

Profits of incumbent telcos halved in 3 years

And operating margins have been culled ~1000 bps

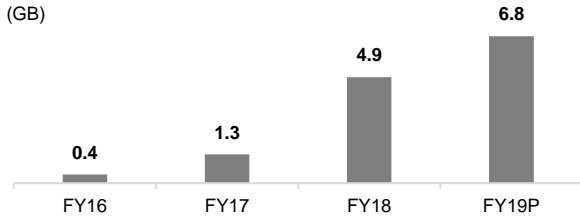
August 2018



Screenshots

Data usage per user soars ~17x....

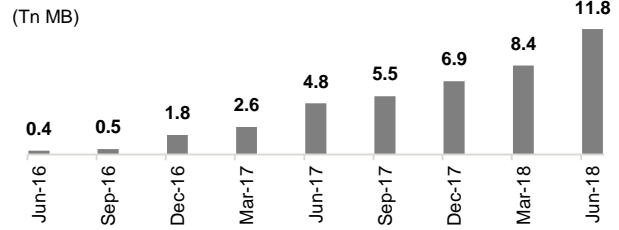
1



Note: Data usage is per subscriber per month; P: Projected
Source: CRISIL Research

...mirrored in quarterly data traffic trends...

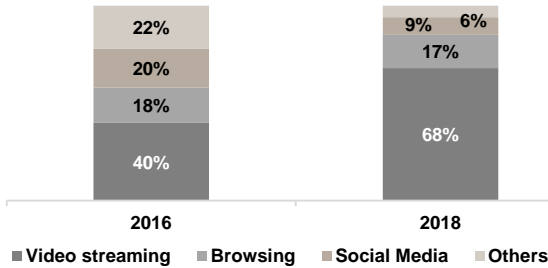
2



Note: Includes data traffic as reported by Bharti Airtel, Vodafone, Idea Cellular and RJio
Source: Company reports, CRISIL Research

...with videos having the highest share...

3



Source: Nokia MBIT Index, CRISIL Research

...ensuring focus on content

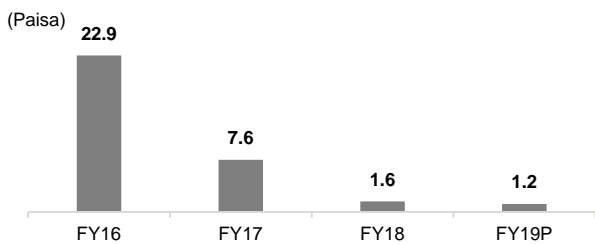
4

Telcos-Media partnerships	Description
Jio-Balaji	24.9% stake; provides content access to Jio
Jio-Eros	Will jointly produce films
Vodafone-HOOQ	HOOQ videos to broadcast on Vodafone Play app
Vodafone-Amazon	Postpaid users to get 1 year free subscription to Netflix
Prime	Netflix
Airtel-Netflix	Ongoing discussion for content partnership

Source: Industry, CRISIL Research

However, data realisation plummeted ~95%...

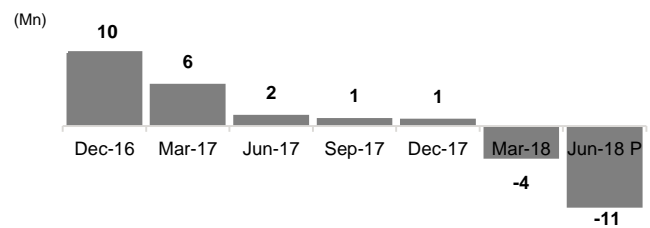
5



P: Projected; Source: CRISIL Research

...leading to dual SIM decline, with smaller players shutting shop

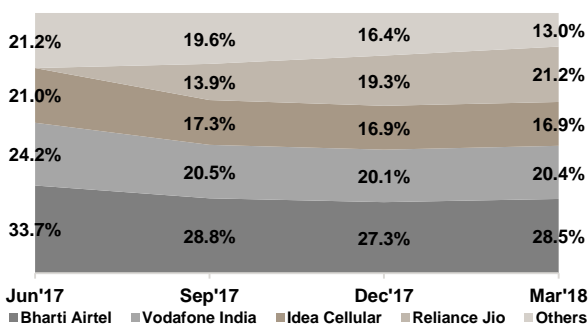
6



Note: Subscribers quarterly net additions includes metros only; P: Projected
Source: TRAI, CRISIL Research

