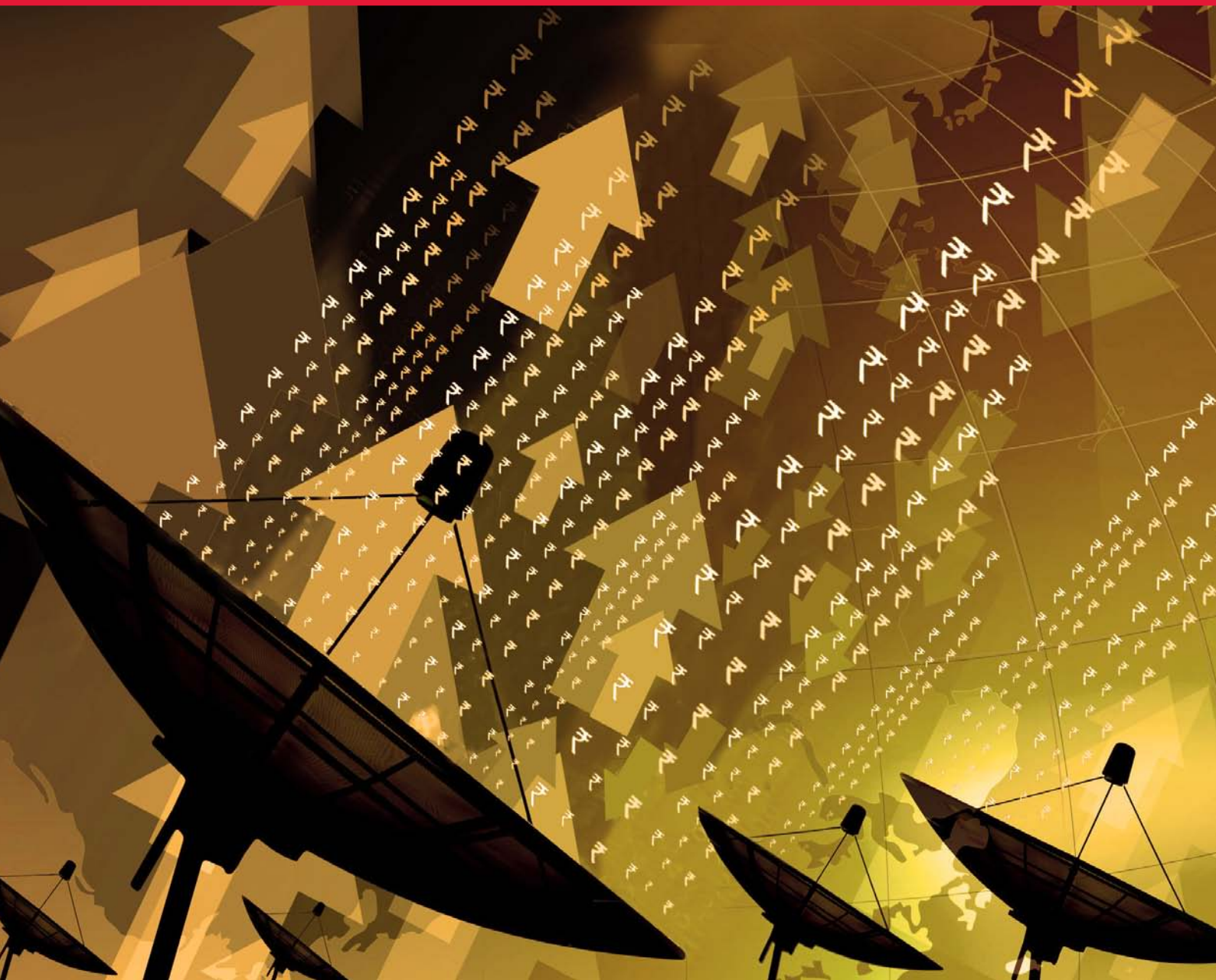




December 2015

Digitisation manna



Next phases should be a win-win for all

*DTH and MSOs to gain Rs 4,800 crore after investing Rs 22,000 crore
Government and broadcasters to gain Rs 10,000 crore sans investments*



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Executive summary

The next two phases of digitisation of television (TV) distribution, which we foresee extending all the way to fiscal 2018-end, should be the best so far for all the stakeholders:

Our analysis shows stakeholders would benefit by Rs 14,800 crore:

- Of this, direct-to-home (DTH) operators are expected to garner as much as Rs 3,300 crore
- Multi-system operators (MSOs) are expected to receive Rs 1,500 crore
- Broadcasters are estimated to receive Rs 3,900 crore
- Incremental tax revenues of Rs 6,100 crores are estimated to accrue to the government, thanks to increased disclosure of revenues by local cable operators (LCOs) and increase in overall subscription base. Of this, around 80% will accrue to the central government through licence fee and service tax, and the rest to state governments through entertainment tax

CRISIL estimates that given their already stretched balance sheets and high capital expenditure (capex) requirement in these phases, MSOs will be able to garner only 45% of the incremental digital market in the next two phases of digitisation. The balance will go to DTH service providers. This is in contrast to the previous two phases of digitisation wherein MSOs garnered 67% of incremental digital market together with LCOs.

DTH's upper hand in 'cable-dark' and sparsely populated regions will aid its market growth. And while incremental revenues will be on similar lines for both, profit share will be significantly more for DTH firms as they have complete access to subscription revenues unlike MSOs, which share a large part of their revenues with LCOs. While MSOs will continue to benefit from carriage revenues from broadcasters, CRISIL believes they are unlikely to receive incremental carriage revenues after digitisation.

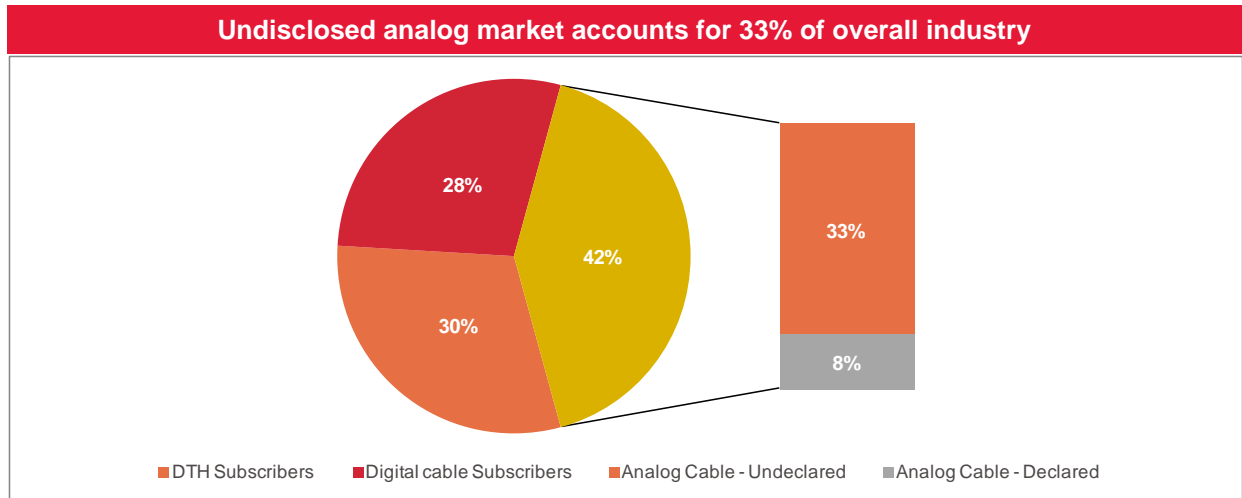
The only catch for the DTH operators is that they need to invest around Rs 13,700 crore over the implementation period. For MSOs, capital expenditure (capex) need is around Rs 8,300 crore. The capex requirements will be insignificant after the digitisation phase.

