

India C&S TV distribution

Sector review

Digital(ization) in the slow lane

The top-down narrative of India Pay-TV distribution is positive – (1) market share ahead of global averages, (2) superior growth profile and (3) low ARPUs (with potential for above-inflation hikes). So why have stock returns not matched the potential? The unorganized, multi-tier Cable TV network in India has constrained value creation. The government's Cable digitization mandate has made progress, but monetization is slow; coupled with large investments (STBs, backend), the 'side-effect' of rising near-term financial leverage (Net-debt/EBITDA >5x) has become the 'primary' concern. Post 10+ years of investments, DTH is maturing (moderate growth but FCF positive and robust c.20%+ return profile). Buy Dish TV; Hold Hathway.

- **The one overhang to rule them all.** The state of the Indian C&S TV market is significantly advanced despite India being an emerging economy, with high Pay-TV penetration (c.80%) and superior subs growth (c.5% CAGR over FY14-20E) versus global averages. Though ARPUs are low (nominal/PPP terms), there is potential for above-inflation rate hikes. However, multi-tier structure Cable TV network in India, dominated by unorganized LMOs (last-mile operators), is the key constraint. Organized MSOs (multi-system operators) capture limited value in the fragmented Analog Cable value chain.
- **Digitization a game-changer, but slow progress.** The government's DAS (Digital Addressable Cable) mandate is the big hope. With encrypted signals and Set-Top-Boxes (paired with every TV), 100% subs declaration is ensured and improved share of consumer ARPUs for Cable MSOs is in the offing, but progress is slow – complete digitization in Phase-I/II markets (Metro/Tier-I cities) but only partial addressability (subs data/control, packaging/billing). Cable outperformed DTH on subs share initially but multi-tier structure weighed on monetization; MSO's share of consumer ARPUs remains sub-par and disputes with LMOs and broadcasters led to churn out of subs (to DTH).
- **Dish TV is the bird in hand.** Starting from 2003, DTH has captured c.30%+ subs share. A pan-India (natural) Digital platform, DTH has direct access and control over subs. The market is consolidated among top-4 players; Dish TV is the leading DTH operator with c.23% subs share. Phase-III digitization to support subs growth in the medium term. Robust c.20%+ return profile (subs growth through internal accruals) indicates compounding stock returns; Buy.
- **Hathway up against the wall of expectations.** Phase-I/II digitization saw Cable outperform DTH with c.60%+ Digital subs share. Hathway led with c.18% Digital subs share. However, financials lagged led by (1) below-par share of consumer ARPU, (2) disputes with broadcasters and (3) operating de-leverage (ahead-of-the-curve Digital opex). Phase-III digitization should drive paid subs base to c.11mn+ (c.10% incremental subs share), add to bargaining power and provide operating leverage (on overhead costs). However, damage to balance sheet is done (c.5x Net-debt/EBITDA); Hold. The company needs equity capital, period, to capitalize on high-speed BB opportunity.

Company	Rec	Target
Dish Tv India	Buy	INR120
Hathway Cable & Datacom	Hold	INR50

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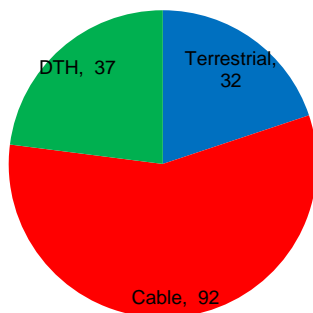
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Structure of Indian C&S TV distribution market

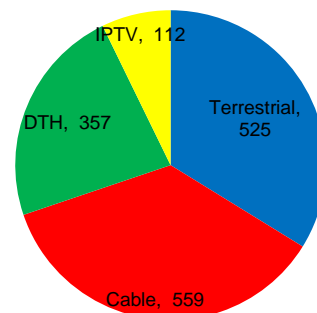
Notwithstanding the emerging nature of the Indian economy, the state of the Indian C&S TV (Pay-TV) ecosystem is significantly advanced, compared to global TV markets. Terrestrial TV, free to the consumer and subsuming public and private free-to-air (FTA) broadcasters, has large 34% share globally. However, its share in the Indian TV market is a modest c.20%, led by (1) the weak Indian pubcaster, Prasar Bharti, and (2) inability of private FTA broadcasters to capitalize on the large reach of terrestrial infrastructure of Prasar Bharti (disallowed by law). This provided an automatic fillip to the Pay-TV (C&S TV) market in India, led by private broadcasters and Cable LMOs (last-mile operators), who had a much better handle on the infotainment needs of the Indian consumer and spread Cable TV across the country in the 1990s. Starting operations in 2003, DTH quickly established itself (1) in Cable-dark rural areas and (2) as the premier Digital platform in cities.

Figure 1: Indian TV subs by technology, FY14 (mn)



Source: Investec Securities estimates

Figure 2: Global TV subs by technology, CY14 (mn)

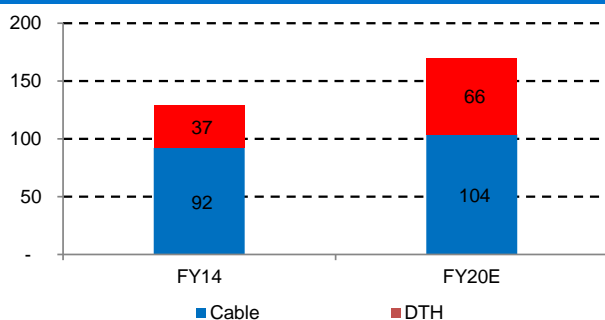


Source: FICCI-KPMG 2015 report, Investec Securities research

Despite already high c.80% C&S TV penetration in India (c.129mn out of c.161mn total TV homes), growth profile remains superior (Figures 3-4). According to KPMG, global Pay-TV market will likely deliver 3% CAGR over CY14-20E. India is expected to lead with robust c.5% Pay-TV subs CAGR in this period. The growth is partially led by low penetration of TV homes in India (c.60% of all homes). Rising income levels and improved prosperity across India is driving robust growth in TV homes (c.3% CAGR), further translating into growth in Pay-TV homes given the limited variety and lack of compelling content with the Indian pubcaster; the linguistic diversity of the Indian population (there are 13 languages in India with >10mn native speakers) has been better served by the invisible hand of the market (private broadcasters and Pay-TV distributors). Low ARPUs (US\$4/month) are supportive.

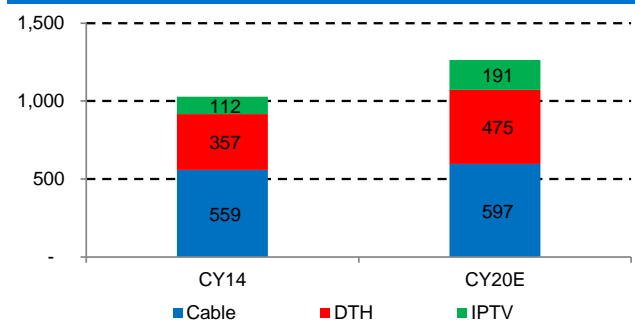
Indian C&S TV distributors enjoy a superior long-term growth profile.

Figure 3: Indian C&S TV subs by technology, FY14-20E (mn)



Source: Investec Securities estimates

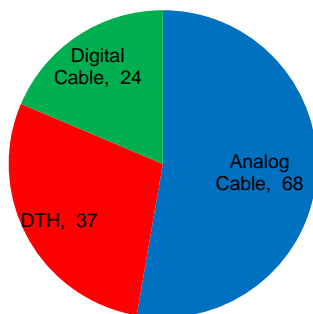
Figure 4: Global C&S TV subs by technology, CY14-20E (mn)



Source: FICCI-KPMG 2015 report, Investec Securities research

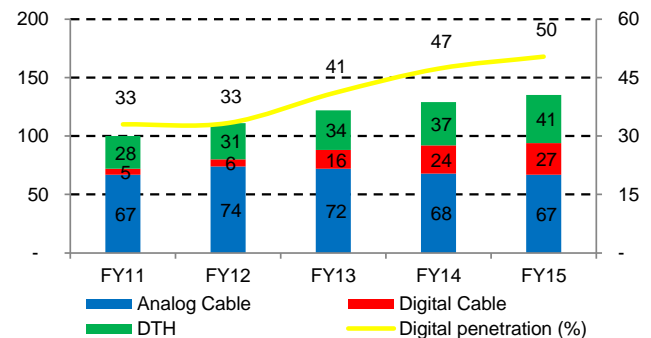
Digital TV is one area where Indian C&S TV distribution ecosystem lags the global market. The share of Analog Cable in India still remains high at c.53% compared to 18% share globally. There are historic as well as economic reasons why: (1) C&S TV started in India in the early 1990s, when Analog Cable was the dominant technology globally. (2) Low cost of operation was a good fit for low ARPU market such as India. (3) However, the primary driver was large number of small, unorganized LMOs, which collectively spread Cable TV across the country despite limited investment ability. Over time, the limitations of Analog Cable, limited channel capacity and poor signal quality, came to the fore. DTH launched as a voluntary (natural) Digital platform in India. Lately, the industry and the government have pushed mandatory digitization of Cable network in India, driving c.24mn Digital Cable subs and c.47% Digital penetration in India.

Figure 5: Indian C&S TV subs by technology, FY14 (mn)



Source: Investec Securities estimates

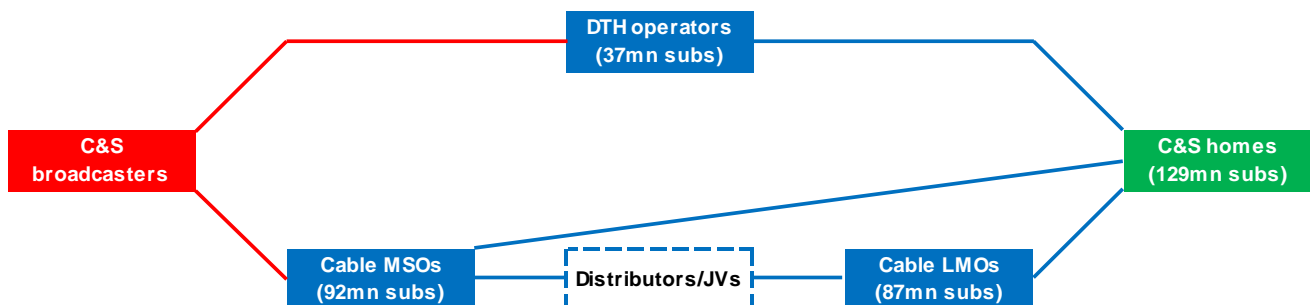
Figure 6: Indian C&S TV subs by technology, FY11-15 (mn)



Source: FICCI-KPMG 2015 report, Investec Securities estimates

The dominance of Analog Cable and limited voluntary penetration of Digital TV in India (prior to mandatory digitization in FY13), is symptomatic of the broader differential between the Indian and global C&S TV market. Figure 7 presents the value chain of the Indian C&S market. The Indian DTH market is similar to the global DTH market; the primary difference is pre-paid operations in India (similar to Telecom sector). But unlike the development of organized Cable MSOs in developed markets under a regulated environment (control over backbone and last-mile), the Indian Cable network evolved into an unorganized, rather unique multi-tier structure (LMOs, distributors/JVs, MSOs). Organized Cable MSOs followed LMOs into the value-chain, as B2B service providers aggregating broadcasters' channels and providing a combined signal/feed to LMOs. The unique market structure results in (1) fragmentation across the value chain and (2) limited value capture for organized Cable MSOs (8-10% of consumer ARPUs) in Analog Cable.

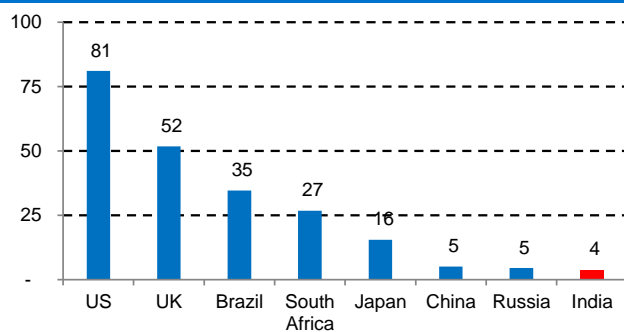
Figure 7: Structure of Indian C&S TV distribution market, FY14 (mn)



Source: Investec Securities estimates

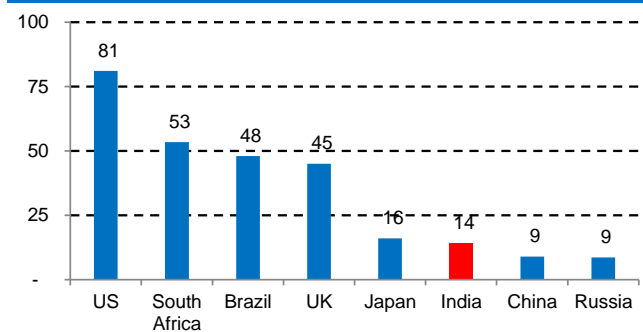
The Pay-TV ARPUs in India are also low compared to global markets, in nominal terms (given low per-capita nominal income in India) but also in PPP terms. There are multiple drivers of the same: (1) Analog Cable ARPUs were low initially (1990s) given the limited amount of channels on offer and the nascent development stage of the industry; low ARPUs drove penetration of Cable TV across India. (2) ARPUs remained subdued throughout 2000s despite sharp growth in available TV channels in India and launch of DTH services. (a) DTH being the challenger, benchmarked ARPUs to Analog Cable. Fearing loss of subs to DTH, LMOs started discounting and reducing ARPUs to hold on to their subs base. (b) The lack of packaging and inability to offer VAS (HD, VoD) services also contributed to low ARPUs in Analog Cable. Increasing maturity of DTH platforms and launch of HD services led to rising ARPUs in the new decade (2010s) – a sustainable trend, in our view.

Figure 8: Pay-TV ARPU across countries, nominal (US\$/month)



Source: BCG-CII 2015 report, Investec Securities estimates

Figure 9: Pay-TV ARPU across countries, PPP (US\$/month)



Source: BCG-CII 2015 report, Investec Securities estimates

The structure of Indian C&S TV distribution market is evolving, led by digitization of Cable network mandated by the government, which had been losing tax revenues as Analog Cable lacked addressability and the large number of unorganized LMOs (>60K, per industry estimate) under-declared their subs base as well as tax liability. The key change is complete declaration of subs base of LMOs for the purposes of tax collection as well as sharing of consumer ARPU with Cable MSOs and C&S TV broadcasters. Digital Cable shifts the balance of power partially in favour of Cable MSOs, which gain greater control over the subs base through encrypted signals and their investment in STBs. Correspondingly, their share of consumer ARPU also increases. We summarize the broad changes across stakeholders in DAS (Digital Addressable Cable) below, discussed in detail ahead in the report.

- **LMOs.** LMOs had the highest bargaining power in Analog Cable led by limited competition (natural monopoly), low switching costs (from one MSO to another) and control over the last mile. Digital Cable or DAS entails each subs/TV to be serviced through as STB, which is invested in and controlled by the MSO. Thus, complete declaration of the subs base and shared control of the subs base along with the MSO moderates their bargaining power.
- **MSOs.** Cable MSOs offered an undifferentiated service and faced aggressive competition in Analog Cable, as LMO switching cost was low. The subs base and key functions (access, billing, collections) were completely controlled by the LMOs. Digital Cable partially shifts the balance of power in their favour, as discussed above. Additionally, Digital Cable allows MSOs to offer differentiated VAS services such as HD and VoD, driving higher ARPUs over time. Overall, their bargaining power has improved, but at the cost of significant increase in capex (headends, STBs) as well as opex.
- **Broadcasters.** Large Pay broadcasters already had reasonable monetization from the value chain, given their exclusive/popular content offerings. Complete declaration in DAS further improves their bargaining power. Analog Cable had limited capacity (max 106 channels); greater capacity in Digital Cable moderates carriage and placement fees paid by FTA/Pay broadcasters.

- **Consumers.** With limitations on channel capacity in Analog Cable removed in Digital, the choice for the consumer has grown manifold. Addressability in Digital Cable also enables affluent consumers to partake premium VAS services (such as HD and VoD). However, subs under-declaration in Analog Cable also implied low prices for consumers; higher tax and MSO payouts by LMOs implies consumer ARPUs will rise; however, consumers will have the option of subscribing to the channels/bouquets they want.

Figure 10: Changes in Cable dynamics led by digitization

	Analog Cable	Digital Cable
LMOs		
Natural monopoly	Yes	Yes
Control over last-mile	Yes	Yes
Switching cost	No	Yes
Subs declaration	15-20%	100%
Bargaining power	High	Medium
MSOs		
Competitive intensity	Aggressive	Limited
Control over subs	No	Partial
Share in ARPU	Low	Medium
Investment requirement	Low	High
Bargaining power	Low	Medium

Source: Investec Securities estimates

Figure 11: Impact of digitization on Cable revenue share (Rs/month)

	Analog Cable	Digital Cable	DTH
Consumer ARPU	200	250	250
Declaration (%) (a)	20	100	100
Tax rate (ST+ET) (%) (b)	20	20	20
Tax provision (a)*(b)	(8)	(50)	(50)
LMO/DTH gross ARPU	192	200	200
MSO/DTH ARPU share (%) (c)	50	50	100
MSO/DTH gross ARPU (a)*(c)	19	100	200
Gross content cost	(35)	(70)	(70)
Broadcaster gross ARPU	35	70	70

Source: Investec Securities estimates

Dish TV India: Largest DTH operator by volume in India

Dish TV India, part of the Essel group, is the leading DTH operator in India. Dish TV pioneered the DTH segment in India with the launch of its operations in 2003. It offers a pan-India DTH platform with >520 channels and services including 48 HD channels and services through the tri-satellite technology. Dish TV has been a pioneer in the launch of innovative products in India such as Dish+ (recording w/o in-built hard drive). It currently has ~13mn net subs, including ~1mn HD subs. Two recent initiatives of Dish TV have been (1) Zing, a DTH service targeted at small-town regional language speaking subs and (2) Dish Lanka, the expansion of Dish TV service in the Sri Lanka market. Majority of Dish TV's subs come from semi-urban/rural markets of India, where purchasing power/nominal income of consumers (and thus, ARPUs) are low.