Revenues of smaller players most-affected owing to loss of market share

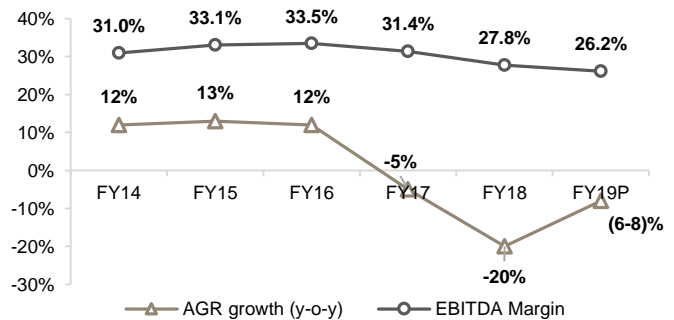
7



Note: Revenues taken are adjusted gross revenues
Source: TRAI, CRISIL Research

Pricing pressure impacts industry revenue and margins

8



Note: Revenues taken are adjusted gross revenues (AGR); The margins includes financials of Bharti Airtel, Idea Cellular, Vodafone and Reliance Jio; P: Projected
Source: TRAI, CRISIL Research

Revenue to skid further in fiscal 2019

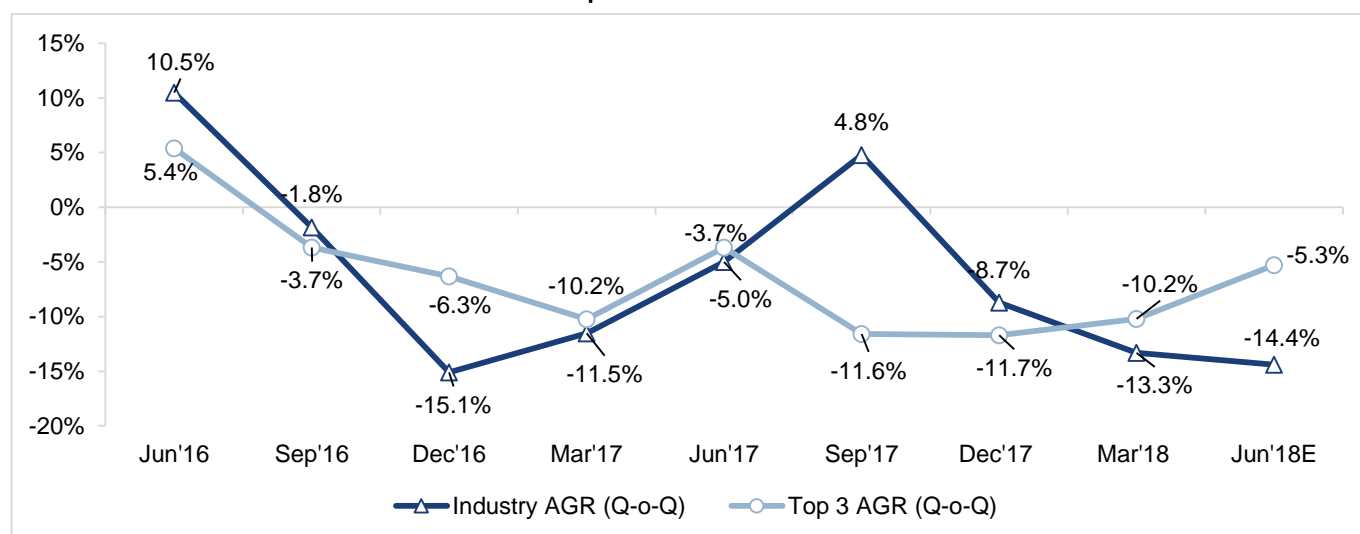
The intense price war in telecom, which started in September 2016 with the entry of Reliance Jio (RJio), is showing no signs of abating. If anything, it has become even more brutal, and the pain is expected to continue this fiscal.