LCOs, who had hitherto been disclosing only an estimated 20% of their analog subscription base, are the only stakeholders who will lose in this phase of digitisation.

CRISIL believes the increase in overall market share and higher profits combined with promoter backing to part-fund the capex will benefit the credit profile of DTH operators. On the other hand, MSOs will have to increase their revenue share with LCOs to nearly 60% to prevent deterioration in their credit profile. Furthermore, while easing of foreign direct investment (FDI) norms will support fund raising plans for both DTH and MSO operators, the ability of MSOs to attract FDI funding will remain contingent on improving their revenue share with LCOs.

Digitisation manna

Digitisation will lead to improved transparency, higher benefits

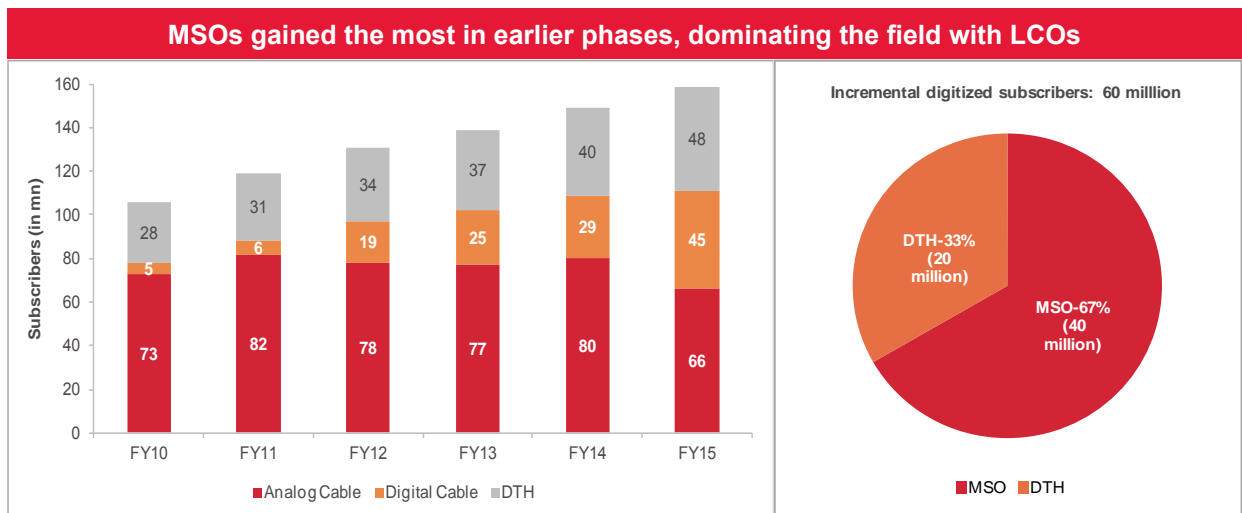


Source: CRISIL estimates

Digitisation is expected to lead to better transparency in the industry. CRISIL estimates that currently, unreported subscriptions of LCOs account for 33% of the total subscriber base of the industry. Digitisation aims to bring these subscribers into the organised fold. These undeclared subscribers, who will be subsequently declared to the MSOs and broadcasters, will contribute to the revenues of MSOs, broadcasters and governments.

MSOs dominated play in Phase I & II of digitisation

In 2002, when the government tried to introduce digitisation, LCOs did not respond. While MSOs had to incur high capex, LCOs had to part with a greater share of revenue and improve disclosure. There was no threat of market-share loss for both because there was no competition. The emergence of DTH as a competitor, however, forced MSOs and LCOs to gravitate during the government's second attempt at digitisation in FY2012 (refers to financial year, April 1 to March 31). In this phase, though the DTH segment garnered a share for itself, MSOs and LCOs retained dominance, garnering around 67% of the incremental digitised subscribers.



Source: CRISIL Ratings and industry sources

Note: Subscribers numbers in the above charts are at net level, after accounting for churn

What helped MSOs retain dominance in Phases I and II

Better customer connect

- Long-standing presence in the markets provided MSOs better access to subscribers vis-à-vis DTH companies, which were relatively new entrants
- Subscribers who were satisfied with the service of LCOs did not have a strong incentive to switch to DTH

Structural advantages in densely populated areas

- Wiring cost per subscriber was low for MSOs as Phase I and II markets were densely populated
- Single head-end used for a large chunk of the population resulted in low marginal cost per subscriber for the head-end

Ability to leverage balance sheet

- Large and national MSOs had capability to approach banks for funding as well as get support from private equity investors

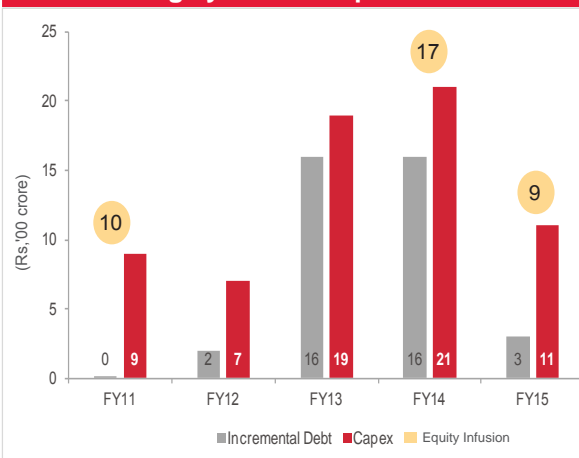
Aggressive targeting of subscribers

- MSOs, in a bid to combat DTH and retain market share, aggressively targeted their existing subscribers.

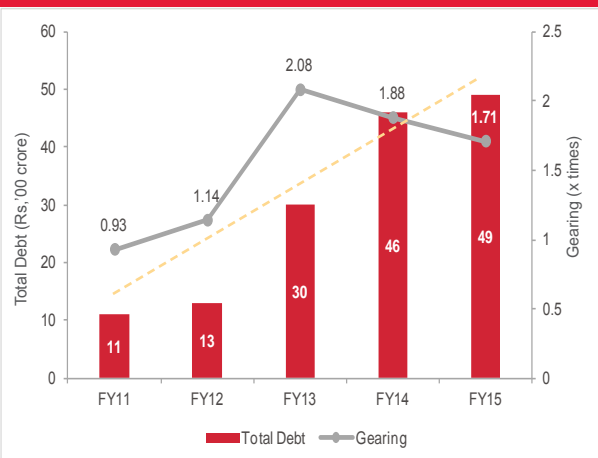
MSOs, however, leveraged their balance sheet to retain dominance

MSOs and DTH operators had to incur high capex (to install equipment at consumer premises,) including set-top box and antenna) for adding subscribers in Phase I & II. The total capex requirement was Rs 16,600 crore, of which 55% was spent by MSOs and 45% by DTH. MSOs predominantly funded their capex through debt, especially in FY2013 and FY2014, when seeding of Phase I & II set-top boxes was in full swing. But the equity infusion was not enough to meet the capex requirements, which led to piling up of debt and leveraging of balance sheets.