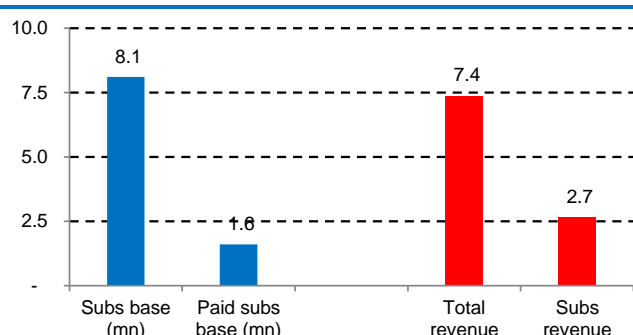
Hathway: Largest MSO & Cable Broadband operator in India

Hathway Cable and Datacom, part of the Rajan Raheja Group, is the largest MSO & Cable Broadband operator in India. Hathway was the first Indian MSO to roll out Digital Cable in India and the first to reach the milestone of 1 million Digital Cable subs. Hathway serves 160+ cities and towns in India with Cable TV, connecting 11.8mn subs and 8.5mn Digital Cable subs. The company has established 23 digital head-ends in the country and has high-quality HFC (Hybrid Fibre Coaxial) backbone and Telecom Fibre network spanning 16,000km. Hathway holds a pan-India ISP license and was the first Cable MSO to offer broadband services. Currently, its Broadband operations span 20 cities with 2.6 million homes passed and 0.5 million subscribers. It launched premium high-speed DOCSIS3 broadband technology in India in 2013, which currently has around 0.2 mn subs.

Phase-I/II digitization: key trends and learnings

The Indian C&S TV market is the third-largest C&S TV distribution market globally by volume (subs base), yet reporting above-average subs growth. However, value creation has been constrained by (1) dominant but fragmented Cable value chain and (2) low ARPUs. The unorganized structure and Analog nature of Cable market implies a lack of addressability (transparency, control) for the organized MSOs/broadcasters with LMOs under-declaring their subs base. Cable MSOs, sandwiched between LMOs (control over last mile) and large Pay broadcasters (channel bouquets), reported limited paid subs base and value-creation potential (subs revenue share at ~36% of FY10 revenues). The loss of significant tax revenues, alongside lobbying by organized industry participants, pushed the Government of India to enforce mandatory digitization of the Cable ecosystem in FY13, across 4 phases; Phase-I/II have been completed.

Figure 12: HATH subs base and revenue, FY10 (Rs bn)



Source: Company data, Investec Securities research

Figure 13: Digitization deadlines and implementation in India

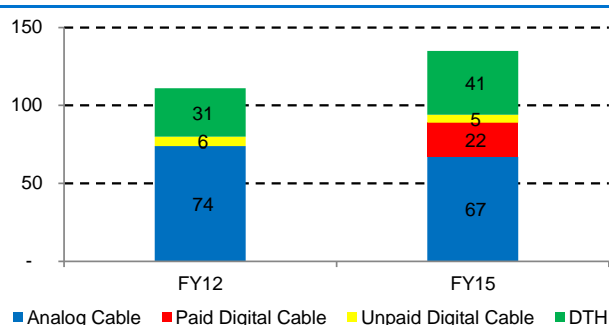
	Subs (mn)	Deadline	Implementation
Phase-I (4 metro cities)	12	Oct-12	Dec-12
Phase-II (38 cities >1mn population)	20	Mar-13	Sep-13
Phase-III (cities >10k population)	38	Dec-15	Jun-16 (E)
Phase-IV (all remaining areas - rural)	65	Dec-16	NA

Source: MIB, Investec Securities estimates

Digitization: Paradigm shift for Cable, on multiple levels

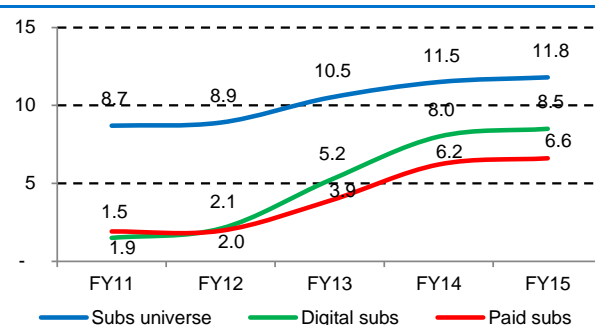
The large scale of the Indian C&S distribution market (111mn subs in FY12) was a mis-representation of sorts since the paid subs base was much lower; we estimate c.47mn in FY12 (assuming 100% of DTH subs and 20% declaration of Cable subs). The DTH segment developed under a regulated environment in India led by organized, well-capitalized players in control of the backend and the consumer. DTH being a natural digital service, subs declaration was 100% from the start. Digitization has the maximum impact on the Cable ecosystem: (1) elimination of subs under-declaration by LMOs (STBs in consumer homes and encrypted signals) driving (2) more equitable distribution of consumer ARPU among LMOs/MSOs. It is a paradigm shift for Cable MSOs: (1) increased control over the subs base (through STBs and encrypted signals) and (2) more critical role in the value chain (quality of service, packaging, VAS services). Phase-I/II digitization led to strong c.18% CAGR in industry paid subs base over FY12-15 (c.77mn in FY15).

Figure 14: Indian C&S TV subs by technology, FY12-15 (mn)



Source: FICCI-KPMG 2015 report, Investec Securities estimates

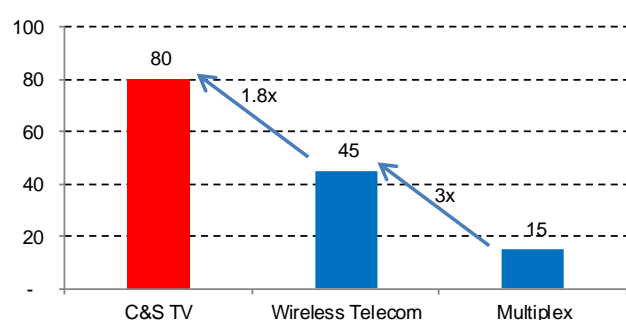
Figure 15: Hath sub base (universe, digital, paid), FY11-15 (mn)



Source: Company data, Investec Securities research

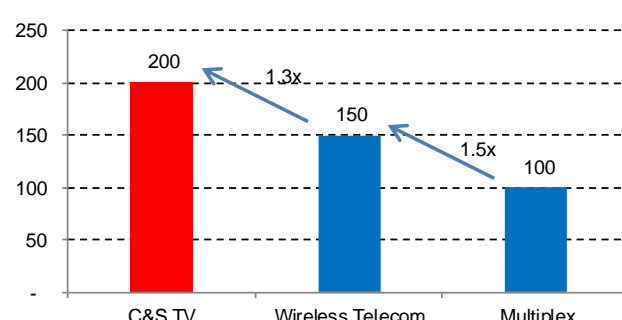
Aside from transparency in subs base, digitization also has the opportunity to unlock the ARPU potential of Indian C&S TV value chain. The current ARPU levels are subdued due to: (1) hyper-competition between Cable and DTH operators and among DTH operators, with LMOs sharply discounting prices fearing loss of subs to (digital) DTH services. (2) More important, the dominant Analog Cable in India has limited capacity (106 channels, restricts consumer choice) and lack of addressability (control over channels a subs can watch) implies inability to offer packaging and premium VAS (HD, VoD) services. Pay-TV services in India, even Analog Cable, provide large amount of content (entertainment, movies, kids, sports, news) at a low price point. Digitization enables potential for ARPU growth led by improved quality, more choice of channels as well as premium packaging/VAS services. A caveat: initial 15-16% ARPU hikes will go to the government (4-5% effective tax rate in the past, given subs under-declaration, versus 20%+ reported rate).

Figure 16: US media and communication ARPUs (US\$/month)



Source: Industry data, Investec Securities estimates

Figure 17: India media and communication ARPUs (Rs/month)

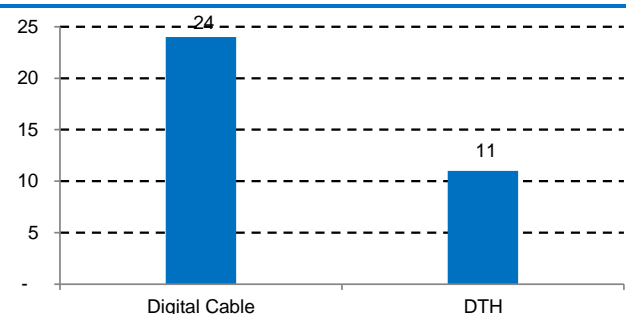


Source: Industry data, Investec Securities estimates

Phase-I/II digitization: A sweet victory for Cable, initially...

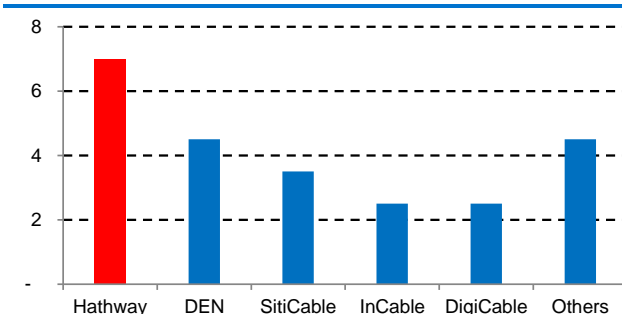
Cable delivered a strong performance in Phase-I/II markets initially, capturing c.70% share of Analog Cable subs shifting to Digital (Cable/DTH). The performance was particularly striking in light of the logistics involved and coordination required among the stakeholders (LMOs, JVs/distributors and MSOs) notably in Phase-II markets and against organized, well-capitalized DTH competition. Cable capitalized on its inherent advantages: (1) dominant, incumbent Pay-TV platform in Metro and Tier-I cities, (2) on-ground presence (LMOs) in each area/locality and (3) ease of installation/digitization (only the STB needs to be installed in consumer home, versus complex/time-consuming DTH installation). Within the Cable segment, the five national MSOs outperformed capturing a robust c.80% share. Besides the legacy strong position of national Cable MSOs in these markets, their capabilities and readiness for digitization also resulted in consolidation, as smaller/regional MSOs aligned (as JVs/distributors) with them.

Figure 18: Digital Cable and DTH STBs in Phase-I/II, 1HFY14 (mn)



Source: Investec Securities estimates * 20% more STBs than subs led by multi-TV homes

Figure 19: Cable MSOs STBs in Phase-I/II markets, 1HFY14 (mn)



Source: Investec Securities estimates

...took a turn for the worse subsequently

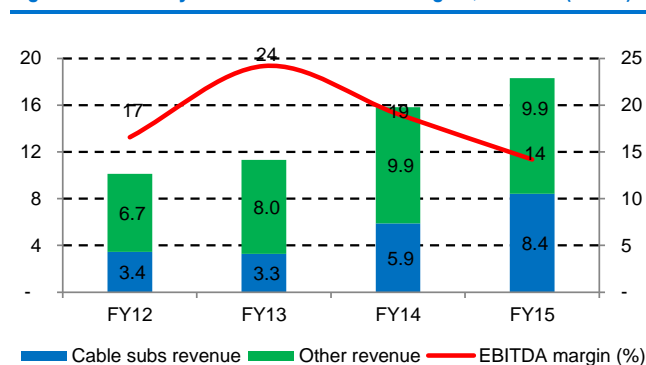
Notwithstanding the strong growth in paid subs and subs revenues, Cable MSOs have reported sub-par profitability over the last 2 years (2HFY14-1HFY16, post completion of Phase-II DAS in 1HFY14). We note the sharp jump in EBITDA margins in FY13-14 was led by Cable MSOs' sale of STBs to LMOs/consumer (one-time income); recurring EBITDA and margins thereafter, disappointed. Although consumer ARPUs increased (our channel checks suggest by Rs50/month on average), the majority of these have gone to satisfy the incremental tax demands. The key driver of the miss was lesser-than-expected share of consumer ARPU from the LMOs (~40% versus at least 50% expected). Additionally, ahead-of-the-curve digitization opex has been a burden with delayed deadline for Phase-III (Dec-15 from Dec-14 previously). Finally, although broadcaster payouts (net of carriage fees) are on expected lines, sharp swing of Rs40/month in absolute terms.

Figure 20: Impact of digitization on Cable MSO margins (Rs/month)

	Analog Cable	Digital Cable Expected	Digital Cable Actual
Consumer ARPU	200	250	250
Declaration (%) (a)	20	100	100
Tax rate (ST+ET) (%) (b)	20	20	20
Tax provision (a)*(b)	(8)	(50)	(50)
LMO ARPU	192	200	200
MSO ARPU share (%) (c)	50	50	40
MSO ARPU (a)*(c)	19	100	80
Net content cost	15	(30)	(25)
Gross content cost	(35)	(70)	(70)
Carriage+placement fee	50	40	45
MSO operating cost	(20)	(25)	(35)
MSO EBITDA	14	45	20
EBITDA margin (%)	21	32	16

Source: Investec Securities estimates

Figure 21: Hathway revenue and EBITDA margins, FY12-15 (Rs bn)



Source: Company data, Investec Securities research

Digitization is a structural shift to B2C business model for Cable MSOs (joint ownership of subs base along with LMOs, which remain in control of the last mile). The relationship between LMOs and MSOs has been difficult in the past, primarily around the low share of consumer ARPU for Cable MSOs. Post-digitization, Cable MSOs exercise control over the STB (signal/channel switch-off) in subs homes. As Cable MSOs pushed not just for higher revenue share but also billing rights to the consumer, supported by the sector regulator (TRAI), this served to create further strain in the relationship. LMOs see themselves as rightful owners of the last-mile and associated rights, and face an unfavourable economic transition with digitization. To push for their rights, LMOs joined hands to form collectives, improving their bargaining power against organized MSOs. Cable MSOs have already relented partially (on billing rights) but disputes on consumer ARPU share have not settled; trust deficit between LMOs and MSOs continues.

Figure 22: Impact of digitization on Cable LMO profits(Rs/month)

	Analog Cable Pre-DTH	Analog Cable Post-DTH	Digital Cable Expected	Digital Cable Actual
Consumer ARPU	225	200	250	250
Declaration (%) (a)	20	20	100	100
Tax rate (ST+ET) (%) (b)	20	20	20	20
Tax provision (a)*(b)	(9)	(8)	(50)	(50)
LMO ARPU	216	192	200	200
MSO ARPU share (%) (c)	40	50	50	40
LMO direct cost (a)*(c)	(17)	(19)	(100)	(80)
LMO operating cost	(60)	(60)	(60)	(60)
LMO EBITDA	139	113	40	60
EBITDA margin (%)	64	59	20	30
Subs base (#)	1,000	1,000	1,000	1,000
LMO income (Rs mn/annu)	1.7	1.4	0.5	0.7

Source: Investec Securities estimates

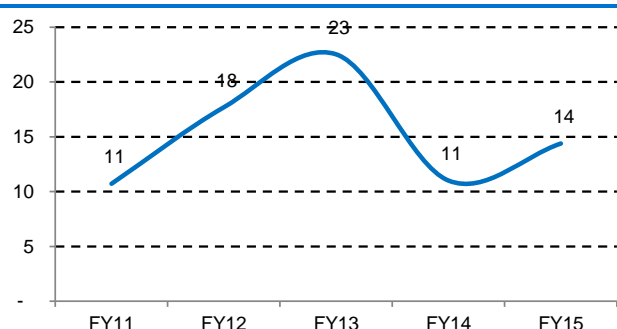
Figure 23: Cable TV Operators' associations in India

Association name	State
Cable operators federation of India (COFI)	All India
Andhra Pradesh Cable operators welfare association	Andhra Pradesh
West Delhi Cable operators association (WDCOA)	Delhi
Gujarat Cable operators association (GCOA)	Gujarat
Karnataka State Cable TV operators association	Karnataka
Maharashtra cable operators federation (MCOF)	Maharashtra
Madhya Pradesh cable operators association	Madhya Pradesh
Malwa Cable Operators association	Punjab
Thamizhaga Cable TV operators association (TCOA)	Tamilnadu
Telangana Cable TV operators association	Telangana
UP Cable operators welfare association	Uttar Pradesh
Cable & Broadband operators welfare association	West Bengal

Source: Industry data, Investec Securities research

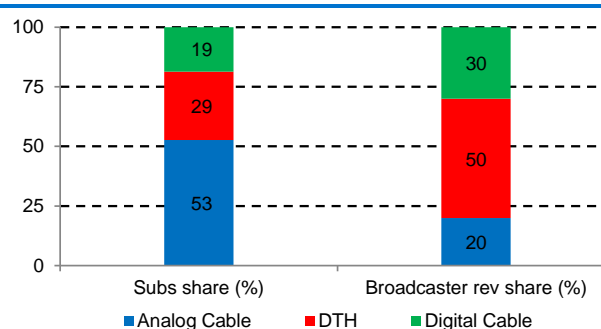
Although Pay-TV broadcasters share of consumer ARPU in digitization has been similar to what was initially envisaged, it has yet been a source of disputes with Cable MSOs. Unlike Cable MSOs, broadcasters did not have to commit any significant capex to the digitization initiative. However, they benefitted from the unlocking of capacity constraints in the shift to Digital Cable (potential ~1,000 channels) from Analog (106 channels), besides complete declaration of subs base and improved share in consumer ARPU. Therefore, although broadcasters did not invest directly in digitization, they agreed to give discounts on wholesale rates for content/channels (a form of subsidy/investment sharing with Cable MSOs) for some time. The implicit discounting/subsidy worked till 2HFY15, when the top-2 broadcasters in India (Star, Zee) demanded and received their fair share of consumer ARPUs. The broadcaster action was also supported by DTH, which continues to compete against price warrior Analog Cable in Phase-III/IV markets (>60% of DTH subs base) and thus, demanded parity in wholesale rates.

Figure 24: Zee adjusted subs revenue growth, FY11-15 (%)



Source: Company data, Investec Securities research

Figure 25: C&S TV subs share and subs revenue share, FY14 (%)

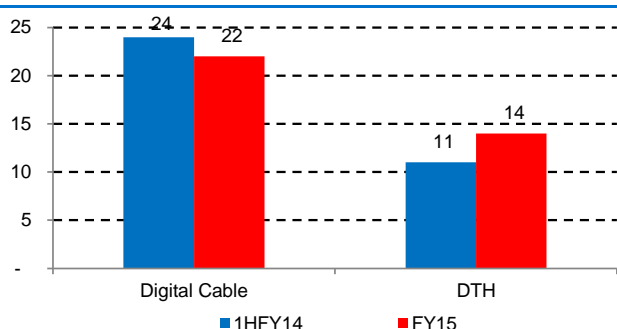


Source: Investec Securities estimates

Trailing impact of LMO/broadcaster disputes on Cable MSOs

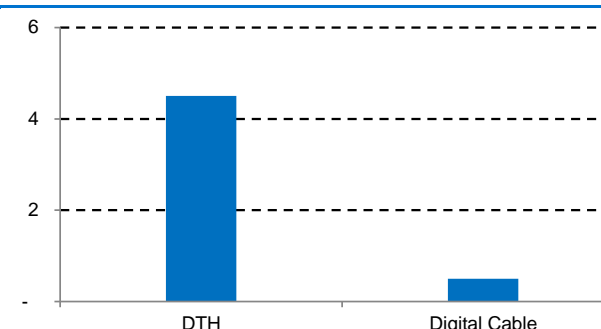
MSOs were envisaged at the centre of the Cable value chain in digitization; the onus was on them to deliver 'something' for everyone' promise of digitization: (1) tax revenue for the government, (2) channel capacity and subs revenues for broadcasters, (3) choice and improved quality for the consumer alongside (4) robust returns for their shareholders. Things haven't quite gone accordingly to plan, and Cable MSOs have struggled, up against the wall of expectations. The push for a higher share of consumer ARPUs continues, through legal and other available means; STB switch-offs have been utilized to drive home the message to LMOs. Broadcasters have also used channel switch-offs as a bargaining chip in their negotiations with MSOs. However, over time, these resulted in poor quality of service for consumers, and in Cable losing share to DTH in Phase-I/II markets. Additionally, continued MSO-LMO disputes have impacted HD rollout; DTH leads.