Consequently, the industry's adjusted gross revenues (AGR; gross revenue net of interconnect charges) could decline another 6-8% on-year this fiscal owing to continued deterioration in realisation from data sales. However, volume growth in data, expected at ~45% (compared with a 4x jump in fiscal 2018), will limit the damage.

The corrosive effect of competition will see gross revenue of the top three incumbents – Bharti Airtel, Idea Cellular and Vodafone India – plunge 14-16% as they focus on retaining subscriber market share (based on a 45% volume growth in data, ~3% growth in subscribers and 18-20% drop in average revenue per user, or ARPU.)

The battle has seen the industry's gross revenue and AGR plummet ~10% and ~20%, respectively, last fiscal.

How revenues have continued to worsen for the top 3



AGR is adjusted gross revenue; E: Estimated

Notes:

Top 3 are Bharti Airtel, Vodafone India and Idea Cellular

Revenues are adjusted gross revenue (net of interconnect charges) as reported by Telecom Regulatory Authority of India.

Source: Telecom Regulatory Authority of India, CRISIL Research

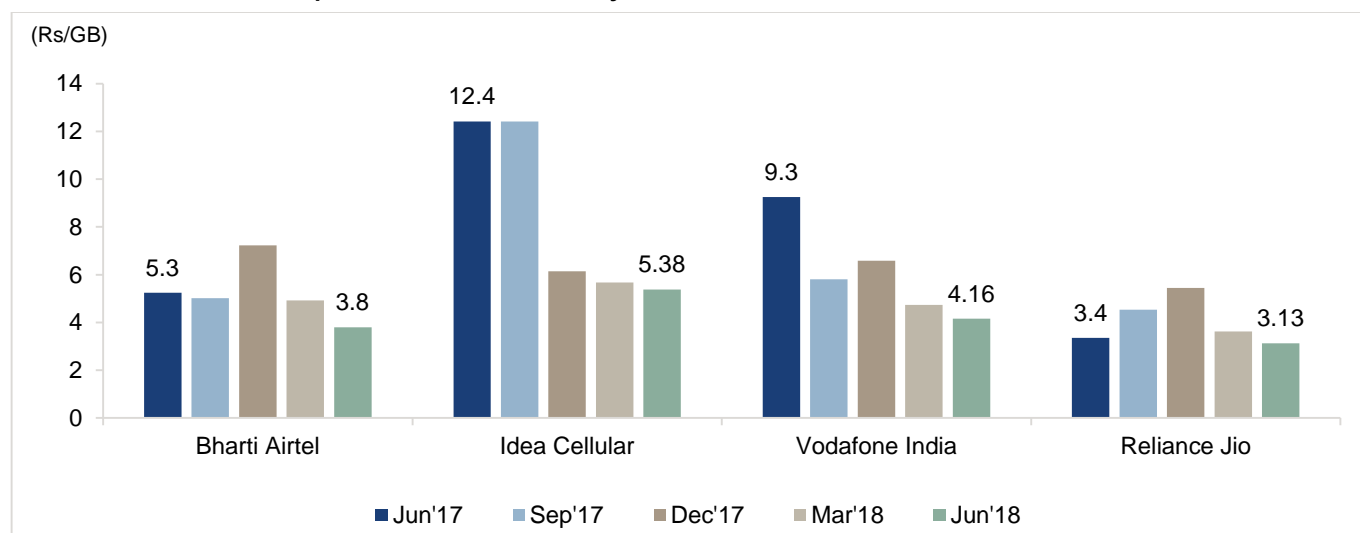
Realisations to remain under pressure as well

Even after RJio began charging for its services, the industry's realisation has been declining owing to continued downward revision in tariffs more for the high end data users. Average realisation per MB, or ARMB, plummeted from ~23 paise in fiscal 2016 to a mere 1.6 paise in fiscal 2018.