MSOs largely funded capex with debt...



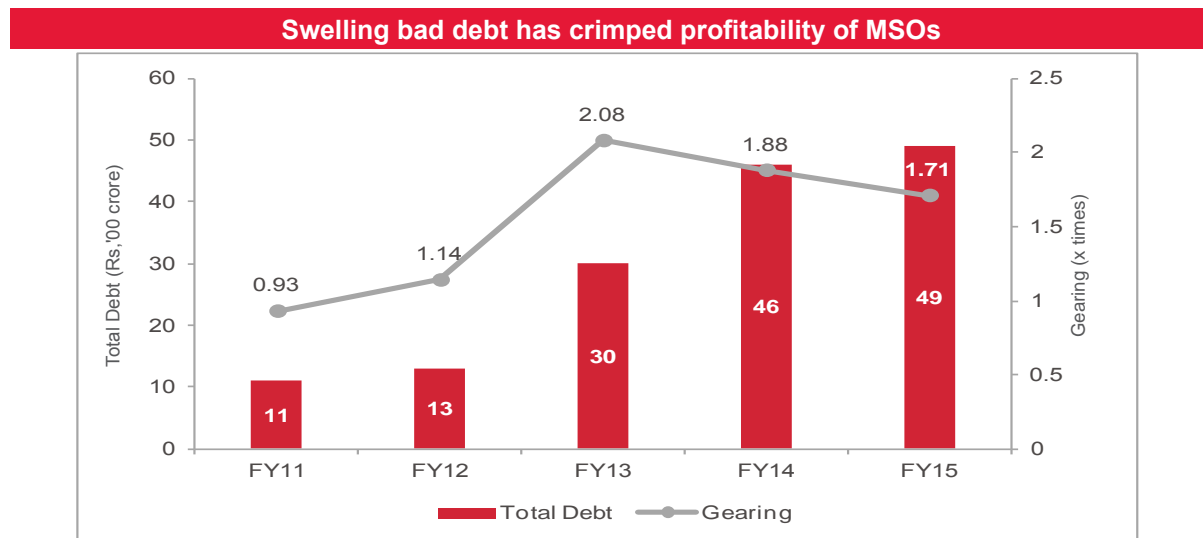
... and it left them with onerous debt



Source: CRISIL Ratings

Note: Large MSOs including Den Networks Ltd (Den Networks), Hathway Cable & Datacom Ltd (Hathway), IndusInd Media Communications Ltd (IndusInd) & Siti Cable have been considered for the charts. These players account for around 40% of the MSO segment. The balance is made up of numerous small players. Digicable, Network (India) Pvt Ltd (Digicable) which accounts for around 8% share, is not included because its financial data is not available.

Persistent revenue-sharing issues with LCOs delayed monetisation, hurt MSOs further



Source: CRISIL Ratings

Note: Large MSOs including Den Networks, Hathway, IndusInd & Siti Cable are considered

MSOs' revenue-sharing negotiations with LCOs did not gather much steam. Feeling the pinch of digitisation, LCOs continue to retain revenues from digital subscribers, preferring not to share them with MSOs.

Bad debt and losses of MSOs increased as LCOs did not pay the portion they had agreed to. So, even as MSOs undertook large capex, returns were nowhere in sight. In contrast to MSOs, DTH companies had an efficient working capital cycle, due to its pre-paid model. Therefore, the DTH companies did not have a receivables related issue and their cash flows benefitted from customer advances.

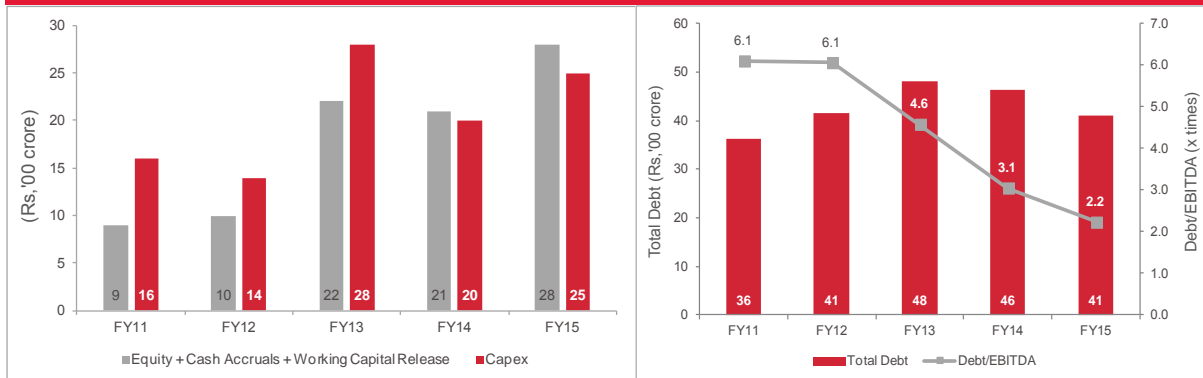
Meanwhile, DTH operators got funding support from promoters and also cut losses

DTH operators also incurred large capex during Phases I & II. However, it was largely financed through equity, cash accruals and working capital (on account of customer advances).

- **Equity:** Resourceful promoters pumped in funds in the business
- **Cash Accruals:** As DTH started getting subscribers, operating margins improved and cash generation increased because of high operating leverage
- **Working capital:** DTH companies, because of their pre-paid model, receive customer advances of around 90 days. The negative working capital business benefits their cash flows

Since a bulk of capex came from internal generation, debt did not increase considerably. Also, the ratio of debt/EBITDA (earnings before interest, tax and depreciation) improved over the years.

DTH capex predominantly funded by equity infusion, cash accruals and subscriber advances



Source: CRISIL Ratings

Note: players considered - TATA Sky Ltd (TATA Sky), Dish TV India Ltd (Dish TV), Sun Direct TV Pvt Ltd (Sun Direct). These players account for about 60% of DTH industry.

How different will Phase III and IV pan out?

The next two phases of digitisation will cover the remaining urban and rural areas of the country. The timeline for completion of Phase III is December 31, 2015, and Phase IV - December 31, 2016. However, CRISIL believes there will be some delay in the next two phases. CRISIL has also assumed 23 million subscribers will remain undigitised by March 31, 2018, and could be digitised later. The process of digitisation in Phase III and IV will be structurally different from the first two. And here, DTH will be in a better position compared with the first two phases.

