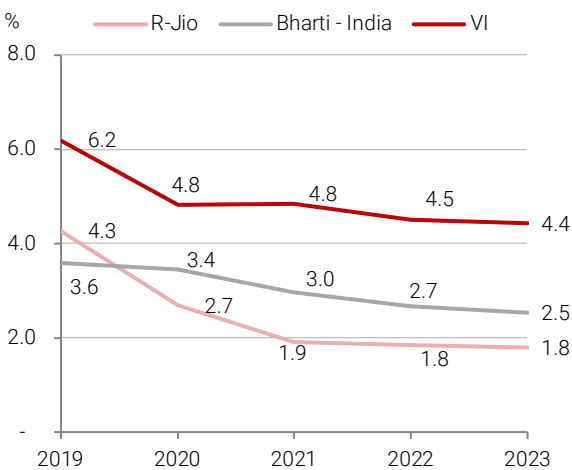
Notes:

i) R-Jio employee count likely includes employees not directly on the company’s rolls

Source: Companies, Kotak Institutional Equities estimates

#### All three telcos benefiting from operating leverage benefits

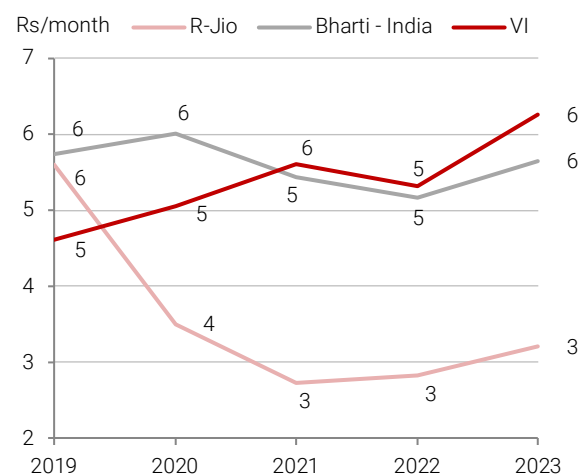
Exhibit 69: Employee costs as % of revenue, March fiscal year-ends



Source: Companies, Kotak Institutional Equities estimates

#### Employee cost account for ~Rs6/month/sub for Bharti and Vi, lower ~Rs3/month/sub for R-Jio

Exhibit 70: Employee cost per subscriber, March fiscal year-ends



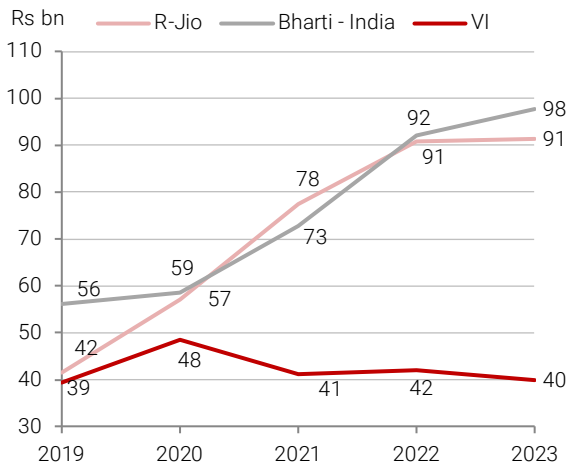
Source: Companies, Kotak Institutional Equities estimates

**Regulatory levies (license fees and spectrum usage charges)**

Regulatory levies include license fee (LF) and spectrum usage charges (SUC). LF is broadly ~8% of telcos’ adjusted gross revenue (AGR), whereas SUC depends on the spectrum quantum and the time when the spectrum was purchased. SUC used to be ~3-5% of AGR earlier, but post-Sep 2021 telecom reforms, SUC on any spectrum purchased after Sep 2021 was made zero. With telcos buying a huge quantum of mmWave (~26.5GHz) spectrum, the blended SUC for all three telcos has declined sharply since 2QFY23 and boosted EBITDA margins by ~2-3%. We expect SUC to tend toward zero, as telcos beef up their spectrum portfolio over time. There is also a case for license fee to be reduced, which could provide a further boost to telcos’ EBITDA over time.

**Regulatory levies for Bharti and R-Jio rising with revenue growth, stable to declining trend for Vi on revenue decline**

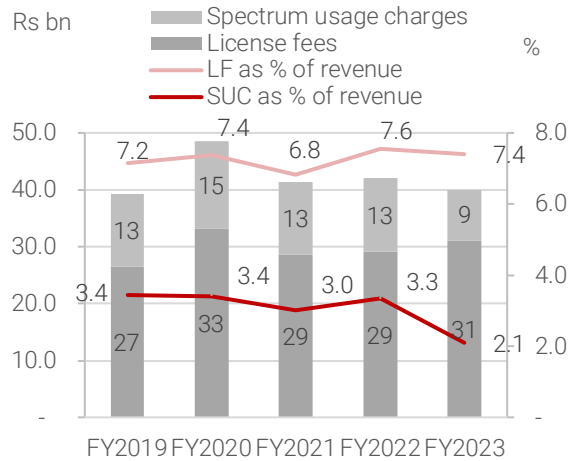
Exhibit 71: Regulatory levies trends, March fiscal-year ends



Source: Companies, Kotak Institutional Equities estimates

**SUC as % of revenue has declined sharply after 5G spectrum acquisition in Aug 2022 for Vi**

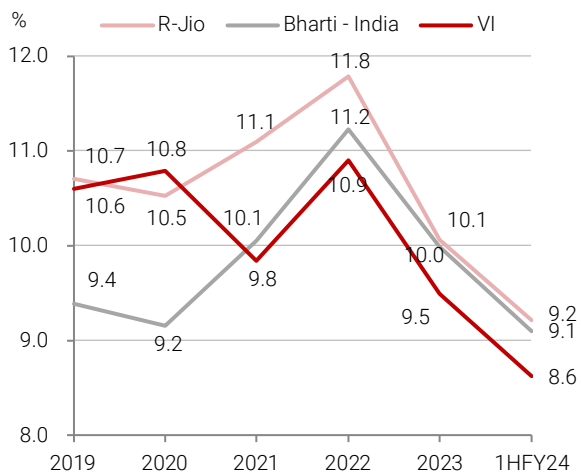
Exhibit 72: Build-up of LF and SUC for Vi, March fiscal year-ends



Source: Companies, Kotak Institutional Equities estimates

**Regulatory levies as % of revenue has declined sharply in FY2023 and 1HFY2024 on zero SUC on 2022 spectrum auction**

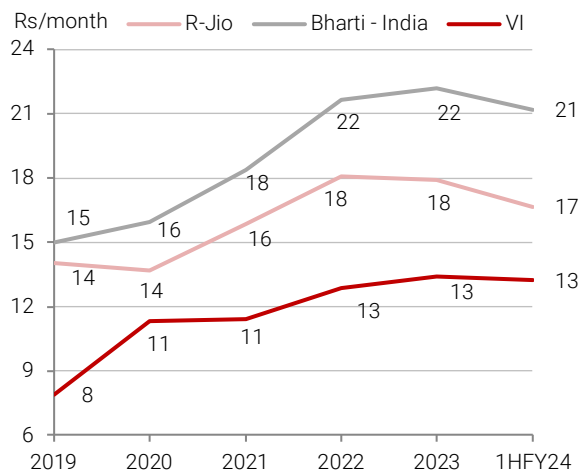
Exhibit 73: Regulatory levies as % of revenue, March fiscal year-ends



Source: Companies, Kotak Institutional Equities estimates

**Regulatory levies per sub highest for Bharti at ~Rs21/month, followed by R-Jio at Rs17/month and lowest for Vi at Rs13**

Exhibit 74: Regulatory levies per subscriber, March fiscal year-ends



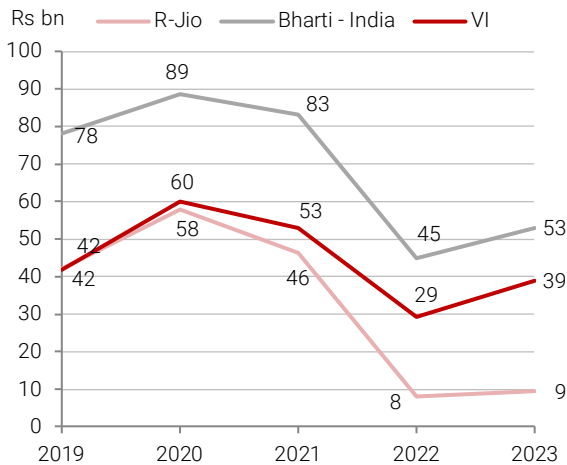
Source: Companies, Kotak Institutional Equities estimates

**Access/inter-connect and roaming charges**

Access or inter-connect charges have declined sharply after the change in the Inter-connect Usage Charge regime to Bill and Keep from January 2021. Earlier, telcos used to receive inter-connect usage fees for calls terminating on their network and had to pay inter-connect charges for outgoing call terminating on other telcos' network. The change in IUC regime has led to a bump-up in reported EBITDA margin for all three telcos, but the quantum of benefit varies depending on the outgoing-incoming ratio and subscriber mix. With data becoming a more prominent revenue source, we believe inter-connect or access charges as a percentage of revenue would keep on declining and provide a further scope of EBITDA margin improvement for telcos. Among the three telcos, the access charge is the highest for Bharti likely due to IUC on ILD calls and access charges pertaining to enterprise offerings.

**Inter-connect charges declined sharply after change in IUC regime to Bill and Keep from January 2021**

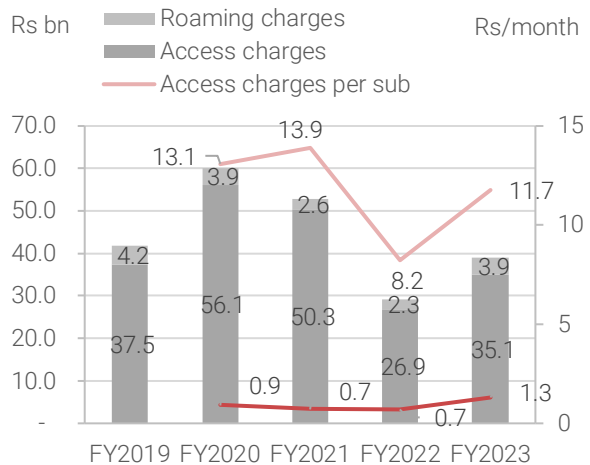
Exhibit 75: Access charges trends, March fiscal-year ends



Source: Companies, Kotak Institutional Equities estimates

**Access charges dips from Jan 2021, but still forms major chunk of inter-connect costs for Vi, roaming charges remain modest**

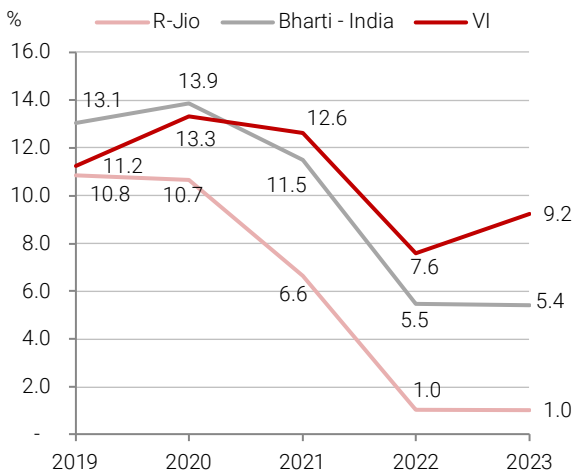
Exhibit 76: Build-up of access and roaming charges for Vi, March fiscal year-ends



Source: Companies, Kotak Institutional Equities estimates

**Access charges as % of revenue declined sharply on shift to Bill and Keep regime, Vi's access charges as % of revenue highest**

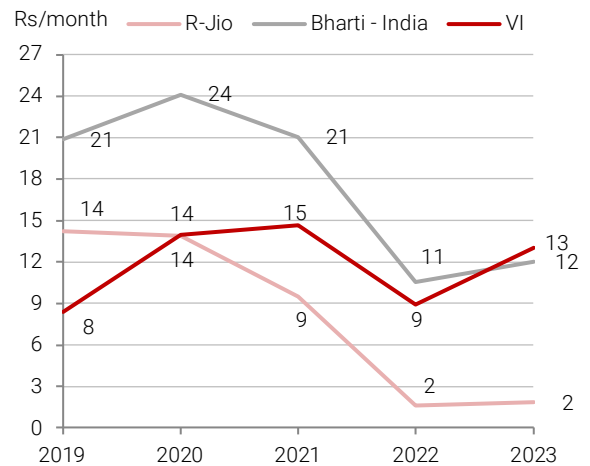
Exhibit 77: Access charges as % of revenue, March fiscal year-ends



Source: Companies, Kotak Institutional Equities estimates

**Access charges per sub low at Rs2/month for R-Jio, but higher Rs12-13/month for Bharti/Vi likely on enterprise offerings**

Exhibit 78: Access charges per subscriber, March fiscal year-ends



Source: Companies, Kotak Institutional Equities estimates

**SG&A and other expenses**

SG&A and other expenses mainly comprise sales/marketing expenses such as cost of customer acquisition and advertisement/promotion expenses along with other expenses such as content costs, bad debt provisions and other miscellaneous expenses. Overall, for the three telcos, SG&A and other expenses have increased sharply (Exhibit 79) over the past few years, driven by high competitive intensity to acquire subscribers. Among the three telcos, R-Jio has the lowest SG&A and other expenses, as a percentage of revenue and per subscriber (Exhibit 81 and 82).

**Sales and marketing: Customer acquisition costs rising sharply, despite muted industry net adds**

Despite muted industry net adds over the past few years, Indian telcos’ cumulatively spend on customer acquisition has increased sharply to ~Rs100 bn in FY2023 (Exhibit 89), driven by high competitive intensity and high incentives for MNP port-ins. On our estimate, telcos spend on customer acquisition has increased to ~Rs240-300 per gross subscriber addition (Exhibit 90). We believe telcos’ have rationalized incentives for MNP port-ins in FY2024, which should likely lead to lower cash cost on customer acquisition in the coming years. However, with telcos amortizing the cost to acquire a customer, the cost of customer acquisition reported in P/L is likely to increase at least for the next few years.

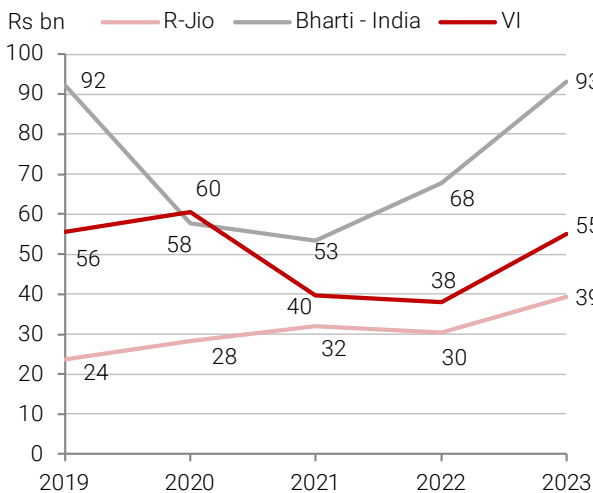
Sales and marketing costs have been on a rising trend for all three telcos. Overall, reported sales and marketing costs are significantly lower for R-Jio as compared with peers (Exhibit 83, 85 and 87). We believe the accounting for amortization of customer acquisition costs varies across telcos, depending on expected lifetime value and churn rates.

**Other expenses largely similar trends across telcos**

Other expenses form a smaller portion of overall SG&A and other expenses for telcos, accounting for ~2-3% of overall revenue for all three telcos (Exhibit 86). Similar to sales and marketing, R-Jio has the lowest spends on other expenses among Indian telcos (Exhibit 88). For Bharti, other expenses are also higher due to content costs (likely for its DTH business) and IT expenses (part of network opex for Vi).

**SG&A expenses increased sharply for all telcos, likely driven by higher cost of customer acquisition over past two years**

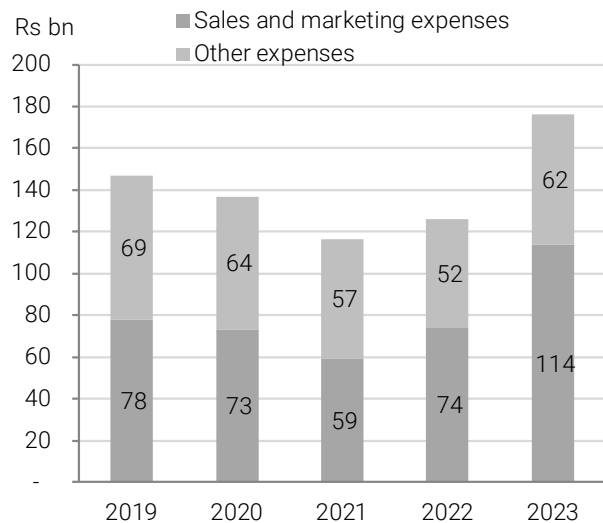
Exhibit 79: SG&A and other expenses trends, March fiscal-year ends



Source: Companies, Kotak Institutional Equities estimates

**Sales and marketing expenses have increased sharply for the three telcos over past two years on high subs acquisition costs**

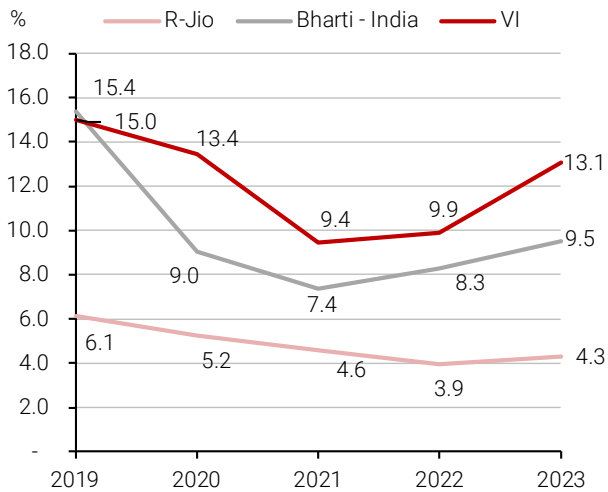
Exhibit 80: Split between sales & marketing and other expenses for three telcos combined, March fiscal year-ends



Source: Companies, Kotak Institutional Equities estimates

**SG&A and other expenses as % of revenue for R-Jio significantly lower as compared with Bharti and Vi**

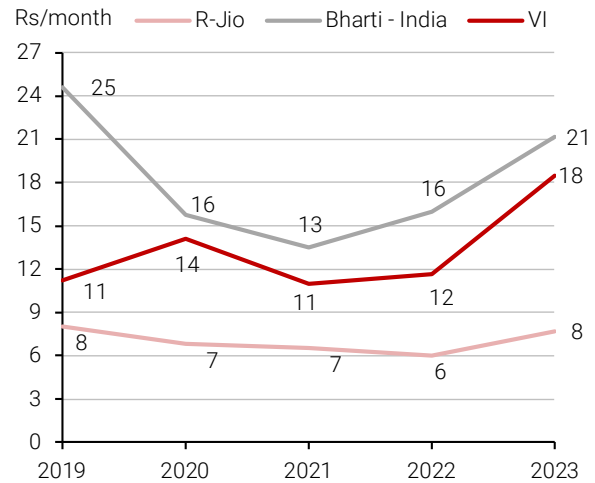
**Exhibit 81: SG&A and other expenses as % of revenue, March fiscal year-ends**



Source: Companies, Kotak Institutional Equities estimates

**SG&A and other expenses per sub highest for Bharti at Rs21/month, followed by Vi at Rs18/month, R-Jio lowest at Rs8**

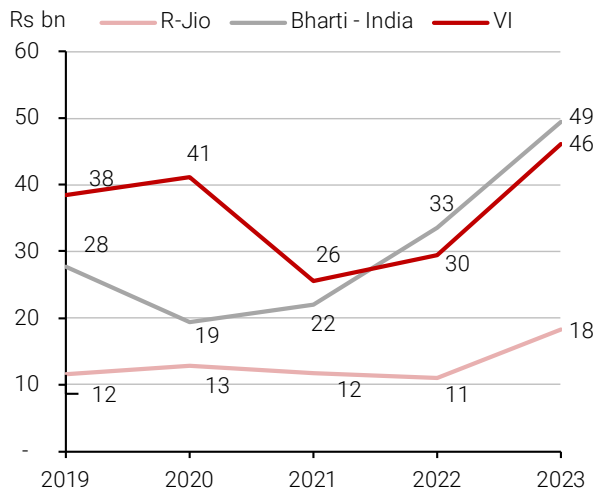
**Exhibit 82: SG&A and other expenses per subscriber, March fiscal year-ends**