We see ARMB falling further to 1.15-1.20 paise by end-fiscal 2019 because of the data pricing war led by RJio, which has been a net gainer following a cut in interconnect usage charges (IUC).

The situation is expected to improve only after fiscal 2020, following completion of consolidation (Idea and Vodafone) for the industry.

Data tariffs of incumbents plummeted over 25% in a year



Note: Pricing includes average of all major prepaid packs offered by players. It is for reference purpose only.

Source: CRISIL Research

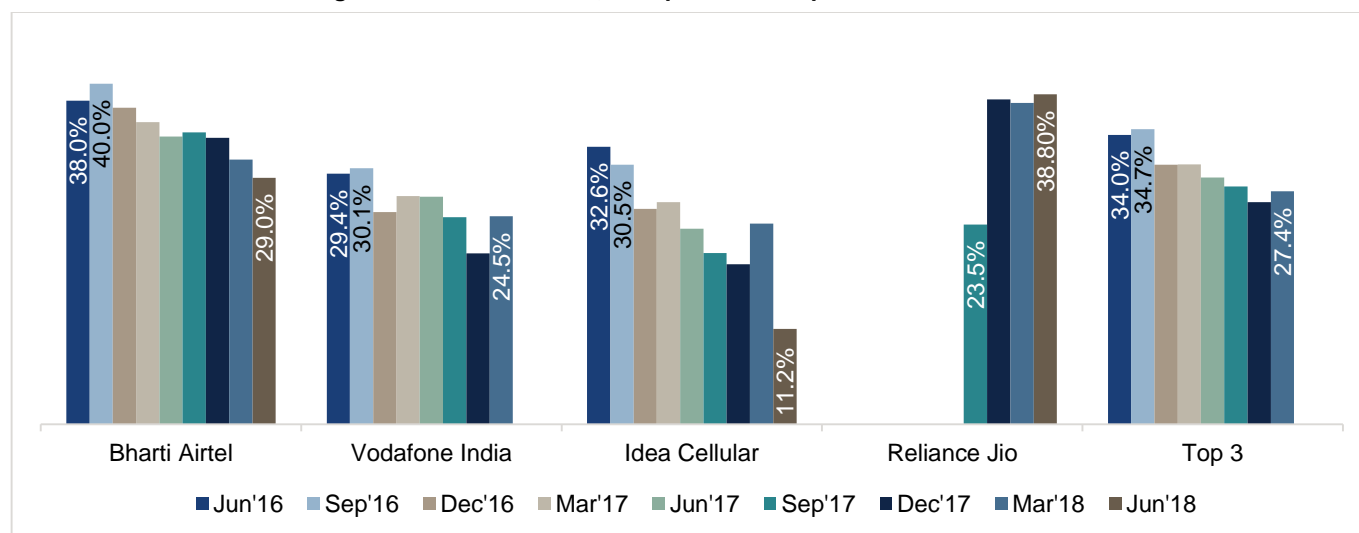
Reduction in IUC charges add to margin pressure

The reduction in IUC by the Telecom Regulatory Authority of India (TRAI) should have lowered access charges payout. However, the impact was just the opposite. Free calling plans by telecom operators sharply increased the minutes of use, which, in fact, increased the IUC payout.

Total minutes rose ~25% in the second half of fiscal 2018 compared with the first half. This increased access charges (as a percentage of revenue) by ~130 basis points (bps). Consequently, the industry's EBITDA margin deteriorated ~350 bps on-year in fiscal 2018.