What will help DTH in Phase III & IV

Sparsely populated regions

- High cable requirement in sparsely populated regions make it a costly affair for MSOs
- The DTH model does not have incremental costs in reaching sparsely populated regions (*an estimated 50% of DTH's present subscribers are already in regions defined under Phase III & IV*)

Fragmented MSO market

- The national MSOs, who dominated Phase I & II, have lower presence in smaller cities
- Such cities are dominated by over 6,000 small MSOs, who may not have the technical expertise and funding support as the larger MSOs

Stretched balance sheets of MSOs

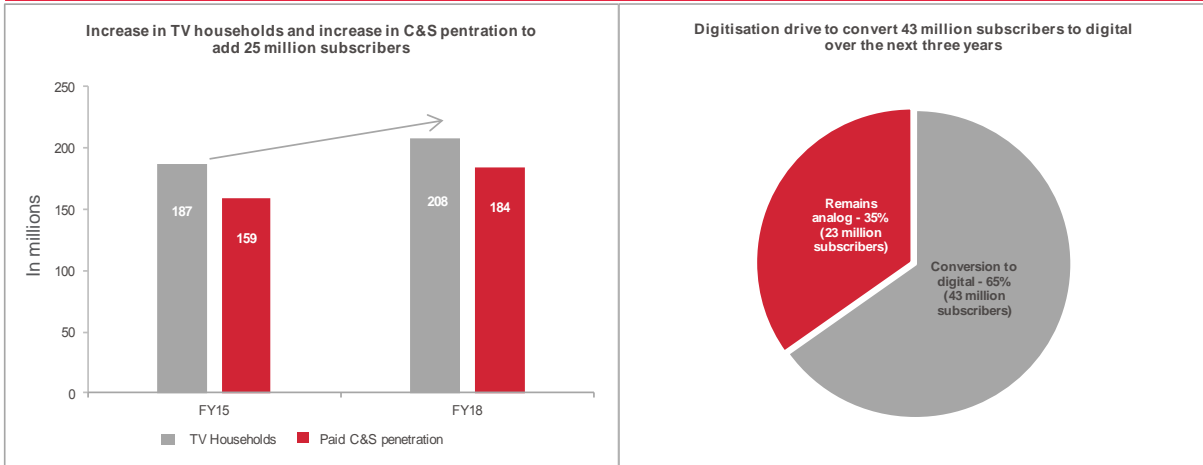
- The balance sheets of MSOs is stretched after funding for the first two phases of digitisation
- Funding requirements over the next two phases will be higher due to larger subscriber additions



Digitisation manna

CRISIL believes DTH will gather over half of incremental digital subscribers in the next two phases

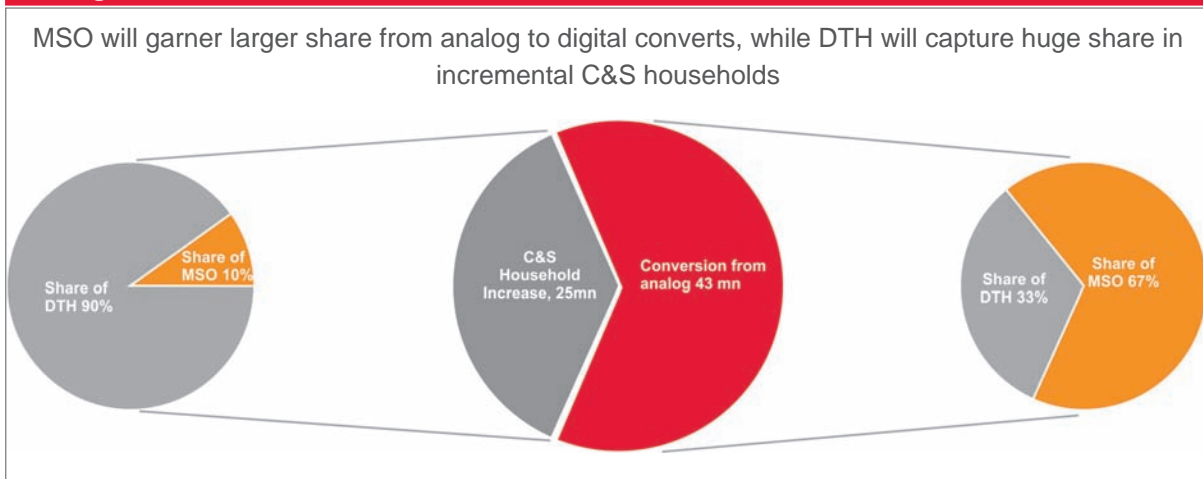
CRISIL estimates that 68 million digital subscribers will be added in Phase III and IV based on expected increase in the number of TV households and trend in penetration of cable & satellite within TV households. Of this, 25 million will be on account of increase in cable & satellite households and the balance 43 million will convert from analog. Today, the analog cable market has 66 million subscribers, and CRISIL expects 65% of it to be converted to digital.



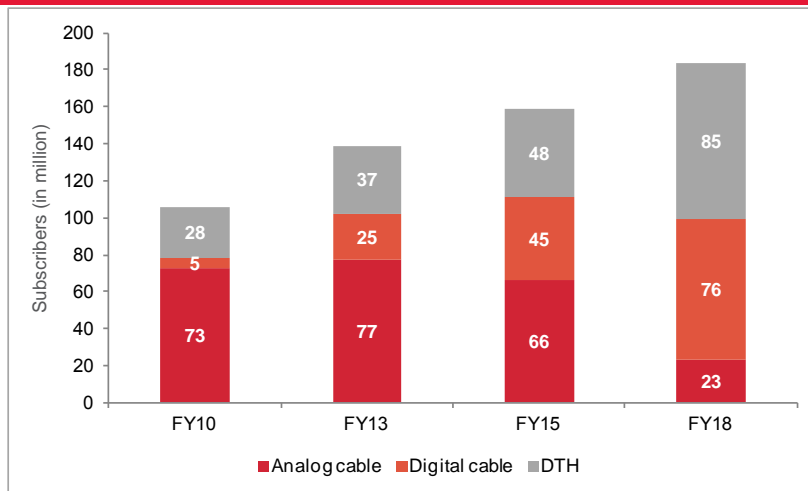
Note: CRISIL expects complete digitisation within a three-year timeframe is unlikely and estimates around 12% will remain analog even post this period.

Given that the increase of 25 million in cable & satellite homes will be mostly in cable-dark and remote areas, CRISIL estimates DTH to capture 90% of these subscribers. CRISIL also believes that it will not make economic sense for MSOs to target these markets on account of low population density and the need for fresh cable infrastructure.

CRISIL estimates that of the 43 million subscribers converted from analog to digital, MSOs will continue to have an upper hand and capture a large share – around 29 million, or 67% - leaving the rest to DTH.



Of the incremental digital market of 68 million in the forthcoming phases of digitisation, MSOs will add 31 million and DTH will add 37 million subscribers, giving them a share of 45% and 55% respectively. This is in contrast to the earlier phases where MSOs garnered two-thirds of the incremental digital subscribers of 60 million, leaving the balance to DTH.



Sources: CRISIL Estimates

Note: CRISIL believes that new players such as Reliance Jio Infocomm Ltd (Reliance Jio) and new technologies such as HITS (head-end in the sky) and ipTV (internet protocol television) can have an impact on both the DTH and MSO segments. However, given that their business models are still evolving, the extent of impact is unascertainable at present and will remain a key monitorable for the industry.