Source: Companies, Kotak Institutional Equities estimates

**Bharti and Vi's sales and marketing expenses booked in P/L are significantly ahead of R-Jio**

**Exhibit 83: Sales and marketing expenses trends, March fiscal year ends**



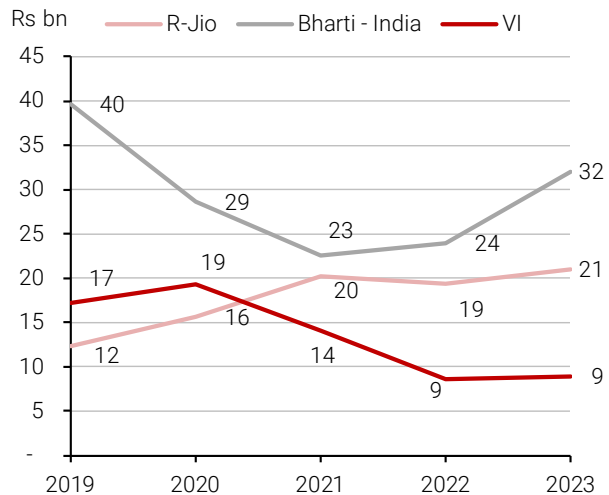
Notes:

i) Bharti India here implies standalone + Hexacom

Source: Companies, Kotak Institutional Equities estimates

**Bharti leads peers on other expenses as well, followed by R-Jio**

**Exhibit 84: Other expenses trends, March fiscal year-ends**



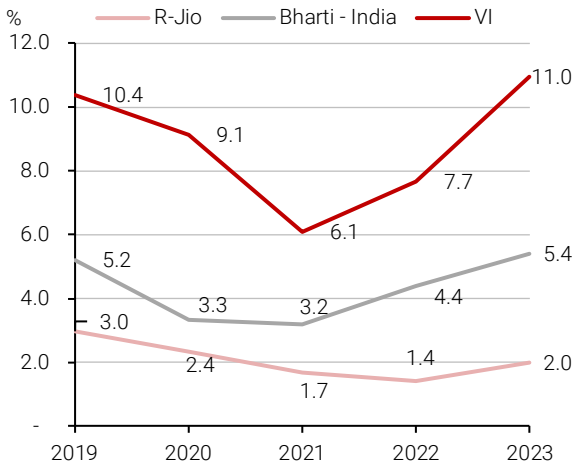
Notes:

i) Bharti India here implies standalone + Hexacom

Source: Companies, Kotak Institutional Equities estimates

**Sales and marketing expenses as % of revenue have increased for all telcos; significantly at ~11% for Vi in FY2023**

**Exhibit 85: Sales and marketing expenses as % of revenue, March fiscal year-ends**



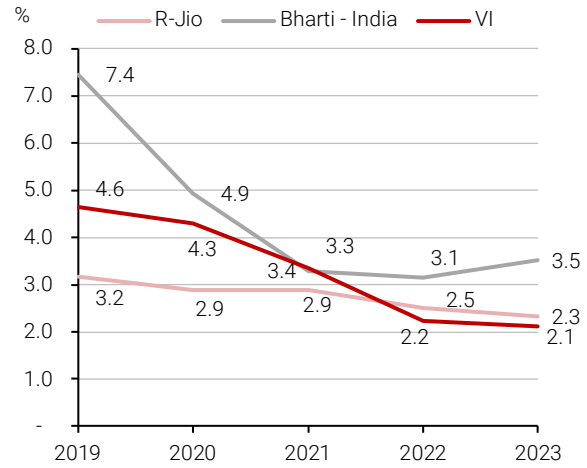
Notes:

i) Bharti India here implies standalone + Hexacom

Source: Companies, Kotak Institutional Equities estimates

**Other expenses as % of revenue has been on a declining trend for all telcos, but remains highest for Bharti at ~3.5% in FY2023**

**Exhibit 86: Other expenses as % of revenue, March fiscal year-ends**



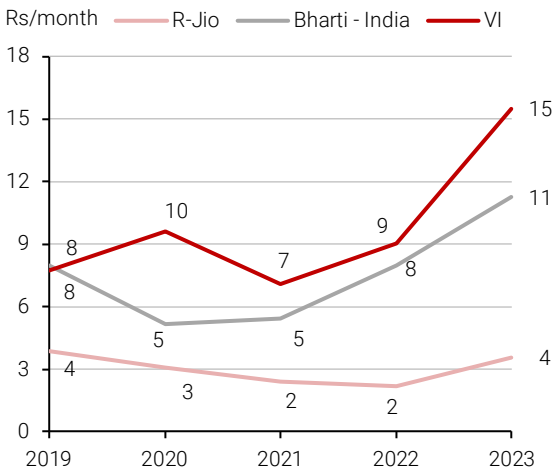
Notes:

i) Bharti India here implies standalone + Hexacom

Source: Companies, Kotak Institutional Equities estimates

**Sales and marketing expenses per sub increased sharply for all three telcos, highest for Vi at Rs15/month, followed by Bharti**

**Exhibit 87: Sales and marketing expenses per subscriber, March fiscal year-ends**



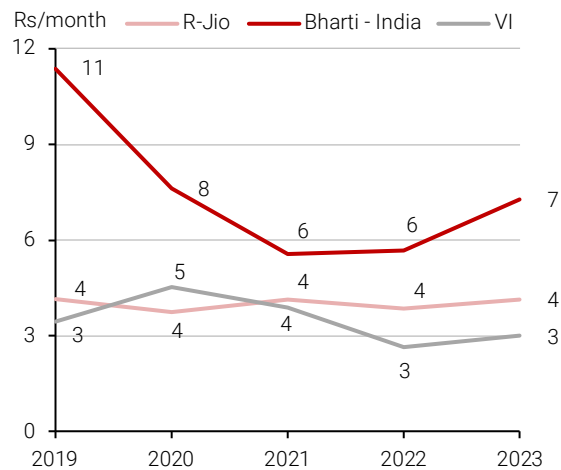
Notes:

i) Bharti India here implies standalone + Hexacom

Source: Companies, Kotak Institutional Equities estimates

**Other expenses per sub highest for Vi at Rs7/month and stable at ~Rs3-4/month for Bharti and Vi**

**Exhibit 88: Other expenses per subscriber, March fiscal year-ends**



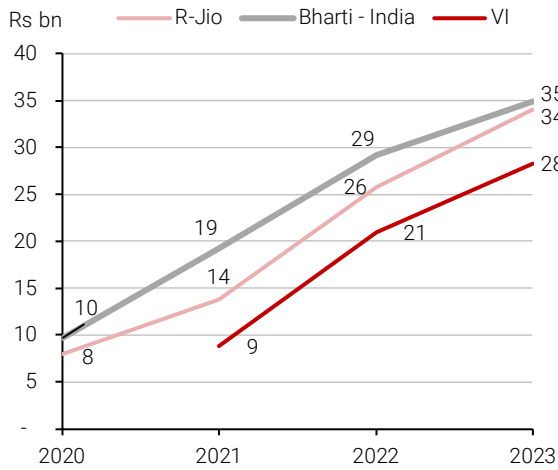
Notes:

i) Bharti India here implies standalone + Hexacom

Source: Companies, Kotak Institutional Equities estimates

**Cost incurred (though not fully amortized) has likely increased sharply for three telcos, despite muted industry net adds**

**Exhibit 89: Likely cost incurred on customer acquisitions, March fiscal year-ends**



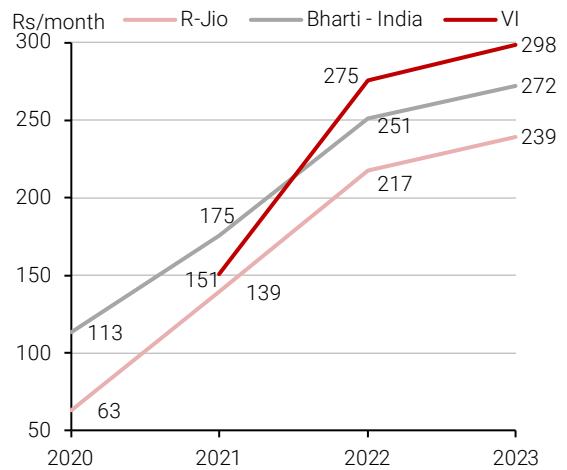
Notes:

i) Bharti India here implies standalone + Hexacom

Source: Companies, Kotak Institutional Equities estimates

**On our estimates, customer acquisition cost per gross subscriber addition has increased sharply for telcos**

**Exhibit 90: Likely customer acquisition cost per gross subscriber addition, March fiscal year-ends**



Notes:

i) Bharti India here implies standalone + Hexacom

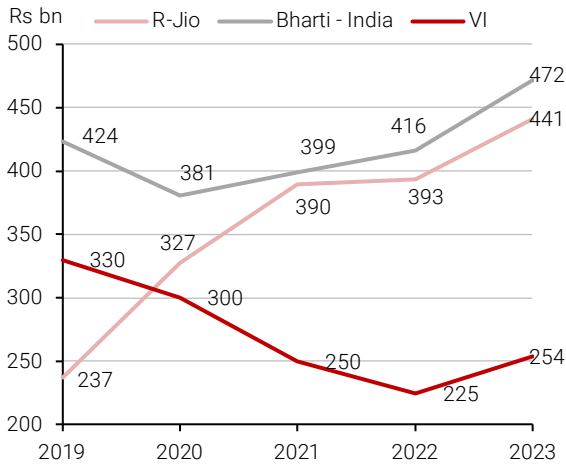
Source: Companies, Kotak Institutional Equities estimates

**Overall reported expenses and expenses including leases**

Among the three telcos, given multiple offerings (DTH, enterprise, data centers and others) apart from wireless and fixed broadband, Bharti has the highest reported operating expenses in FY2023, followed by R-Jio. Bharti also leads in overall expenses on per subs basis at Rs107/month, while it is broadly similar for R-Jio and Vi at ~Rs85/month. We note that Bharti and Vi have benefited more from Ind AS 116 implementations than R-Jio.

**Bharti leads in overall reported expenses, followed by R-Jio**

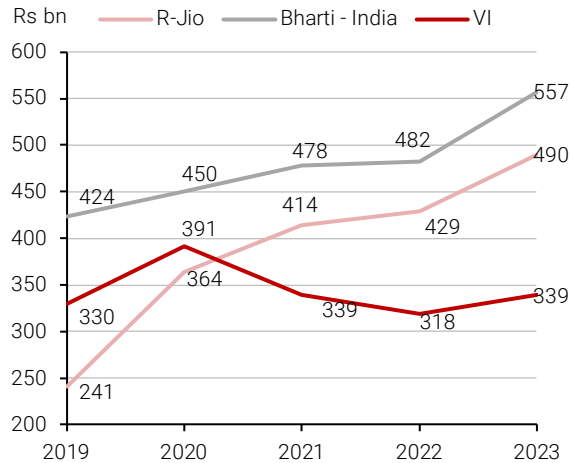
Exhibit 91: Overall reported expenses trends, March fiscal-year ends



Source: Companies, Kotak Institutional Equities estimates

**Bharti has by far the largest expenses adjusted for leases, Ind AS impact on expenses highest for Vi, followed by Bharti**

Exhibit 92: Overall expenses adjusted for leases, March fiscal year-ends



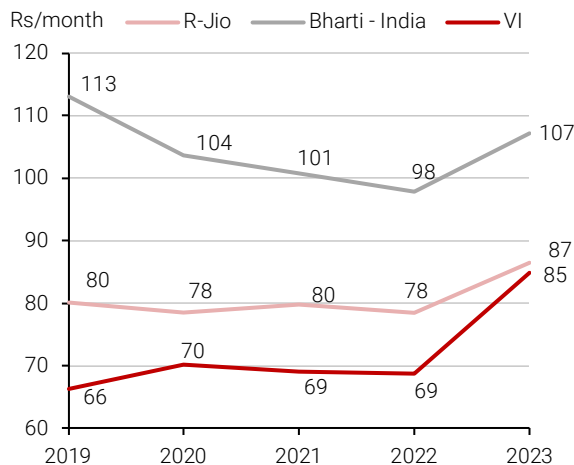
Notes:

- i) Adjusted expenses include impact of depreciation and interest on leases
- ii) Bharti India includes lease impact for standalone + Hexacom

Source: Companies, Kotak Institutional Equities estimates

**Reported expenses highest for Bharti at Rs107/sub/month, followed by Rs85-87 per month for Vi and R-Jio**

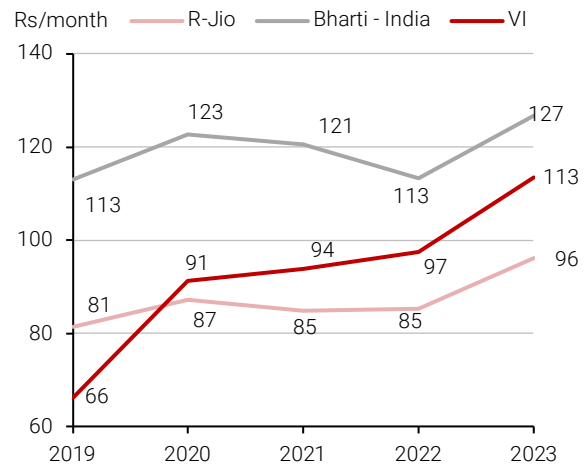
Exhibit 93: Overall reported expenses per subscriber, March fiscal year-ends



Source: Companies, Kotak Institutional Equities estimates

**Adjusted for lease impact, Bharti has the highest expense per sub at Rs124/month, followed by Vi at Rs113 and R-Jio at Rs96**

Exhibit 94: Overall expenses adjusted for leases per subscriber, March fiscal year-ends



Notes:

- i) Adjusted expenses include impact of depreciation and interest on leases
- ii) Bharti India includes lease impact for standalone + Hexacom

Source: Companies, Kotak Institutional Equities estimates

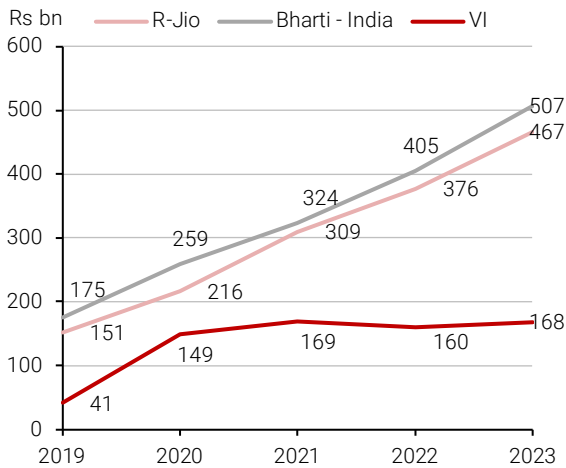


**EBITDA and Ind AS 116-adjusted EBITDA**

On reported basis, Bharti leads in overall EBITDA, followed by R-Jio with Vi a distant third. In the past few years, Bharti has leapfrogged R-Jio on reported EBITDA margins. However, adjusted for leases, Bharti and R-Jio’s EBITDA would be largely similar at ~Rs420 bn, whereas Vi’s Ind AS-adjusted EBITDA is significantly lower versus peers at ~Rs83 bn. On adjusted basis, telcos margins are lower with R-Jio leading with the highest margin at ~46%, followed by Bharti at ~43%.

**Bharti’s India operations reported EBITDA slightly ahead of R-Jio, but R-Jio catching up fast, Vi continues to trail peers**

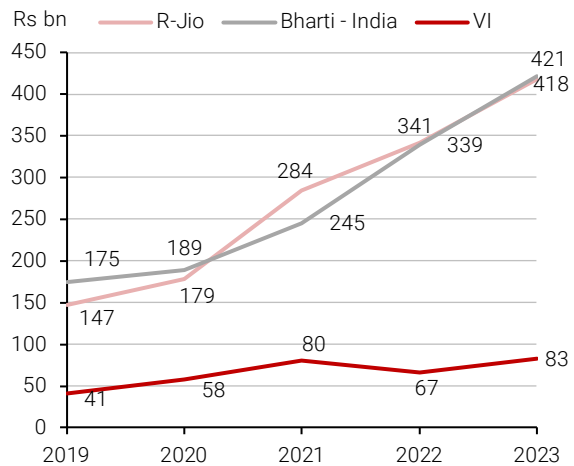
Exhibit 95: Reported EBITDA trends, March fiscal-year ends



Source: Companies, Kotak Institutional Equities estimates

**Adjusted EBITDA largely similar for Bharti’s India operations and R-Jio, Vi significantly trails both Bharti and R-Jio**

Exhibit 96: Ind AS-adjusted EBITDA trends, March fiscal-year ends



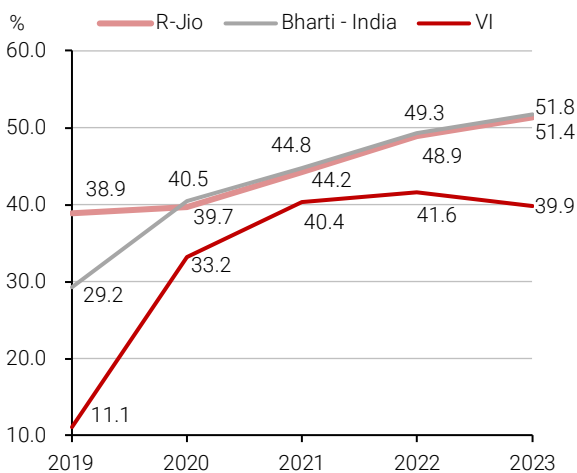
Notes:

- i) Adjusted EBITDA includes impact of depreciation and interest on leases
- ii) Bharti India includes lease impact for standalone + Hexacom

Source: Companies, Kotak Institutional Equities estimates

**Bharti has slight lead versus R-Jio on reported EBITDA margins**

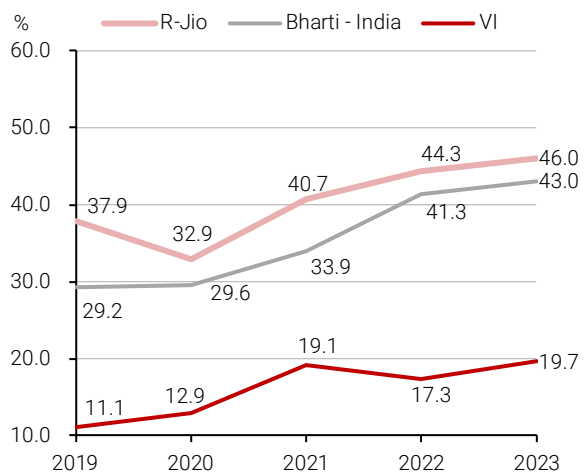
Exhibit 97: Reported EBITDA margin trends, March fiscal year-ends



Source: Companies, Kotak Institutional Equities estimates

**However, adjusted for leases, telcos’ margins are lower with R-Jio ahead of Bharti on EBITDA margins**

Exhibit 98: Adjusted EBITDA margin trends, March fiscal year-ends



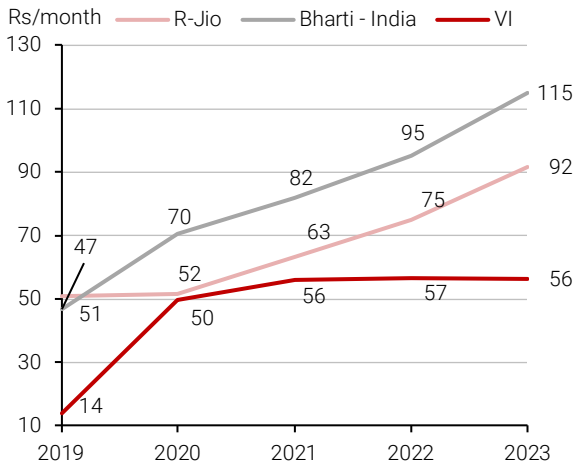
Notes:

- i) Adjusted EBITDA includes impact of depreciation and interest on leases
- ii) Bharti India includes lease impact for standalone + Hexacom

Source: Companies, Kotak Institutional Equities estimates

**Bharti leads on reported EBITDA per subscriber, Vi's EBITDA per sub flat over FY2021-23E versus growth for peers**

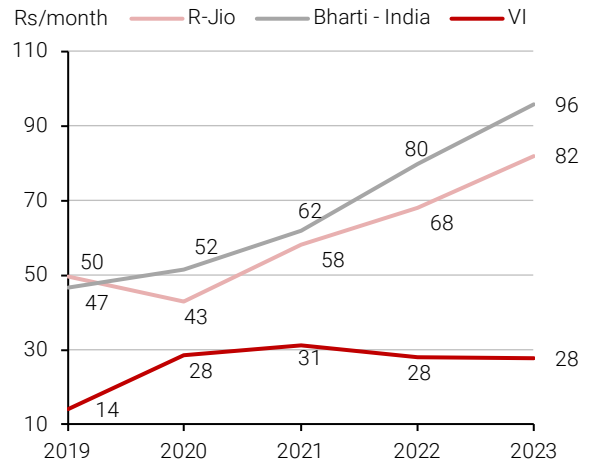
Exhibit 99: Reported EBITDA per subscriber, March fiscal year-ends



Source: Companies, Kotak Institutional Equities estimates

**Bharti and R-Jio's adjusted EBITDA per subscriber rose sharply over FY2021-23, whereas it has been on a declining trend for Vi**

Exhibit 100: Adjusted EBITDA per subscriber, March fiscal year-ends



Notes:

- i) Adjusted EBITDA includes impact of depreciation and interest on leases
- ii) Bharti India includes lease impact for standalone + Hexacom

Source: Companies, Kotak Institutional Equities estimates

### Depreciation and Amortization

Given the asset heavy nature of the telecom business, depreciation and amortization is a key expense for telcos. The depreciation and amortization expense booked in P/L depends on the choice of accounting policy—straight line method, WDV or based on optimum capacity utilization. After the implementation of Ind AS 116 for leases, part of the network opex is now reported as depreciation on RoU assets. Among other things, we note that depreciation and amortization is also impacted by commercialization/non-commercialization of spectrum/network equipment.

#### R-Jio's reported and adjusted D&A as % of gross block lower than peers

On a reported basis, Bharti has the highest D&A expenses, with D&A as a percentage of gross block above 8%, followed by Vi at ~7.5%, with R-Jio lowest at ~7% (Exhibits 111 and 113). Reported D&A accounts for ~Rs77/month per sub for Vi, followed by ~Rs67/month for Bharti, with R-Jio by far the lowest at ~Rs36/month per sub (Exhibit 115). Vi has been reporting loss at EBIT levels, given significantly higher D&A at ~55% of revenue (versus 20%/30% for R-Jio/Bharti, Exhibit 117).

As highlighted earlier in the network opex section, Vi and Bharti have seen the highest EBITDA margin expansion due to implementation of Ind AS 116. After implementation of Ind AS 116 for leases, part of the network opex is now reported as depreciation on RoU assets. We note, depreciation on RoU assets is the highest for Vi followed by Bharti, with R-Jio's depreciation on RoU assets nearly half of Vi's (Exhibit 123).