Figure 26: Digital Cable, DTH STBs in Phase-I/II, 1HFY14-FY15 (mn)



Source: Investec Securities estimates * 20% more STBs than subs led by multi-TV homes

Figure 27: HD subs across DTH and Digital Cable (mn)



Source: Investec Securities estimates

DTH: Steady growth, robust returns

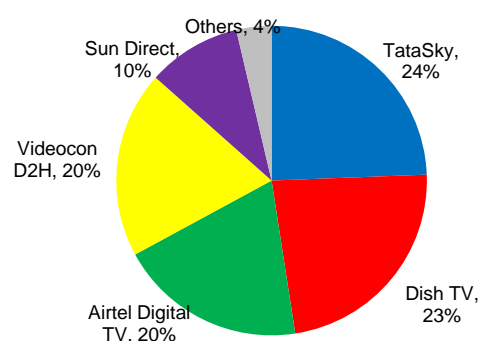
The DTH market in India was established in 2003 with the launch of operations by Dish TV. However, regulatory uncertainty (on content availability) in the initial years constrained operations. These had been resolved by the time the next wave of operators launched – TataSky (2006) and Sun Direct (Jan-08). The key differentiators of DTH versus Cable in India: (1) direct access and control over the consumer, (2) pre-paid services and (3) natural Digital platform. The DTH market in India also went through a hyper-competitive half-decade (CY06-11): (1) sharply reduced entry prices (STB subsidies), (2) low ARPUs benchmarked to Analog Cable despite superior service levels while (3) natural Digital platform implied 100% subs declaration and payments to broadcasters. The upshot was scale (c. 25%+ subs share in FY11, within 5 years of launch); organized, well-capitalized promoters (Dish TV – Essel group; TataSky – News Corp) supported the business.

Figure 28: DTH and Digital Cable MSO payback (Rs/month)

	DTH	Digital Cable
Consumer ARPU	250	250
Declaration (%) (a)	100	100
Tax rate (ST+ET) (%) (b)	20	20
Tax provision (a)*(b)	(50)	(50)
DTH/LMO ARPU	200	200
DTH/MSO ARPU share (%) (c)	100	40
DTH/MSO ARPU (a)*(c)	200	80
Net content cost	(60)	(25)
DTH/MSO operating cost	(70)	(35)
DTH/MSO EBITDA	70	20
DTH/MSO capex (Rs/sub)	2,200	1,500
STB subsidy (Rs/sub)	2,000	1,000
Fixed capex+WC (Rs/sub)	200	500
Payback period (months)	31	75

Source: Investec Securities estimates

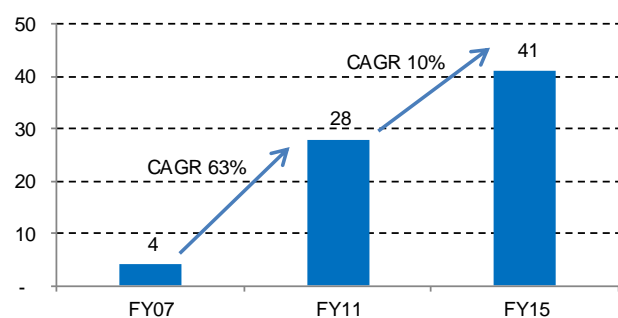
Figure 29: DTH operators market share, FY15 (%)



Source: Investec Securities estimates * active subs base

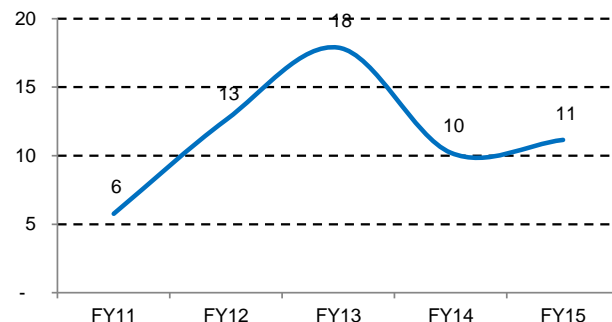
However, the state of affairs was unsustainable, and lessons were learned by the DTH market. Competitive intensity moderated over time; entry and package prices were increased, even at the cost of churn (loss of subs – price-sensitive subs went back to Analog Cable). The market has consolidated among four national players with Sun Direct a regional player (South India). The focus shifted to improving subs mix (VAS services such as HD were launched in late-CY10) and driving profitability. Return ratios have significantly improved; few operators have become cash positive and the others are close to achieving cash breakeven. The explosive growth of initial few years (also base effect) has moderated but remains robust. Mandatory digitization of the Cable network has multiple benefits for DTH operators: (1) subs adds in the shift to Digital, (2) higher ARPUs in the Digital ecosystem but most important, (3) reduced churn. The share of HD has gone to c.10% of the DTH subs base, within 5 years of launch, supporting margins and return profile.

Figure 30: Indian DTH segment subs base, FY07-15 (mn)



Source: Investec Securities estimates

Figure 31: Airtel Digital TV annual churn rate (%), FY11-15 (%)



Source: Investec Securities estimates

Cable: Strengthening co-dependent relationship offers hope

Although higher-than-expected content costs (partially negated by yet healthy carriage and placement fees) and overinvestment in overheads (likely to correct with Phase-III around the corner) have contributed to the weak financial profile of Cable MSOs, lower-than-expected realizations/share of consumer ARPUs from LMOs has been the primary driver. As discussed, we are not on-board the street's argument that LMO reluctance to digitization and share in consumer ARPU is just a mindset issue; LMOs face a real and unfavourable economic transition in digitization. So are Cable MSOs a 'lost' cause – far from it, in our view. Our channel checks suggest LMOs, albeit reluctantly, have accepted digitization. Analog Cable, given its limitations, was not a long-term option for Cable to compete with naturally digital DTH platform. Digital Cable is a must for the Cable ecosystem (LMOs/MSOs) to protect its market share in the long run. Cable has lagged in HD/VAS services, but these are in the infancy of their development in India.

MSOs-LMOs have a co-dependent relationship, with LMOs controlling the last-mile (access, billing, collections) and MSOs controlling the scale functions (technology, backbone). However, in Analog Cable, LMOs could easily switch signals from one MSO to another, reflecting on the latter's weak bargaining position. In Digital Cable, the dependency of LMOs on MSOs and barriers to competition increase, since switching from one MSO to another requires replacement of all STBs with the LMOs' subs base. This is expensive as well as a logistical challenge since the replacement needs to be done at consumer-end. Few LMO collectives, discussed previously, tried to transition to an MSO but performance has been middling. Thus, the co-dependent relationship between LMOs and MSOs has strengthened post digitization. The digitization part of DAS (Digital, Addressable System) is done but addressability is pending. Improved packaging and billing will help bridge the pricing gap versus DTH, which will support MSOs' case for Rs100+/month ARPU from Phase-I/II markets (without impacting LMO financials adversely).

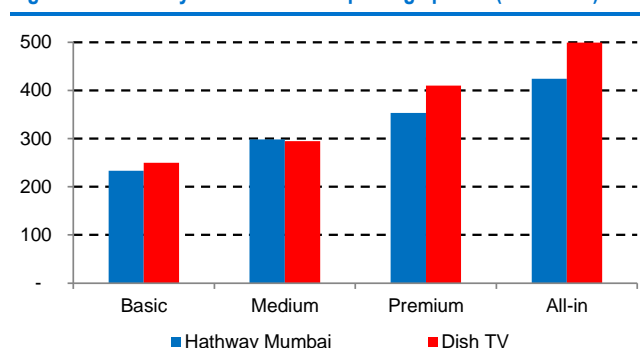
The LMO:MSO share of consumer ARPU will likely settle at 50:50 (give or take few ppts), per the economics of the respective businesses, in our view.

Figure 32: State of DAS rollout in Phase-I/II markets

Process	Status	Comment
STB seeding	Completed	
Consumer Data	Completed	Need consumer details and choice to enable packages
Packaging	Partial	Consumer selects the content he/share wants
Itemized Billing	Partial	Consumer pays for the selected package
Pre-paid	Limited	Solves the problem of bad debts and receiveables

Source: Investec Securities estimates

Figure 33: Hathway and Dish TV SD package prices (Rs/month)



Source: Investec Securities estimates

Phase-III digitization: subs potential, reduced churn

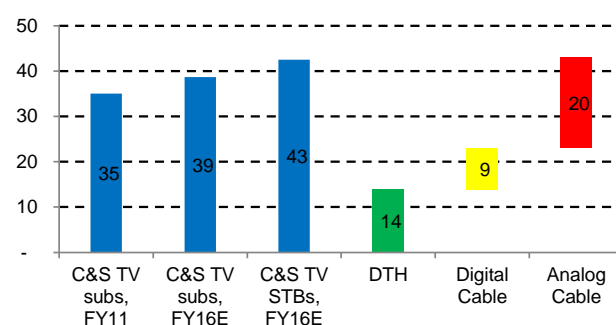
Ministry of Information and Broadcasting (MIB) in India has notified ~35mn C&S TV (Census 2011) homes in Phase-III markets. Including 10% multi-TV homes, we estimate c.43mn STBs requirement (FY16E). Further, some of these subs/TV sets have already been digitized (DTH, Cable) voluntarily. We estimate c.14mn DTH (active) subs and c.9mn Digital Cable subs in Phase-III markets. Thus, at 23mn Digital subs, already 50%+ of Phase-III market potential (STBs) has been achieved. MIB data indicates >20mn STBs on order or in inventory, across DTH operators and Cable MSOs, which drives high degree of confidence on (1) government/MIB's assertion that the deadline for switch-off of analog signals remains intact and (2) our estimate of complete digitization of Phase-III notified markets by Jun-16. We believe 90%+ digitization levels might be achieved by Mar-16 (end-FY16).

Figure 34: C&S TV subs in Phase-III markets, FY11 (mn)

State	C&S TV subs
Tamil Nadu	6.6
Maharashtra	3.5
Uttar Pradesh	3.2
Karnataka	2.2
Andhra Pradesh	2.1
West Bengal	2.0
Madhya Pradesh	1.8
Gujarat	1.6
Rajasthan	1.5
Punjab	1.2
Kerala	1.2
Haryana	1.1
Others	6.5
Total	35

Source: MIB, Investec Securities research

Figure 35: Phase-III market C&S TV subs breakdown (mn)



Source: Investec Securities estimates * 10% more STBs than subs led by multi-TV homes

The question of DTH/Cable MSO competitive intensity

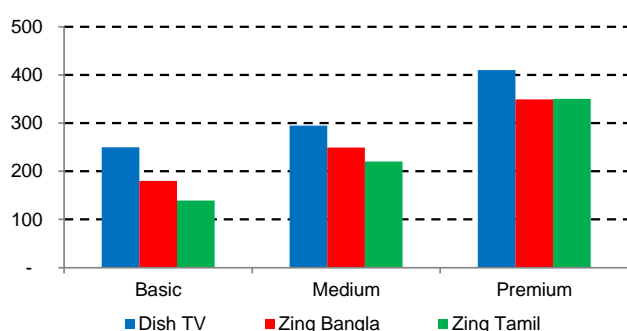
As highlighted above, DTH already has c.33% share in Phase-III markets and the street expects it to be 50%+ post digitization. We disagree – the ground presence and access of Cable (LMOs) is under-appreciated; we note DTH took >10 years to achieve c.14mn subs in Phase-III markets, whereas Cable has ramped up to c.9mn subs within two years. **Our channel checks in Haryana (large Phase-III market) indicate strong STB seeding momentum for Cable; ARPUs in the market are Rs125-175, expected to increase to Rs200-225 post digitization.** DTH price points are relatively high for Phase-III mass consumers. Finally, national MSO market share may not sustain at ~80% levels in Phase-I/II DAS, as Phase-III markets have more regional MSOs (Tamil Nadu, Asianet in Kerala, Ortel in Orissa). New technology options (HITS on Cable, Reliance Jio IPTV) are emerging, which may also impact market share of DTH/national MSOs.

- **Headend-in-the-Sky (HITS)** technology is not new to India, with national MSO SitiCable (Not Rated) having previously experimented with it in the late-2000s. However, the regulatory environment was not conducive at the time. HITS operators work like Cable MSOs but use satellite technology (similar to DTH) for transmitting digital signals to LMOs. Thus, although it has advantages of large area/footprint of operation, operating expenses are high and optimal scale is needed (minimum c.5mn subs, per our discussions with industry experts). **NXTDigital, launched by national MSO InCable (Not Rated), is a credible attempt, in our view. Besides InCable's own large subs base (c.8mn C&S TV homes), it has offered (1) HITS-as-a-Service (similar to SaaS) model to regional MSOs and (2) financing support through sister company Ashok Leyland Finance.** InCable will likely drive higher market share in Phase-III (c.4mn STBs ordered versus c.2.5mn in Phase-I/II).

Dish TV: Zing to drive improved subs growth in FY16E-17E

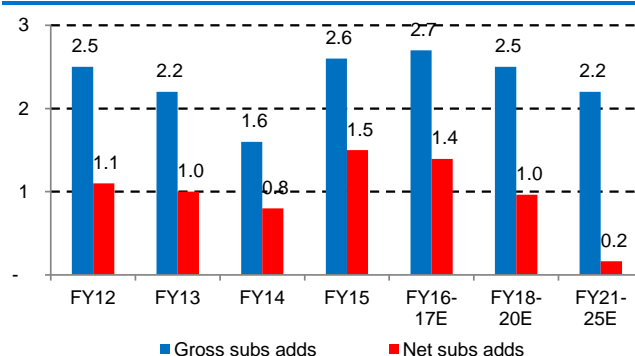
Beyond the modest performance of DTH in Phase-I/II digitization, Dish TV performance was particularly weak in FY13-14. Dish TV's brand orientation is value-for-money; premium DTH brands such as TataSky delivered strongly in Phase-I/II digitization. The uptick in Dish TV performance in FY15 came from (1) improved distribution focus (increased dealer-distributor incentives) and (2) launch of regional sub-brand Zing. Zing is targeted towards regional language consumers willing to forgo expensive Hindi channels; correspondingly, Zing services are priced cheaper than Dish TV. With a strong core brand in Phase-III markets (our channel checks suggest Dish is #2 DTH operator in Haryana, a core Hindi market) and second-brand Zing in regional markets, we model robust gross/net adds in Phase-III digitization. Dish reported 20-25% incremental share from Zing (likely to accelerate) and 15-20% from HD (largely Phase-I/II) in 1HFY16.

Figure 36: Prices of SD packages of Dish TV/Zing Digital (Rs/month)



Source: Company data, Investec Securities research

Figure 37: Dish TV gross and net subs adds, FY12-25E (mn)

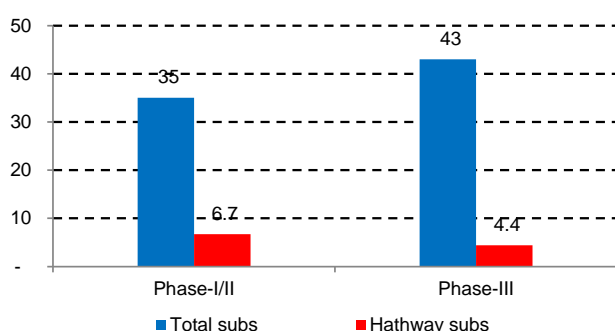


Source: Company data, Investec Securities estimates

Hathway Cable: Aiming to consolidate Phase-I/II performance

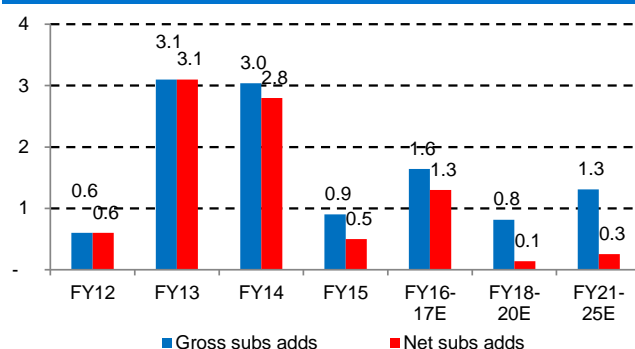
Although Hathway has traditionally been strong in Metro markets, Phase-I/II digitization yet surprised with c.18% Digital subs share (6.7mn/36mn subs) and c.30%+ Digital Cable share (6.7mn/22mn subs). Hathway's organic subs base is limited in Phase-III markets, where it has already seeded 1.8mn STBs. With sub-par monetization in Phase-I/II markets and a stretched balance sheet (which we discuss ahead in the report), Hathway's plans for Phase-III have been conservative; it is aiming to seed STBs in select markets, with consolidation (tie-ups with independent MSOs) limited to markets contiguous to existing operations. Nonetheless, we believed Hathway would target minimum 10mn Digital Cable subs base (11mn+, on the safe side) to drive bargaining power versus broadcasters. On cue, Hathway disclosed 3mn STB ordering in 2QFY16. We do not model Phase-IV digitization in our Dish TV/Hathway models (discussed ahead).

Figure 38: Hathway C&S TV subs across Phase-I/II, Phase-III (mn)



Source: Company data, Investec Securities estimates

Figure 39: Hathway gross and net subs adds, FY12-25E (mn)



Source: Company data, Investec Securities estimates

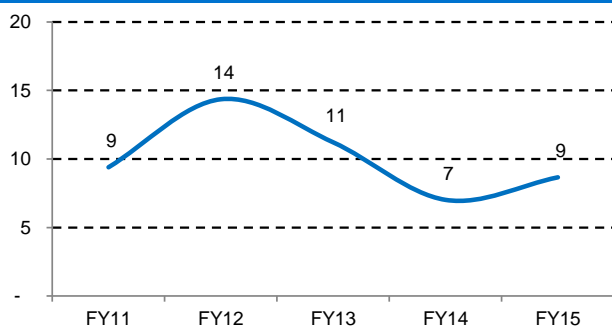
Caveat: revenue share, not subs share will drive stocks

The Cable MSO stocks, including Hathway, delivered strong returns during FY12-14 led by strong subs share momentum in Phase-I/II DAS. However, operational performance did not translate into financial performance and correspondingly, the gains were reversed in last 18 months. Therefore, in our view, subs share performance would be sanity variable in Phase-III digitization. Investors would look for comfort on overall subs base (certainly 10mn+, in our view, required for improved bargaining power in the value chain). However, a standout performance on subs share alone may not reflect in strong stock performance; the street will likely wait for the same to translate into revenue share and EBITDA – financial parameters such as ARPU and EBITDA/sub are likely to more closely monitored. Nonetheless, subs base will be a determinant variable in financial metrics such as carriage & placement fees, content costs and operating leverage.