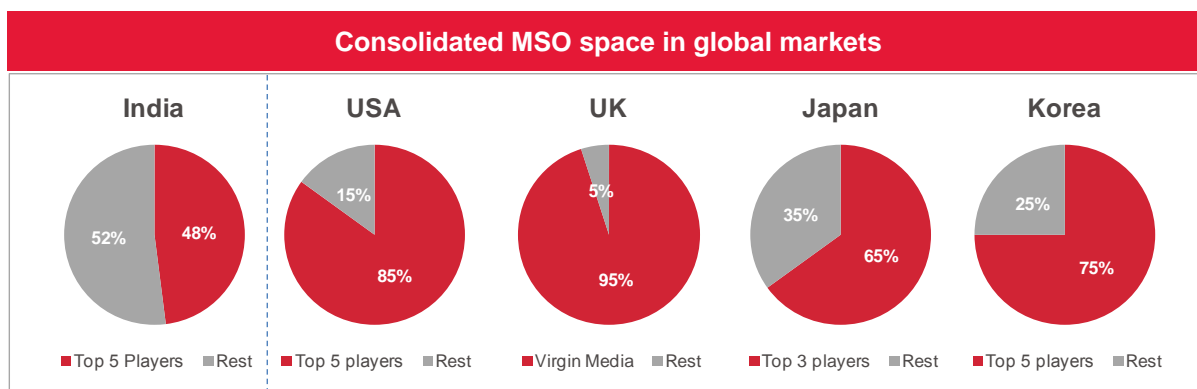
Growth for MSOs will be through consolidation

The Indian MSO market is fragmented with the top 5 operators having 48% share and the remaining 52% distributed among as many as 6,000 entities. CRISIL believes consolidation is imminent and will be symbiotic to both large and small MSOs.



*Carriage revenues are paid to the MSOs by broadcasters for placing channels at desired frequencies.

Digitisation manna



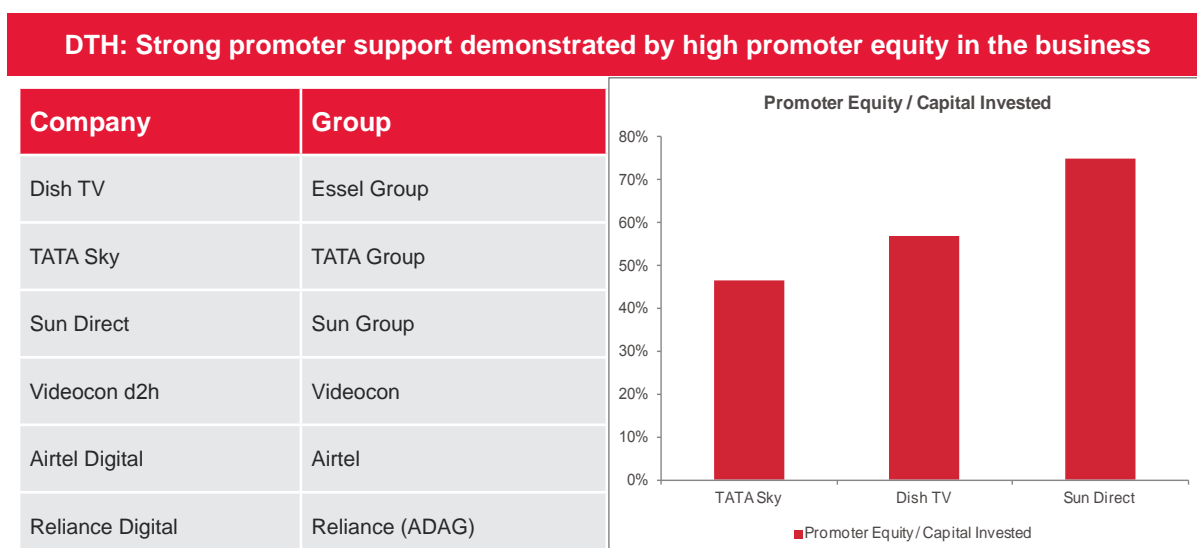
Source: Published sources

The MSO space in the global markets is much more consolidated. These are, however, much mature with greater level of transparency. CRISIL believes the Indian market will also move in that direction over a period of time.

Furthermore, CRISIL believes that the revenue sharing dispute between MSOs and LCOs will drive these players towards consolidation. MSOs have been taking initiatives to improve the revenue share including negotiating with the LCOs, pushing the pre-paid model and going for direct billing. These measures are expected to yield gradual benefits for the MSOs; consequently, revenue share is expected to improve to 60% by FY2018 from current levels of 40%.

DTH players will continue to enjoy support of resourceful promoters

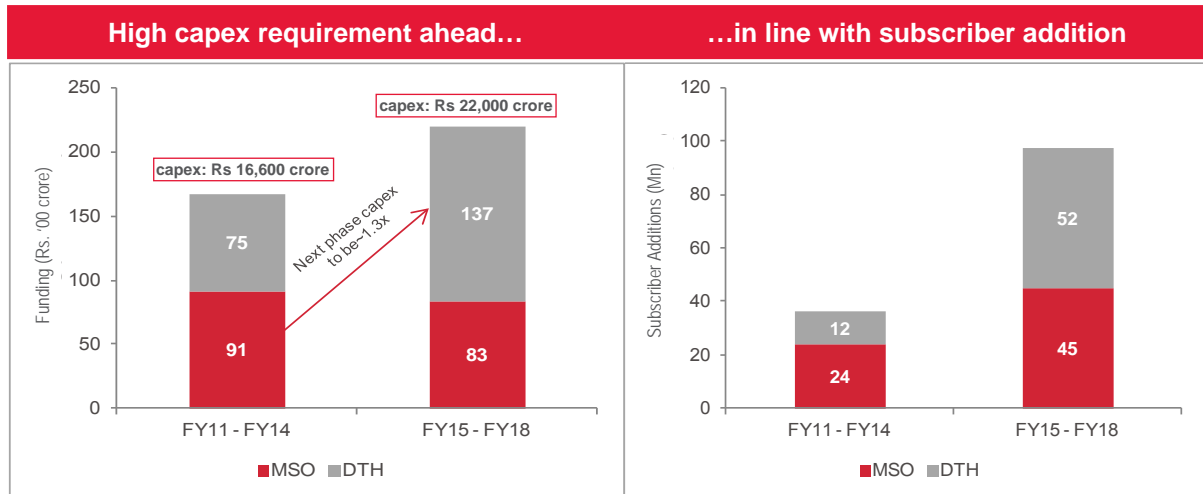
DTH companies have resourceful promoters, as seen from the table below. The promoters have been consistently infusing funds into the business to support operations through gestation losses. The strong intent of the promoter to support the ventures is demonstrated by high level of promoter equity as a proportion of invested capital.



Source: CRISIL Ratings

Next two phases of digitisation will require a capex of Rs 22,000 crore

The capex requirement over the next two phases is estimated at Rs 22,000 crore (at current levels of equipment cost), or ~1.3x what was spent in the first two phases. This is despite lower set-top box costs because gross subscriber addition over the next two phases is expected to be 1.6x more than the previous two phases. CRISIL estimates that DTH companies will have to invest Rs 13,700 crore as they will add more subscribers and their cost of capex per subscriber is relatively higher. MSOs will need to invest Rs 8,300 crore in forthcoming phases. Capex requirements will be negligible after completion of digitisation.



Source: CRISIL estimates

Note:

For capex, CRISIL has considered gross subscriber numbers, adjusting for subscriber churn. CRISIL believes gross subscriber addition over the next 2 phases will be 1.25x net subscriber addition.

Average cost of consumer premises equipment, or CPE, in first two phases was Rs 5,200 and Rs 3,150 for DTH and MSOs, respectively. The cost of CPE for DTH is higher on account of antenna cost. The gradual decline in set-top box cost has brought down the cost of CPE to Rs 2,550 and Rs 1,700 for DTH and MSOs, respectively. For calculating future capex, CRISIL has assumed these costs to continue.