Bharti and Vi continue to have higher depreciation, even after adjusting for Ind AS 116 implementation (Exhibit 112), with adjusted D&A as a proportion of gross block (excluding RoU assets), hovering in the ~7.2-7.5% range for Bharti, followed by the ~6.5-7.5% range in the past few years for Vi. R-Jio's depreciation rate has been on a rising trend in the past few years, but still remains significantly below Bharti and Vi's at ~6.1% in FY2023 (Exhibit 114).

Adjusted D&A accounts for ~Rs55-56/month per sub for Bharti and Vi in FY2023, as compared with modest ~Rs30/month for R-Jio (Exhibit 116). Even on adjusted basis, Vi's EBIT would remain negative as core depreciation remains high at ~40% of revenue (versus 17%/25% for R-Jio/Bharti, Exhibit 118).

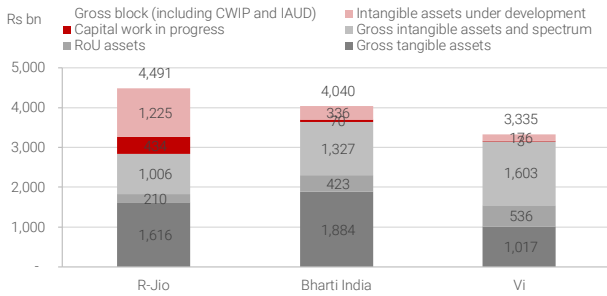
#### Expect R-Jio's D&A expense to rise sharply, as it commercializes recently acquired spectrum

On a more granular analysis of telcos' depreciation and amortization, we note:

- ▶ Depreciation on tangible assets for Bharti has been broadly stable in the range of 8.3-8.6% of gross block, while it has declined to ~8% of gross block for Vi in FY2023, likely due to lower asset additions in the past few years. For R-Jio, depreciation on tangible assets as a percentage of gross block has been rising over the years, but still remains significantly below Bharti and Vi at ~6.8% in FY2023 (Exhibits 119 and 120). We believe depreciation on tangible assets will continue to rise for R-Jio over the next few years.
- ▶ Amortization of intangible assets and spectrum has been largely stable for Bharti and Vi at ~5.5-6% for Bharti and Vi, while it has been fluctuating for R-Jio and was lower at ~5% in FY2023 (Exhibits 121 and 122).
- ▶ Furthermore, we note that including CWIP and intangibles under development (primarily spectrum purchases in 2021 and 2022 auctions), R-Jio now has the highest gross block (Exhibit 101), but ~37% of the gross block is yet to be deployed (versus ~5%/10% for Vi/Bharti; Exhibits 103 and 104). Based on R-Jio's current depreciation rates, we believe **R-Jio's D&A expenses could rise ~Rs90 bn, as the under-development assets are commercialized over the next few years.**

**With recent spectrum investments, R-Jio has highest overall gross block, followed by Bharti and Vi**

**Exhibit 101: Gross block (including CWIP and IAUD) build-up for three telcos for 2023, March fiscal year-ends**



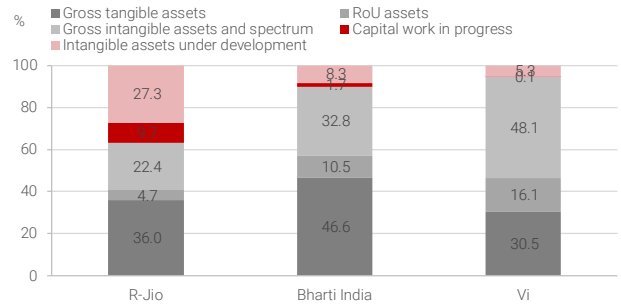
Notes:

i) Bharti India here implies standalone + Hexacom

Source: Companies, Kotak Institutional Equities estimates

**CWIP and IAUD account for ~37% of overall gross block for R-Jio as compared with modest ~10% for Bharti and ~5.4% for Vi**

**Exhibit 102: Gross block (including CWIP and IAUD) build-up for three telcos for 2023, March fiscal year-ends**



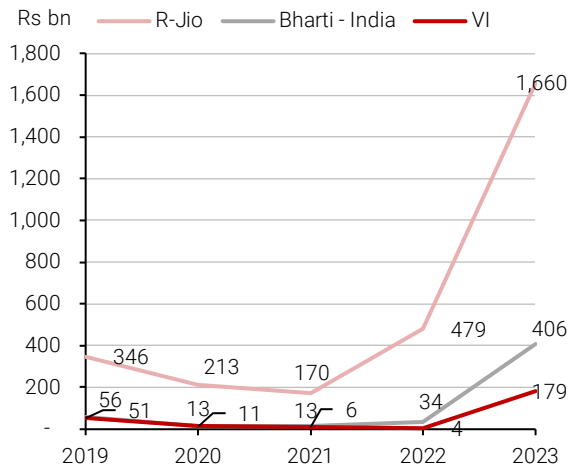
Notes:

i) Bharti India here implies standalone + Hexacom

Source: Companies, Kotak Institutional Equities estimates

**R-Jio has significantly higher assets under development as compared to Bharti and Vi, recent increases driven by 5G**

**Exhibit 103: Capital work in progress (CWIP) and intangible assets under development (IAUD) trends, March fiscal year-ends**



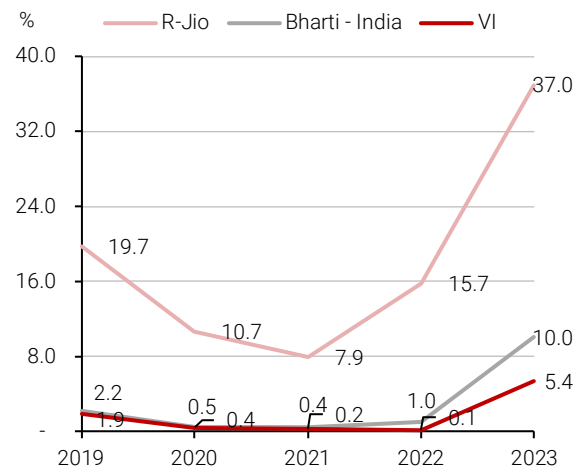
Notes:

i) Bharti India here implies standalone + Hexacom

Source: Companies, Kotak Institutional Equities estimates

**R-Jio's asset under development as % of gross block has remained significantly higher than Bharti and Vi**

**Exhibit 104: CWIP and IAUD as % of overall gross block, March fiscal year-ends**



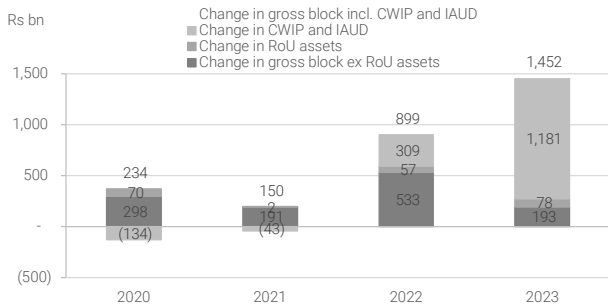
Notes:

i) Bharti India here implies standalone + Hexacom

Source: Companies, Kotak Institutional Equities estimates

**R-Jio's gross block additions have increased sharply over past two years on large spectrum purchases**

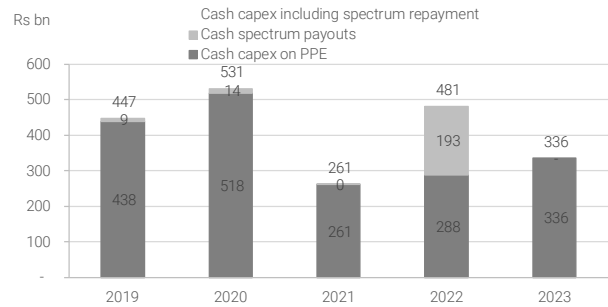
**Exhibit 105: Gross block additions (including CWIP and IAUD) for R-Jio, March fiscal year-ends**



Source: Companies, Kotak Institutional Equities estimates

**R-Jio's cash capex has consistently remained ahead of the peers**

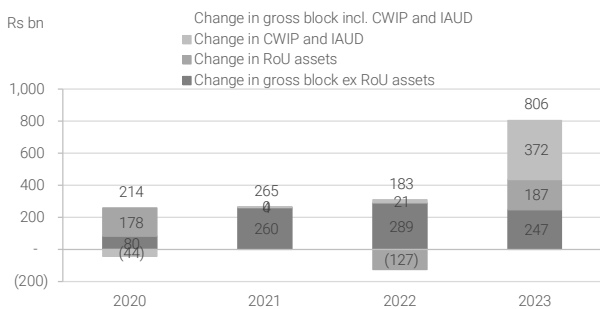
**Exhibit 106: Cash capex on PPE and deferred/upfront spectrum payments for R-Jio, March fiscal year-ends**



Source: Companies, Kotak Institutional Equities estimates

**Bharti's gross block additions in FY2023 increased sharply on 5G spectrum purchases**

**Exhibit 107: Gross block additions (including CWIP and IAUD) for Bharti, March fiscal year-ends**



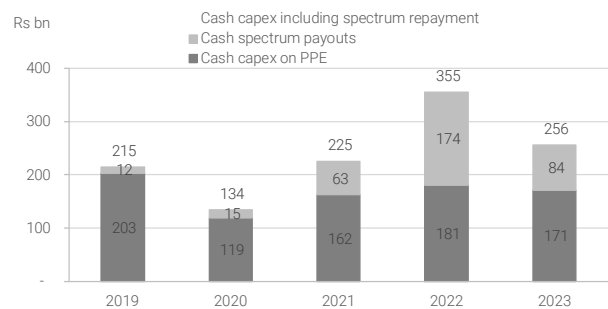
Notes:

i) Bharti India here implies standalone + Hexacom

Source: Companies, Kotak Institutional Equities estimates

**Cash capex on PPE remain rangebound for Bharti, prepayments drive higher cash spends on spectrum in FY2022 and FY2023**

**Exhibit 108: Cash capex on PPE and deferred/upfront spectrum payments for Bharti, March fiscal year-ends**



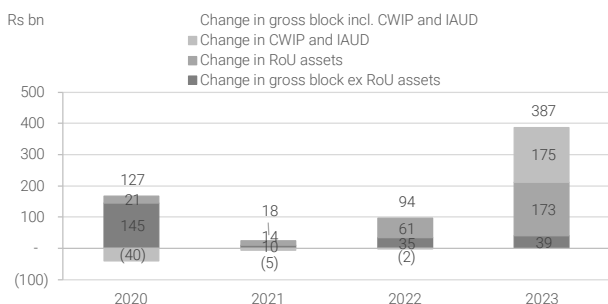
Notes:

i) Bharti India here implies standalone + Hexacom

Source: Companies, Kotak Institutional Equities estimates

**Gross block additions have been relatively lower for Vi, FY2023 bump up, driven by 5G spectrum acquisition**

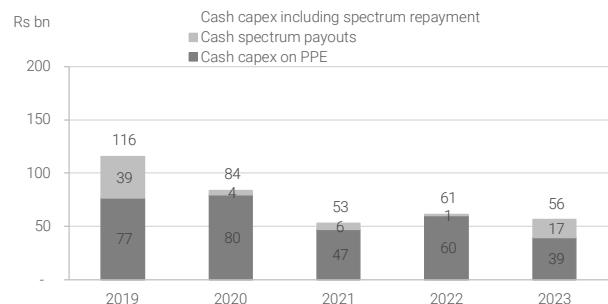
**Exhibit 109: Gross block additions (including CWIP and IAUD) for Vi, March fiscal year-ends**



Source: Companies, Kotak Institutional Equities estimates

**Driven by cash constraints, Vi's cash capex has been a small fraction of peers over the past few years**

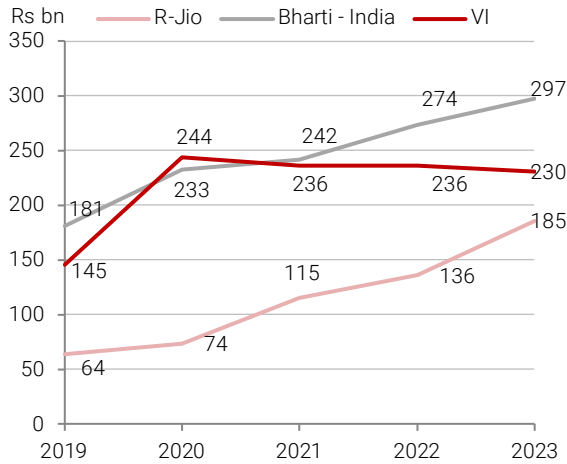
**Exhibit 110: Cash capex on PPE and deferred/upfront spectrum payments for Vi, March fiscal year-ends**



Source: Companies, Kotak Institutional Equities estimates

**Bharti's reported D&A significantly ahead of peers, R-Jio's reported D&A rising sharply over past few years**

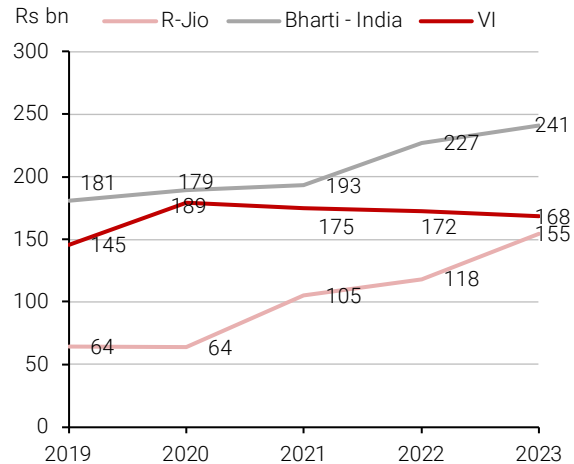
**Exhibit 111: Reported depreciation and amortization trends, March fiscal-year ends**



Source: Companies, Kotak Institutional Equities estimates

**Bharti's adjusted D&A still the highest followed by Vi, expect R-Jio's adjusted D&A to increase sharply over next few years**

**Exhibit 112: Depreciation and amortization adjusted for Ind AS 116, March fiscal-year ends**



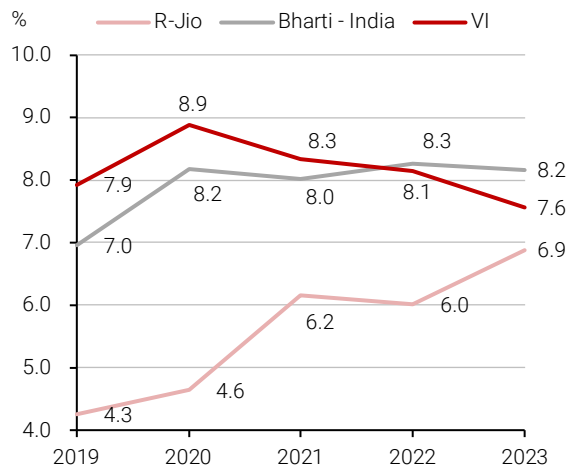
Notes:

- i) Adjusted D&A excludes depreciation on RoU assets
- ii) Bharti India excludes depreciation on RoU assets for standalone + Hexacom

Source: Companies, Kotak Institutional Equities estimates

**Bharti and Vi's reported D&A significantly higher due to more conservative depreciation polycys on tangible assets**

**Exhibit 113: Reported D&A as % of gross block, March fiscal year-ends**



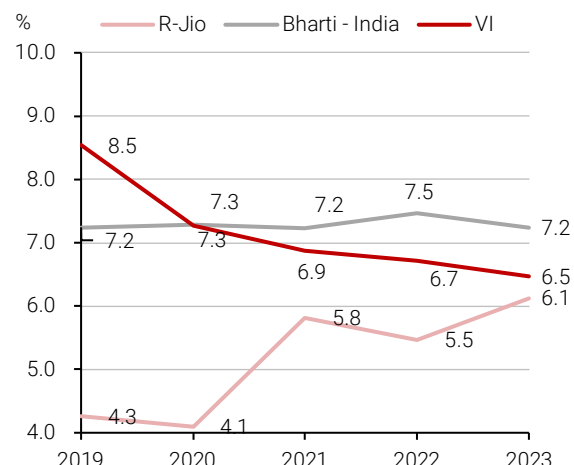
Notes:

- i) Bharti India here implies standalone + Hexacom

Source: Companies, Kotak Institutional Equities estimates

**Even adjusted for depreciation on RoU assets, Bharti's depreciation rate significantly higher versus Vi and R-Jio**

**Exhibit 114: Adjusted D&A as % of gross block, March fiscal year-ends**



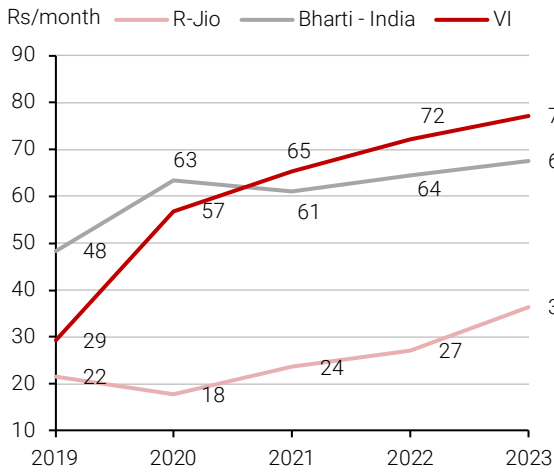
Notes:

- i) Adjusted D&A excludes depreciation on RoU assets
- ii) Bharti India here implies standalone + Hexacom

Source: Companies, Kotak Institutional Equities estimates

**Vi's reported D&A was highest on per subscriber basis, followed by Bharti; R-Jio's reported D&A per sub on rising trend**

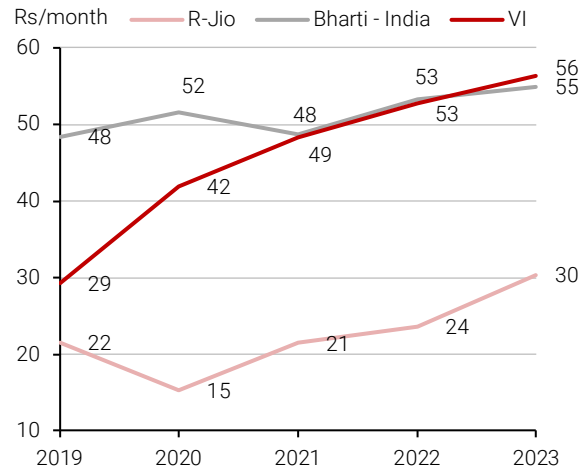
Exhibit 115: Reported D&A per subscriber, March fiscal year-ends



Source: Companies, Kotak Institutional Equities estimates

**Adjusted for leases, Bharti and Vi's D&A per sub largely similar and significantly higher as compared with R-Jio**

Exhibit 116: Adjusted D&A per subscriber, March fiscal year-ends



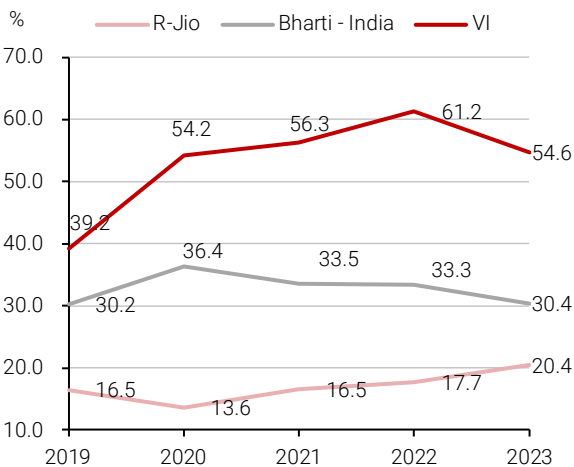
Notes:

- i) Adjusted D&A excludes depreciation on RoU assets
- ii) Bharti India excludes depreciation on RoU assets for standalone + Hexacom

Source: Companies, Kotak Institutional Equities estimates

**Reported D&A as % of revenue significantly higher for Vi as compared with Bharti, with R-Jio least at ~20%**

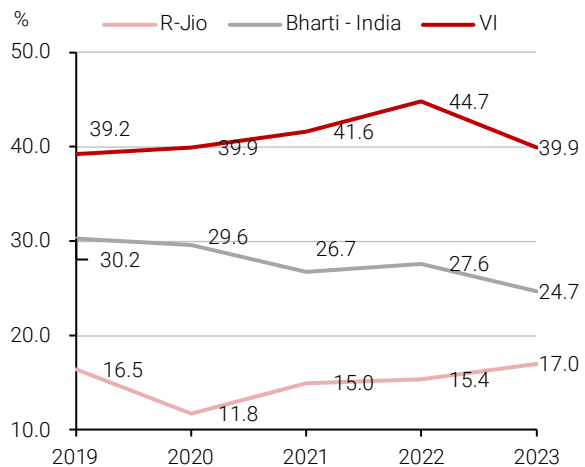
Exhibit 117: Reported D&A as % of revenue, March fiscal year-ends



Source: Companies, Kotak Institutional Equities estimates

**Vi's adjusted D&A as % of revenue still the highest, followed by Bharti and R-Jio, expect R-Jio's D&A to increase sharply**