Churn rate: Key overhang on DTH, to moderate going ahead

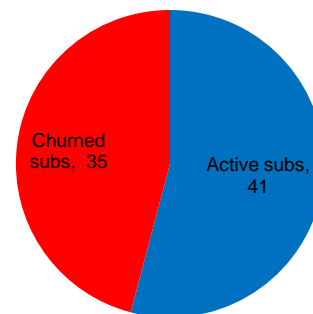
Notwithstanding the many benefits and strengths of Digital platforms (Cable/DTH) compared to Analog Cable, explicit operating costs are much higher. At least, the explicit costs are visible in the P&L and well understood by the street. Implicit costs such as churn (subs loss) are less so, notably in the case of Cable MSOs; we agree that getting a handle on churn rates in the early stages of digitization is a challenge (Cable digitization is <3years old). Churn results in (1) explicit loss of subsidy incurred on STB (subscriber acquisition) and (2) future revenue/EBITDA loss. There is more clarity on churn levels of DTH operators, having been present in the market for >10years. There are multiple drivers of churn, and not all of them have a negative connotation: (1) upgrade to HD (positive), (2) subs need for new STB as old STB has reached end of life (neutral), (3) quality of service (choice of channels, signal quality, service quality et al) and (4) price sensitivity.

Figure 40: Dish TV annual churn rate, FY11-15 (%)



Source: Company data, Investec Securities research

Figure 41: Active/churned out DTH subs base, FY15 (mn)



Source: TRAI, Investec Securities research

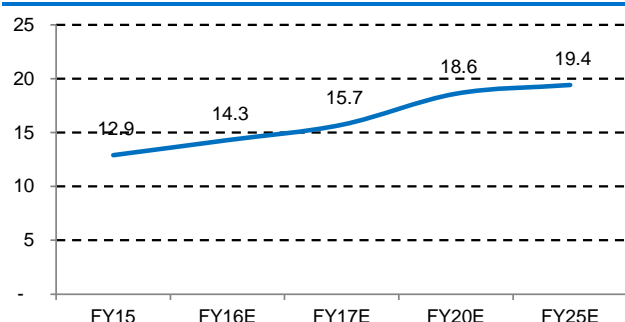
In the Digital ecosystem (whether Cable or DTH), the existence of churn results in different representations of subs base. Different operators report different representations: (1) Dish TV reports net subs base, at 13.6mn in 1HFY16 (active subs base ~10mn); (2) Hathway presupposes to report active subs base.

- **Gross subs base.** This represents the total number of STBs seeded by the operator in the market, ever.
- **Active subs base.** This represents the number of STBs/subs that have enough balance left in their accounts to watch C&S/Pay-TV for one more day, in a pre-paid model such as DTH.
- **Net subs base.** The active subs base may be a conservative number in the pre-paid model; the subs may not have permanently left the platform but temporarily forgotten to recharge. Net subs base is estimated including subs that have not recharged for a certain limited time (90-120 days).

Dish TV: Churn rate to moderate led by Phase-III digitization

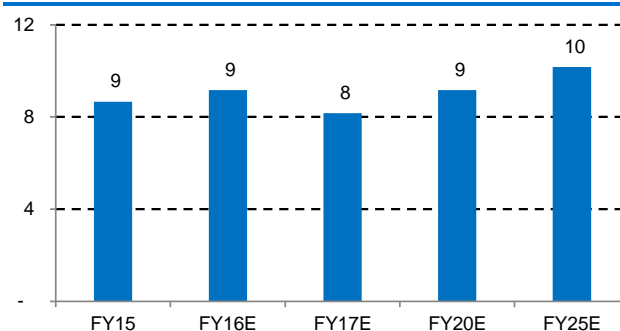
We model Dish TV's gross adds at 2.7mn in FY16E-17E, 2.5mn in FY18E-20E and 2.2mn in FY21-25E. DTH has seen its churn levels increase over time as the subs base matured. We note that STBs (like any other electronic item) have a natural life (10-12 years), which implies a minimum churn rate of 8-9%. Also, DTH operators have witnessed strong upgrades to HD. The large pricing gap between DTH and Analog Cable has also led to churn notably in Phase-III/IV markets (contribute >60% of Dish TV's subs base); Phase-III digitization will result in the disappearance of Analog Cable option, and DTH may even win back some churned out subs. We model moderate churn rate in the near term but c.10%+ in the long run. We model Dish TV's net/paying subs at c.18.6mn in FY20E and c.19.4mn in FY25E.

Figure 42: Dish TV net subs base, FY15-25E (mn)



Source: Company data, Investec Securities estimates

Figure 43: Dish TV annual churn rate, FY15-25E (%)

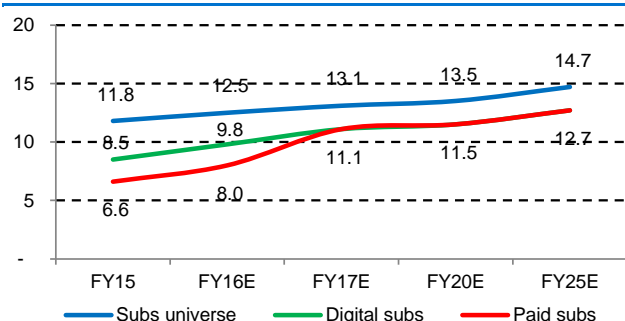


Source: Company data, Investec Securities estimates

Hathway Cable: Likely increase in churn as platform matures

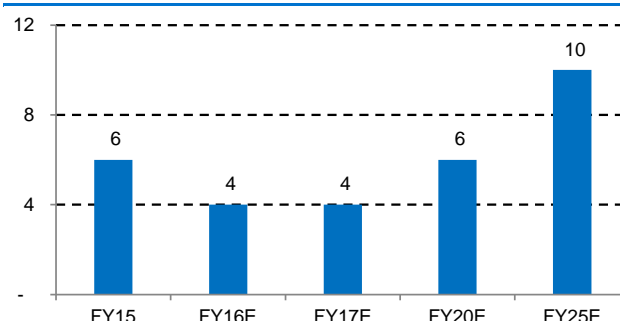
Hathway Cable does not report gross subs or churn rates. Our discussion with the company indicates 5-6% churn rate in FY14-15, which seems low. However, we note <3year average age of STBs and limited HD upgrades in Cable (as discussed in Figure 27); the loss of subs is likely primarily on account of quality of service (channel/signal switch-offs), to DTH operators. We model stable churn in the near term but c.10%+ in the long run, in line with Dish TV. We model Hathway's paying subs base at c.11.5mn in FY20E and c.12.7mn in FY25E. We do not model Phase-IV digitization in our Dish/Hathway models (discussed next).

Figure 44: Hathway Cable sub base, FY15-25E (mn)



Source: Company data, Investec Securities estimates

Figure 45: Hathway annual churn rate, FY15-25E (%)



Source: Company data, Investec Securities estimates

Phase-IV digitization: the later, the better

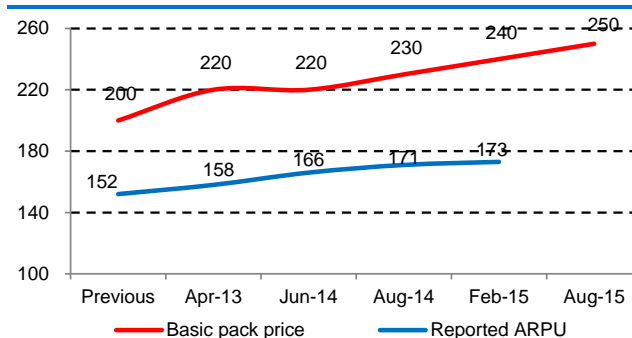
We do not believe that Phase-IV digitization, were it to conclude per the government's Dec-16 deadline (or anywhere near it), is going to have ANY significant value creation potential for Pay-TV/C&S TV operators – there, we said it. The reasons for our aggressive view flow from Figure 46, which shows the large gap between Dish TV's basic package price and reported ARPU. In an ideal world, Dish TV's reported ARPU should have been higher than the basic package price (net of commission/taxes) what with (1) ~40% of its consumers subscribing to premium packages and (2) significantly higher HD subs (~1mn) than Zing subs (<0.5mn). **The key driver of the differential is 'floating' subs, as per the company, which are active on the platform only for part of the year (usually during high-profile sports season).** Adjusting for the subs mix highlighted above, we estimate 'floating' subs to be 30-35% of Dish TV's reported net subs base.

Figure 46: Differential between Dish TV's estimated, reported ARPU

	(Rs/month)
Dish TV basic package price	250
Recharge commission (%)	4.0
Recharge commission	(10)
Service tax (%)	14
Service tax provision	(35)
Dish TV estimated ARPU	205
Dish TV reported ARPU (2QFY16)	171
Differential (%)	(17)

Source: Company data, Investec Securities estimates

Figure 47: Differential between Dish TV's pack price, reported ARPU



Source: Company data, Investec Securities estimates

Figure 48 presents the limits to value creation potential from 'floating' subs; limited revenue as well as higher fixed cost (apportioned) implies that breakeven period and recurring returns are sub-optimal. Our estimate of 30-35% floating subs for Dish TV is very near its rural subs base (Phase-IV markets). Although part of these subs may belong to Phase-III markets (10K-1mn population cities), these consumers revert to Analog Cable as their primary TV platform. Phase-IV floating subs likely revert to terrestrial Doordarshan or FreeDish FTA DTH as their primary TV platform. Thus, unless rural income levels improve meaningfully, mandatory digitization may only end up in large number of 'floating' subs for DTH/Cable MSOs. Delayed Phase-IV digitization will allow rural incomes to catch-up and may provide value-creation potential in the next decade (2020s). On current deadlines, Cable MSOs/DTH operators may be better off limiting participation in Phase-IV.

Figure 48: Scenario analysis - returns from 'floating' DTH subs (%)

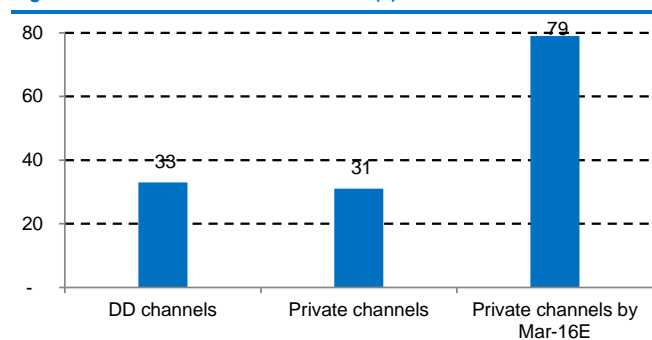
Activity period	12 m	10 m	8 m	6 m
Consumer revenue	3,000	2,500	2,000	1,500
Tax rate (ST+ET) (%) (b)	20	20	20	20
Tax provision (a)*(b)	(600)	(500)	(400)	(300)
DTH revenue	2,400	2,000	1,600	1,200
Net content cost	(720)	(600)	(480)	(360)
DTH operating cost	(840)	(735)	(616)	(504)
DTH EBITDA	840	665	504	336
EBITDA margin (%)	33	32	30	27
DTH Capex (Rs/sub)	2,200	2,200	2,200	2,200
STB subsidy (Rs/sub)	2,000	2,000	2,000	2,000
Fixed capex (Rs/sub)	200	200	200	200
Payback period (months)	31	40	52	79
Pre-tax return rate (%)	38	30	23	15

Source: Investec Securities estimates

Freedish DTH – effective bottom-of-the-pyramid platform

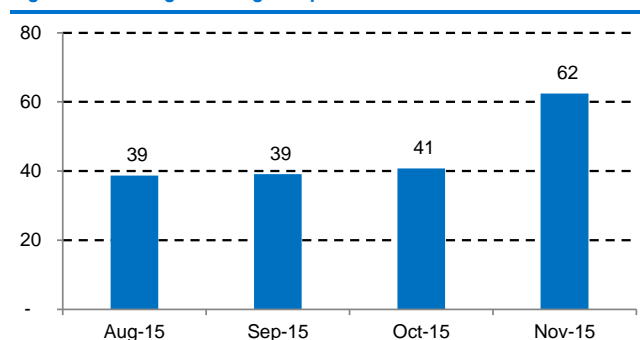
Free dish (previously DD Direct+) is a free-to-air (FTA) digital DTH service operated by the state-controlled pubcaster Prasar Bharti/DoorDarshan. Launched in Dec-04, Freedish initially telecast only DoorDarshan (33 channels). Correspondingly, the attractiveness of FreeDish to the consumers was limited, given the state of Prasar Bharti broadcasting/channel operations. However, FreeDish later expanded its capacity to 64 channels, to include private FTA channels as well. Over time, FreeDish has become a very popular service in rural areas, and proven to be very effective for bottom-of-the-pyramid population, so as to give food for thought to the government on whether DD's terrestrial service should be discontinued (cost savings), in light of the large recurring losses in Prasar Bharti. The popularity of FreeDish can be gauged from the sharp jump in ratings of channels once rural ratings data was incorporated in industry standard BARC system.

Figure 49: DD FreeDish channel count (#)



Source: Company data, Investec Securities research

Figure 50: Average bidding slot price for DD Freedish auctions



Source: Company data, Investec Securities research

We would like to offer our kudos to the FreeDish team for running not just an effective operation (servicing the targeted audience) but also a profitable one – a combination which is usually not seen within government owned and operated departments/entities, especially in a highly competitive segment. FreeDish service is free to the consumer, and it generates carriage revenues by selling 31 slots earmarked for private FTA channels/broadcasters. Additionally, FreeDish plans to increase private FTA channel slots to 79 by Mar-16. Based on last minimum auction bid of ~Rs60mn, FreeDish carriage fee revenue run rate is likely to be ~Rs4.7bn. FreeDish being an unencrypted service, organization overheads are very limited and it relies on the large number of entrepreneurial electronic dealers across the country for installations and service. FreeDish will likely be a more viable alternative to Pay-TV platforms for majority of Phase-IV consumers.

Figure 51: Top Hindi GEC channels, pre- and post-rural ratings

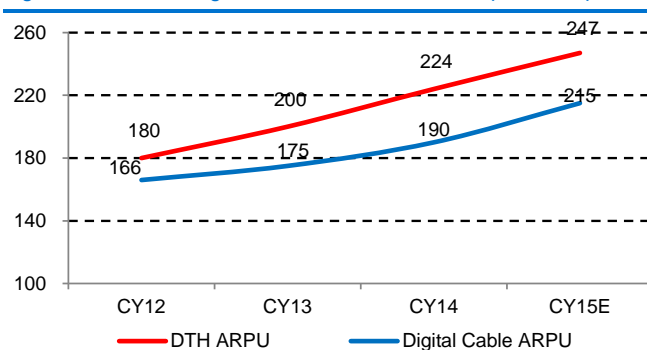
Pre-rural ratings		Post-rural ratings	
Channel	Viewers (mn)	Channel	Viewers (mn)
Star Plus	403	Star Plus	804
Colors	397	Colors	709
Zee TV	253	Zee Anmol (FTA)	609
Life OK	231	Zee TV	588
Sony TV	176	Star Utsav (FTA)	501

Source: BARC, Investec Securities research

ARPU inflation and subs revenue drivers

Although DTH operators aggressively increased package prices in early 2010s, low-value and correspondingly low-priced Analog Cable has been the drag on market ARPUs. Mandatory Digitization of Cable in India has set the stage for sustained ARPU growth in India. Having established its value proposition with the consumer, DTH has been ahead of the curve, as per KPMG. Given the relatively limited service record of Digital Cable, ARPUs/pricing has lagged, despite Digital Cable subs base largely concentrated in Phase-I/II markets (high per-capita-income Metro/Tier-I cities of India) versus DTH (subs base spread across the country). Nonetheless, digitization has supported DTH efforts to improve ARPUs alongside subs share gains in Phase-I/II markets, as discussed.

Figure 52: DTH and Digital Cable ARPUs, CY12-15E (Rs/month)



Source: FICCI-KPMG 2015 report * calculated on active subs base

Low base and rising income levels to drive ARPU inflation

We have compared the nominal and real Pay-TV ARPUs in India to global markets (in Section 1 of the report, Figures 8-9) and to telecom ARPUs in India and global markets (in Section 2, Figures 16-17) previously. Suffice to summarize that the base of Pay-TV/C&S TV ARPUs in India is low.

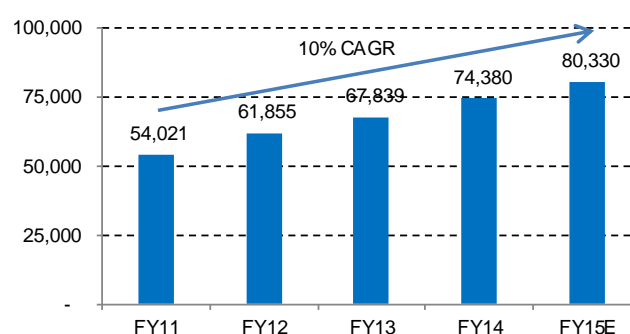
Aside from Analog Cable, the emerging state of development of Indian economy has also contributed low ARPUs, in our view. In developed economies, majority 60-70% of consumer wallet is spent on discretionary goods and services. In an emerging economy like India, with low per-capita income, majority ~70% of the wallet goes to staples. The good news is robust double-digit growth in nominal per-capita income is driving discretionary consumption. For example, we note near-100% penetration of HD TVs/services (high-end discretionary service) in developed markets. In India, HD TV penetration is ~10% and HD services active on <50% of HD TVs, but robust ramp-up from 'zero' base 5 years back.