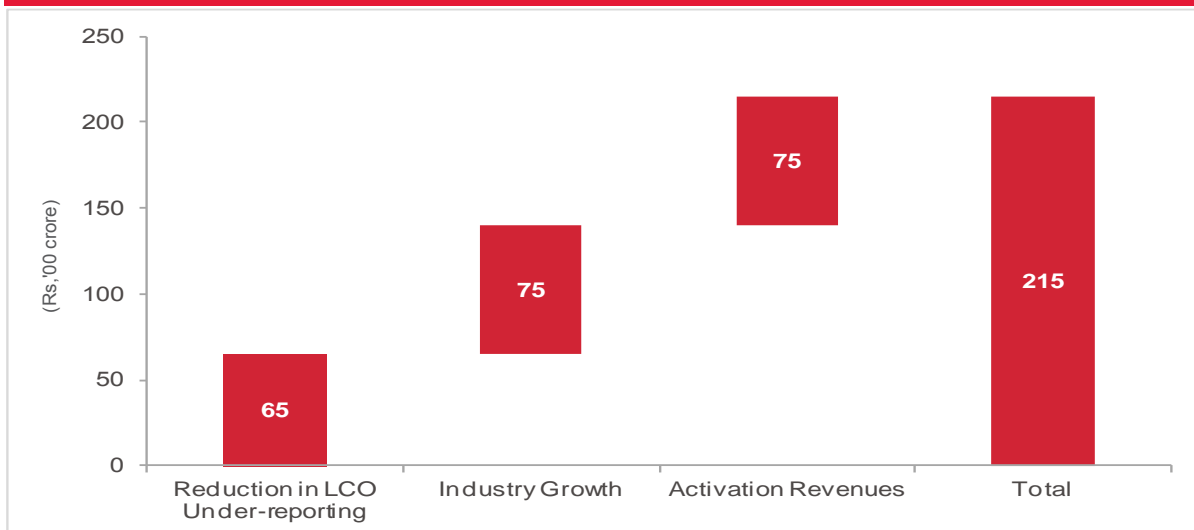
Capex for the next two phases is calculated from fiscal 2015 since voluntary digitisation of the next two phases has been undertaken by players from this fiscal, after completion of the first two phases of digitisation.

CRISIL sees Rs 14,800 crore gains accruing to all stakeholders over the next three years

The receipts from customers of MSOs, DTH companies and broadcasters will increase by Rs 21,500 crores (including Rs.4,400 crore of license fee payment and collection of service tax and entertainment tax). CRISIL believes that the increase in revenues will be without significant increase in operating costs. These revenues will be contributed by higher subscription revenues through better disclosure by LCOs, additional C&S households, and one-time activation revenues.

Digitisation manna

Increase in revenues, and therefore increase in EBITDA to be driven by lower under-reporting, higher subscriber base and one-time activation fee charged to new users



Sources: CRISIL estimates

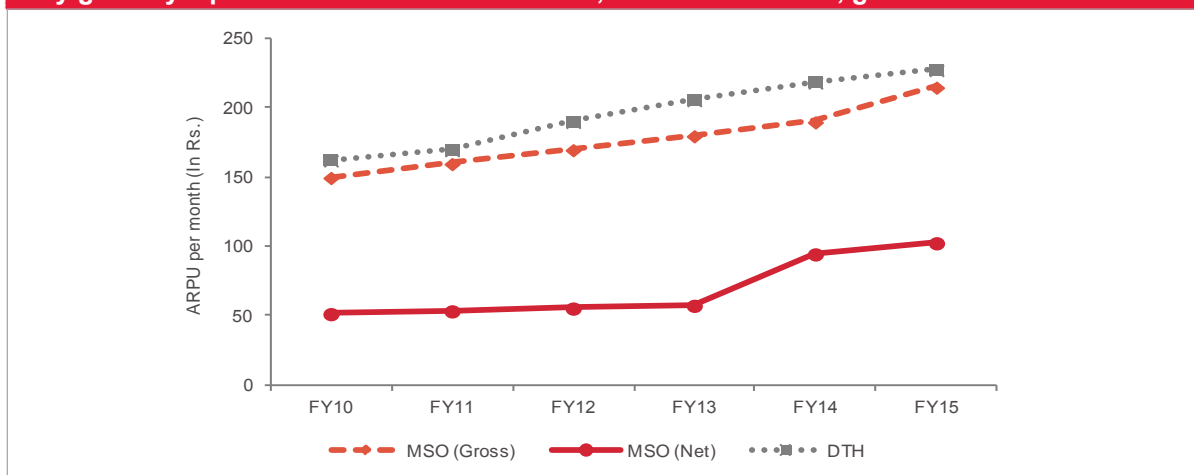
Note:

- Of the total analog cable subscription base of 66 million today, 65% is expected to be digitised in Phases III and IV.
- New subscriber addition of 25 million will add to both subscription revenue and activation revenue.
- Churn in subscribers is assumed to remain at 7-8% per year. This will additionally contribute to activation revenues.
- The activation revenue per new subscriber is estimated at Rs 1,100 for DTH and Rs 700 for MSOs after licence fee (only for DTH companies), service tax and entertainment tax.
- CRISIL has assumed an ARPU of Rs.210 for DTH subscribers and Rs.195 for digital MSO subscribers. While gross average revenue per user (ARPU) for DTH and MSOs are assumed to be maintained despite penetration in cost-conscious segment of the rural market, up-trading in existing customer base due to better value-added services and shift towards high-definition and paid channels will help retain ARPU. Average industry ARPU will, however, increase as DTH (which enjoys more ARPU than MSO) is expected to add more customers. The ability of players to uptrade their existing subscriber base will be a key monitorable during this phase
- ARPU share between MSOs and LCOs in digital cable is expected to be 60:40 – with growth in the share of MSOs (which was 40% in the past) triggered by better negotiations

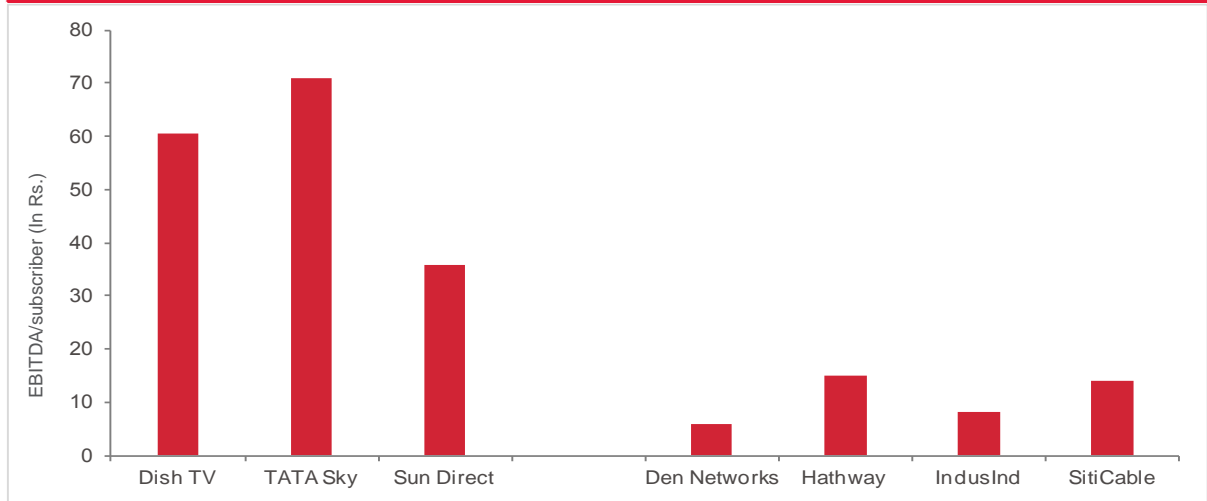
In line with their expected subscriber addition of 31 million and 37 million respectively, MSOs and DTH will generate similar increase in their revenues. However, MSOs are expected to report lower profits at the EBITDA level. That's because they have to share revenue with LCOs and so their net revenue will be significantly lower than that of DTH players.