Exhibit 118: Adjusted D&A as % of revenue, March fiscal year-ends



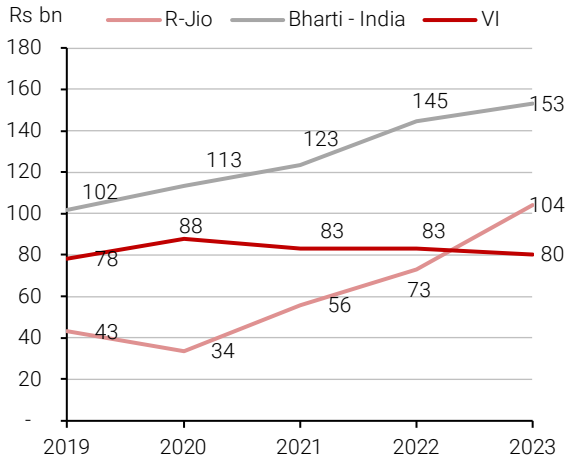
Notes:

- i) Adjusted D&A excludes depreciation on RoU assets
- ii) Bharti India excludes depreciation on RoU assets for standalone + Hexacom

Source: Companies, Kotak Institutional Equities estimates

**Bharti's depreciation on assets highest, R-Jio's depreciation rising with asset base, whereas Vi's is on a declining trend**

**Exhibit 119: Depreciation on assets, March fiscal year-ends**



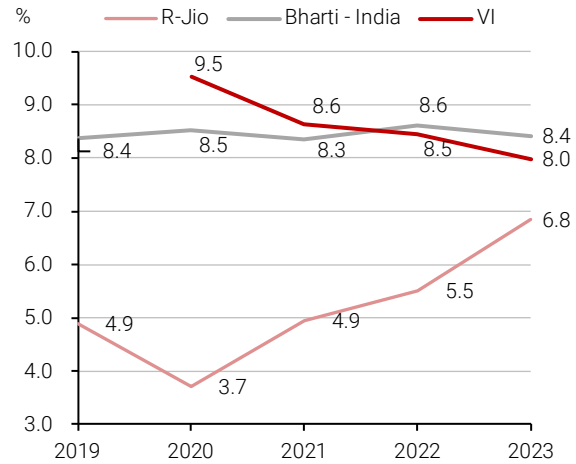
Notes:

i) Bharti India here implies standalone + Hexacom

Source: Companies, Kotak Institutional Equities estimates

**Bharti and Vi's depreciation rate on tangible assets significantly higher than R-Jio, R-Jio's depreciation rate on a rising trend**

**Exhibit 120: Depreciation on assets % of gross tangible assets, March fiscal year-ends**



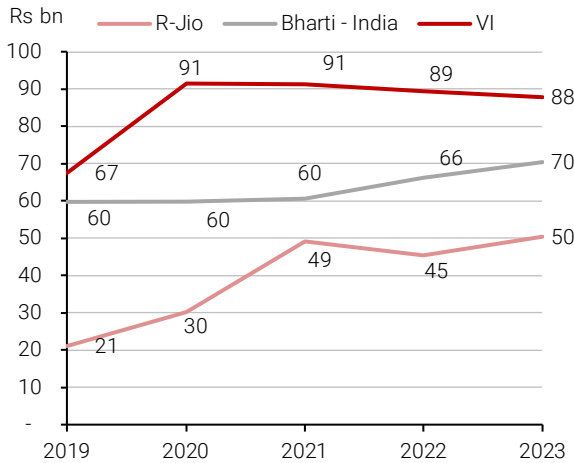
Notes:

i) Bharti India here implies standalone + Hexacom

Source: Companies, Kotak Institutional Equities estimates

**Vi's amortization currently highest, expect R-Jio's amortization to increase once recently acquired spectrum is commercialized**

**Exhibit 121: Amortization of intangibles and spectrum, March fiscal year-ends**



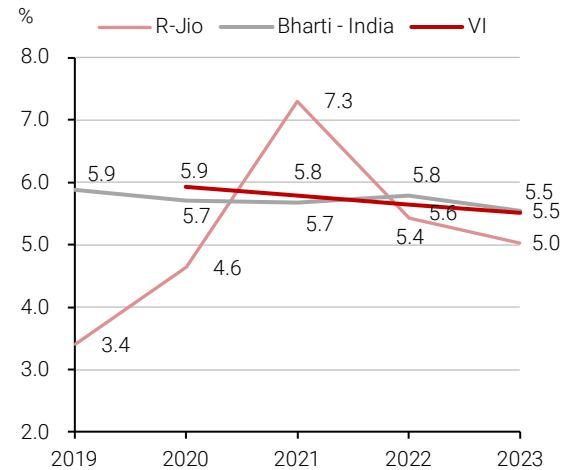
Notes:

i) Bharti India here implies standalone + Hexacom

Source: Companies, Kotak Institutional Equities estimates

**Bharti and Vi's amortization rate has been largely stable, while it has fluctuated significantly for R-Jio in past few years**

**Exhibit 122: Amortization as % of gross intangibles including spectrum, March fiscal year-ends**



Notes:

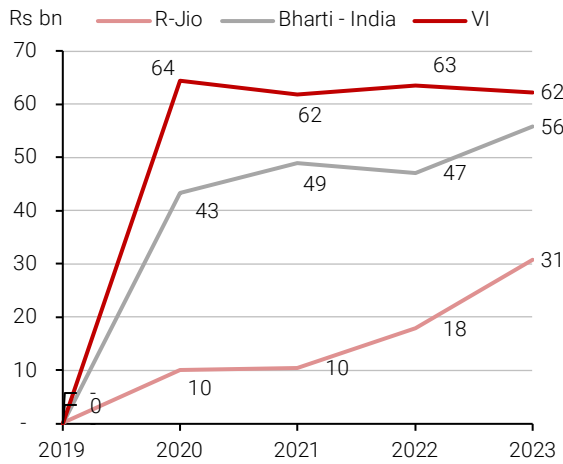
i) Bharti India here implies standalone + Hexacom

Source: Companies, Kotak Institutional Equities estimates



**Vi and Bharti are significantly ahead of R-Jio on depreciation on RoU assets, in line with their significantly higher RoU assets**

**Exhibit 123: Depreciation on RoU assets, March fiscal year-ends**



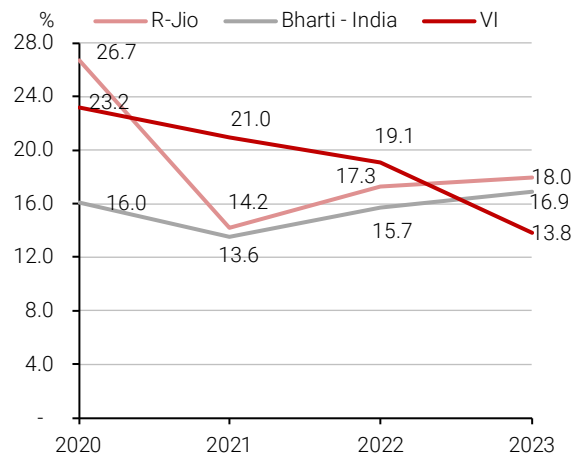
Notes:

i) Bharti India here implies standalone + Hexacom

Source: Companies, Kotak Institutional Equities estimates

**Depreciation rate on RoU assets has remained higher at 14-21% for three telcos in past few years**

**Exhibit 124: Depreciation on RoU assets % of RoU assets, March fiscal year-ends**



Notes:

i) Bharti India here implies standalone + Hexacom

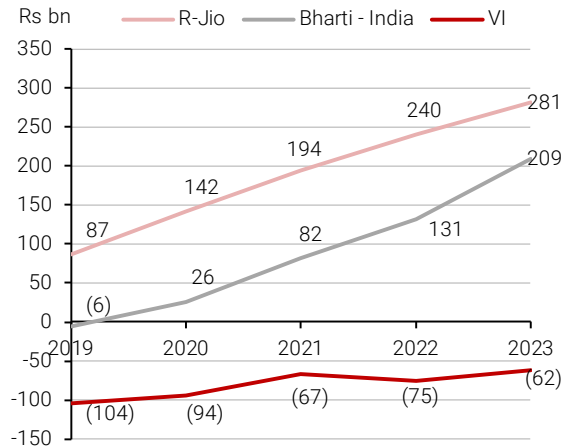
Source: Companies, Kotak Institutional Equities estimates

**EBIT, Ind AS 116-adjusted EBIT and RoCE trends**

On reported and lease adjusted basis, R-Jio leads the Indian telcos on EBIT. However, we note that driven by India wireless market repair, EBIT growth has been sharpest for Bharti, while it has grown at slower pace for R-Jio over the past few years. R-Jio’s depreciation has been rising over the past few years and we expect R-Jio’s depreciation to increase sharply over the next few years, as it deploys the spectrum and other assets under development. R-Jio’s RoCE has remained stable in 8-9%, while it has improved sharply for Bharti over the past few years and we expect Bharti’s RoCE to leapfrog R-Jio’s over the next few years.

**R-Jio leads on reported EBIT, but Bharti’s EBIT growth significantly higher than R-Jio in past few years**

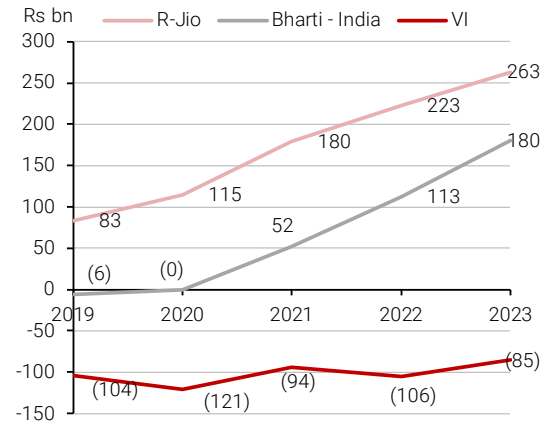
**Exhibit 125: Reported EBIT trends, March fiscal-year ends**



Source: Companies, Kotak Institutional Equities estimates

**Adjusted EBIT gap between Bharti and R-Jio higher, but Bharti’s growth has been stronger in past few years**

**Exhibit 126: Ind AS-adjusted EBIT trends, March fiscal-year ends**



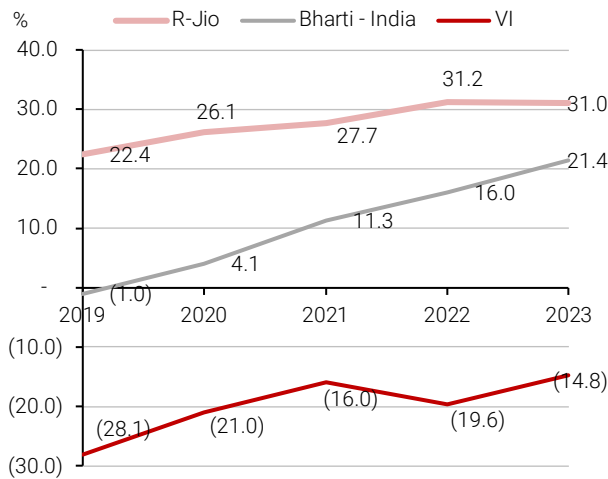
Notes:

- i) Adjusted EBIT includes impact of interest on leases
- ii) Bharti India includes interest on leases for standalone + Hexacom

Source: Companies, Kotak Institutional Equities estimates

**R-Jio leads on reported EBIT margin, Bharti closing the gap with R-Jio in past few years**

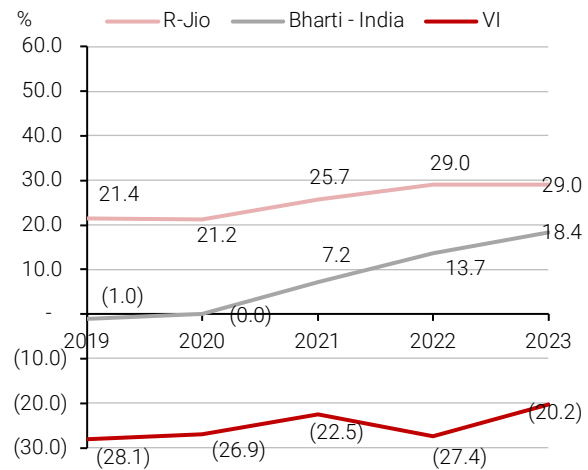
**Exhibit 127: Reported EBIT margin trends, March fiscal year-ends**



Source: Companies, Kotak Institutional Equities estimates

**Even on adjusted basis, Bharti is catching up with R-Jio on EBIT margins, expect Bharti’s EBIT margin growth to remain stronger**

**Exhibit 128: Adjusted EBIT margin trends, March fiscal year-ends**



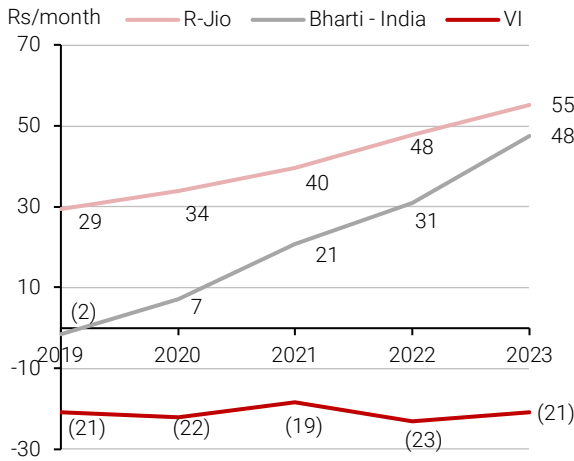
Notes:

- i) Adjusted EBIT includes impact of interest on leases
- ii) Bharti India includes interest on leases for standalone + Hexacom

Source: Companies, Kotak Institutional Equities estimates

**R-Jio leads on reported EBIT per subscriber at Rs55/month, Bharti's EBIT per subscriber improves sharply to Rs48/month**

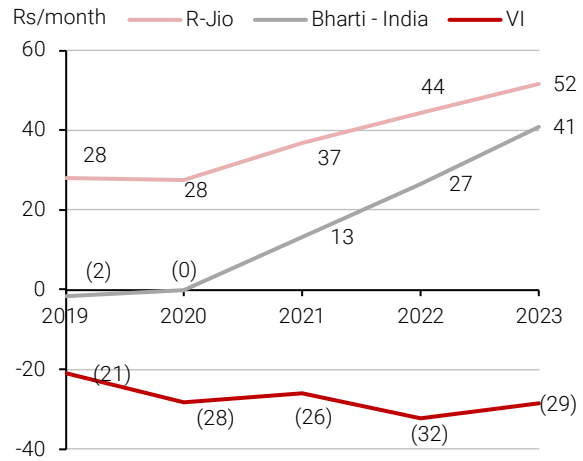
**Exhibit 129: Reported EBIT per subscriber, March fiscal year-ends**



Source: Companies, Kotak Institutional Equities estimates

**Even on adjusted basis, R-Jio leads with Rs52/month per sub, followed by Bharti at Rs41/month, remains negative for Vi**

**Exhibit 130: Adjusted EBIT per subscriber, March fiscal year-ends**



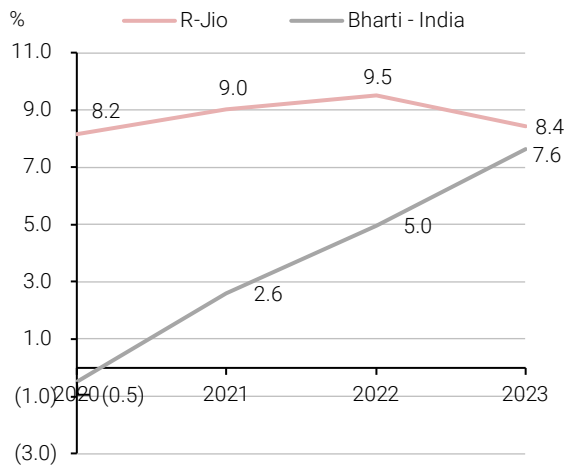
Notes:

- i) Adjusted EBIT includes impact of interest on leases
- ii) Bharti India includes interest on leases for standalone + Hexacom

Source: Companies, Kotak Institutional Equities estimates

**Bharti's RoCE has improved significantly over past few years on India wireless market repair, R-Jio's largely stable**

**Exhibit 131: Pre-tax RoCE, March fiscal year-ends**



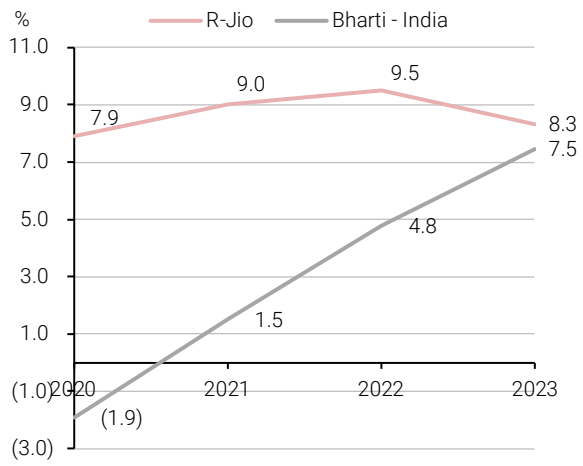
Notes:

- i) Bharti India here implies standalone + Hexacom

Source: Companies, Kotak Institutional Equities estimates

**Even on lease adjusted basis, Bharti's RoCE has improved sharply over past few years**

**Exhibit 132: Adjusted pre-tax RoCE, March fiscal year-ends**



Notes:

- i) Adjusted EBIT includes impact of interest on leases
- ii) Bharti India here implies standalone + Hexacom

Source: Companies, Kotak Institutional Equities estimates

### Finance cost

With large spectrum acquisitions over past decade and high competitive intensity to increase network rollouts, Indian telcos' debt levels have increased, as they took significant external debt and large deferred payment liabilities on spectrum acquisitions. Given the debt heavy balance sheet, finance cost is also a key expense for Indian telcos.

#### Debt levels increase for all three telcos, but large proportion of debt is Gol debt toward spectrum

Over the past few years, overall debt has increased sharply (Exhibit 137) for all three telcos, driven by spectrum purchases and accelerated network rollouts (for Bharti and R-Jio). R-Jio's gross debt (including deferred spectrum liabilities) increased to Rs1.5 tn (from ~Rs300 bn in FY2021), as it acquired ~Rs1.5 tn worth of spectrum in 2021 and 2022 spectrum auctions. For Bharti and Vi, apart from spectrum purchases, debt has also increased due to adverse judgment on the long-standing AGR dispute. Bharti's India operations (standalone + Hexacom) gross debt increased to ~Rs1.5 tn (from Rs876 bn in FY2020) and for Vi, it increased to Rs2 tn (from Rs1.15 tn in FY2020). Overall, debt for telcos would be even higher including the creditors for capex and interest accrued, but not yet due (Exhibit 140) However, we note that bulk of the telco's debt is toward deferred payment liabilities to the GoI for spectrum and AGR dues (Exhibit 134). With Bharti and R-Jio going for accelerated 5G rollouts, creditors for capex have also increased sharply in FY2023 (Exhibit 139).

#### Reported finance cost in P/L statement significantly higher and rising for Vi, lowest for R-Jio

Increase in debt levels has also led to a sharp rise in reported finance costs, especially for Bharti and Vi. The reported finance cost in P/L is relatively lower for R-Jio and has been rather stable, despite a significant increase in gross debt (including DPL) over the past few years (Exhibit 141). Bharti and Vi's interest rate based on reported finance cost stood at ~9-11%, while it was significantly lower for R-Jio at ~3.2% in FY2023 (Exhibit 143). Given Vi's lower revenue, finance cost accounts for a significantly higher share of revenue as compared with peers (Exhibit 145). Furthermore, with a declining subscriber base and rising finance costs, the cost per subscriber has been rising sharply and stood at Rs78/month per sub in FY2023 (Exhibit 147).

#### Capitalized interest and Ind AS 116 implementation impact actual finance costs versus reported costs

Finance cost has been impacted by implementation of Ind AS 116, with interest on lease liabilities now reported as part of finance costs. The interest cost on leases is highest for Vi, followed by Bharti, while it remains relatively lower for R-Jio (Exhibit 155).

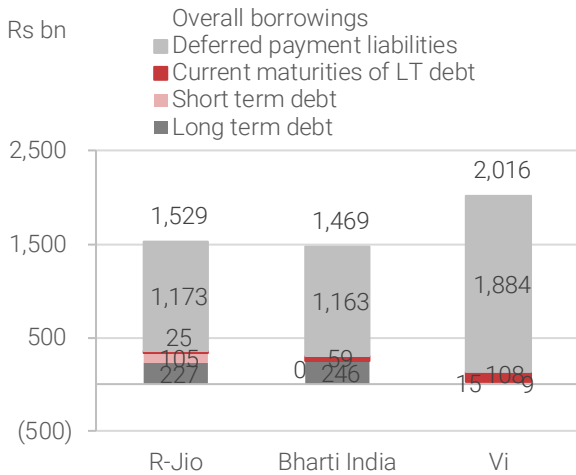
Furthermore, telcos have also capitalized the finance costs related to yet to be deployed spectrum. The **capitalized finance cost is significantly higher for R-Jio at ~Rs59 bn in FY2023 (versus ~Rs5-10 bn for Vi and Bharti, Exhibit 149)**. We note that the yet to be deployed spectrum has declined significantly for Bharti in 1HFY24, but it still remains at elevated levels for R-Jio and should lead to continued interest cost capitalization for R-Jio in the near term, in our view (Exhibit 150).

Adjusting for interest capitalized and interest cost on leases, actual finance cost on borrowings is still the highest for Vi at Rs202 bn, but the gap between Bharti and R-Jio is relatively lower (Exhibit 153). On our estimates, actual interest rate on borrowings is surprisingly highest for Bharti at ~10.5% in FY2023 (versus ~10.3% for Vi and lower ~7.5% for R-Jio, Exhibit 154). We note that Bharti has been pre-paying higher cost GoI debt over the past few years and we expect Bharti's actual finance cost to decline over time.

The actual finance cost paid by telcos could be significantly different from finance cost provided in P/L due to 1) moratorium on GoI dues, 2) lease-related finance costs and 3) capitalization of finance costs on yet to be deployed spectrum.