Figure 53: Composition of India Consumer Price Index (CPI) (%)

Staples Group	(%)
Food and beverages *	44.7
Fuel and lighting	9.5
Clothing and footw ear	4.7
Housing	9.8
Total staples group	68.7
Discretionary group	(%)
Prepared meals and intoxicants	5.0
Transport and communication	7.6
Personal care and effects	2.9
Household appliances	4.3
Others	10.0
Total discretionary group	31.3

Source: CSO, Investec Securities research * excluding prepared meals and intoxicants

Figure 54: India per-capita income (Rs/annum)

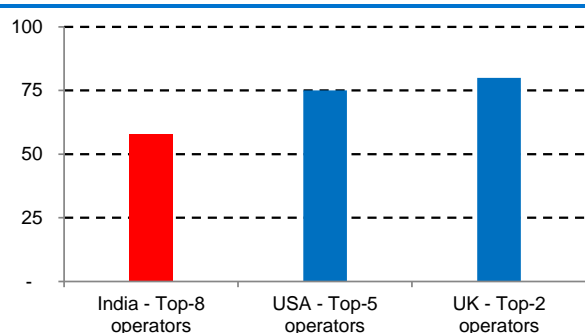


Source: RBI, Investec Securities research

Competitive intensity high, but market consolidating

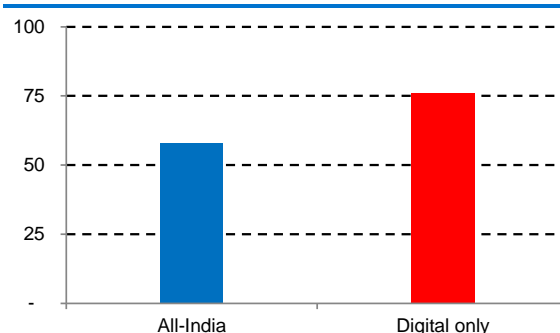
Separately viewed from the perspective of individual segments: (1) DTH segment in India seems consolidated with top-4 operators capturing c.>80% of the market and (2) Cable segment seems fragmented with top-4 national MSOs capturing c.45% of the market. However, given DTH and Cable are substitute services, a consolidated view provides a more comprehensive picture – the top-8 C&S TV operators in India capture c.<60% of the market; a competitive market has contributed to low ARPUs. However, the direction is positive with rising consolidation in the market – DTH segment (very consolidated) gained at the expense of Cable in Phase-I/II digitization (organic consolidation), and national MSOs explicitly consolidated smaller operators. The launch of HITS platform by national MSO InCable will drive further consolidation in the market. The details of Jio IPTV platform are limited but seem to miss the Phase-III digitization deadline, limiting medium-term impact. In the long run, Jio could be an aggressive competitor.

Figure 55: Pay-TV/C&S TV market concentration (%)



Source: Company data, Investec Securities estimates

Figure 56: Top-8 C&S TV operators market share in India (%)

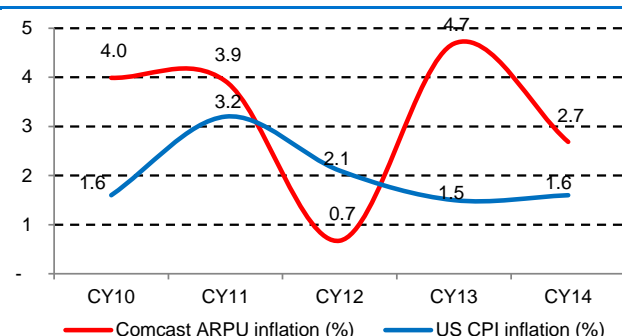


Source: Investec Securities estimates

ARPU inflation likely ahead of CPI but below income growth

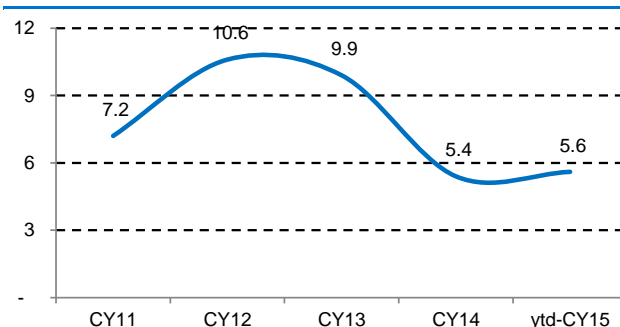
From a low base, with support from (1) rising income levels, (2) implementation of digitization driving (3) consolidation in the market, the direction of ARPU trajectory is quite clearly on the uptrend. However, the quantum of ARPU inflation is equally important for potential value creation; as noted previously, lower-than-expected ARPUs for Cable MSOs have constrained stock returns. Globally, the example of Comcast/US C&S TV industry shows ARPU growth at 1.5-2.0x CPI inflation. However, the level of consolidation in the US market is much ahead of India, which somewhat invalidates the comparison. Certainly, ARPU inflation at 1.0x CPI inflation should be achievable. Additionally, we highlight that moderating CPI inflation trends in India are actually positive for C&S TV ARPUs; the Indian CPI inflation basket is ~70% staples and modest staples inflation implies higher discretionary spending. ARPU growth at 2.0x CPI inflation (near income growth) constrained by (1) industry structure and (2) low-ARPU Phase-III subs adds.

Figure 57: Comcast ARPU growth and US CPI inflation, CY10-14 (%)



Source: Company data, Investec Securities research

Figure 58: India CPI inflation, CY11-15E (%)

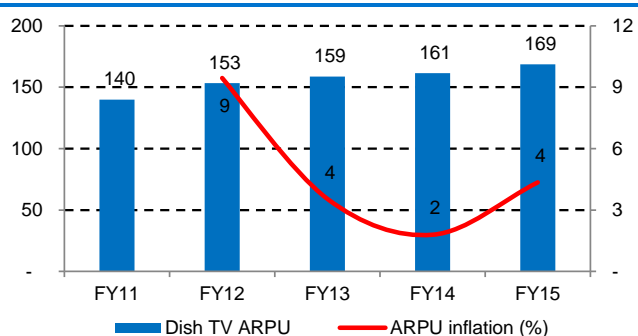


Source: MOSPI, Investec Securities research

Dish TV: Digitization to drive gains beyond FY17E

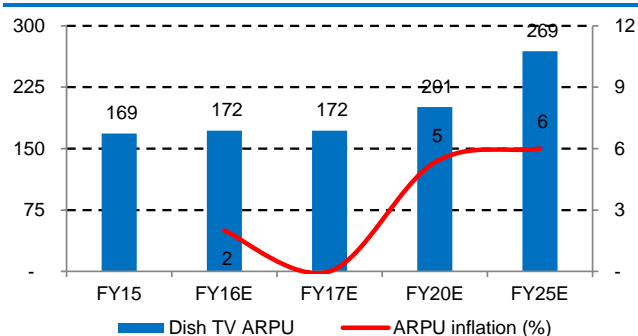
Dish TV reported robust ~5% CAGR in ARPUs over FY12-15; we note that this seems much below KPMG data since the company calculates ARPUs on net subs base (including 'floating' subs) while KPMG calculates the same on active subs base; Dish TV's 'floating' subs base has increased over time. Our key assumptions for Dish TV ARPUs/inflation going ahead: (1) flat ARPUs in FY17E led by higher share of regional service Zing subs (targeted towards Phase-III). (2) Improved c.5% CAGR in ARPUs over FY18E-20E, supported by rising Cable ARPUs in Phase-I/II markets. (3) As the Digital C&S TV ecosystem settles, we model c.6% CAGR in ARPUs (1.2x CPI inflation). Robust mix of subs adds and ARPU growth to drive 10%+ CAGR in Dish TV's subs revenues over FY16E-20E. Subs revenue CAGR to moderate to high single-digits beyond FY20E.

Figure 59: Dish TV ARPUs, FY11-15 (Rs/month)



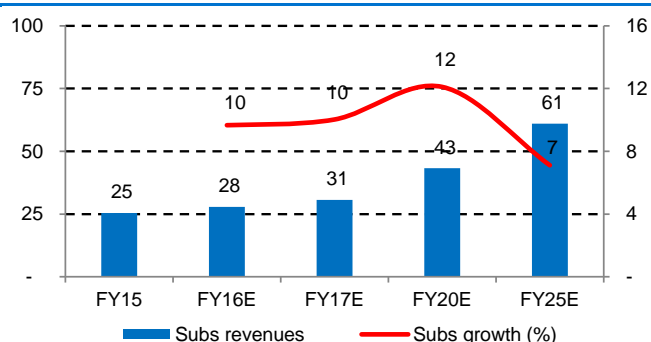
Source: Company data, Investec Securities research

Figure 60: Dish TV ARPU expectation, FY15-25E (Rs/month)



Source: Company data, Investec Securities estimates

Figure 61: Dish TV subs revenues, FY15-25E (Rs bn)

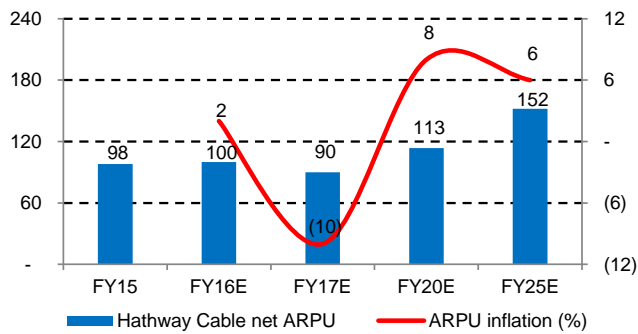


Source: Company data, Investec Securities estimates

Hathway: Sharp dip in FY17E led by low-value subs adds

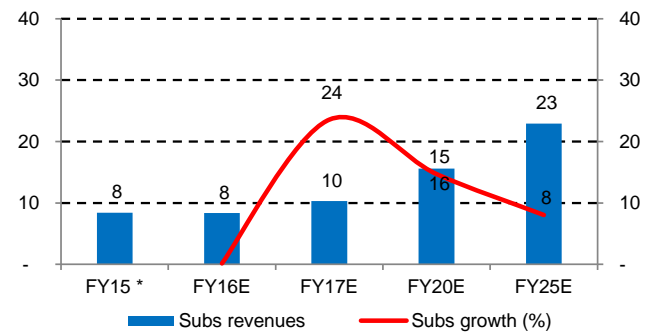
Our key assumptions for Hathway Cable ARPUs/inflation going ahead: (1) largely flat ARPUs in FY16E despite low base (at discount to DTH) led by content disputes (Sony Entertainment in 2QFY16) driving dissatisfaction with consumers and LMOs. (2) Sharp 10% decline in FY17E net ARPU led by inclusion of (initially) low-value Phase-III subs. We note Phase-II markets also reported net ARPUs of ~Rs50/month initially. (3) Our discussions with Hathway indicates consumer purchasing power in Phase-III (barring few pockets) is similar to Phase-II. Strong c.8% CAGR in net ARPUs over FY18E-20E imply robust inflation in Phase-I/II markets and sharp jump in Phase-III markets. (4) As the digital ecosystem settles, we model c.6% CAGR in net Cable ARPUs (1.2x CPI inflation levels), similar to Dish TV. **If the C&S TV distribution segment consolidates further, there is upside risk to our long-term (FY20E-25E) ARPU assumptions.**

Figure 62: Hathway Cable net ARPU expectation, FY15-25E (Rs/m)



Source: Company data, Investec Securities estimates

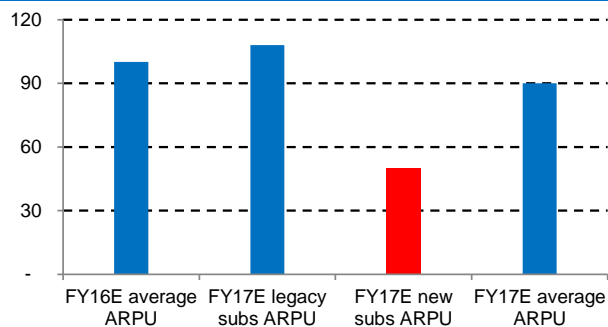
Figure 63: Hathway Cable subs revenues, FY15-25E (Rs bn)



Source: Company data, Investec Securities estimates

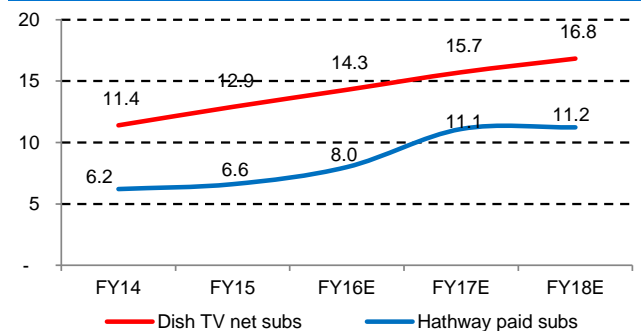
To explain the large disparity between Dish and Hathway Cable ARPU trend in FY17E, we note that while Dish TV's sub mix already includes Phase-III/IV markets, Hathway's paid subs base will include Phase-III subs for the first time in 4QFY16. Dish TV's current reported ARPUs already include the impact from low-value price-sensitive subs. Additionally, whereas we model cumulative c.22% growth in Dish TV's subs over FY15-17E, correspondingly c.68% growth is expected in Hathway's paid Cable subs base. Thus, the sharp deflation in Hathway's ARPU levels is just a normalization to include large number of Phase-III subs. Overall, Hathway's c.24% subs revenue growth in FY17E will outpace Dish TV.

Figure 64: Hathway FY17E Cable ARPU estimation (Rs/month)



Source: Investec Securities estimates

Figure 65: Dish TV net and Hathway paid subs base, FY14-18E (mn)

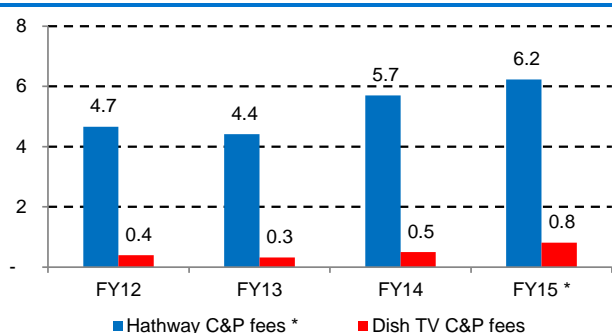


Source: Company data, Investec Securities estimates

Carriage and placement revenues: modest gains

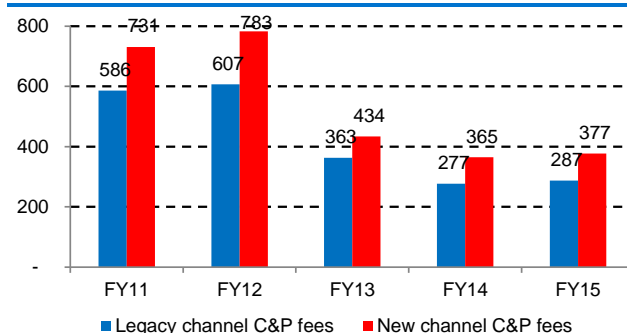
The trends in C&P fees have been a positive surprise thus far. Against expectations of sharp decline post Phase-I/II digitization, C&P fees have seen modest growth for Cable (from a high base) and strong growth for DTH (from a very low base). C&P fees witnessed strong inflation during CY05-10 in the dominant Analog Cable ecosystem led by large supply-demand mismatches (106 slots available versus >600 active channels). Digital Cable, with expanded capacity (300-500 channels currently, potential >1K channels), was expected to drive C&P fees lower. It did so, on a per channel basis, but the overall C&P fees increased as the number of channels on the platform increased. The large gap between per-sub C&P fees between Cable and DTH is due to (1) Cable's dominance in high-value Phase-I/II markets and (2) emerging DTH platforms (<7years average age). However, the gap is extraordinarily large and getting bridged with time.

Figure 66: Hathway and Dish TV C&P fees, FY12-15 (Rs bn)



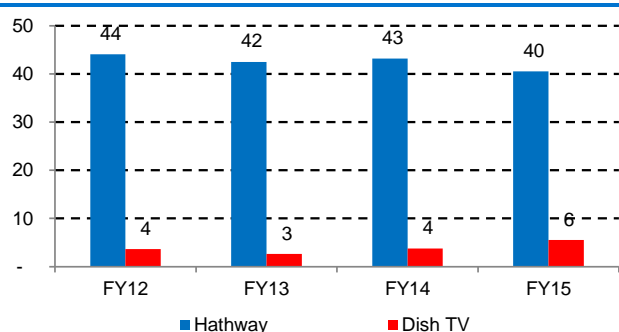
Source: Company data, Investec Securities research * includes 15 months of key subsidiary GTPL financials

Figure 67: All-India legacy/new channel C&P fees, FY11-15 (Rs mn)



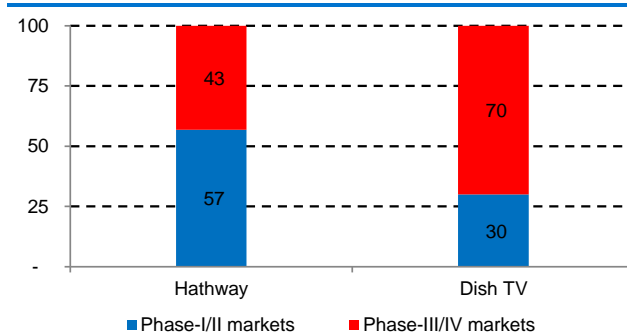
Source: FICCI-KPMG 2015 report, Investec Securities research

Figure 68: Hathway/Dish TV per-sub C&P fees, FY12-15 (Rs/month)



Source: Company data, Investec Securities estimates

Figure 69: Hathway and Dish TV subs mix (%)

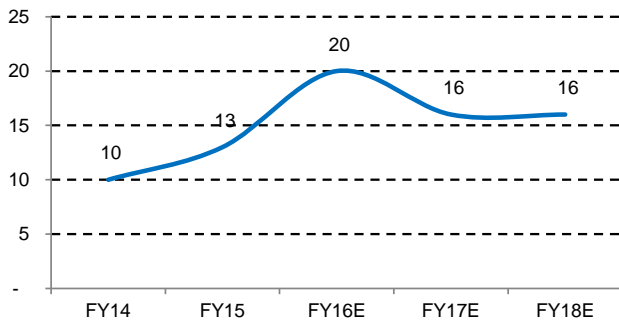


Source: Company data, Investec Securities estimates

The key factor that drives C&P fees is supportive

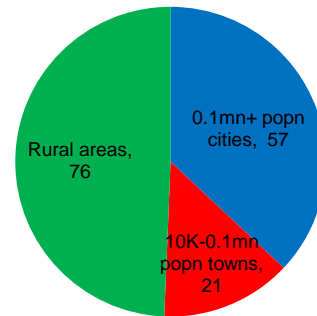
Besides supply-demand mismatch, the key factor that forms the basis of C&P fees is the dominance of ad revenues within Indian C&S TV broadcaster financials; broadcasters pay C&P fees to reach the subs base of C&S TV distributors (10mn+ for both Hathway and Dish TV), also reflecting in the higher revenues of Cable (higher subs in affluent Phase-I/II markets). Thus, the Indian TV ad market is a key influencer: (1) supported by an improving economic environment, we expect strong growth in Indian C&S TV ad market over FY16-18E. (2) Strong TV ad market is driving existing broadcasters to launch new channels; new entrants may soon follow. (3) The legacy TV ratings system in India (TAM) was focused on Phase-I/II markets. The new ratings system (BARC) covers Phase-III/IV markets as well, implying improved C&P monetization (FreeDish for example, Figure 50).