DTH to have a larger share of profit compared with MSOs

While gross ARPUs are similar for MSOs and DTH operators, net ARPUs are lower for MSOs as they get only a part of ARPU from LCOs. DTH, on the other hand, gets it all..



... this leads to lower EBITDA/subscriber for MSOs compared with DTH



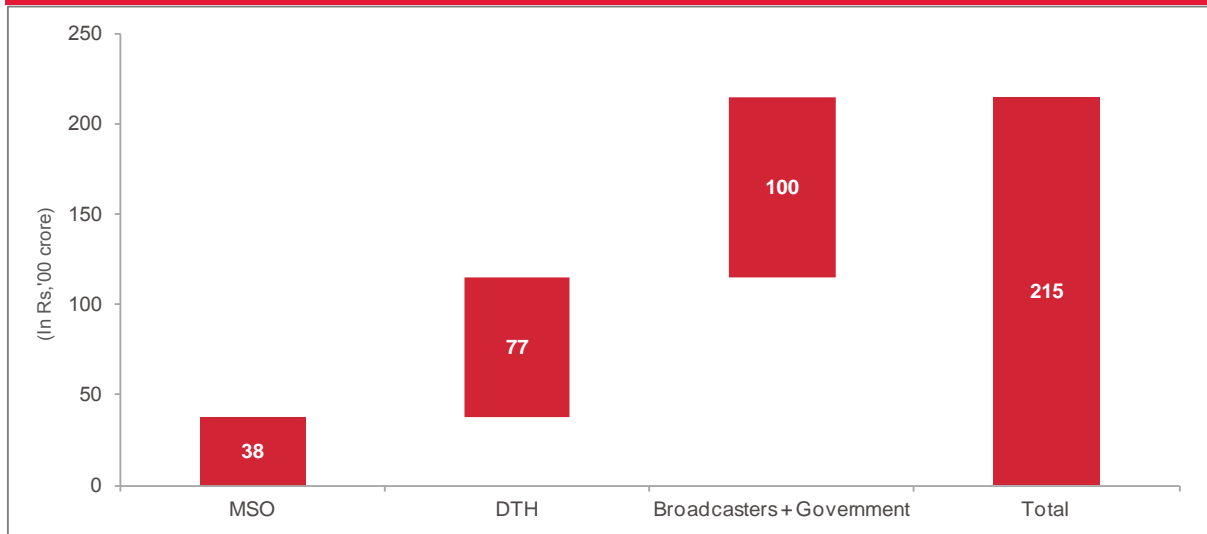
Sources: CRISIL Estimates

Note: EBITDA/subscriber is not considering one-time activation revenue

Gross ARPU: ARPU paid by the subscriber

Net ARPU: ARPU share accruing to the MSOs, after deducting the share of LCOs

DTH operators are expected to garner a higher share of incremental EBITDA as compared to MSOs. Broadcasters and government authorities would be the other large beneficiaries.



Source: CRISIL estimates

Note:

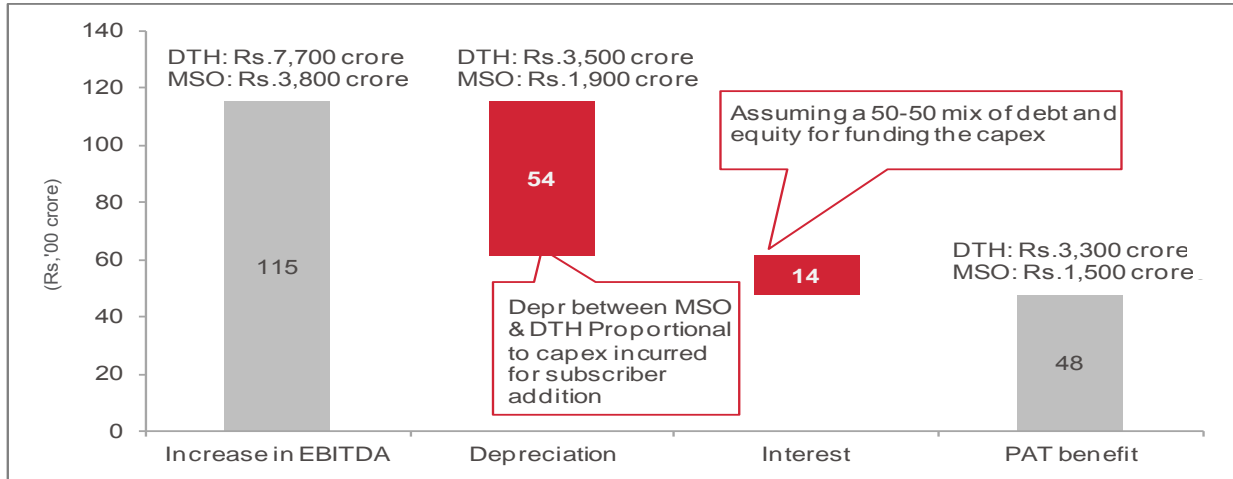
EBITDA increase for DTH operators and MSOs is calculated on the basis of subscriber addition, ARPU increase and revenue share.

MSOs and DTH operators share a part of their ARPU with broadcasters as content cost. Increase in subscription base and better disclosure at LCOs will significantly benefit them. For this calculation, CRISIL has assumed that MSOs and DTH companies will share 20% and 35% of the gross ARPU respectively with the broadcasters, based on past trends.

DTH operators and MSOs collect 14% as service tax to the central government and 8% as entertainment tax to the state government. In addition, DTH operators collect an additional 8% as licence fee. These taxes are levied on revenue. CRISIL has assumed tax rates will remain unchanged in the next three years.