**With recent spectrum investments, gross debt has increased for all three telcos, DPL accounts for bulk of telcos' gross debt**

**Exhibit 133: Gross debt (ex-leases) build-up for three telcos for 2023, March fiscal year-ends**



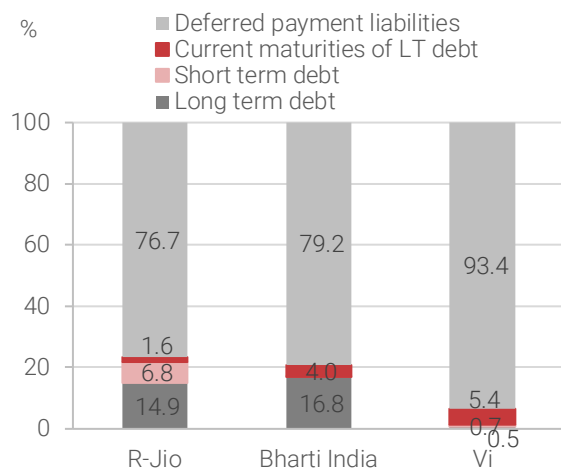
Notes:

i) Bharti India here implies standalone + Hexacom

Source: Companies, Kotak Institutional Equities estimates

**DPL (Gol debt) accounts for 77%-93% of the three telcos' gross debt in FY2023**

**Exhibit 134: Gross debt (ex-leases) build-up for three telcos for 2023, March fiscal year-ends**



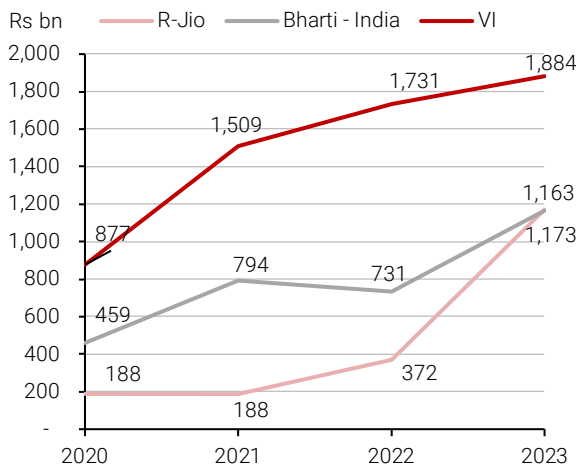
Notes:

i) Bharti India here implies standalone + Hexacom

Source: Companies, Kotak Institutional Equities estimates

**Vi has the largest debt due toward Gol, while R-Jio's Gol debt has increased sharply in past two years on spectrum purchases**

**Exhibit 135: Deferred payment liabilities on spectrum and AGR trends, March fiscal year-ends**



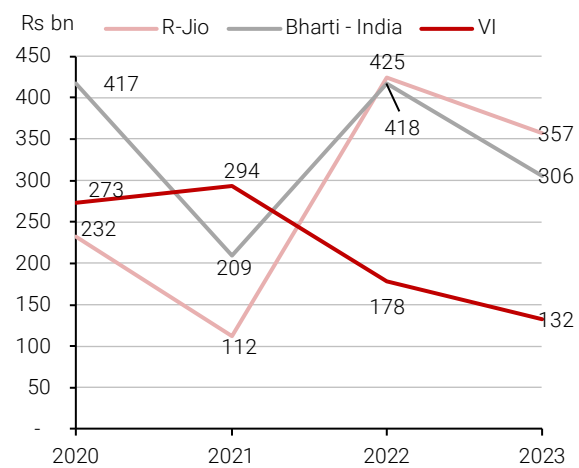
Notes:

i) Bharti India here implies standalone + Hexacom

Source: Companies, Kotak Institutional Equities estimates

**Vi has the lowest non Gol debt, whereas R-Jio has the highest non-Gol related debt in FY2023**

**Exhibit 136: Gross debt excluding Gol debt trends, March fiscal year-ends**



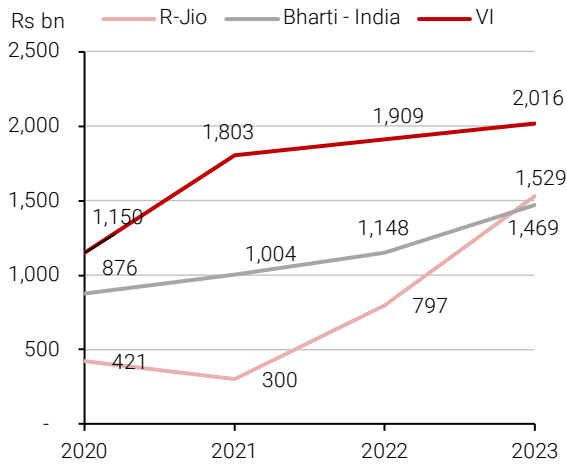
Notes:

i) Bharti India here implies standalone + Hexacom

Source: Companies, Kotak Institutional Equities estimates

**Vi leads in overall gross debt (excluding lease liabilities), R-Jio has overtaken Bharti after recent spectrum purchases**

**Exhibit 137: Gross debt excluding lease liabilities trends, March fiscal year-ends**



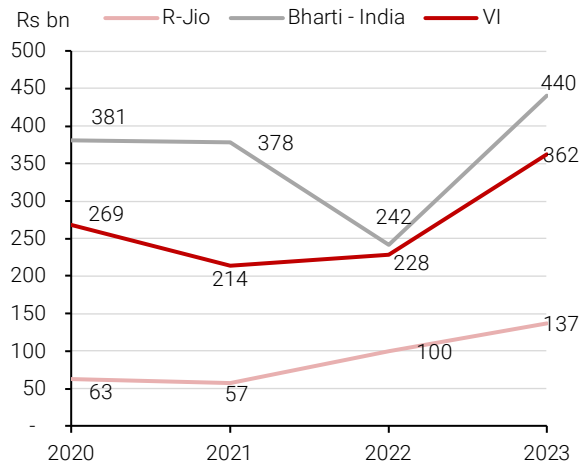
Notes:

i) Bharti India here implies standalone + Hexacom

Source: Companies, Kotak Institutional Equities estimates

**Bharti has the highest lease liabilities among Indian telcos, followed by Vi**

**Exhibit 138: Lease liabilities trends, March fiscal year-ends**



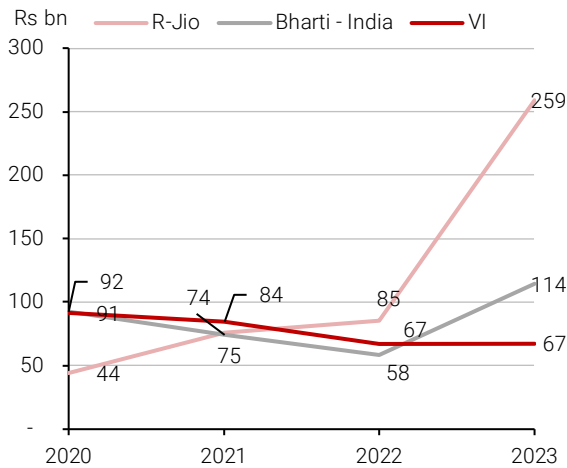
Notes:

i) Bharti India here implies standalone + Hexacom

Source: Companies, Kotak Institutional Equities estimates

**R-Jio has significantly higher creditors for capex as compared with peers, recent increase driven by 5G equipment purchases**

**Exhibit 139: Creditors for capex trends, March fiscal year-ends**



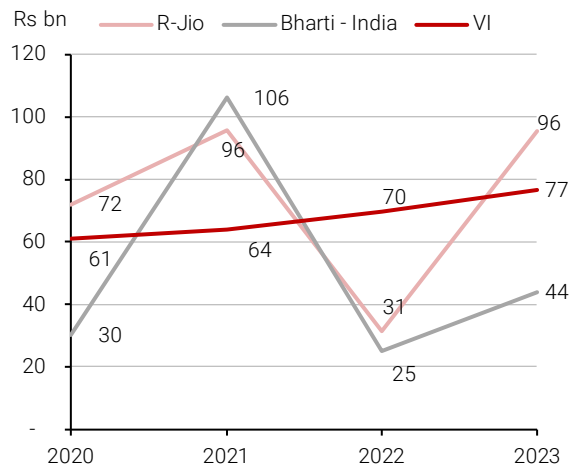
Notes:

i) Bharti India here implies standalone + Hexacom

Source: Companies, Kotak Institutional Equities estimates

**Interest accrued but not due has also increased sharply for R-Jio in FY2023, largely on recent spectrum purchases**

**Exhibit 140: Interest accrued but not due, March fiscal year-ends**



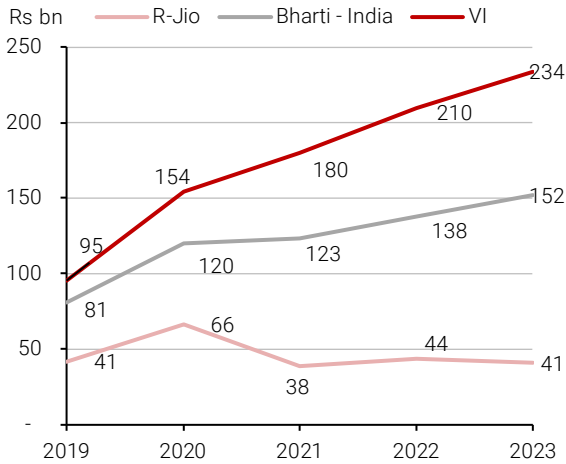
Notes:

i) Bharti India here implies standalone + Hexacom

Source: Companies, Kotak Institutional Equities estimates

**Vi has the highest reported finance cost, followed by Bharti, R-Jio reports relatively modest finance cost in P/L**

**Exhibit 141: Reported P/L finance cost trends, March fiscal-year ends**



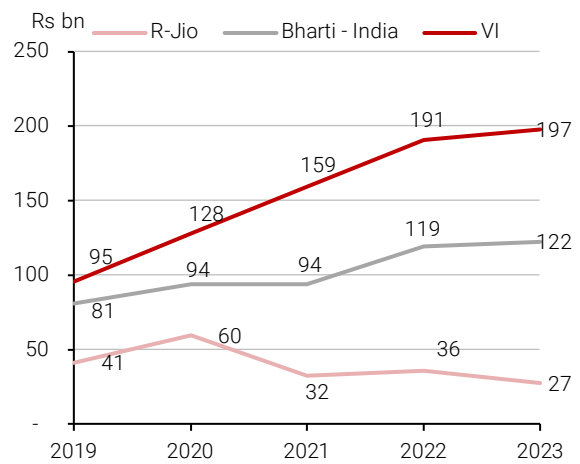
Notes:

i) Bharti India here implies standalone + Hexacom

Source: Companies, Kotak Institutional Equities estimates

**Interest on leases account for significant part of reported finance cost for Vi and Bharti**

**Exhibit 142: P/L finance cost adjusted for leases, March fiscal year-ends**



Notes:

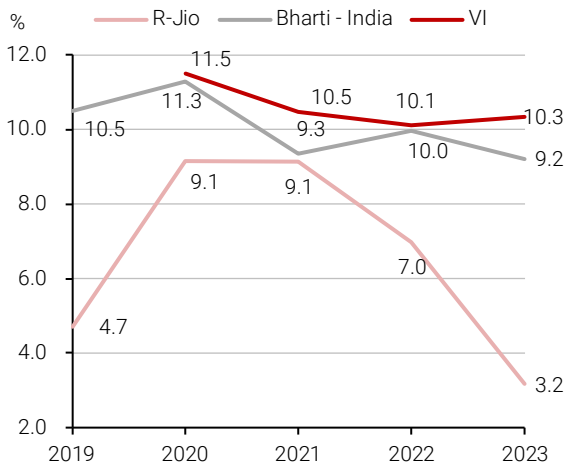
i) Adjusted finance cost excludes interest on leases

ii) Bharti India here implies standalone + Hexacom

Source: Companies, Kotak Institutional Equities estimates

**R-Jio's blended interest cost based on reported finance cost in P/L is significantly lower as significant part is being capitalized**

**Exhibit 143: Blended interest rate based on reported finance cost, March fiscal year-ends**



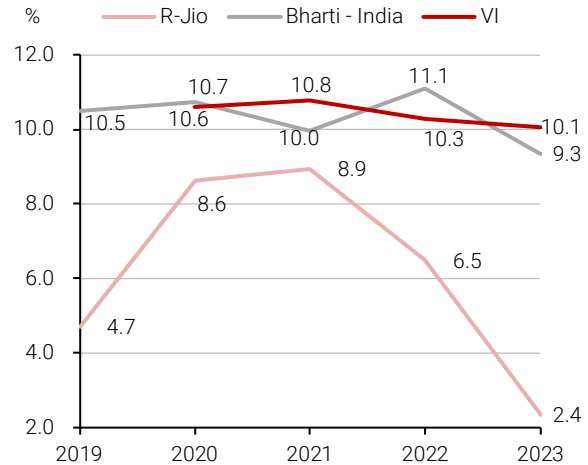
Notes:

i) Bharti India here implies standalone + Hexacom

Source: Companies, Kotak Institutional Equities estimates

**Adjusted for leases, R-Jio's interest rate in P/L is significantly low as large part of interest on spectrum is being capitalized**

**Exhibit 144: Blended interest rate based on adjusted finance cost, March fiscal year-ends**



Notes:

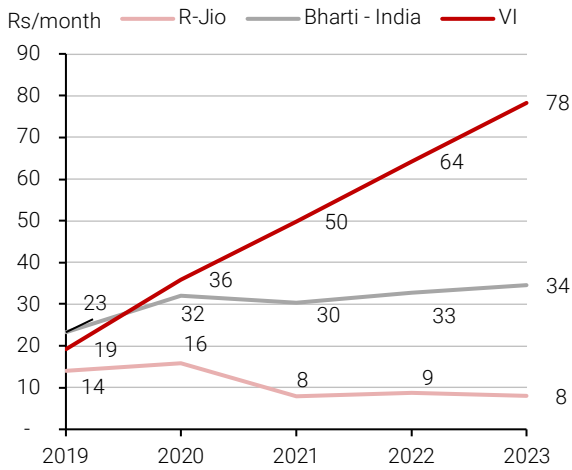
i) Adjusted finance cost excludes interest on leases

ii) Bharti India here implies standalone + Hexacom

Source: Companies, Kotak Institutional Equities estimates

**Vi's reported finance cost per subscriber at Rs78/month significantly higher versus peers, R-Jio the least**

**Exhibit 145: Reported finance cost per subscriber, March fiscal year-ends**



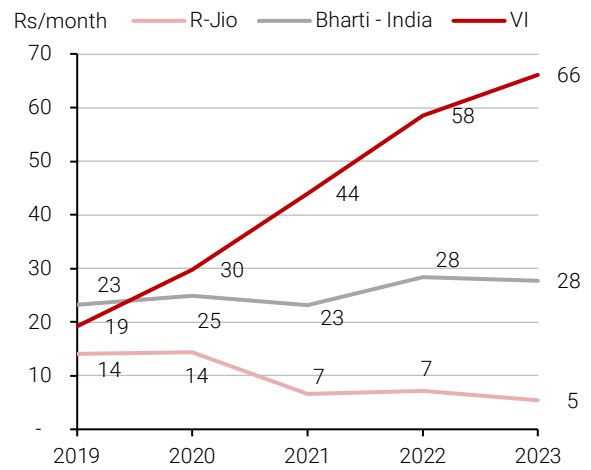
Notes:

i) Bharti India here implies standalone + Hexacom

Source: Companies, Kotak Institutional Equities estimates

**Adjusted for leases, Vi's interest cost still significantly higher versus peers, R-Jio's interest cost likely to rise over time**

**Exhibit 146: Adjusted finance cost per subscriber, March fiscal year-ends**



Notes:

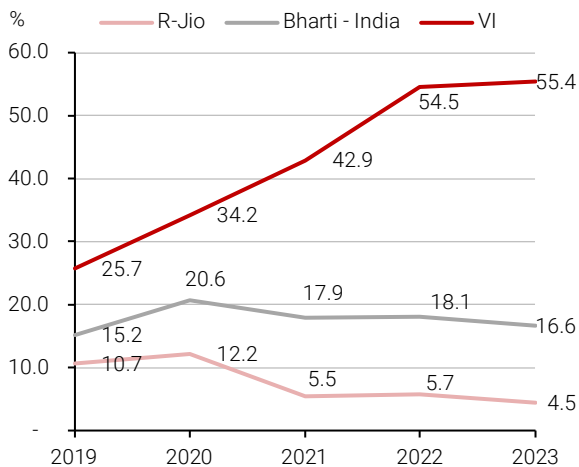
i) Adjusted finance cost excludes interest on leases

ii) Bharti India here implies standalone + Hexacom

Source: Companies, Kotak Institutional Equities estimates

**Reported finance cost accounts for ~55% of Vi's revenue and rising over time as compared with declining trends for peers**

**Exhibit 147: Reported finance cost as % of revenue, March fiscal year-ends**



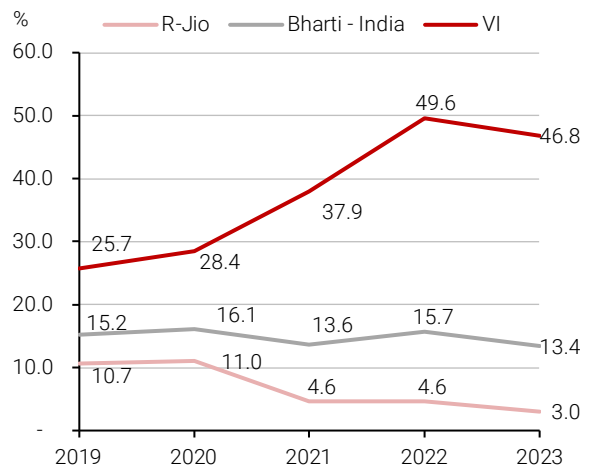
Notes:

i) Bharti India here implies standalone + Hexacom

Source: Companies, Kotak Institutional Equities estimates

**Adjusted for leases, finance cost account for significant ~47% of revenue for Vi in FY2023 (versus 3%/13% for R-Jio/Bharti)**

**Exhibit 148: Adjusted finance cost as % of revenue, March fiscal year-ends**



Notes:

i) Adjusted finance cost excludes interest on leases

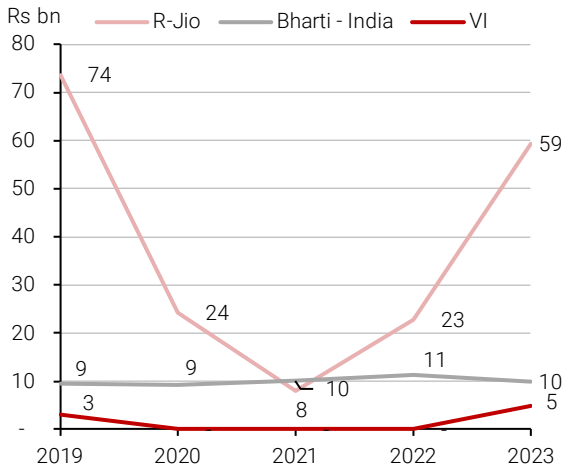
ii) Bharti India here implies standalone + Hexacom

Source: Companies, Kotak Institutional Equities estimates



**R-Jio's capitalized finance cost much higher versus peers and increased sharply in FY2023 on 5G spectrum purchases**

Exhibit 149: Capitalized finance cost, March fiscal year-ends



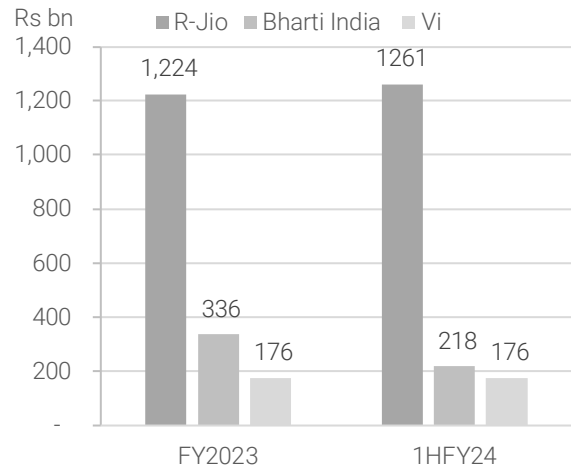
Notes:

i) Bharti India here implies standalone + Hexacom

Source: Companies, Kotak Institutional Equities estimates

**Bharti's capitalized interest cost to decline in FY2024 with drop in spectrum yet to be deployed, but likely to stay high for R-Jio**

Exhibit 150: Spectrum yet to be deployed, March fiscal year-ends



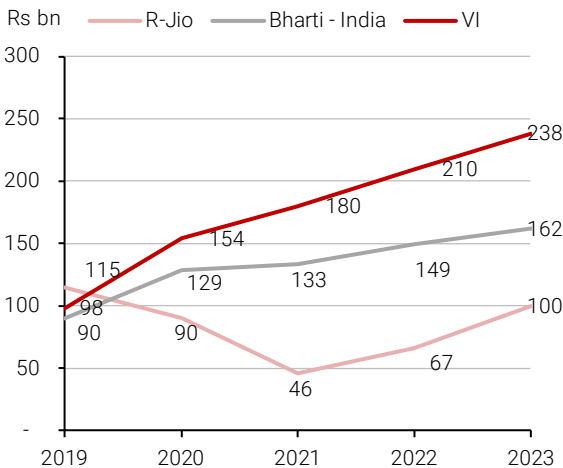
Notes:

i) Bharti India here implies standalone operations

Source: Companies, Kotak Institutional Equities estimates

**Including capitalized interest, R-Jio's finance cost much higher, but still significantly below peers**

Exhibit 151: Overall finance cost including interest capitalized, March fiscal year-ends