The situation is unlikely to improve in fiscal 2019. The industry's EBITDA margin is expected to contract a further 150-200 bps owing to the full-year impact of the IUC cut. The top three incumbents (Bharti Airtel, Vodafone India and Idea Cellular) will see a sharper deterioration.

Consolidated margin of the top three incumbents is expected to shrink 250-300 bps on-year because of increase in network operation cost and deterioration in ARPU as competition is no longer limited to prepaid, but has entered the postpaid space as well. Between fiscals 2016 and 2019, the operating profit of the top three incumbents is likely to halve following a drop of ~1,000 bps in operating margins.

Market leader's EBITDA margin has deteriorated ~1,100 bps in seven quarters


Note: Top 3 are Bharti Airtel, Vodafone India and Idea Cellular. The EBITDA margin of Vodafone India for June 2018 is not available. The margins are based on standalone financials.

Source: CRISIL Research

Only bright spots are low data tariffs and rising digital content consumption

The one bright spot in the wireless space is the exponential growth in data traffic. In just one year, i.e. fiscal 2018, overall data traffic grew four-fold. Availability of cheap 4G-enabled devices along with all-time low data tariffs are driving the shift in subscriber mix towards 4G. Telcos are increasingly making content partnerships with over-the-top (OTT) players in order to drive data usage. Then there is the paradigm shift in data offering that the industry has undergone after the entry of RJio - from GBs per month to GBs per day. Availability of appealing original content and major events such as *FIFA World Cup* is likely to fuel data usage this fiscal. This will ensure that data traffic in fiscal 2019 increases ~45% despite a high base.

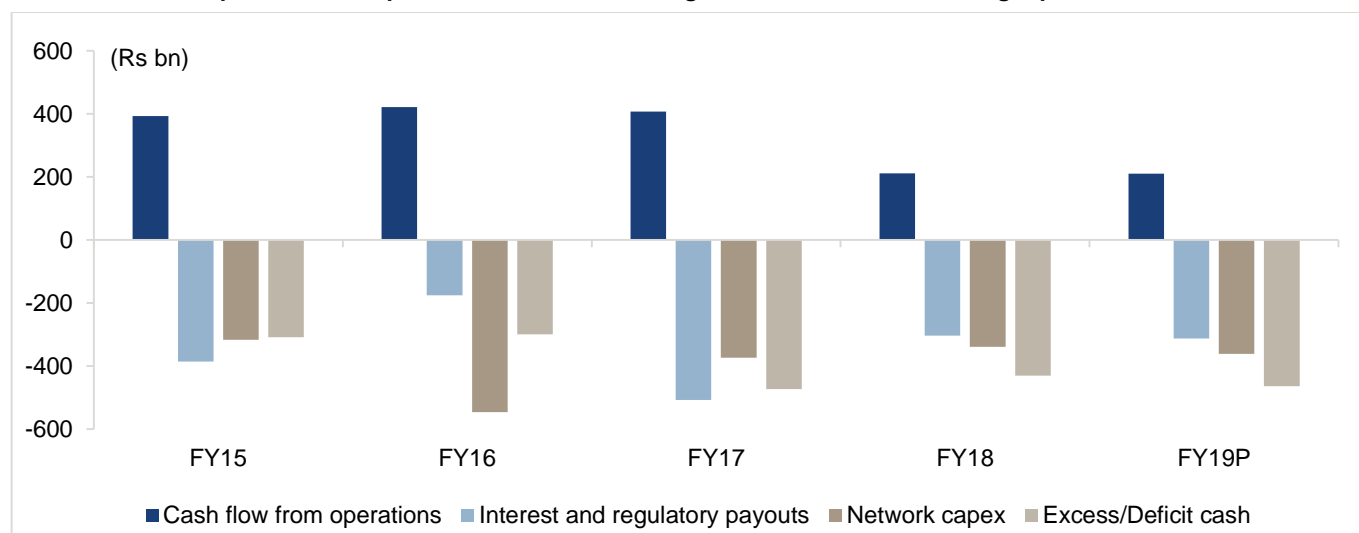
Additional debt funding likely to finance capital expenditure needs