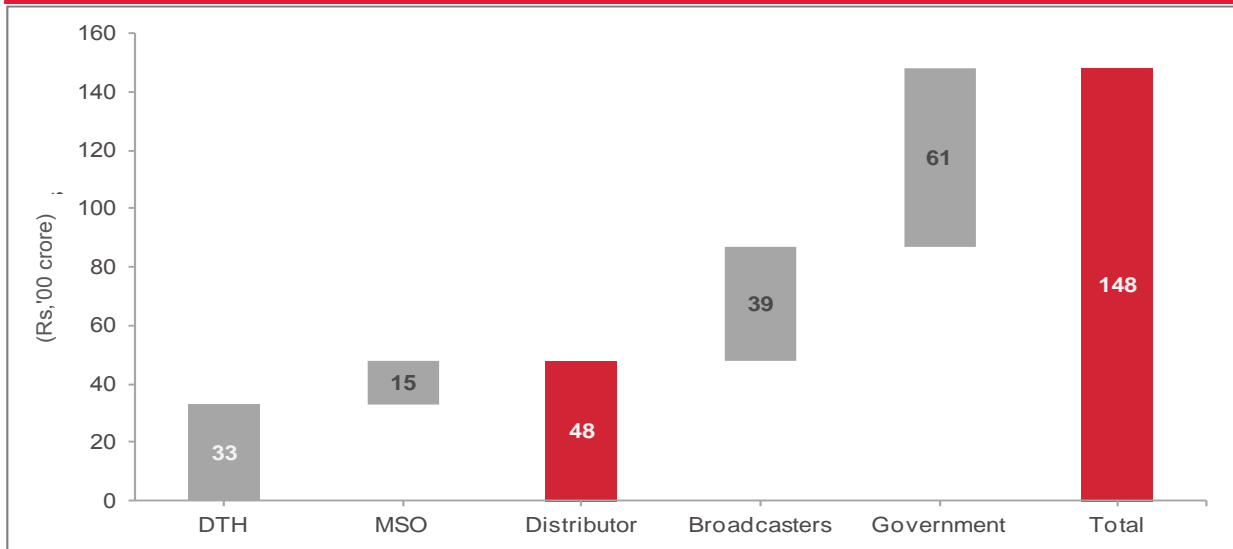
Digitisation manna

Rs 4,800 crore of PAT to be made by DTH and MSOs in Phase III and IV, of which DTH will get 65%



Note: Depreciation on CPE is assumed to be spread over 5 years. CRISIL has assumed a 1:1 funding mix towards external debt and equity + internal accrual for MSO and DTH companies. The proposed increase in FDI in the sector to 100% from 76% will further enhance the ability of MSOs to tap funds for capex. However, CRISIL believes that MSOs have to work out a proper revenue-sharing mechanism with the LCOs, thereby making the business model more feasible to attract FDI investments. Furthermore, CRISIL believes that DTH companies will continue to depend on support from promoters.

Total PAT benefits of Rs 14,800 crore for all stakeholders



Sources: CRISIL estimates

The benefits accruing to broadcasters at the EBITDA level are expected to flow to the bottom line since they will not incur additional costs for this income. They will, however, pay income tax on their gains.

PAT-level taxes have been considered only for broadcasters. DTH operators and MSOs are not expected to pay income tax due to their accumulated losses.

Total taxes in the chart also includes taxes paid by broadcasters

Digitisation will improve the credit profile of DTH operators notwithstanding their capex. For MSOs, improvement will be contingent on extent of revenue sharing with LCOs

In the previous two phases of digitisation, DTH companies gained critical mass in terms of subscriber base and also gradually increased their ARPU's because of sharper focus on value-added services. And decline in the cost of set-top boxes led to lower subsidy and quicker breakeven per subscriber. Since these companies are leveraged because of high fixed cost, incremental subscribers led to incremental revenues at a significantly lower cost, which meant a material decline in losses. This, along with part-funding of capex with equity, significantly improved their credit profile.

On the contrary, MSOs, which were making profits prior to digitisation, plunged into the red in Phase I and II of digitisation because of high bad debts (following debtor write-off from LCOs). The LCOs, which were facing revenue loss with increased disclosures, did not pass on the required revenue to MSOs despite increase in ARPU. Consequently, MSOs faced low net ARPUs on the one hand and increased content cost on the other. This, along with recourse to large debt for capex led to a substantial deterioration in their credit profile.

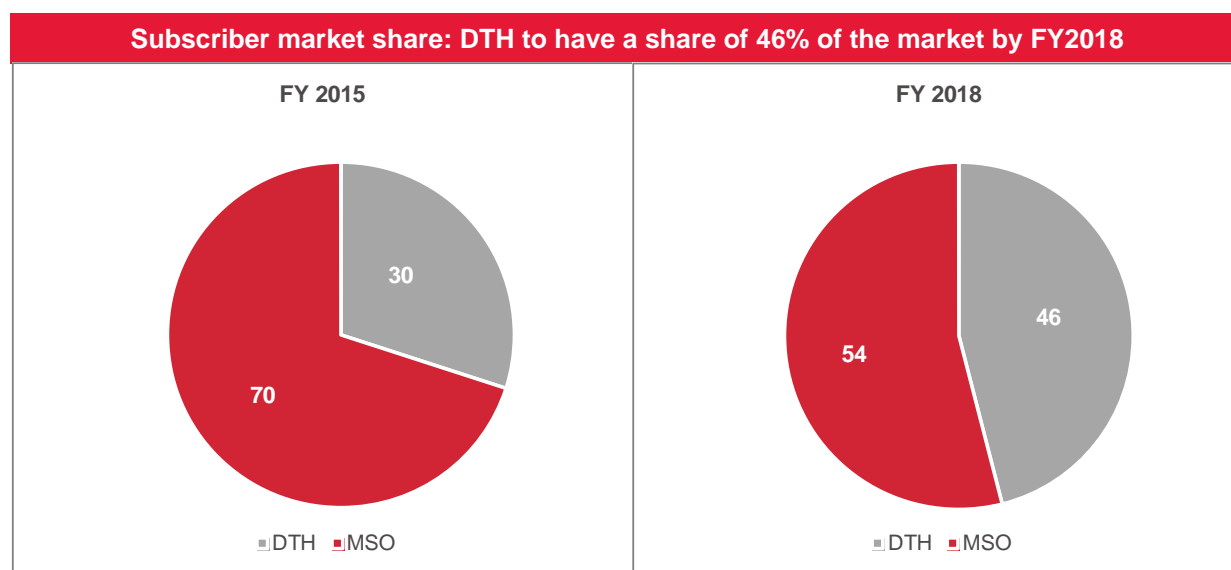
Going forward, CRISIL believes the credit profile of DTH companies will continue to benefit in the next two phases of digitisation driven by further improvement in operating performance and higher subscriber base. While their capex requirements will be more than that of MSOs because of higher subscriber addition, promoters will provide need-based support to fund capex, as was witnessed in the previous phases of digitisation.

MSOs will have to improve their revenue share with LCOs and will have to ensure 60% of ARPU collected to sustain their business and financial risk profile over the medium term. While MSOs are also expected to increasingly access customers directly and provide additional services such as broadband to increase profitability, any material improvement will hinge on the extent of revenue sharing by LCOs. This is also critical for them to restrict deterioration in their credit risk profile.

The Government of India has also increased FDI limit for MSOs and DTH operators to 100% from 74% (of which 49% was through the automatic route). This is particularly useful for MSOs as it will support fund-raising. However, resolution of revenue-sharing agreement with LCOs will be the key to attracting investment.

MSOs and DTH to co-exist

Overall, while DTH will have a slight edge over MSOs in Phase III and IV of digitisation, unlike in the previous legs, CRISIL believes they will co-exist. What's more, they will have an equal split of subscribers by the end of digitisation. MSOs will dominate larger cities and predominantly urban regions. DTH is expected to have a stronger footing in the two extremes of the subscriber market – the premium market requiring high-quality service (such as high-definition channels, call centre-based customer support) and the lower population density areas, rural areas and cable dark areas



Source: CRISIL estimates

The impact of HITS, ipTV and Reliance Jio is unascertainable due to their evolving business model. The impact of these on subscription share of MSO and DTH operators will be key monitorables.



Notes

About CRISIL Limited

CRISIL is a global analytical company providing ratings, research, and risk and policy advisory services. We are India's leading ratings agency. We are also the foremost provider of high-end research to the world's largest banks and leading corporations.

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