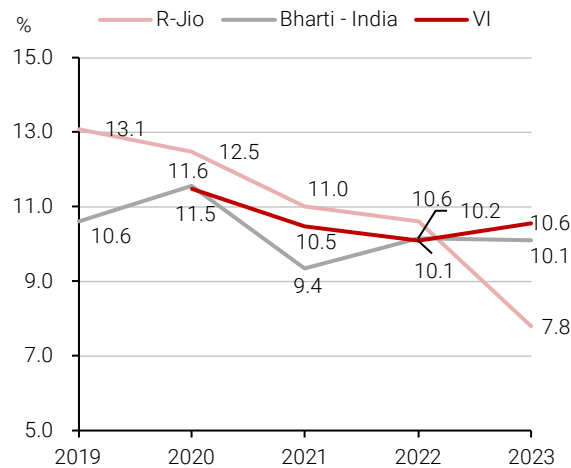
Notes:

i) Bharti India here implies standalone + Hexacom

Source: Companies, Kotak Institutional Equities estimates

**R-Jio's interest cost significantly lower versus peers, but the gap is not that big when capitalized interest is included**

Exhibit 152: Blended interest rate including capitalized interest cost, March fiscal year-ends



Notes:

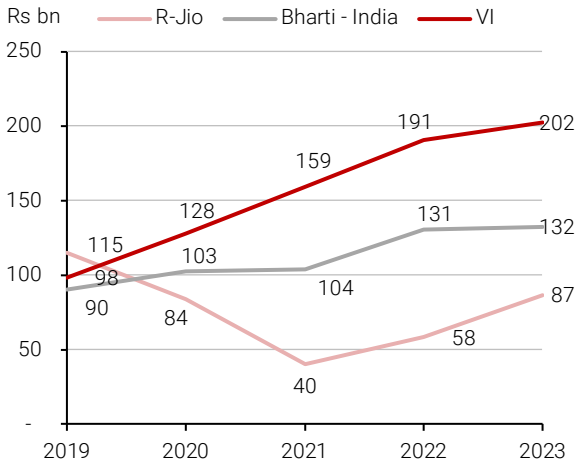
i) Adjusted finance cost excludes interest on leases

ii) Bharti India here implies standalone + Hexacom

Source: Companies, Kotak Institutional Equities estimates

**The gap between Bharti and R-Jio on actual finance cost including capitalized interest but excluding leases is lower**

**Exhibit 153: Actual finance cost including interest capitalized but excluding interest on leases, March fiscal year-ends**



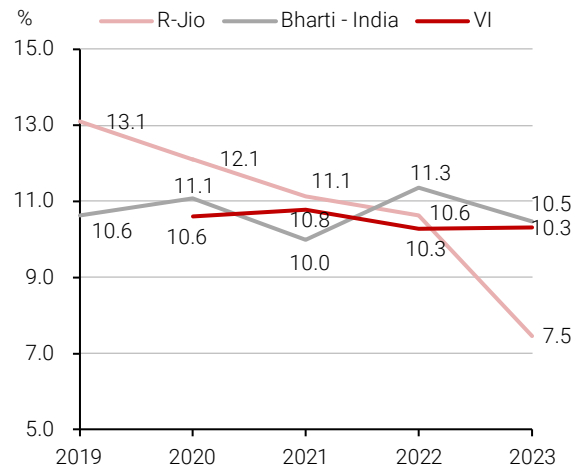
Notes:

- i) Adjusted finance cost excludes interest on leases
- ii) Bharti India here implies standalone + Hexacom

Source: Companies, Kotak Institutional Equities estimates

**Adjusted for leases, Bharti's actual interest rate highest at ~10.5% (versus 10.3% for Vi and ~7.5% for R-Jio) in FY2023**

**Exhibit 154: Actual interest rate including interest capitalized but excluding leases, March fiscal year-ends**



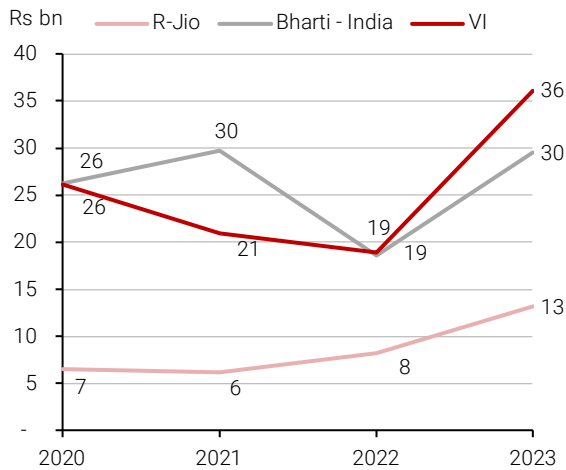
Notes:

- i) Adjusted finance cost excludes interest on leases
- ii) Bharti India here implies standalone + Hexacom

Source: Companies, Kotak Institutional Equities estimates

**Finance cost on leases highest for Vi, followed by Bharti and least for R-Jio**

**Exhibit 155: Finance cost on leases, March fiscal year-ends**



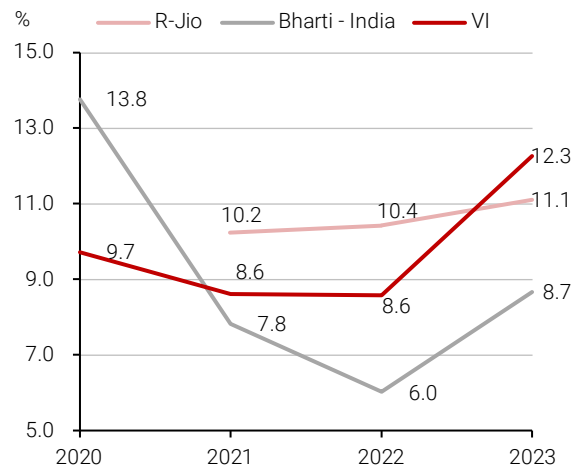
Notes:

- i) Bharti India here implies standalone + Hexacom

Source: Companies, Kotak Institutional Equities estimates

**Interest cost on leases for Vi increased sharply in FY2023, ~10-11% for R-Jio and lower ~9% for Bharti**

**Exhibit 156: Interest rate on leases, March fiscal year-ends**



Notes:

- i) Bharti India here implies standalone + Hexacom

Source: Companies, Kotak Institutional Equities estimates

# 3

## Maintain ADD on Bharti and Indus; Buy on R-Jio's parent entity RIL

### LT risk-reward favorable for Bharti, reiterate ADD with revised FV of Rs1,050/share

**Base case:** In our base case scenario, we assume the status quo (3+1 market construct) to continue beyond 2HFY26, with the Gol allowing some relief (deferral/conversion of spectrum and AGR dues) to ensure Vi's survival and a 3+1 (or 2+2) market construct. However, given the significant gap in 4G/5G coverage with peers, we expect Bharti and R-Jio to continue gaining market share at Vi's expense. In our base case, we bake in modest ~5.5% 10-yr ARPU CAGR, with wireless ARPU touching Rs300 only in FY2030E.

**Bull case 1/Duopoly:** In our first bull case scenario, we assume an effective duopoly in the Indian telecom sector, with Bharti and R-Jio proportionately gaining Vi's subscriber base after FY2026. We believe the ability to raise tariffs would theoretically be higher in a duopoly, but we assume only a modest (Rs25 higher) increase in ARPU in a duopoly scenario as compared with our base case, with wireless ARPU reaching Rs350 by FY2033E (versus Rs325 in our base case).

**Bull case 2/Sharper tariff hikes:** In our second bull case scenario, we assume a much sharper tariff hike, with ARPU reaching ~Rs300 by FY2027 (versus FY2030 in our base case) for Vi to be able to partly service Gol dues post-moratorium and a waiver/conversion for past dues. In a waiver, the company could continue as a going concern, with the current promoters or Gol could look to merge Vi with public sector telcos. Furthermore, we believe rather than a sharp hike in headline tariffs, telcos could implement this by changing the tariff construct from unlimited data plans to bulk data plans (effectively monetizing higher data usage). However, we believe sharper tariff hikes would benefit Vi's competitors more and it would continue to lose market share.

**Bear case/Higher competitive intensity and stronger third player:** In our bear case scenario, we assume a deep-pocketed strategic investor taking over Vi to maintain a 3+1 market construct and a higher competitive intensity as a result. However, Vi's revival would require significant equity infusion and waive-off the past Gol dues, which could be difficult, in our view. Although we build in higher competitive intensity and lower tariff hike, we believe the gap between Vi and peer telcos would be too far to bridge even for a deep-pocketed strategic investor; we continue to assume market share gains for Bharti and R-Jio. In this case, we bake in ~4.5% 10-yr ARPU CAGR, with wireless ARPU reaching Rs300 by FY2033E (versus by FY2030E in our base case).

Exhibit 157: Key changes to Bharti's earnings model, March fiscal year-ends, 2024-26E

	Revised			Earlier			Change (%)		
	2024E	2025E	2026E	2024E	2025E	2026E	2024E	2025E	2026E
<b>Consolidated</b>									
Revenue (Rs mn)	1,508,781	1,762,658	2,010,539	1,506,062	1,748,143	1,968,175	0.2	0.8	2.2
EBITDA (Rs mn)	793,375	954,388	1,107,817	796,085	952,159	1,086,941	(0.3)	0.2	1.9
EBITDA margin (%)	52.6	54.1	55.1	52.9	54.5	55.2	-28 bps	-33 bps	-13 bps
EBIT (Rs mn)	396,585	506,052	605,028	395,513	492,422	577,395	0.3	2.8	4.8
Recurring EPS (Rs/share)	25.6	39.4	50.5	25.7	37.9	47.4	(0.4)	4.0	6.7
<b>India wireless</b>									
Revenue (Rs mn)	846,136	1,012,532	1,156,000	845,812	1,010,769	1,126,217	0.0	0.2	2.6
EBITDA (Rs mn)	462,657	577,397	670,334	465,235	577,176	657,711	(0.6)	0.0	1.9
EBITDA margin (%)	54.7	57.0	58.0	55.0	57.1	58.4	-33 bps	-8 bps	-42 bps
Capex (Rs mn)	264,953	219,908	200,811	264,856	219,525	199,904	0.0	0.2	0.5
EOP subscribers base (mn)	350.3	367.5	381.0	350.3	367.5	382.5	-	(0.0)	(0.4)
Wireless ARPU (Rs/sub/month)	203.5	232.9	255.2	203.4	232.6	248.3	0.0	0.1	2.8
<b>Africa</b>									
Revenue (US\$ mn)	5,115	5,598	6,165	5,086	5,527	6,073	0.6	1.3	1.5
EBITDA (US\$ mn)	2,547	2,805	3,104	2,536	2,786	3,074	0.5	0.7	1.0
EBITDA margin (%)	49.8	50.1	50.4	49.9	50.4	50.6	-6 bps	-30 bps	-26 bps
Capex (US\$ mn)	834	856	878	829	846	865	0.6	1.3	1.5

Source: Kotak Institutional Equities estimates

Exhibit 158: Key assumptions for Bharti, March fiscal year-ends, 2018-26E

	2019	2020	2021	2022	2023	2024E	2025E	2026E
<b>India wireless business</b>								
<b>Paying subscriber base ('000s)</b>	<b>282,640</b>	<b>283,667</b>	<b>321,374</b>	<b>326,043</b>	<b>335,412</b>	<b>350,305</b>	<b>367,505</b>	<b>381,005</b>
Net monthly additions ('000s)	(1,796)	86	3,142	389	781	1,241	1,433	1,125
<b>Data subscribers ('000s)</b>	<b>115,147</b>	<b>148,578</b>	<b>188,635</b>	<b>208,448</b>	<b>232,678</b>	<b>260,887</b>	<b>289,387</b>	<b>316,000</b>
Net monthly additions ('000s)	2,422	2,786	3,338	1,651	2,019	2,351	2,375	2,218
<b>Wireless ARPU (Rs/sub/month)</b>	<b>116</b>	<b>136</b>	<b>153</b>	<b>160</b>	<b>189</b>	<b>203</b>	<b>233</b>	<b>255</b>
Change (%)	(12.2)	16.6	12.9	4.3	18.5	7.6	14.4	9.6
<b>Data volumes (bn MB)</b>	<b>11,733</b>	<b>21,020</b>	<b>32,541</b>	<b>45,203</b>	<b>54,148</b>	<b>65,613</b>	<b>77,975</b>	<b>91,712</b>
Change (%)	200.7	79.2	54.8	38.9	19.8	21.2	18.8	17.6
<b>Data consumption (MB/sub/month)</b>	<b>9,718</b>	<b>13,284</b>	<b>16,083</b>	<b>18,973</b>	<b>20,458</b>	<b>22,156</b>	<b>23,617</b>	<b>25,249</b>
Change (%)	114.4	36.7	21.1	18.0	7.8	8.3	6.6	6.9
<b>Voice traffic (bn mins)</b>	<b>2,811</b>	<b>3,035</b>	<b>3,603</b>	<b>4,104</b>	<b>4,348</b>	<b>4,646</b>	<b>4,960</b>	<b>5,323</b>
Change (%)	44.4	7.9	18.7	13.9	6.0	6.8	6.8	7.3
<b>MOU (min/sub/month)</b>	<b>798</b>	<b>893</b>	<b>992</b>	<b>1,056</b>	<b>1,096</b>	<b>1,129</b>	<b>1,152</b>	<b>1,185</b>
Change (%)	42.2	11.9	11.1	6.4	3.7	3.1	2.0	2.9
<b>Homes business</b>								
<b>EoP subscriber base ('000s)</b>	<b>2,270</b>	<b>2,414</b>	<b>3,067</b>	<b>4,483</b>	<b>6,046</b>	<b>7,806</b>	<b>9,200</b>	<b>10,500</b>
Net monthly additions ('000s)	8.2	12.0	54.4	118.0	130.3	146.7	116.2	108.3
<b>Implied ARPU (Rs/month)</b>	<b>840</b>	<b>799</b>	<b>710</b>	<b>671</b>	<b>641</b>	<b>609</b>	<b>602</b>	<b>603</b>
Change (%)	(14.2)	(4.9)	(11.1)	(5.5)	(4.5)	(5.0)	(1.0)	0.0
<b>FWA EoP subscriber base ('000s)</b>						<b>0.5</b>	<b>2.5</b>	<b>5.0</b>
Net monthly additions ('000s)						0.0	0.2	0.2
<b>Implied ARPU (Rs/month)</b>						<b>799.0</b>	<b>799.0</b>	<b>807.0</b>
Change (%)							-	1.0
<b>Airtel DTH*</b>								
<b>EoP subscriber base ('000s)</b>	<b>15,392</b>	<b>16,613</b>	<b>17,716</b>	<b>16,028</b>	<b>15,946</b>	<b>15,599</b>	<b>14,999</b>	<b>14,499</b>
Net monthly additions ('000s)	99.4	101.7	92.0	(140.7)	(6.8)	(28.8)	(50.0)	(41.7)
<b>Implied ARPU (Rs/month)</b>	<b>231</b>	<b>152</b>	<b>148</b>	<b>156</b>	<b>154</b>	<b>158</b>	<b>159</b>	<b>159</b>
Change (%)	(0.5)	(34.1)	(2.5)	5.0	(1.4)	2.7	0.7	(0.0)
<b>Capex (Rs mn)</b>								
<b>India (ex-spectrum)</b>	<b>233,793</b>	<b>198,003</b>	<b>192,570</b>	<b>204,433</b>	<b>280,567</b>	<b>342,702</b>	<b>320,270</b>	<b>305,739</b>
As % of revenues	39.1	31.0	26.1	24.9	28.7	31.3	24.5	20.3
<b>Consolidated (ex-spectrum)</b>	<b>286,872</b>	<b>252,224</b>	<b>237,918</b>	<b>253,324</b>	<b>341,946</b>	<b>411,977</b>	<b>392,074</b>	<b>379,800</b>
As % of revenues	35.5	28.8	23.6	21.7	24.6	27.3	22.2	18.9
<b>Consolidated overall</b>	<b>336,872</b>	<b>252,224</b>	<b>237,918</b>	<b>436,399</b>	<b>772,796</b>	<b>411,977</b>	<b>392,074</b>	<b>379,800</b>
As % of revenues	41.7	28.8	23.6	37.4	55.5	27.3	22.2	18.9

Notes:

- i) India wireless subs reporting changed to paying subs from 2019
- ii) DTH subs reporting changed to active subs from 2022
- iii) DTH ARPU net of content cost from 2020

Source: Company, Kotak Institutional Equities estimates

Exhibit 159: Segment-wise revenue, EBITDA, margin and capex trends and forecasts, March fiscal year-ends

	2019	2020	2021	2022	2023	2024E	2025E	2026E
<b>Segmental revenue (Rs bn)</b>								
<b>India</b>	<b>255</b>	<b>261</b>	<b>271</b>	<b>(0)</b>	<b>599</b>	<b>1,095</b>	<b>1,302</b>	<b>1,504</b>
Wireless	416	460	556	629	759	846	1,013	1,156
Homes	22	22	23	30	40	52	76	108
DTH	41	29	31	32	29	30	29	28
Airtel Business	125	132	144	161	186	209	234	262
Passive infra	68	67	–	–	–	–	–	–
South Asia	4	5	4	4	3	4	4	4
Africa	215	242	289	351	423	423	467	518
<b>Consolidated</b>	<b>808</b>	<b>875</b>	<b>1,006</b>	<b>1,165</b>	<b>1,391</b>	<b>1,509</b>	<b>1,763</b>	<b>2,011</b>
Eliminations	(84)	(82)	(40)	(41)	(49)	(54)	(60)	(65)
<b>Segmental EBITDA (Rs bn)</b>								
<b>India</b>	<b>134</b>	<b>139</b>	<b>146</b>	<b>(0)</b>	<b>179</b>	<b>588</b>	<b>726</b>	<b>852</b>
Wireless	94	170	243	312	401	463	577	670
Homes	11	11	13	16	20	26	39	61
DTH	16	20	21	21	17	17	16	14
Airtel Business	41	43	55	62	74	84	94	107
Passive infra	32	37	–	–	–	–	–	–
South Asia	0	0	0	(1)	(1)	(0)	(0)	(0)
Africa	84	107	133	172	207	211	234	261
<b>Consolidated</b>	<b>258</b>	<b>366</b>	<b>454</b>	<b>575</b>	<b>713</b>	<b>793</b>	<b>954</b>	<b>1,108</b>
Eliminations	(15)	(22)	(11)	(7)	(6)	(6)	(6)	(5)
<b>Segmental EBITDA margin (%)</b>								
<b>India</b>	<b>52.5</b>	<b>53.1</b>	<b>53.8</b>	<b>36.3</b>	<b>29.9</b>	<b>53.7</b>	<b>55.8</b>	<b>56.7</b>
Wireless	22.7	36.9	43.7	49.6	52.8	54.7	57.0	58.0
Homes	48.3	50.4	57.6	52.3	50.6	49.6	51.7	56.6
DTH	38.3	68.3	68.0	66.6	58.9	57.2	55.3	51.2
Airtel Business	32.6	32.2	38.2	38.7	39.7	40.2	40.0	40.9
Passive infra	47.6	55.1						
South Asia	2.8	9.4	3.1	(16.0)	(17.6)	(11.6)	(10.1)	(9.5)
Africa	38.9	44.3	46.1	49.1	49.0	49.8	50.1	50.4
<b>Consolidated</b>	<b>32.0</b>	<b>41.8</b>	<b>45.1</b>	<b>49.4</b>	<b>51.2</b>	<b>52.6</b>	<b>54.1</b>	<b>55.1</b>
<b>Segmental Capex ex-spectrum (Rs bn)</b>								
<b>India</b>	<b>82</b>	<b>89</b>	<b>95</b>	<b>(0)</b>	<b>242</b>	<b>207</b>	<b>196</b>	<b>302</b>
Wireless	65	71	80	(0)	201	151	147	197
Homes	8	6	11	17	22	32	53	55
DTH	11	11	13	13	14	15	15	14
Airtel Business	14	30	22	32	40	30	33	35
Passive infra	9	9	–	–	–	–	–	–
South Asia	0	0	0	0	1	1.0	3.7	3.7
Africa	44	46	45	49	60	69	72	74
<b>Consolidated</b>	<b>103</b>	<b>99</b>	<b>109</b>	<b>(0)</b>	<b>287</b>	<b>254</b>	<b>245</b>	<b>380</b>

Notes:

Homes segment includes contribution of Airtel's AirFiber (FWA offering) from FY2024

Source: Company, Kotak Institutional Equities estimates

**For every Rs10/month change in ARPU, FY2025E consolidated EBITDA could change by Rs27 bn (~3%) and for every 10mn paying subs change, FY2025E consolidated EBITDA could change by Rs9 bn (~1%)**

**Exhibit 160: Sensitivity of FY2025E consolidated EBITDA to FY2025E India wireless ARPU and paying wireless subs, March fiscal year-ends**

		FY2025E India wireless ARPU (Rs)				
		213	223	233	243	253
FY2025E India wireless paying subs (mn)	348	882	909	936	963	991
	358	890	918	945	973	1,001
	368	898	926	<b>954</b>	982	1,010
	378	907	935	963	992	1,020
	388	915	944	973	1,001	1,030

Source: Kotak Institutional Equities estimates

**We ascribe an enterprise value of Rs980/share to Bharti's India wireless business in our base case (implies ~8.7X FY2026 EBITDA)**

**Exhibit 161: Calculation of Bharti's India wireless enterprise value using discounted cash flow analysis in base case scenario (Rs bn)**