Figure 70: Indian C&S TV ad growth forecasts, FY14-18E (%)



Source: Investec Securities estimates

Figure 71: BARC ratings system subs breakdown (mn)

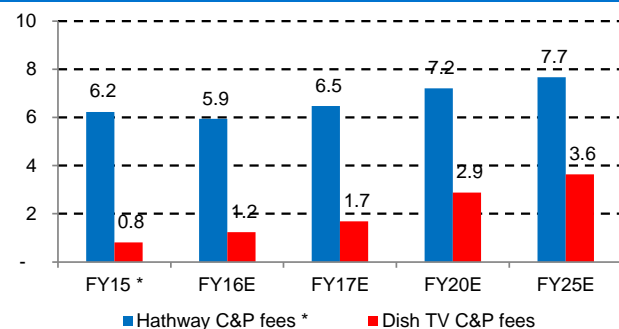


Source: Investec Securities estimates

Strong growth for Dish, modest growth for Hathway to continue

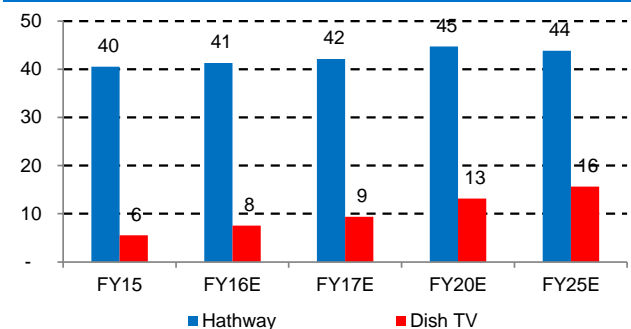
The decline in Hathway's expected C&P revenues in FY16E is an aberration, as its FY15 financials included 15months of GTPL revenues (key subsidiary). Led by BARC expansion into Phase-III markets (10K-1mn population towns), we model improved C&P revenues through to FY20E. Thereafter, we model flat per-sub C&P fees and modest growth driven by subs base. On the other hand, we model strong growth in Dish TV's C&P revenues during FY16E-20E led by large subs share in Phase-III markets (improved per-sub realizations); thereafter, we model relatively modest growth. As discussed, C&P revenues should be seen in light of robust long-term growth in Indian TV ad market. We expect a stable trend in FY16E-20E led by (1) visibility on strong 15%+ CAGR in TV ad market and (2) expansion in monetizable subs base led by BARC. However, improving channel capacity led by digitization should drive a declining trend over FY20E-25E.

Figure 72: Hathway and Dish TV C&P fees, FY15-25E (Rs bn)



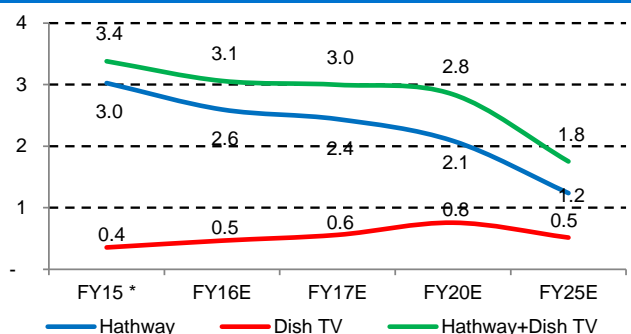
Source: Company data, Investec Securities estimates * includes 15 months of key subsidiary GTPL financials

Figure 73: Hathway/Dish TV per-sub C&P fees, FY15-25E (Rs/month)



Source: Company data, Investec Securities estimates

Figure 74: C&P fees share in the C&S TV ad market, FY15-25E (%)



Source: Investec Securities estimates

Key margin drivers: Content, Digitization opex

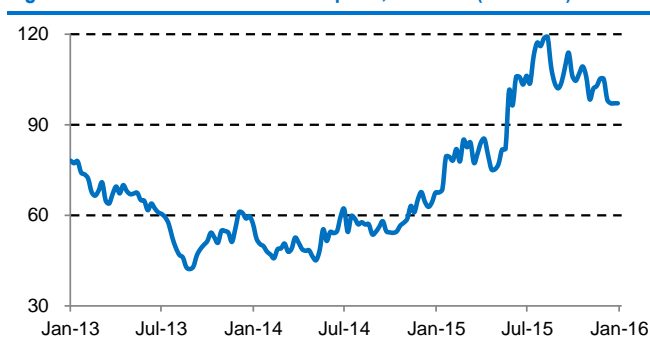
We conduct a simple de-construction of Dish TV and Hathway financials to identify key margin drivers and analyse their historical trends. Dish TV has reported stable EBITDA margins over FY12-15 with robust 48% cumulative growth in EBITDA driven by (1) robust 34% growth in subs base and 53% growth in subs revenues (positive ARPU traction). (2) 32% content cost inflation has been managed in line with growth in subs base, with ARPU hikes driving gross margins. (3) Sharp inflation in payout to government (notably E-tax) has been a drag on margins. (4) Growth in overheads in-line with subs base does not indicate much operating leverage, yet. Correspondingly, the stock has done well over time; In FY14, renewed content deals with few large broadcasters and resultant impact on gross/EBITDA margins spooked the street; however, margins recovered thereafter.

Figure 75: De-construction of Dish TV financials, FY12-15 (Rs bn)

	FY12	FY13	FY14 *	FY15 *	FY15/ FY12 (%)
Subs revenues *	16.6	19.2	22.7	25.4	53
--Content costs	(6.1)	(6.5)	(7.8)	(8.0)	32
Gross contribution	10.6	12.7	14.9	17.4	65
Gross margin (%)	63.4	66.1	65.7	68.5	
Other op. income	2.9	2.4	2.4	2.4	(19)
--Gvt. fee and taxes	(2.7)	(3.3)	(3.9)	(4.4)	63
--Overhead costs	(5.9)	(6.0)	(7.1)	(8.1)	39
EBITDA	5.0	5.8	6.2	7.3	48
EBITDA margin (%)	25.3	26.7	24.9	26.4	
Net subs base (mn)	9.6	10.6	11.4	12.9	34

Source: Company data, Investec Securities research * includes activation revenues for FY14-15

Figure 76: Dish TV historical stock price, CY13-15 (Rs/share)



Source: Company data, Investec Securities research

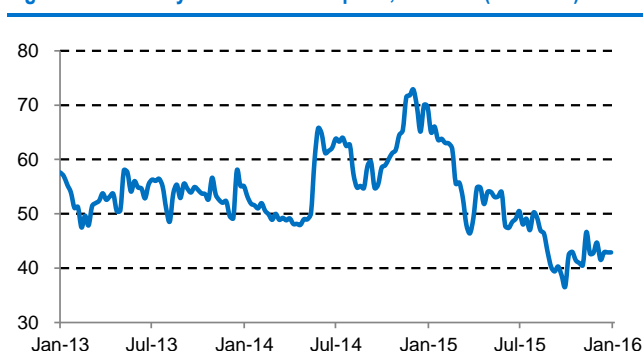
Relatively, Hathway has done better with 55% cumulative growth in EBITDA. However, it missed expectations as financial performance lagged operating performance by a wide margin. (1) Subs revenue growth of 145% over FY12-15 lagged strong paid subs growth of 237%, reflecting the challenges in realizing fair share of consumer ARPUs from LMOs. (2) Contrary to street's view, content cost has been managed well, reflecting in gross margin expansion. However, gross margins remain low in absolute terms. (3) Sharp jump in other operating income in FY13-14 reflects activation revenues (sale of STBs); cumulative 42% growth over FY12-15 reflects trends in C&P fees. (4) Sharp 87% inflation in overhead costs has been the largest drag on EBITDA, largely due to upfront opex for digitization (Phase-I/II/III); we discuss this point in detail ahead in this section. Not surprisingly, ~240bps margin decline (from a low base) has not been looked upon kindly by the street, especially given 200%+ growth in paid Digital subs (huge capex).

Figure 77: De-construction of Hathway financials, FY12-15 (Rs bn)

	FY12	FY13 *	FY14 *	FY15	FY15/ FY12 (x)
Subs revenues	3.4	3.3	5.9	8.4	145
--Content costs	(4.3)	(4.3)	(6.7)	(8.1)	89
Gross contribution	(0.9)	(1.0)	(0.8)	0.3	
Gross margin (%)	(24.8)	(31.7)	(13.6)	3.5	
BB revenues	1.5	1.5	1.7	2.5	68
--BB direct costs	(0.6)	(0.5)	(0.7)	(0.9)	59
BB contribution	0.9	0.9	0.9	1.6	75
Other op. income *	5.2	6.6	8.3	7.4	42
--Overhead costs	(3.6)	(3.7)	(5.4)	(6.7)	87
EBITDA	1.7	2.7	3.0	2.6	55
EBITDA margin (%)	16.6	24.2	19.0	14.2	
Paid subs base (mn)	2.0	3.9	6.2	6.6	237
--Content-C&P	0.4	0.1	(1.0)	(1.9)	

Source: Company data, Investec Securities research * includes C&P and activation revenues

Figure 78: Hathway historical stock price, CY13-15 (Rs/share)

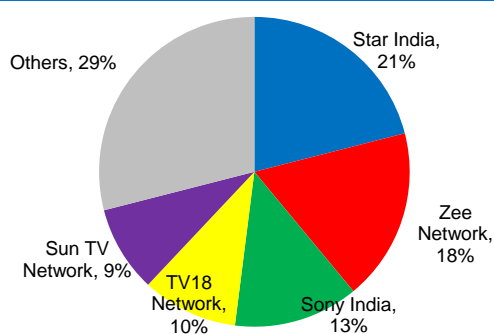


Source: Company data, Investec Securities research

Content costs: Expect stability but with potential for surprises

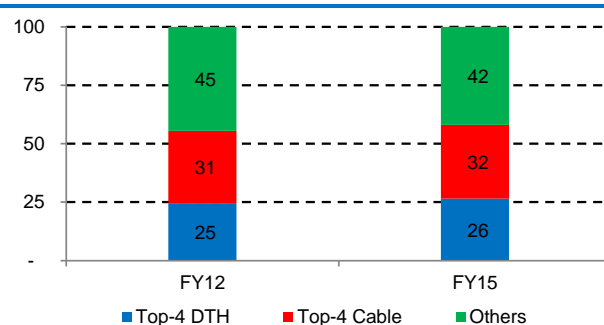
Content cost, with ~40% share of Dish TV's cost structure and ~50% share of Hathway's cost structure, is the most critical margin variable for these companies. The Indian C&S broadcasting market is split across (1) large Pay-TV broadcasters (30-40 channels), (2) mid-sized Pay-TV broadcasters (5-15 channels) and (3) FTA (free-to-air) broadcasters. Although the latter form the majority of the market in terms of number of channels, large Pay broadcasters capture majority of the eyeballs (ratings) led by their large investments in exclusive content (fiction/non-fiction, films, sports et al). The balance of bargaining power is in favour of top-5 broadcasters, which capture c.71% of the market. In comparison, top-8 C&S TV operators capture c.58% of the subs base/market. However, as highlighted previously, digitization is driving consolidation with the top-8 C&S TV operators capturing c.300bps incremental subs share over FY12-15.

Figure 79: Top broadcasters in India, FY14 (%)



Source: Industry data, Investec Securities estimates

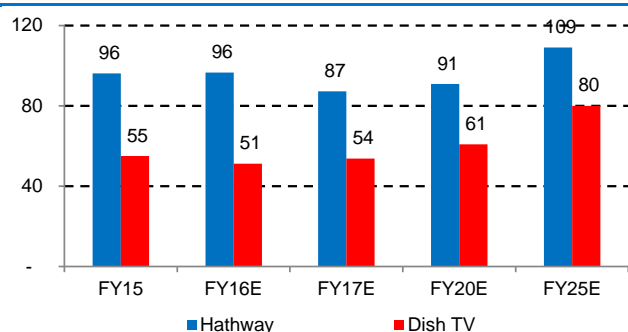
Figure 80: Top-4 DTH/Cable operator market share, FY12-15 (%)



Source: Investec Securities estimates

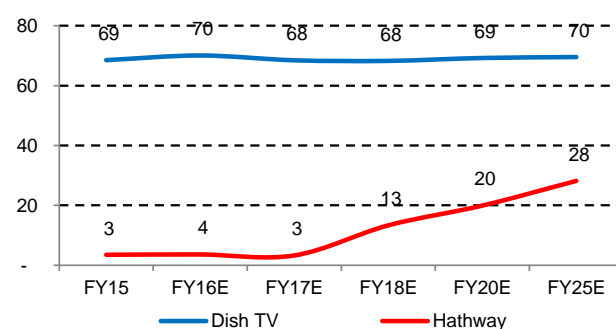
Dish TV and Hathway are both leading C&S TV operators in India and thus, have some bargaining power versus broadcasters relative to the rest of the market. Correspondingly, we expect relative stability in their content costs, but with potential for surprises. Unlike developed markets, where long-term content deals (4-5 years) are the norm, the emerging state of Indian C&S TV market implies short-term deals (1 year) are more common. Recurring renewals also implies scope for disputes and volatility, as was seen with Dish TV in FY14 and Hathway in FY15 (in both cases, content inflation was ahead of 10-15% guidance given by companies). We model (1) increase in Dish TV per-sub content cost in FY17E (renewals with Star and Zee). (2) Hathway per-sub content cost to decline materially through to FY18E, led by changed subs mix; normalized inflation for both companies thereafter. Stable gross margins for Dish but rising trajectory for Hathway (from low base), led by improved net ARPU inflation post completion of Phase-III.

Figure 81: Hathway/Dish TV per-sub content cost, FY15-25E (Rs/month)



Source: Company data, Investec Securities estimates

Figure 82: Hathway and Dish TV gross margins, FY15-25E (%)

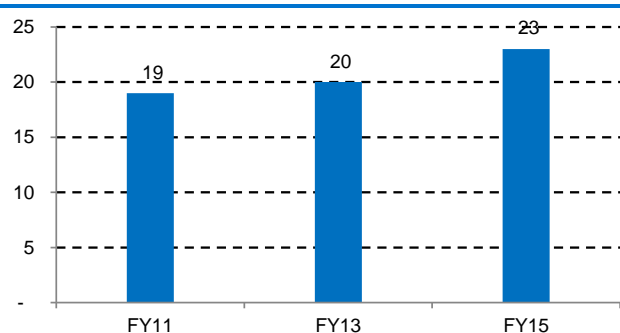


Source: Company data, Investec Securities estimates

Digitization opex: Cable MSOs invested ahead of the curve

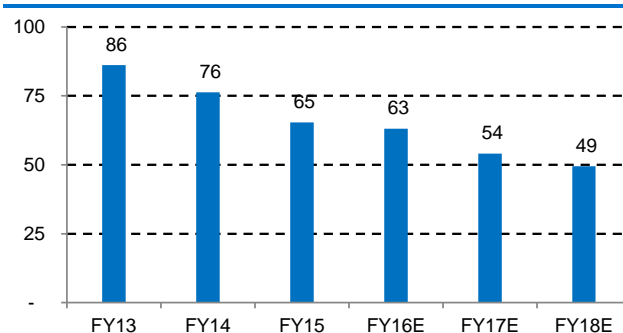
As discussed, the transition of Cable MSOs in digitization, to Digital Cable from Analog and to B2C business model (joint ownership of subs base along with LMOs, which remain in control of last mile) from B2B, entails many explicit costs. The operating cost of running DAS-compliant infrastructure is much higher than Analog Cable, including cost of higher capacity (300-500 channels), operating HD and other VAS services, CAS (conditional access system), consumer and financial backend (consumer support systems, call centre, billing) et al. These costs are substantially fixed in nature (Digital headend opex) with Cable MSOs needing to invest ahead of the curve (prior to digitization). National MSOs such as Hathway invested for complete digitization and delay in Phase-III has impacted costing; Hathway's paid subs are limited to <7mn versus 12mn+ subs universe. Additionally, Hathway is currently running operations in dual-mode (Analog+Digital); Analog operations closure can drive further, and significant, savings in overheads.

Figure 83: Hathway operational digital headends, FY11-15 (#)



Source: Company data, Investec Securities research

Figure 84: Hathway per-sub overhead cost, FY13-18E (Rs/month)

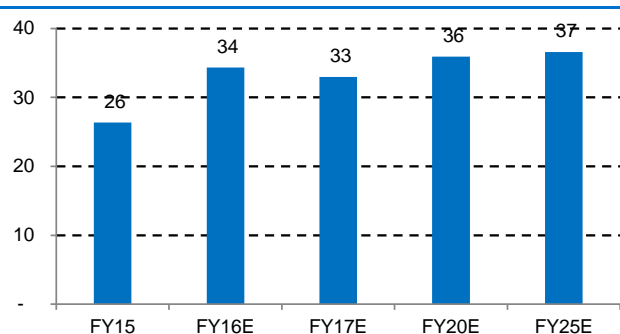


Source: Company data, Investec Securities estimates

Dish TV: Modest expansion in already high EBITDA margins

The sharp jump in Dish TV's FY16E EBITDA margins is attributable to (1) gross margin expansion led by decline in per-sub content cost, for the second consecutive year. (2) Savings on license fee (10% of gross revenue) as Dish TV demerged part of the operations (sale of STBs, consumer service) and revenues to a wholly owned subsidiary. We agree with the street's concerns on the validity of such an arrangement, and discuss it later in our report. (3) Operating leverage on overheads notably subscriber acquisition costs. There is limited margin expansion potential in the near term; in fact, we model 100bps+ margin decline in FY17E, led by higher content costs. Declining per-sub content costs over FY15-16E, led by part-fixed content deals with few large broadcasters, are likely to be reset higher in FY17E; strong subs adds in 2HFY16E (Phase-III digitization) will get captured in the reset. Thereafter, we model modest operating leverage and margin gains.