To retain and expand market share, telecom companies will need to improve their services. CRISIL Research hence projects the network capital expenditure in fiscal 2019 at ~Rs 75,000 crore. Bulk of the capital expenditure would be in the mobile services segment, including the roll-out and strengthening of 4G services. Regulatory capital expenditure, however, will get some relief as the deferred payment period has been extended to 16 years from 10 years and will be at ~Rs 16,500 crore in fiscal 2019.

The industry's debt stands at Rs 3.5- 3.7 lakh crore in fiscal 2018, of which the top three incumbents' debt share is over 50%. The debt pile is expected to remain high in fiscal 2019 as cash headroom continues to drop. This is in line with decline in the industry's revenue and lower operating margins. As network capital expenditure is expected to remain high, the cash deficit (inflow *minus* outflow) is unlikely to get better in fiscal 2019.

Cash flow from operations of the top three incumbents is expected to shrink 3-5% on-year this fiscal. The higher debt needs gets substantiated by players raising or announcing plans to raise Rs 60,000-65,000 crore debt via bonds, debentures and loans. This is in addition to operators planning to raise over Rs 16,500 crore through sale of stakes.

Cash flows from operations of top 3 incumbents to remain grim amid revenue and margin pressure



P: Projected

Note: Financials of top 3 incumbents - Bharti Airtel, Vodafone India and Idea Cellular

Source: Company reports, CRISIL Research

Reserve prices lowered, but industry to see limited participation in next auction

In TRAI's recommendations to the Department of Telecom (DoT) on spectrum auction, prices have been lowered for most spectrum bands. If TRAI's recommendation is approved by the DoT, it will be the biggest spectrum auction in India till date in terms of number of bands (nine against seven bands offered in 2016) and quantum of spectrum (almost four times of that in 2016). As per the recommendation, the total quantum of spectrum available for auction across bands is over 8,000 MHz. Of this, ~75% of spectrum is available in new bands (3300-3600 MHz), likely to be used for 5G services.

In the sub-1 GHz bands, 700 MHz could be a good proposition in some circles owing to limited availability in other sub 1 GHz bands. For instance, a 78% cut in the reserve price of 700 MHz band in Tamil Nadu makes it cheaper than the 900 MHz band in this circle. Owning a block (5 MHz) in each circle in 700 MHz would come at a base price of ~Rs 32,800 crore for PAN India which may not be possible for players to bid in the current situation. Further, lack of a strong ecosystem may limit offtake for the newer bands.

The top telecom companies accounting for over 85% of revenue market share have good spectrum holdings. At the same time, much of the airwaves acquired during the previous auction are yet to be deployed. This, coupled with the stretched balance sheets of major telecom players will limit new purchases. Consequently, CRISIL Research believes if spectrum auctions are held within one year, participation is likely to be muted and limited to specific off takes.

JioGigaFiber means competition in wireline segment a monitorable

The launch of JioGigaFiber is likely to intensify competition in the wireline broadband space. Competitors such as Airtel have already been focusing on retaining wireline broadband subscribers, having revised tariffs. Thus, the pricing of JioGigaFiber after commercial launch will be the key to gauging its uptake.

In the medium-to long term, bundled services would be the key differentiator for telecom's having ability across categories – voice, data (including fixed-line broadband) and video. Bundled services will start gaining importance among operators as they seek to improve stickiness and gain market share.

Globally as well, telcos such as Verizon in the US and Vodafone in the UK have relied on bundles to retain subscribers and gain market share, and have moved towards offering quad-play bundles by either developing or acquiring fibre infrastructure.

Thus, we believe that once avenues of growth become fewer, or markets achieve high penetration – if not saturation – Indian telcos, too, would look at cross-capitalising their market position in one segment to strengthen another through bundled services.

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