	2024E	2025E	2026E	2027E	2028E	2029E	2030E	2031E	2032E	2033E	2034E	2035E
<b>Assumptions</b>												
Paying subscriber base (mn)	350	368	381	393	403	413	421	428	433	438		
Net adds	14.9	17.2	13.5	12.0	10.0	10.0	7.5	7.5	5.0	5.0		
ARPU (Rs/month)	203	233	255	268	279	290	300	309	318	326		
y-y	7.6	14.4	9.6	5.0	4.0	4.0	3.5	3.0	3.0	2.5		
<b>DCF model</b>												
EBITDA	463	577	670	734	790	848	900	948	994	1,033		
Adjusted tax expense	(116)	(145)	(169)	(185)	(199)	(213)	(227)	(239)	(250)	(260)		
Change in working capital	14	27	24	17	14	14	13	12	12	10		
Operating cash flow	360	459	525	566	606	649	687	721	755	783		
Capital expenditure	(265)	(220)	(201)	(270)	(275)	(280)	(285)	(290)	(295)	(300)		
Free cash flow	96	240	324	296	331	369	402	431	461	482	502	522
Discounted cash flow-now	93	211	259	214	216	218	215	209	202	191		
Discounted cash flow-1 year forward		234	286	237	239	241	238	231	223	212	199	
Discounted cash flow-2 year forward			316	261	264	267	263	255	247	234	220	207
	<b>Now</b>	<b>+1-year</b>	<b>+2-years</b>									
Discount rate (%)	10.5%	10.5%	10.5%									
Total PV of free cash flow	2,030	2,340	2,535									
<b>Terminal value assumption</b>												
Growth in perpetuity	4.0%	4.0%	4.0%									
FCF in terminal year	482	502	522									
Exit FCF multiple (X)	16.0	16.0	16.0									
Exit EV/EBITDA multiple (X)	7.5	7.8	8.1									
Terminal value	7,718	8,027	8,348									
PV of terminal value	3,064	3,186	3,314									
Value of India wireless	5,094	5,526	5,848									
Implied EV/EBITDA	11.0	9.6	8.7									
Enterprise value (Rs bn)	5,094	5,526	5,848									
Shares outstanding (mn)	5,967	5,967	5,967									
EV/share for India wireless (Rs/share)	854	926	980									
<b>Sensitivity of 12-month fair value to WACC and perpetual growth</b>												
		Perpetual growth (%)										
		2.0%	3.0%	4.0%	5.0%	6.0%						
WACC (%)	9.5%	934	1,028	1,156	1,341	1,632						
	10.0%	875	955	1,061	1,209	1,432						
	10.5%	823	891	<b>980</b>	1,101	1,276						
	11.0%	777	836	911	1,011	1,151						
	11.5%	736	787	851	935	1,049						

Source: Company, Kotak Institutional Equities estimates

**LT risk-reward appears favorable for Bharti, with ~40% upside in duopoly or sharper tariff hike scenario**

**Exhibit 162: Summary of valuation for Bharti's India wireless business and upside/downside skew**

	Base	Strong 3rd player	Duopoly	Higher tariffs
<b>Bharti - India wireless</b>				
10-yr revenue CAGR	8.5%	6.9%	10.4%	10.2%
<b>10-yr EBITDA CAGR</b>	<b>9.9%</b>	<b>8.1%</b>	<b>12.1%</b>	<b>11.7%</b>
Enterprise value (Rs bn)	5,848	4,748	7,811	7,549
Implied FY2026E EBITDA	8.7	8.0	11.7	10.8
India wireless Enterprise value (Rs/share)	980	796	1,309	1,265
<b>Bharti SoTP based Fair value (Rs/share)</b>	<b>1,050</b>	<b>847</b>	<b>1,398</b>	<b>1,372</b>
Upside / downside to CMP	6%	-14%	41%	39%

Source: Company, Kotak Institutional Equities estimates

**Our SoTP-based Fair Value of Bharti is Rs1,050**

**Exhibit 163: Bharti's sum-of-the-parts valuation based on September 2025 estimates**

	Valuation base (Rs bn)		Multiple (X)		Valuation	
	EBITDA	Other	EBITDA	Other	(Rs bn)	(Rs/share)
<b>India business</b>						
<b>India wireless</b>	<b>647</b>		<b>9.0</b>	<b>DCF implied</b>	<b>5,848</b>	<b>980</b>
Homes	55		9.0	DCF implied	501	84
DTH	15		4.0		59	10
Enterprise	104		9.0		934	157
Indus Towers attributable value		239		0.75	179	30
Other investments		128		1	128	21
<b>India business enterprise value</b>					<b>7,650</b>	<b>1,282</b>
India business net debt					1,537	258
Network I2I perps					124	21
<b>India business equity value (a)</b>					<b>5,989</b>	<b>1,004</b>
<b>International business</b>						
Airtel Africa attributable value		346		0.75	259	43
Robi Axiata attributable value		25		0.75	19	3
<b>International business equity value (b)</b>					<b>278</b>	<b>47</b>
<b>Bharti Airtel Fair Value (c) = (a) + (b)</b>					<b>6,268</b>	<b>1,050</b>

Notes:

Homes segment also includes contribution from Airtel's AirFiber (FWA offering)

Source: Kotak Institutional Equities estimates

**LT risk-reward appears favorable, with ~40% upside in bull cases and ~15% downside in bear case**

**Exhibit 164: Bharti's risk-reward skew**

Bharti Valuation scenarios	Base	Strong 3rd player	Duopoly	Higher tariffs
<b>India business</b>				
<b>India wireless</b>	<b>980</b>	<b>796</b>	<b>1,309</b>	<b>1,265</b>
Homes	84	74	93	93
DTH	10	10	12	12
Enterprise	157	139	174	174
Indus Towers attributable value	30	38	20	38
Other investments	21	21	21	21
<b>India business enterprise value</b>	<b>1,282</b>	<b>1,079</b>	<b>1,630</b>	<b>1,604</b>
India business net debt	258	258	258	258
Network I2I perps	21	21	21	21
<b>India business equity value (a)</b>	<b>1,004</b>	<b>800</b>	<b>1,352</b>	<b>1,326</b>
<b>International business</b>				
Airtel Africa attributable value	43	43	43	43
Robi Axiata attributable value	3	3	3	3
<b>International business equity value (b)</b>	<b>47</b>	<b>47</b>	<b>47</b>	<b>47</b>
<b>Bharti Airtel Fair Value (c) = (a) + (b)</b>	<b>1,050</b>	<b>847</b>	<b>1,398</b>	<b>1,372</b>

Source: Kotak Institutional Equities estimates

**For every Rs10/month change in ARPU, FV could change by Rs40/share (~3.8%) and for every 10mn paying subs change, FV could change by Rs12/share (~1.1%)**

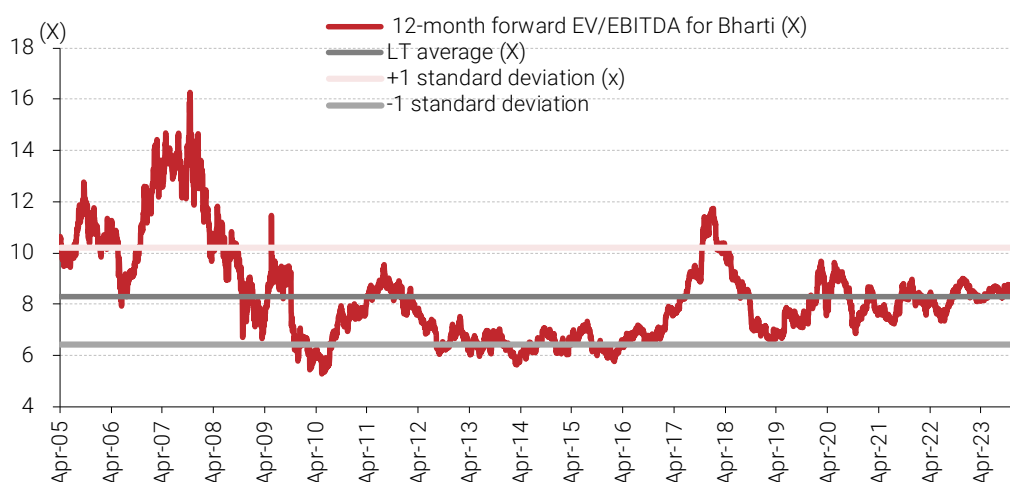
**Exhibit 165: Sensitivity of FV to FY2025E India wireless ARPU and paying wireless subs, March fiscal year-ends**

		FY2025E India wireless ARPU (Rs)				
		213	223	233	243	253
FY2025E India wireless paying subs (mn)	348	941	982	1,023	1,064	1,105
	358	953	995	1,037	1,078	1,120
	368	966	1,008	<b>1,050</b>	1,093	1,135
	378	978	1,021	1,064	1,107	1,150
	388	991	1,034	1,078	1,121	1,165

Source: Kotak Institutional Equities estimates

**Bharti is largely trading in line with its LT average 12-month forward EV/EBITDA**

Exhibit 166: Bharti rolling 12-month forward EV/EBITDA



Source: Bloomberg, Company, Kotak Institutional Equities estimates

**Bharti should command a premium valuation to global telcos, given its superior EBITDA growth and margin profile, in our view**

Exhibit 167: Global telcos valuation comparables

Global Telco comps	Enterprise Value		Market cap		EV/EBITDA (X)		Net debt/EBITDA (X)		EBITDA margin (%)		RoE (%)		EBITDA CAGR (%)
	(US\$ bn)	(US\$ bn)	2024	2025	2024	2025	2024	2025	2024	2025	2024	2025	2023-26E
Bharti Airtel	91	70	10.2	8.5	2.6	1.9	52.6	54.1	9.1	17.5			15.8
Vodafone Idea	37	8	19.1	17.6	15.4	15.4	37.8	38.9	n/a	n/a			(2.2)
<b>Indian telcos average (a)</b>			<b>14.7</b>	<b>13.0</b>	<b>9.0</b>	<b>8.6</b>	<b>45.2</b>	<b>46.5</b>	<b>9.1</b>	<b>17.5</b>			<b>6.8</b>
Verizon Inc	327	158	6.8	6.7	3.5	3.5	35.7	35.9	20.3	18.2			(2.2)
AT&T	286	118	6.6	6.4	3.9	3.8	35.6	36.1	16.2	14.8			33.8
T-Mobile	289	180	9.8	9.1	3.7	3.4	37.7	39.2	13.3	18.5			8.1
<b>US telcos average</b>			<b>7.8</b>	<b>7.4</b>	<b>3.7</b>	<b>3.6</b>	<b>36.3</b>	<b>37.1</b>	<b>16.6</b>	<b>17.2</b>			<b>13.3</b>
Deutsche Telecom	300	120	6.9	6.3	4.2	3.9	36.5	38.9	15.2	16.1			n/a
Vodafone Plc	80	24	5.7	5.7	4.3	4.3	29.9	30.6	3.2	3.6			(21.0)
Orange	76	31	5.4	5.2	3.2	3.1	29.4	29.9	8.4	8.6			0.8
Telefonica	69	23	5.0	5.0	3.4	3.4	31.8	31.5	7.5	7.0			n/a
Telenor	25	16	7.4	7.1	2.7	2.6	42.9	43.4	27.2	15.0			n/a
<b>European telcos average</b>			<b>6.1</b>	<b>5.9</b>	<b>3.5</b>	<b>3.4</b>	<b>34.1</b>	<b>34.9</b>	<b>12.3</b>	<b>10.1</b>			<b>(10.1)</b>
China Mobile	142	174	2.9	2.7	(1.0)	(0.9)	34.6	34.0	10.2	10.5			5.5
China Unicom	62	63	3.3	3.1	(0.3)	(0.3)	26.5	26.2	6.9	7.5			5.5
China Telecom	14	18	1.0	0.9	(0.4)	(0.4)	27.1	26.6	5.4	5.7			3.3
<b>China telcos average</b>			<b>2.4</b>	<b>2.2</b>	<b>(0.6)</b>	<b>(0.5)</b>	<b>29.4</b>	<b>28.9</b>	<b>7.5</b>	<b>7.9</b>			<b>4.8</b>
SK Telecom	16	8	3.7	3.7	1.8	1.8	31.5	30.6	9.4	9.5			1.0
KT Corp	14	7	3.2	3.2	1.6	1.6	20.8	20.7	6.9	7.2			2.4
LG Uplus	9	4	3.2	3.1	1.9	1.9	25.7	25.8	8.1	8.0			2.5
<b>Korea telcos average</b>			<b>3.4</b>	<b>3.3</b>	<b>1.8</b>	<b>1.7</b>	<b>26.0</b>	<b>25.7</b>	<b>8.1</b>	<b>8.3</b>			<b>1.9</b>
Axiata	13	5	5.8	5.6	3.7	3.5	46.1	46.1	2.0	3.1			5.2
Maxis	8	6	9.9	9.7	2.3	2.2	39.9	39.7	20.5	22.0			2.0
Celcom Digi	13	10	10.2	10.0	2.1	2.1	46.5	46.5	11.1	12.4			28.8
<b>Malaysia telcos average</b>			<b>8.6</b>	<b>8.4</b>	<b>3.0</b>	<b>2.9</b>	<b>43.0</b>	<b>42.9</b>	<b>11.2</b>	<b>12.5</b>			<b>3.6</b>
Chungwa Telecom	30	30	10.6	10.4	0.2	0.2	39.6	39.9	9.9	10.3			2.3
SingTel	37	30	13.2	12.5	2.5	2.4	25.7	26.3	9.4	9.8			4.0
Telekom Indonesia	29	25	5.6	5.3	0.7	0.7	53.1	53.5	18.7	19.1			7.4
XL Axiata	4	2	4.4	4.1	2.7	2.5	49.3	49.3	4.9	6.2			n/a
Indosat	8	5	5.4	4.8	2.1	1.9	46.4	48.0	11.7	14.4			5.0
<b>Other regional telcos average</b>			<b>7.8</b>	<b>7.4</b>	<b>1.7</b>	<b>1.5</b>	<b>42.8</b>	<b>43.4</b>	<b>10.9</b>	<b>12.0</b>			<b>4.7</b>
<b>Global telcos average</b>			<b>6.9</b>	<b>6.5</b>	<b>2.8</b>	<b>2.7</b>	<b>36.4</b>	<b>36.8</b>	<b>11.1</b>	<b>11.5</b>			<b>4.2</b>

Notes:

a) KIE estimates for India telcos, Bloomberg consensus estimates for other telcos

Source: Bloomberg, Kotak Institutional Equities estimates



**Airtel Africa trades at a discount to peers; with robust underlying growth and reducing leverage, we believe there is a case for re-rating**

Exhibit 168: African telcos valuation comps

African Telco comps	Enterprise Value	Market cap	EV/EBITDA (X)		Net debt/EBITDA (X)		EBITDA margin (%)		RoE (%)		EBITDA CAGR (%)
	(US\$ bn)	(US\$ bn)	2024	2025	2024	2025	2024	2025	2024	2025	2023-26E
Airtel Africa	10	6	3.7	3.3	1.8	1.6	49.9	49.2	13.7	21.2	7.7
Vodacom	14	12	4.8	4.6	0.9	0.9	38.1	38.0	21.1	22.3	11.6
Safaricom	5	3	4.9	4.5	1.6	1.4	48.3	47.9	32.7	34.3	11.9
MTN	17	11	3.6	3.5	1.2	1.2	41.7	41.8	12.6	13.0	n/a
<b>African telcos average</b>			<b>4.2</b>	<b>4.0</b>	<b>1.4</b>	<b>1.3</b>	<b>44.5</b>	<b>44.2</b>	<b>20.0</b>	<b>22.7</b>	<b>10.4</b>

Source: Bloomberg, Kotak Institutional Equities

Exhibit 169: Bharti's condensed financials, Ind AS, March fiscal year-ends, 2018-26E (Rs mn)

	2018	2019	2020	2021	2022	2023	2024E	2025E	2026E
<b>Profit and loss statement</b>									
Revenues	826,388	807,802	875,390	1,006,158	1,165,469	1,391,448	1,508,781	1,762,658	2,010,539
<b>EBITDA</b>	<b>300,791</b>	<b>258,189</b>	<b>366,095</b>	<b>453,717</b>	<b>575,339</b>	<b>712,735</b>	<b>793,375</b>	<b>954,388</b>	<b>1,107,817</b>
EBIT	108,360	44,714	89,199	159,673	244,432	348,417	396,585	506,052	605,028
PBT	29,992	(50,162)	(32,731)	15,191	83,614	164,784	197,798	319,304	429,701
Recurring PAT	18,921	(25,193)	(36,390)	(28,758)	25,564	90,157	152,541	235,015	301,593
<b>Recurring EPS (Rs/share)</b>	<b>4.7</b>	<b>(6.3)</b>	<b>(6.7)</b>	<b>(5.2)</b>	<b>4.6</b>	<b>15.9</b>	<b>25.6</b>	<b>39.4</b>	<b>50.5</b>
<b>Balance sheet</b>									
Total equity	783,483	849,480	1,021,295	812,266	919,350	1,064,443	1,184,568	1,494,565	1,778,888
Borrowings	1,141,676	1,254,283	1,176,190	1,297,899	1,329,145	1,655,448	1,589,388	1,347,123	1,074,814
Other liabilities	580,657	648,212	1,410,305	1,350,113	1,388,065	1,746,441	1,717,200	1,888,546	1,967,485
<b>Total equity and liabilities</b>	<b>2,505,816</b>	<b>2,751,975</b>	<b>3,607,790</b>	<b>3,460,278</b>	<b>3,636,560</b>	<b>4,466,332</b>	<b>4,491,155</b>	<b>4,730,234</b>	<b>4,821,186</b>
Net fixed assets	758,168	903,661	917,545	901,711	948,111	1,062,534	1,150,588	1,173,655	1,140,765
Net intangibles	1,211,348	1,200,996	1,158,784	1,102,233	1,229,983	1,659,192	1,586,326	1,506,998	1,416,899
Cash and equivalents	135,684	127,287	296,606	175,442	143,557	181,231	123,457	258,133	358,551
Other assets	400,616	520,031	1,234,855	1,280,892	1,314,909	1,563,375	1,630,784	1,791,448	1,904,972
<b>Total assets</b>	<b>2,505,816</b>	<b>2,751,975</b>	<b>3,607,790</b>	<b>3,460,278</b>	<b>3,636,560</b>	<b>4,466,332</b>	<b>4,491,155</b>	<b>4,730,234</b>	<b>4,821,186</b>
<b>Net debt (including leases)</b>	<b>1,003,748</b>	<b>1,129,813</b>	<b>1,209,372</b>	<b>1,552,290</b>	<b>1,620,214</b>	<b>2,149,664</b>	<b>2,062,866</b>	<b>1,770,390</b>	<b>1,484,128</b>
<b>Cash flow statement</b>									
Operating cash flow	232,153	124,531	23,554	346,550	342,150	510,367	540,199	686,169	776,769
Capex	(267,262)	(306,495)	(222,592)	(335,816)	(434,690)	(388,184)	(411,977)	(392,074)	(379,800)
Other income	16,039	16,286	4,748	27,370	3,963	17,500	10,171	10,730	11,562
<b>Free cash flow</b>	<b>(19,070)</b>	<b>(165,678)</b>	<b>(194,290)</b>	<b>38,104</b>	<b>(88,577)</b>	<b>139,683</b>	<b>138,393</b>	<b>304,824</b>	<b>408,532</b>
<b>Key ratios</b>									
EBITDA margin (%)	36.4	32.0	41.8	45.1	49.4	51.2	52.6	54.1	55.1
Avg. RoAE (%)	1.4	0.5	NM	NM	4.9	8.4	9.1	17.5	18.4
Avg. RoACE (%)	3.8	0.7	3.0	NM	5.9	10.5	10.8	13.7	16.9
Net debt to EBITDA (X)	3.3	4.4	3.3	3.4	2.8	3.0	2.6	1.9	1.3

Notes:

i) Pro forma numbers for FY2021, adjusted for de-consolidation of Bharti Infratel

Source: Company, Kotak Institutional Equities estimates

### Maintain ADD with revised FV of Rs200 on Indus Towers

Our FY2024-26E earnings are broadly unchanged. We continue to value Indus Towers on DCF and ascribe a Fair Value of Rs200/share (earlier Rs185) in our base case. The increase in FV is driven by roll-forward to Dec 2024 (from Sep 2024) and on lower WACC at 12% (versus 12.5% earlier). We maintain our ADD rating on Indus, with favorable medium-term risk-reward.

**Base case:** In our base case, we assume Vi to make payments as per its cashflows. We assume Indus' collections from Vi to improve materially, driven by Vi's easing cashflow constraints at least until 1HFY26. We do not build in any upside from Vi's potential fund raise. After 1HFY26, we continue to assume bad debt provisions at ~10% of revenue (~Rs32 bn annually), implying a ~50% shortfall from Vi on service rentals. In this case, we ascribe a Fair Value of Rs200/share (earlier Rs185).

**Bear case:** In our bear case, we assume a duopoly in the Indian telecom market from FY2027. As a result, we remove ~40% of tenancies, but assume ~5% escalation on residual tenancies. In this case, our FV for Indus could potentially decline to Rs135/share (earlier Rs125).

**Bull case:** In our bull case, we assume Vi to survive beyond FY2026 (either write-off of Gol dues or Gol/strategic investor taking up ownership) and make 100% payouts to Indus. Furthermore, we build modest upside in net tower/tenancy adds from Vi's potential fund raise. In this case, our FV for Indus could potentially rise to Rs280/share (earlier Rs255/share).