Figure 85: Dish TV EBITDA margin, FY15-18E (%)



Source: Company data, Investec Securities estimates

Figure 86: De-construction of Dish TV financials, FY15-18E (Rs bn)

	FY15	FY16E	FY17E	FY18E	FY18E/ FY15 (%)
Subs revenues *	25.4	27.9	30.7	34.5	36
--Content costs	(8.0)	(8.3)	(9.7)	(11.0)	37
Gross contribution	17.4	19.5	21.0	23.6	35
Gross margin (%)	68.5	70.1	68.5	68.3	
Other op. income	2.4	2.5	2.7	3.3	37
--Gvt. fee and taxes	(4.4)	(3.9)	(4.3)	(4.9)	12
--Overhead costs	(8.1)	(7.7)	(8.4)	(9.1)	12
EBITDA	7.3	10.4	11.0	12.8	75
EBITDA margin (%)	26.4	34.3	33.0	34.0	
Net subs base (mn)	12.9	14.3	15.7	16.8	30

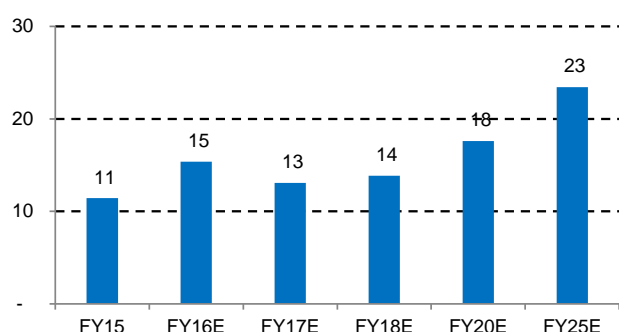
Source: Company data, Investec Securities estimates * change in recharge commission a/c policy in FY16E

Hathway: Gross margin and operating leverage from FY18E

The sharp margin gains for Hathway's Cable segment in FY16E-17E are purely on account of increased activation revenues (sale of STBs) riding on the back of Phase-III digitization. Additionally, margins are likely to decline in FY17E over FY16E as higher content costs to broadcasters likely kick-in immediately, in line with complete declaration of subs base; however, subs revenues from LMOs will likely flow through with a lag of 6-12 months, as seen in Phase-I/II digitization. FY17E should be the year of transition for Phase-III digitization. FY18E should be the first normalized year of operation post Phase-III, and we expect both gross margin expansion as well as operating leverage led by (1) improved paid subs base (c.68% growth over FY15), (2) improved bargaining power versus broadcasters (11mn+ declared subs base) and (3) relatively stable fixed overheads (operating leverage). Thereafter, we model continuous improvement in gross and operating margins throughout FY18E-25E, led by improved net ARPUs (pass through from LMOs) across Phase-I/II/III markets and consolidating operations.

Hathway's overall EBITDA margins are much ahead of its Cable EBITDA margins; the differential is accounted for by high-margin broadband operations, which we discuss in detail in the following section. Nonetheless, to summarise, strong growth in high-margin broadband (BB) segment will contribute positively to Hathway's overall/consolidated EBITDA margins over time.

Figure 87: Hathway Cable EBITDA margin, FY15-18E (%)



Source: Company data, Investec Securities estimates

Figure 88: De-construction of Hathway financials, FY15-18E (Rs bn)

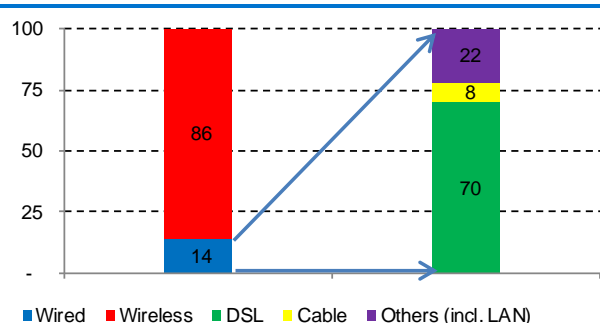
	FY15	FY16E	FY17E	FY18E	FY18E/ FY15 (%)
Subs revenues	8.4	8.4	10.3	13.0	55
--Content costs	(8.1)	(8.1)	(10.0)	(11.3)	39
Gross contribution	0.3	0.3	0.3	1.7	489
Gross margin (%)	3.5	3.6	3.3	13.3	
BB revenues	2.5	3.8	5.2	7.0	181
--BB direct costs	(0.9)	(1.4)	(1.9)	(2.5)	170
BB contribution	1.6	2.4	3.3	4.5	188
Other op. income *	7.4	7.8	8.7	8.2	11
--Overhead costs	(6.7)	(7.1)	(8.6)	(9.6)	44
EBITDA	2.6	3.5	3.8	4.8	85
EBITDA margin (%)	14.2	17.4	15.8	17.1	
Paid subs base (mn)	6.6	8.0	11.1	11.2	70

Source: Company data, Investec Securities estimates

Broadband: large option value but scalability (?)

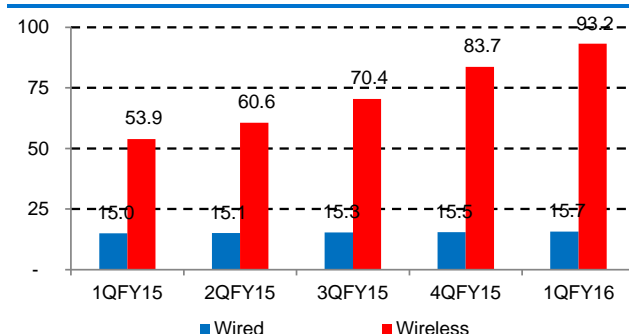
Figures 89-91 present the state of the broadband (BB) market in India presently. Wireless techs capture majority 86% share of the market with limited 14% share for wired technologies. Within wired BB, public sector telcos (BSNL, MTNL) dominate with DSL. The wired BB market in India can be viewed from the dual-lens of (1) sub-optimal currently but (2) with immense future potential, in line with global trends. India is a relatively immature BB market with large number of casual/first-time users. This reflects in strong growth in smartphone sales and wireless BB subs (73% yoy), with limited offering in terms of bandwidth and usage (<1GB/month) but good enough for first time users. The launch of 4G by Jio and incumbent telcos implies India BB market may continue to be dominated by wireless in the medium term. The inflection point for wired broadband may be some time away, as improved maturity of subs (regular users) reflecting in rising demand for data-heavy services (Video/OTT). Scalability is the key challenge, beyond Metro markets.

Figure 89: India broadband subs base, 1QFY16 (%)



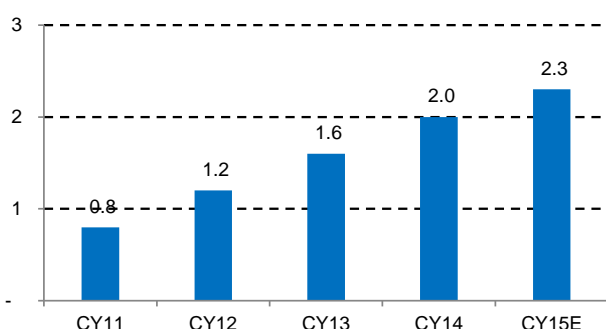
Source: TRAI, Investec Securities research

Figure 90: India broadband subs base, 1QFY15-16 (mn)



Source: TRAI, Investec Securities research

Figure 91: Average broadband speed in India, CY11-15E (Mbps)



Source: Akamai, Investec Securities research

Figure 92: Hathway DOCSIS3 broadband plans

Plan	Speed (Mbps)	Usage (GB)	FUP * speed	Charges (Rs/month)
HD2 Stream	50	15	1	800
HD3 Stream	50	25	1	1,000
HD4 Stream	50	50	1	1,500
HD30 Stream	50	30	1	900
HD50 Stream	50	50	1	1,100
HD75 Stream	50	75	1	1,400
Topup 5	50	5	1	299
Topup 10	50	10	1	499
Topup 100	50	100	1	2,499

Source: Company data, Investec Securities research * FUP is Fair Usage Policy

Hathway: High-Speed DOCSIS3 broadband key differentiator

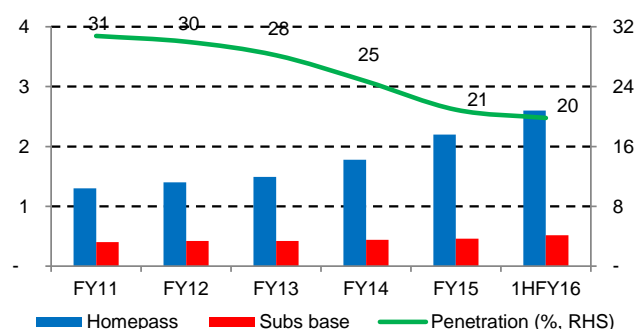
Hathway is the leader in Cable BB in India with 35% market share (0.45mn subs at end-FY15), capitalizing on its first-mover advantage as well as robust Cable presence in Metro/Tier-I cities. Hathway further pressed home its advantage with the launch of high-speed DOCSIS3 (D3) BB services in FY14, with 30% penetration in its total BB subs base at end-FY15. D3 BB offers high speed (50Mbps) as well as usage (15-75GB/month); correspondingly, the service is priced at a premium (Rs800+/month) and offers high 30-40% EBITDA margins. But we also note D3 BB is capital intensive with significant fixed capex (backend, home pass). Thus, network efficiency represented by (1) penetration (active BB subs within homes reached/passed) and (2) subs churn are important determinants of value. Declining penetration (FY11-1HFY16) is a concern. In our view, Rs250-400/month price point (2-5Mbps speed and 5-10GB usage) remain the sweet spot in India.

Figure 93: Broadband economics and sensitivity to penetration (%)

Penetration (%)	20%	18%	16%
Consumer ARPU (Rs/month)	850	850	850
Service tax @14% (Rs/month)	(119)	(119)	(119)
Net ARPU (Rs/month)	731	731	731
Bandwidth charges @12%	(88)	(88)	(88)
Commission @10% (to LMOs)	(73)	(73)	(73)
License fee @8%	(58)	(58)	(58)
Overheads @30/35/40%	(219)	(234)	(249)
EBITDA (Rs/month)	292	278	263
EBITDA margin (%)	40	38	36
BB capex (Rs/sub)	9,700	10,438	11,175
Backend capex	1,900	2,138	2,375
Homepass capex	4,000	4,500	5,000
CPE capex	3,800	3,800	3,800
Payback (months)	33	38	42

Source: Company data, Investec Securities estimates

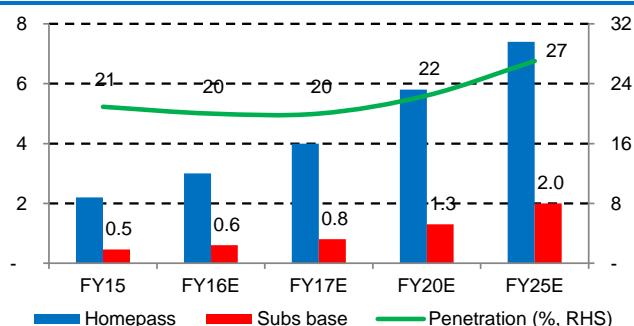
Figure 94: Hathway BB home pass and subs base, FY11-1HFY16 (mn)



Source: Company data, Investec Securities estimates

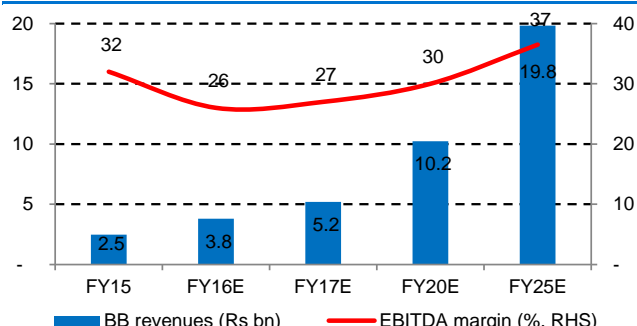
We model c.5mn home pass and c.1mn subs base for Hathway's BB business in FY18E, with a stable 20% penetration rate. The high price points imply that D3 BB service will be viable only in Metro markets to begin with; the opportunity will unfold slowly in Tier-I/Phase-II markets (viability @20% penetration), likely over the next decade. We model c.2mn subs base by FY25E. Including ARPU inflation (sharp c.30% yoy growth in FY16E, flat ARPUs in FY17E-18E led by Jio competition, c.4% inflation thereafter), we model c.4x increase in BB revenues by FY20E and c.8x increase by FY25E. The sharp decline in BB margins in FY16E is due to introduction of 8% license fee by the government; we model steady improvement from FY16E levels to reach c.30% in FY20E and c.37% in FY25E. Notwithstanding the risks, we model considerable option value from BB in our model, noting likely consumer demand for a high-quality BB service in the long run (although near-term is hard to predict) and Hathway's strong position in the business.

Figure 95: Hathway BB home pass and subs base, FY15-25E (mn)



Source: Company data, Investec Securities estimates

Figure 96: Hathway BB revenues and EBITDA margin, FY15-25E

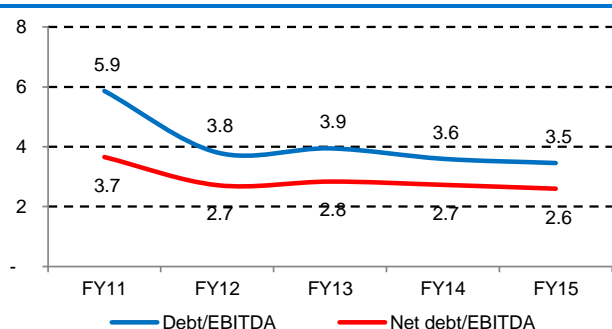


Source: Company data, Investec Securities estimates

Financial leverage: Critical risk factor for Cable MSOs

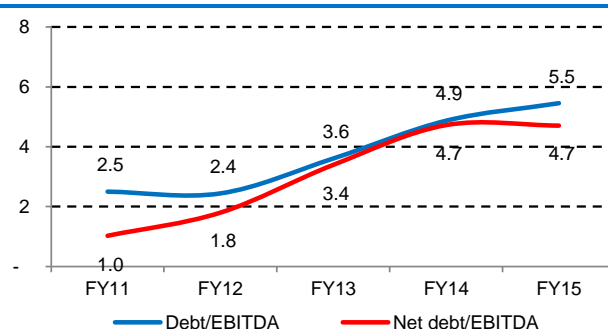
Given the capital intensive nature of C&S distribution business model with large upfront investments required in backend (headends – whether satellite or on the ground) as well as frontend, financial leverage ratios are key monitorables. An analysis of Debt/EBITDA and Net debt/EBITDA ratios of Dish TV and Hathway indicates a divergent trend. Dish TV has reported significant decline in its financial leverage even as Hathway has seen a sharp jump, despite ~Rs7bn of equity dilution in FY14-15 (Rs2.5bn in FY14 at Rs57/share and Rs4.5bn in FY15 at Rs64/share). This is more than just a timing issue, in our view: Dish TV being >10year old digital platform hit peak investment in FY11. On the other hand, Hathway's peak investment period was FY13-14 (Phase-I/II digitization). However, we do not see any decline in leverage levels in FY15 (Phase-III digitization was pushed to FY16) with EBITDA performance lagging. With Phase-III digitization and BB investments, financial leverage is key risk for Hathway.

Figure 97: Dish TV financial leverage ratios, FY11-15 (x)



Source: Company data, Investec Securities research

Figure 98: Hathway financial leverage ratios, FY11-15 (x)

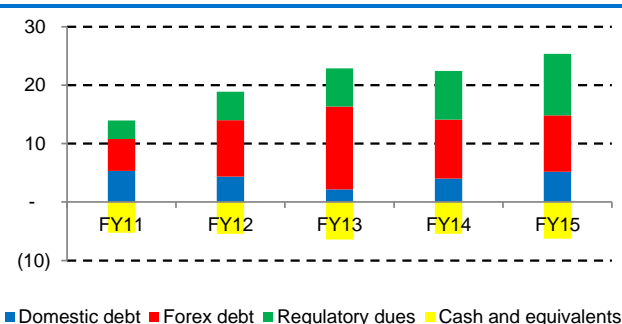


Source: Company data, Investec Securities research

Dish TV: We assume license fee liabilities as debt

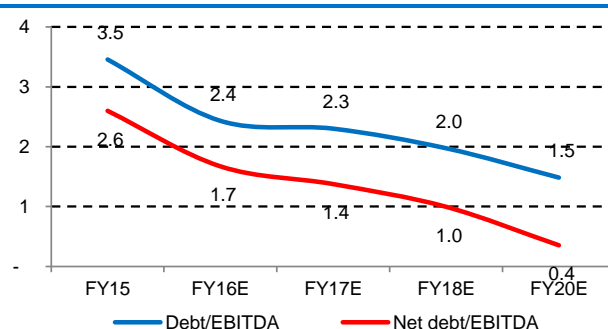
Figure 99 presents a breakdown of Dish TV's net debt. We assume its license fee liabilities (short payment of license fee payable to the government annually, at 10% of gross revenues) as debt. The license fee dispute between the government of India and DTH operators (including Dish TV) relates to the quantum of license fee (not applicable on Cable) and definition of applicable revenues. Dish TV has banked upon a favourable TDSAT judgment to justify its short payment. Correspondingly, the government of India has also not renewed Dish TV's license (expired on Sep-2014) but continued to grant it interim 1-year extensions. The case is currently in the Supreme Court. In our discussions, the company is cognizant of the overhang/uncertainty on account of its license fee liability and noted it continues to maintain high levels of cash expressly due to this. Additionally, sector regulator TRAI has recommended that DTH license fee should be reduced to 8% of adjusted gross revenues (~7.5% of revenues), in line with Telecom.

Figure 99: Dish TV net debt breakdown, FY11-15 (Rs bn)



Source: Company data, Investec Securities research

Figure 100: Dish TV financial leverage ratios, FY15-20E (x)

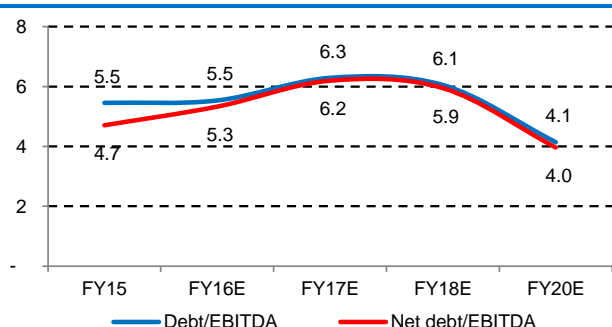


Source: Company data, Investec Securities research

Hathway: Leverage yet to hit peak (and that is worrying)

Hathway's high levels of leverage have not yet peaked, given further investments in Phase-III digitization and DOCSIS3 broadband over FY16E-17E. We model peak leverage in FY17E but at an unsustainable level of >6x net debt/EBITDA. Even so, we have two further issues with Hathway's leverage. (1) The key drivers of disappointment in Hathway's past financial performance remain alive (lack of last-mile access and dependence on LMOs); even modest disappointment on key operating metrics (versus our expectation) would imply financial leverage higher than our expectation. (2) The share of foreign currency debt in Hathway's overall debt levels has increased over time. Given the large volatility in Rs/US\$ rate in the recent past and emerging global macro-environment (US Fed increased rates for the first time in 7 years, with impact expected on emerging market currencies), this trend serves to accentuate the risk profile of Hathway.