Exhibit 170: Key changes to our estimates

	New estimates			Old estimates			Change (%)		
	2024E	2025E	2026E	2024E	2025E	2026E	2024E	2025E	2026E
<b>Financials</b>									
Revenues (Rs mn)	288,914	310,371	325,568	288,914	309,305	322,347	-	0.3	1.0
Service revenues (Rs mn)	176,391	187,275	195,605	176,391	186,778	194,116	-	0.3	0.8
<b>EBITDA (Rs mn)</b>	<b>140,829</b>	<b>153,555</b>	<b>127,983</b>	<b>140,829</b>	<b>153,138</b>	<b>127,102</b>	-	<b>0.3</b>	<b>0.7</b>
<b>Ind-AS 116 adjusted EBITDA (Rs mn)</b>	<b>106,320</b>	<b>117,169</b>	<b>90,607</b>	<b>106,320</b>	<b>116,850</b>	<b>90,023</b>	-	<b>0.3</b>	<b>0.6</b>
EBITDA margin (% on service revenues)	79.8	82.0	65.4	79.8	82.0	65.5	-	1 bps	(5)bps
PAT (Rs mn)	52,288	57,024	36,087	52,288	56,928	36,075	(0.0)	0.2	0.0
<b>Recurring EPS (Rs/share)</b>	<b>19.4</b>	<b>21.2</b>	<b>13.4</b>	<b>19.4</b>	<b>21.1</b>	<b>13.4</b>	<b>(0.0)</b>	<b>0.2</b>	<b>0.0</b>
<b>Operational metrics (consolidated)</b>									
# of towers	212,712	224,712	232,712	212,712	222,712	228,712	-	0.9	1.7
# of tenants	361,537	373,537	381,537	361,537	371,537	377,537	-	0.5	1.1
Tenancy ratio (X)	1.70	1.66	1.64	1.70	1.67	1.65	-	(0.4)	(0.7)

Source: Company, Kotak Institutional Equities estimates

Exhibit 171: Annual per tower model, March fiscal year-ends, 2020 onward (Rs/tower/month)

Per tower model	2020	2021	2022	2023	2024E	2025E	2026E
Rentals	74,768	74,973	75,118	73,657	71,851	70,513	70,141
Energy	47,502	44,529	46,209	45,817	46,239	46,902	47,353
Exit revenue and one-offs	75,942	3,372	5,350	5,560	633	842	1,130
<b>Revenue</b>	<b>198,213</b>	<b>122,874</b>	<b>126,676</b>	<b>125,034</b>	<b>118,723</b>	<b>118,257</b>	<b>118,624</b>
Power and fuel	(73,635)	(45,866)	(46,918)	(46,657)	(47,335)	(47,816)	(48,228)
Employee	(5,936)	(3,676)	(3,529)	(3,410)	(3,269)	(3,182)	(3,195)
Other expenses	(21,012)	(10,648)	(8,128)	(32,372)	(10,249)	(8,751)	(20,569)
Repairs and Maintenance	(6,817)	(6,910)	(6,155)	(5,950)	(5,773)	(5,735)	(5,694)
CSR	(649)	(769)	(193)	(433)	(584)	(591)	(593)
Provisions and writeoffs	-	-	-	(23,384)	(1,514)	-	(11,909)
<b>Total costs</b>	<b>(100,583)</b>	<b>(60,191)</b>	<b>(58,575)</b>	<b>(82,440)</b>	<b>(60,852)</b>	<b>(59,750)</b>	<b>(71,992)</b>
<b>EBITDA</b>	<b>97,630</b>	<b>62,684</b>	<b>68,101</b>	<b>42,594</b>	<b>57,870</b>	<b>58,507</b>	<b>46,632</b>
Adj. core EBITDA	47,821	60,649	63,460	37,874	58,334	58,580	46,377
Adj. energy EBITDA	(26,133)	(1,337)	(709)	(840)	(1,096)	(914)	(874)
Depreciation and Amortization	(40,237)	(25,555)	(24,338)	(23,454)	(24,658)	(24,572)	(24,416)
on assets	(9,097)	(17,210)	(15,710)	(14,684)	(15,570)	(15,750)	(15,750)
on leases	(4,171)	(8,413)	(8,628)	(8,771)	(9,088)	(8,822)	(8,666)
<b>EBIT</b>	<b>57,393</b>	<b>37,129</b>	<b>43,763</b>	<b>19,140</b>	<b>33,213</b>	<b>33,935</b>	<b>22,216</b>
Interest cost (net)	355	(308)	(240)	56	699	142	308
Interest on leases	(2,248)	(4,975)	(4,992)	(4,869)	(5,093)	(5,041)	(4,952)
Interest cost	(1,893)	(5,283)	(5,232)	(4,813)	(4,394)	(4,899)	(4,644)
<b>PBT</b>	<b>55,499</b>	<b>31,846</b>	<b>38,531</b>	<b>14,327</b>	<b>28,819</b>	<b>29,036</b>	<b>17,571</b>
<b>Ind-AS 116 adjusted EBITDA</b>	<b>91,211</b>	<b>49,296</b>	<b>54,481</b>	<b>28,954</b>	<b>43,690</b>	<b>44,644</b>	<b>33,013</b>

Source: Company, Kotak Institutional Equities estimates

Exhibit 172: Annual per tenant model, March fiscal year-ends, 2020 onward (Rs/tenant/month)

Per tenant model	2020	2021	2022	2023	2024E	2025E	2026E
Rentals	40,616	41,209	41,617	41,063	41,373	41,961	42,491
Energy	25,804	24,475	25,601	25,542	26,625	27,910	28,687
Exit revenue and one-offs	165,013	7,413	11,855	12,399	1,457	2,004	2,737
<b>Revenue</b>	<b>107,673</b>	<b>67,537</b>	<b>70,181</b>	<b>69,704</b>	<b>68,362</b>	<b>70,372</b>	<b>71,862</b>
Power and fuel	(40,000)	(25,210)	(25,993)	(26,011)	(27,256)	(28,454)	(29,216)
Employee	(3,224)	(2,021)	(1,955)	(1,901)	(1,882)	(1,894)	(1,936)
Other expenses	(11,414)	(5,853)	(4,503)	(18,047)	(5,901)	(5,208)	(12,461)
Repairs and Maintenance	(3,703)	(3,798)	(3,410)	(3,317)	(3,324)	(3,413)	(3,449)
Other expenses	(4,379)	(1,632)	(986)	(1,451)	(1,369)	(1,443)	(1,437)
CSR	(353)	(422)	(107)	(242)	(336)	(352)	(359)
Provisions and writeoffs	-	-	-	(13,036)	(872)	-	(7,215)
<b>Total costs</b>	<b>(54,639)</b>	<b>(33,083)</b>	<b>(32,452)</b>	<b>(45,959)</b>	<b>(35,040)</b>	<b>(35,555)</b>	<b>(43,613)</b>
<b>EBITDA</b>	<b>53,035</b>	<b>34,454</b>	<b>37,729</b>	<b>23,746</b>	<b>33,323</b>	<b>34,816</b>	<b>28,250</b>
Adj. core EBITDA	25,977	33,335	35,158	21,114	33,590	34,860	28,095
Adj. energy EBITDA	(14,196)	(735)	(393)	(468)	(631)	(544)	(530)
Depreciation and Amortization	(21,858)	(14,046)	(13,484)	(13,075)	(14,198)	(14,622)	(14,791)
on assets	(4,941)	(9,459)	(8,704)	(8,186)	(8,965)	(9,372)	(9,541)
on leases	(2,266)	(4,624)	(4,780)	(4,889)	(5,233)	(5,250)	(5,250)
<b>EBIT</b>	<b>31,177</b>	<b>20,408</b>	<b>24,246</b>	<b>10,670</b>	<b>19,124</b>	<b>20,194</b>	<b>13,458</b>
Interest cost (net)	193	(169)	(133)	31	402	85	187
Interest on leases	(1,221)	(2,734)	(2,766)	(2,715)	(2,933)	(3,000)	(3,000)
Interest cost	(1,029)	(2,904)	(2,899)	(2,683)	(2,530)	(2,915)	(2,813)
<b>PBT</b>	<b>30,148</b>	<b>17,504</b>	<b>21,347</b>	<b>7,987</b>	<b>16,594</b>	<b>17,278</b>	<b>10,645</b>
<b>Ind-AS 116 adjusted EBITDA</b>	<b>49,548</b>	<b>27,096</b>	<b>30,184</b>	<b>16,142</b>	<b>25,157</b>	<b>26,566</b>	<b>20,000</b>

Source: Company, Kotak Institutional Equities estimates

**We ascribe Rs200/share Fair Value to Indus Towers in our base case DCF**

**Exhibit 173: Calculation of equity value using discounted cash flow analysis in base case, March fiscal year-ends (Rs mn)**

	2024E	2025E	2026E	2027E	2028E	2029E	2030E	2031E	2032E	2033E	2034E	2035E
<b>Assumptions</b>												
Average tenancies (#)	361,537	373,537	381,537	387,537	393,537	398,537	403,537	408,537	412,537	416,537		
Net additions (#)	18,706	12,000	8,000	6,000	6,000	5,000	5,000	5,000	4,000	4,000		
Sharing revenue per tenant (Rs/month)	41,737	42,462	43,176	43,823	44,481	45,148	45,825	46,512	47,210	47,918		
yoy (%)	(2.5)	1.7	1.7	1.5	1.5	1.5	1.5	1.5	1.5	1.5		
<b>DCF model</b>												
Ind-AS 116 adj. EBITDA	106,320	117,169	90,607	100,099	103,186	106,209	109,163	112,182	115,126	117,992		
Adjusted tax expense	(17,843)	(19,181)	(12,138)	(13,410)	(13,823)	(14,228)	(14,624)	(15,029)	(15,423)	(15,807)		
Change in working capital	(3,347)	1,829	(4,031)	(4,453)	(4,591)	(4,725)	(4,857)	(4,991)	(5,122)	(5,249)		
<b>Operating cash flow</b>	<b>85,130</b>	<b>99,817</b>	<b>74,437</b>	<b>82,236</b>	<b>84,772</b>	<b>87,255</b>	<b>89,682</b>	<b>92,162</b>	<b>94,581</b>	<b>96,935</b>		
Capital expenditure	(82,353)	(57,560)	(45,286)	(35,000)	(35,000)	(32,500)	(30,000)	(30,000)	(26,000)	(25,000)		
<b>Free cash flow</b>	<b>2,777</b>	<b>42,257</b>	<b>29,151</b>	<b>47,236</b>	<b>49,772</b>	<b>54,755</b>	<b>59,682</b>	<b>62,162</b>	<b>68,581</b>	<b>69,953</b>	<b>71,352</b>	<b>72,779</b>
Discounted cash flow-now	2,700	36,678	22,592	32,685	30,740	30,195	29,385	27,327	26,910	24,737		
Discounted cash flow-1 year forward		41,080	25,303	36,607	34,440	33,818	32,911	30,606	30,149	27,449	25,232	
Discounted cash flow-2 year forward			28,339	41,000	38,572	37,888	36,861	34,279	33,767	30,752	27,998	25,736
	<b>Now</b>	<b>+1-year</b>	<b>+2-years</b>									
Discount rate (%)	12.0%	12.0%	12.0%									
Total PV of free cash flow	263,949	317,594	335,192									
<b>Terminal value assumption</b>												
Growth in perpetuity (%)	2.0%	2.0%	2.0%									
FCF in terminal year	69,953	71,352	72,779									
Exit FCF multiple (X)	10.2	10.2	10.2									
Exit EV/EBITDA multiple (X)	6.0	6.2	6.3									
Terminal value	713,519	727,790	742,345									
PV of terminal value	252,318	257,364	262,512									
Enterprise value	516,267	574,959	597,704									
Implied EV/EBITDA multiple (X)	4.9	4.9	6.6									
Net debt (ex leases)	44,146	39,668	1,081									
<b>Equity value</b>	<b>472,121</b>	<b>535,290</b>	<b>596,623</b>									
Shares outstanding (mn)	2,695	2,695	2,695									
<b>Fair value of Indus Towers (Rs), including dividends</b>	<b>175</b>	<b>200</b>	<b>236</b>									

				Sensitivity of 12-month fair value to WACC and perpetual growth					
				WACC (%)	Perpetual growth (%)				
					1.0%	1.50%	2.0%	2.50%	3.0%
11.0%	199	205	211	218	225				
11.5%	195	200	205	211	218				
12.0%	191	195	200	206	212				
12.5%	187	191	196	201	206				
13.0%	183	187	191	196	201				

Source: Company, Kotak Institutional Equities estimates

**Indus Towers' EBITDA and FCF yield are highly sensitive to provision write-offs**

**Exhibit 174: Sensitivity analysis of FY2026E EBITDA and FCF to different provision write-off scenarios**

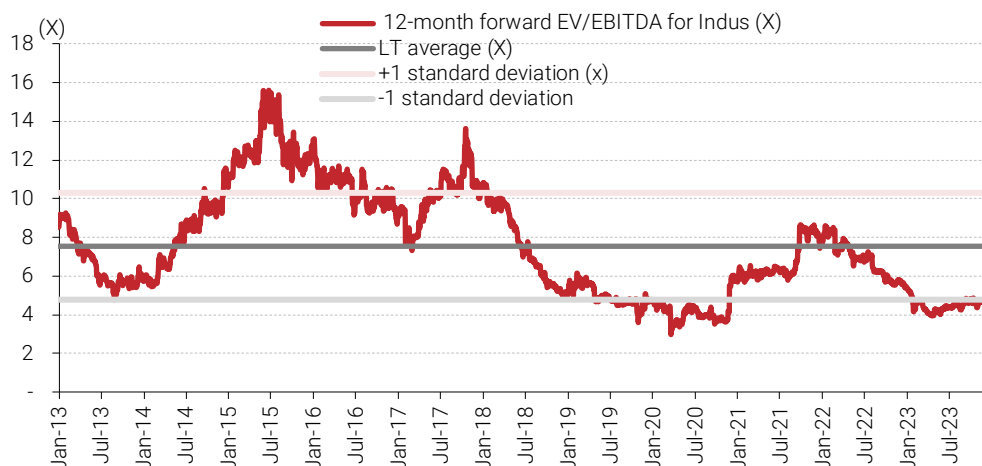
			Base case		
Provision write-off / revenue (%)	-	5	10	15	20
FY2026E Revenue (Rs bn)	326	326	326	326	326
<b>Bad debt provisions (Rs bn)</b>	<b>-</b>	<b>16</b>	<b>33</b>	<b>49</b>	<b>65</b>
Other opex (Rs bn)	165	165	165	165	165
<b>FY2026E EBITDA (Rs bn)</b>	<b>161</b>	<b>144</b>	<b>128</b>	<b>112</b>	<b>95</b>
change vs base case (%)	25	13		(13)	(25)
FY2026E FCF (Rs bn)	57	43	29	15	2
<b>Implied FCF yield at CMP (%)</b>	<b>10.4%</b>	<b>7.9%</b>	<b>5.3%</b>	<b>2.8%</b>	<b>0.3%</b>

Source: Kotak Institutional Equities estimates



**Indus de-rated in FY2023 on increased worries on Vi's receivables, trades at -1 std dev below its LT average**

**Exhibit 177: Rolling 12-month forward EV/Ind AS 116-adjusted EBITDA for Indus Towers**



Notes:

(a) The sharp decline in EV/EBITDA valuation in 2018-19 is partly due to merger-driven EBITDA bump-up

Source: Bloomberg, Company, Kotak Institutional Equities estimates

**Exhibit 178: Consolidated financial statements, Indus Towers, March fiscal year-ends, 2018-26E (Rs mn)**

	BHIN SA + Indus 42%		Pro forma for merged entity		2022	2023	2024E	2025E	2026E
	2018	2019	2020	2021					
<b>Key financials</b>									
<b>Income statement</b>									
<b>Gross revenues</b>	<b>144,896</b>	<b>144,273</b>	<b>255,624</b>	<b>256,729</b>	<b>270,872</b>	<b>283,818</b>	<b>288,914</b>	<b>310,371</b>	<b>325,568</b>
Service revenues	89,688	84,773	157,522	163,691	169,765	174,317	176,391	187,275	195,605
Power and fuel reimbursements	55,242	61,050	98,102	93,038	101,107	109,501	112,523	123,096	129,963
<b>EBITDA</b>	<b>63,801</b>	<b>58,462</b>	<b>125,868</b>	<b>130,969</b>	<b>142,707</b>	<b>96,686</b>	<b>140,829</b>	<b>153,555</b>	<b>127,983</b>
EBIT	40,339	36,223	73,158	77,575	89,455	43,447	80,824	89,064	60,971
PBT	42,762	39,828	63,982	66,537	78,007	32,521	70,131	76,205	48,225
<b>Recurring PAT</b>	<b>25,437</b>	<b>24,272</b>	<b>50,270</b>	<b>49,751</b>	<b>57,431</b>	<b>25,328</b>	<b>52,288</b>	<b>57,024</b>	<b>36,087</b>
OPM (on gross,%)	44.0	40.5	49.2	51.0	53.8	34.1	48.7	49.5	39.3
OPM (on net,%)	71.1	69.0	79.2	81.4	85.4	54.3	81.1	83.1	66.2
<b>EPS (Rs/share)</b>	<b>13.8</b>	<b>13.1</b>	<b>18.7</b>	<b>18.5</b>	<b>21.3</b>	<b>9.4</b>	<b>19.4</b>	<b>21.2</b>	<b>13.4</b>
<b>Balance sheet</b>									
Total Equity	169,544	145,245	177,081	158,770	221,505	211,095	263,383	316,365	317,419
Borrowings	16,901	23,492	76,372	69,703	54,868	47,126	47,126	27,126	15,126
Other liabilities	53,418	53,759	209,638	220,964	203,303	207,503	223,004	233,482	237,134
<b>Total equity and liabilities</b>	<b>239,863</b>	<b>222,496</b>	<b>463,091</b>	<b>449,437</b>	<b>479,676</b>	<b>465,724</b>	<b>533,513</b>	<b>576,973</b>	<b>569,679</b>
Net fixed assets	134,806	128,356	322,105	320,738	320,048	327,382	383,336	406,519	409,739
Cash and equivalents	65,832	30,920	25,205	22,859	26,323	2,980	7,458	26,045	9,008
Other assets	39,225	63,220	115,781	105,840	133,305	135,362	142,719	144,409	150,932
<b>Total assets</b>	<b>239,863</b>	<b>222,496</b>	<b>463,091</b>	<b>449,437</b>	<b>479,676</b>	<b>465,724</b>	<b>533,513</b>	<b>576,973</b>	<b>569,679</b>
<b>Cash flow statement</b>									
Operating cash flow	15,925	31,909	55,434	78,786	58,272	45,104	79,104	93,720	68,640
Capital expenditure	(21,610)	(16,188)	(28,807)	(31,507)	(28,697)	(31,681)	(82,353)	(57,560)	(45,286)
Other income	5,011	6,665	1,273	673	585	578	7,726	6,469	6,642
<b>Free cash flow</b>	<b>(674)</b>	<b>22,386</b>	<b>27,900</b>	<b>47,952</b>	<b>30,160</b>	<b>14,001</b>	<b>4,478</b>	<b>42,630</b>	<b>29,996</b>
Dividends paid	-	31,073	30,985	65,654	-	29,638	-	4,042	35,034
<b>Key operating metrics</b>									
End-period tower base (#)		163,934	169,002	179,225	185,447	192,874	212,712	224,712	232,712
End-period tenants (#)		305,824	311,111	322,438	335,791	342,831	361,537	373,537	381,537
Tenancy (X)		1.87	1.84	1.80	1.81	1.78	1.70	1.66	1.64
Rental/tenant/month (Rs)			42,555	43,062	44,580	42,812	41,737	42,462	43,176

Source: Company, Kotak Institutional Equities estimates

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**BUY.** We expect this stock to deliver more than 15% returns over the next 12 months.

**ADD.** We expect this stock to deliver 5-15% returns over the next 12 months.

**REDUCE.** We expect this stock to deliver -5+5% returns over the next 12 months.

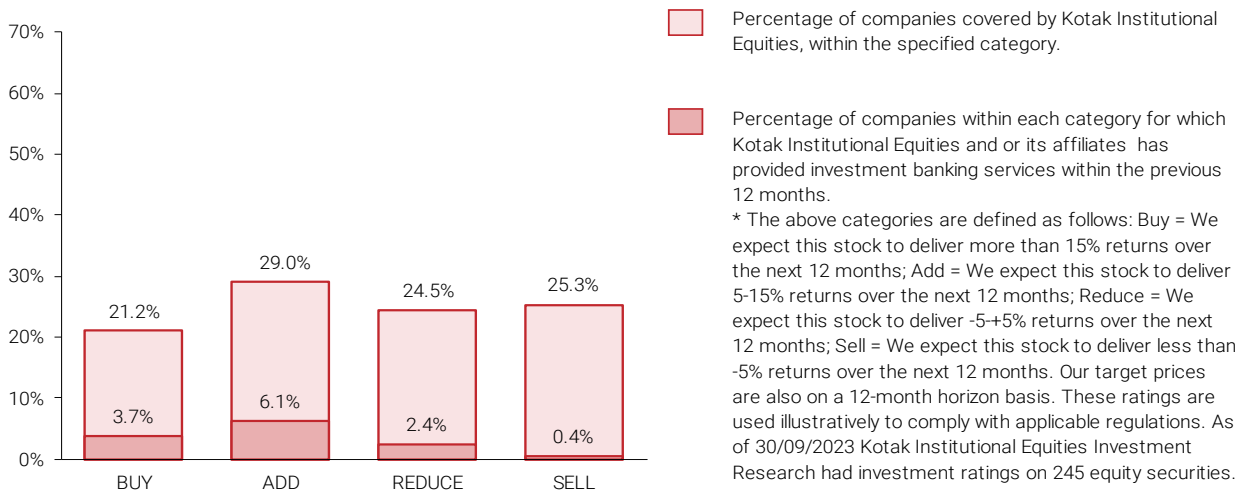
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Kotak Institutional Equities Research coverage universe



Source: Kotak Institutional Equities

As of September 30, 2023

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