Figure 101: Hathway financial leverage ratios, FY15-20E (x)



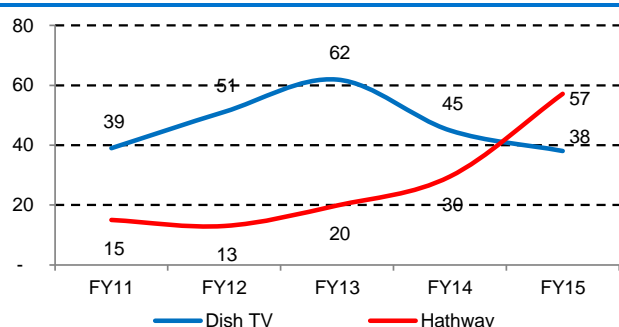
Source: Company data, Investec Securities estimates

Figure 102: Sensitivity of Hathway's financial leverage, FY16E-20E

	FY16E	FY17E	FY18E	FY19E	FY20E
Base case					
Net debt (Rs bn)	18.5	23.8	28.7	29.9	29.6
EBITDA (Rs bn)	3.5	3.8	4.8	6.0	7.3
Net debt/EBITDA (x)	5.3	6.2	5.9	5.0	4.0
ARPU growth (%)		(10)	8	8	8
Sensitivity assuming ARPU growth is 2% below expectation					
Net debt (Rs bn)	18.5	24.0	29.3	31.3	32.4
EBITDA (Rs bn)	3.5	3.6	4.3	5.1	6.1
Net debt/EBITDA (x)	5.3	6.6	6.8	6.1	5.2
ARPU growth (%)		(12)	6	6	6

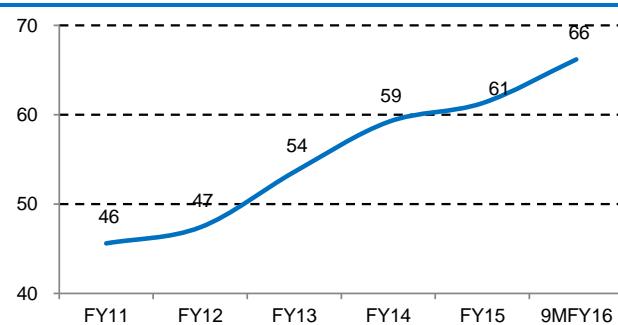
Source: Company data, Investec Securities estimates

Figure 103: Dish TV and Hathway share of forex debt, FY11-15 (%)



Source: Company data, Investec Securities research

Figure 104: Rs/US\$ exchange rate trend, FY11-9MFY16



Source: Company data, Investec Securities research

Valuations and ratings: We prefer DCF

We prefer the DCF valuation methodology for growth economies such as India in order to capture (1) the emerging state of the economy and correspondingly the Indian media market with long-term high-growth potential and (2) investments in new initiatives and their long-term value creation potential (Hathway's broadband business, which is at its infancy, for example; though we believe some conservativeness is merited here, given inflection point of consumer demand beyond Metro markets is unclear). The factors above preclude the use of multiples or relative valuations. In addition, we note: (1) phase of development of individual companies (Hathway with <3years of Digital Cable operations deserves higher multiple than Dish TV with >10years of relatively mature business now), (2) cash flow differential (negative working capital for Dish TV being a prepaid business model versus Hathway, which has a postpaid business model) and (3) differential accounting policies (STB/CPE depreciation, for example).

Nonetheless, for the sake of completeness, we provide key financial metrics and valuation comps for C&S TV companies below. If at all, EV/EBITDA is a much better valuation metric compared to P/E (following from points 1 and 3 above). Given Phase-III digitization in 4QFY16, FY17E will be the year of transition and thus, FY18E (CY17E) financials are best suited for comparison.

Figure 105: Indian and global C&S TV distribution valuation comps, CY15E-17E/FY16E-18E

	Mcap (US\$ mn)	EV (US\$ mn)	Sales (US\$ mn)	EBITDA CAGR (%)	Average RoCE (%)	CY15E/FY16E	EV/EBITDA (X) CY16E/FY17E	CY17E/FY18E
India C&S TV distribution - Investec estimates								
Dish TV India	1,606	1,870	421	11	32	11.8	11.2	9.6
Hathway Cable	539	763	278	18	NA	14.5	13.1	10.4
India average				14	32	13.2	12.2	10.0
India C&S TV distribution - Factset consensus estimates								
Dish TV India	1,606	1,676	454	19	39	11.2	9.1	7.2
Videocon D2H	846	1,054	382	24	16	9.3	7.2	5.7
Hathway Cable	539	752	299	38	NA	13.7	8.9	7.4
DEN Networks	293	272	182	NA	NA	89.8	4.7	NA
SitiCable Network	375	479	148	41	10	10.5	9.9	5.3
India average				30	22	26.9	7.9	6.4
Asian C&S TV distribution								
Astro Malaysia	3,222	4,071	1,588	4	25	8.9	8.9	8.3
Asian Pay Television Trust	655	1,435	252	3	6	9.9	9.8	9.7
Shenzhen Topway	1,577	1,358	211	11	9	10.0	9.2	8.2
PT MNC Sky Vision	657	896	276	9	NA	10.9	10.2	9.1
Beijing Gehua Cable	4,138	2,822	396	8	6	24.9	19.2	18.6
Asian average				7	12	12.9	11.5	10.8
Developed market C&S TV distribution								
Comcast Corporation	135,565	186,391	68,775	6	13	7.5	7.0	6.7
Liberty Global	10,550	83,993	18,248	6	5	9.8	9.2	8.7
DISH Network Corp	12,879	38,479	14,643	(1)	10	13.2	13.0	12.7
Liberty Media Corp	3,884	26,504	4,450	10	5	11.7	10.8	10.4
British Sky Broadcasting	27,447	35,754	15,717	7	13	12.7	10.7	10.9
Cablevision Systems	7,038	16,902	6,461	3	19	9.8	9.9	9.5
Developed market average				5	11	10.8	10.1	9.8

Source: Factset consensus estimates, Investec Securities research * prices as of January 05, 2016; EBITDA CAGR and average RoCE (pre-tax) over CY15E-17E

Dish TV: Initiate with Buy and FY17E TP of Rs120/share

We initiate coverage on Dish TV with a Buy rating and FY17E DCF-based target price of Rs120/share. For our DCF valuation, we explicitly model our revenue and margin assumptions over FY17E-25E. The robust c.10% EBITDA CAGR during this period is driven by a mix of subs adds (Phase-III digitization and improving penetration of TV/Pay-TV in India) and ARPU inflation (likely ahead of consumer price inflation given low base currently). We assume WACC of c.11.5%, at the median of our coverage given yet competitive C&S TV distribution segment and modest free cash flows (although enough to manage organic growth, but not in case of an adverse judgement on large license fee liabilities). Dish TV's strong position across the C&S distribution market supports. We model c.5% terminal growth (2% subs growth in line with household growth in India and 3% inflation rate).

Figure 106: DCF based valuation of Dish TV India

	FY17E	FY18E	FY19E	FY20E	FY21E	FY22E	FY23E	FY24E	FY25E	FY26E	FY27E
EBIT	4,714	6,268	8,439	10,579	12,235	13,743	15,319	16,885	18,473	20,321	21,845
Cash tax	(943)	(1,254)	(1,688)	(2,116)	(3,304)	(4,673)	(5,209)	(5,741)	(6,281)		
Depreciation	6,297	6,565	6,521	6,494	6,478	6,162	5,973	5,860	5,793		
Working capital change	564	701	749	736	649	568	607	640	674		
Capital expenditure	(5,963)	(6,455)	(6,455)	(6,455)	(5,692)	(5,692)	(5,692)	(5,692)	(5,692)		
Annual FCFF	4,669	5,826	7,566	9,238	10,367	10,108	10,999	11,952	12,967	14,264	15,334
Discount rate (%)	11.5	Assumed									
Discount year (#)	-	1	2	3	4	5	6	7	8	9	
Discounted annual FCFF	4,669	5,225	6,086	6,664	6,707	5,865	5,724	5,578	5,428	5,355	
Discounted cumulative FCFF	57,302										
Terminal growth (%)	5.0	Assumed blended 2% subs growth with 3% inflation rate									
Exit FCF multiple (X)	15										
Terminal FCFF	235,905										
Discounted terminal FCFF	88,565										
Enterprise fair value	145,867										
Net cash/(debt)	(17,425)	End-FY16E									
Equity fair value	128,442										
Number of shares (mn)	1,067										
DITV stock fair value (Rs/shar)	120										
Terminal value contribution ('	64										
FY17E-26E EBITDA CAGR (%)	10										

Source: Investec Securities estimates

Hathway: Initiate with Hold and FY17E TP of Rs50/share

We initiate coverage on Hathway with a Hold rating and FY17E DCF-based target price of Rs50/share. For our DCF valuation, we explicitly model our revenue and margin assumptions over FY17E-30E. The robust c.18% EBITDA CAGR during this period is driven by mix of robust subs adds (Phase-III digitization, improving penetration of TV/Pay-TV in India and strong growth in BB subs from a low base) and potential ARPU inflation (likely ahead of consumer price inflation given low base currently). Current low base of EBITDA margins will likely improve led by the operating leverage provided by Phase-III subs base. We assume WACC of c.12.5%, at the high-end of our coverage given currently negative free cash flows and high debt/leverage, as discussed previously. Hathway has a leadership position across Cable distribution market, but the entire segment has struggled with converting subs share into revenues and profitability. We model c.5% terminal growth (2% subs growth and 3% inflation rate), similar to Dish TV.

Figure 107: DCF based valuation of Hathway Cable

	FY17E	FY18E	FY19E	FY20E	FY21E	FY22E	FY23E	FY24E	FY25E	FY26E	FY27E	FY28E	FY29E	FY30E	FY31E	FY32E
EBIT	(519)	(393)	296	1,480	2,806	4,299	5,931	7,783	9,671	11,251	12,941	14,758	16,723	18,856	20,741	22,297
Cash tax	-	-	-	-	(561)	(860)	(1,186)	(2,101)	(3,288)	(3,825)	(4,400)	(5,018)	(5,686)	(6,411)		
Depreciation	4,363	5,215	5,662	5,806	5,700	5,650	5,631	5,578	5,471	5,376	5,317	5,288	5,283	5,298		
Working capital change	295	131	331	486	54	523	652	801	273	112	121	133	145	159		
Capital expenditure	(7,756)	(7,665)	(5,061)	(5,091)	(5,364)	(5,496)	(5,598)	(5,090)	(4,905)	(5,006)	(5,107)	(5,210)	(5,313)	(5,417)		
Gross FCFF	(3,617)	(2,712)	1,228	2,682	2,634	4,117	5,430	6,971	7,222	7,908	8,872	9,951	11,153	12,485	13,733	14,763
Minority interest	723	515	(221)	(456)	(421)	(617)	(760)	(906)	(867)	(870)	(887)	(995)	(1,115)	(1,248)	(1,373)	(1,476)
Annual FCFF	(2,894)	(2,197)	1,007	2,226	2,213	3,499	4,670	6,065	6,355	7,038	7,985	8,956	10,037	11,236	12,360	13,287
Discount rate (%)	12.5	Assumed														
Discount year (#)	-	1	2	3	4	5	6	7	8	9	10	11	12	13	14	
Discounted annual FCFF	(2,894)	(1,953)	795	1,563	1,381	1,942	2,303	2,659	2,477	2,438	2,459	2,452	2,442	2,430	2,376	
Discounted cumulative FCFF	22,872															
Terminal growth (%)	5.0	Assumed blended 2% subs growth with 3% inflation rate														
Exit FCF multiple (X)	13															
Terminal FCFF	177,157															
Discounted terminal FCFF	34,058															
Enterprise fair value	56,930															
Net cash/(debt)	(14,779)	End-FY16E; adjusted for minority interest														
Equity fair value	42,152															
Number of shares (mn)	831															
HATH stock fair value (Rs/sha)	50															
Terminal value contribution ('	81															
FY17E-26E EBITDA CAGR (%)	18															

Source: Investec Securities estimates

We discuss a few specific aspects related to our valuation model below.

- Our financial model has explicit 15-year forecasts (compared to 10-year for Dish TV) to capture: (1) relatively emerging state of Digital Cable operations as well as (2) long-tail of D3 BB operations. The latter is a viable option in Metro markets, despite premium pricing of Rs10K+/annum, but Tier-I cities will open up over time with improving consumer maturity/pricing power.
- The company has started implementing prepaid billing in its network, starting with its primary subs base (where Hathway is both the LMO and MSO; c.5% of its total subs universe). We factor in prepaid/advanced billing implementation with LMOs over time and improving working capital profile in our model.
- Figure 107 presents the sensitivity of Hathway's valuation to assumed WACC. As discussed, current financial leverage is unsustainable (in our view) and the company needs equity capital, period. The growth opportunity can peter out given emerging competition, in the absence of capital. **Commensurately, improved balance sheet (equity capital) can drive lower WACC and higher valuation (+30% with 100bps lower WACC).**

Figure 108: Sensitivity of Hathway valuation to WACC

	(Rs/share)	Comment
10.5%	86	Zee TV
11%	75	
11.5%	65	Sun TV, Dish TV, PVR
12%	57	INOX
Base WACC - 12.5%	50	UFO Moviez
13%	44	

Source: Investec Securities estimates

Dish Tv India (DSTV.NS)

India | Media

BUY

The bird in hand

Dish TV is the leading pan-India DTH platform with reported 13.6mn net subs, including ~1mn HD subs. On a conservative basis, the company has ~10mn active subs. Dish TV will likely be a robust beneficiary of Phase-III digitization led by (1) value-for-money brand, (2) Zing (second brand) regional language service, (3) renewed marketing aggression on the core brand (after 2-3 year gap) and (4) large number of independent MSOs with limited Digital Cable experience. With robust return ratios (c.20%+ CROCI) and FCF breakeven, subs growth manageable through internal accruals, indicating compounding stock returns. We initiate at Buy; valuations are inexpensive at c.9.7x FY18E EV/EBITDA, at modest premium to global comps.

■ **Structure of DTH value chain makes all the difference.** Unlike Cable network in India (multi-tiered, fragmented market), DTH evolved into a simple value chain structure, under a regulated environment. Backed by organized, well-capitalized groups, the market is concentrated among four pan-India operators. After the initial hyper-competitive period of scale-up, the market successfully transition to business fundamentals: (1) improved subs mix (including HD), (2) ARPU and (3) churn. Improved discretionary spending supports the broader macro-environment for Pay-TV services in India.

■ **Phase-III digitization to drive improvement in operating metrics.** Dish TV is better positioned to capitalize on Phase-III digitization (Tier-II/III/IV towns) than Phase-I/II (Metro/Tier-I cities) given (1) a value-for-money brand, (2) Zing service targeted at regional language consumers, (3) renewed marketing aggression on core brand (after 2-3 gap) and (4) modest Cable competition. Dish TV to drive improved subs adds, reduced churn (in fact, win back of lost subs) and improved ARPU inflation (beyond FY17E). Strong growth in high-margin C&P revenues led by new rating system (BARC).

■ **Initiate at BUY with Rs120 target price, and key risks.** We initiate on Dish TV stock with DCF-based fair value of Rs120. Inexpensive valuation at c.9.7x FY18E EV/EBITDA at modest premium to global comps, despite superior growth profile (we expect double-digit revenue CAGR through to FY20E). With capex moderating beyond Phase-III, FCF yield to improve to c.4.5% by FY18E. Key risks: (1) FY17E gross margin decline led by reset of content deals, (2) delayed Phase-III digitization, (3) license fee liability, (4) competitive dynamics in the market and (5) higher-than-expected churn.

Price: INR100.30

Target: INR120.00

Forecast Total Return: 20.4%

Market Cap: INR107bn

EV: INR124bn

Average daily volume: 5.9m

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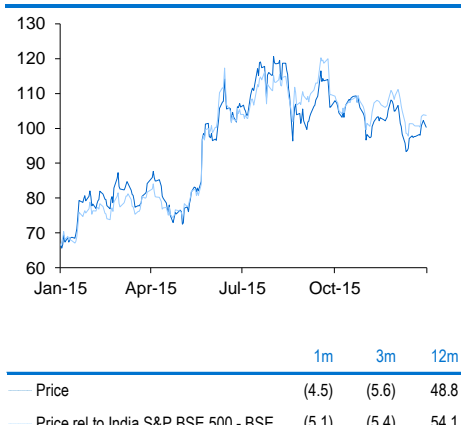
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Financials and valuation

Year end: 31 March

Price Performance

	2014A	2015A	2016E	2017E	2018E
Revenue (INRm)	25,090	27,818	30,365	33,391	37,790
EBITDA (INRm)	6,240	7,331	10,420	11,011	12,833
EBITA (INRm)	266	1,193	4,572	4,714	6,268
PBT (normalised) (INRm)	-412	74	2,957	3,284	5,055
Net Income (normalised) (INRm)	-1,576	32	2,957	2,627	4,044
EPS (norm. cont.) – FD (INR)	(0.4)	0.0	2.8	2.5	3.8
FCFPS - FD (INR)	4.0	0.4	1.5	3.3	4.5
DPS (INR)	0.0	0.0	0.0	1.0	2.0
PE (normalised) (x)	(259.3)	3,339.7	36.2	40.8	26.5
EV/sales (x)	5.0	4.5	4.1	3.7	3.3
EV/EBITDA (x)	19.9	17.0	11.9	11.3	9.7
FCF yield (%)	4.0	0.4	1.5	3.3	4.5
Dividend yield (%)	0.0	0.0	0.0	1.0	2.0



Source: Company accounts/Investec Securities estimates

Source: FactSet

Figure 109: Company description of Dish TV

Dish TV India, part of the Essel group, is the second largest DTH operator in India. Dish TV pioneered the DTH segment in India with the launch of its operations in 2003. It currently has ~13.6mn net subs in India, including ~1mn HD subs. Dish TV offers a pan-India DTH platform with >520 channels and services including 48 HD channels and services. Dish TV has been a pioneer in launch of innovative products in India such as Dish+ (recording w/o in-built hard drive). Two recent initiatives of Dish TV have been (1) Zing, a DTH service targeted at small-town regional language consumers and (2) Dish Lanka, the expansion of Dish TV service in the Sri Lanka market. Majority of Dish TV's subs come from semi-urban/rural markets of India.

Source: Investec Securities research

Figure 110: Catalysts for Dish TV India

Positive Catalysts

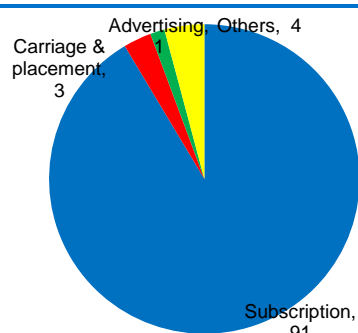
- Long-term TV/Pay-TV penetration opportunity
- Robust ARPU growth potential from low base
- Market consolidation driven by digitization
- VAS services such as HD and Bollywood-on-Demand

Negative Catalysts

- Delayed Phase-III digitization (beyond our expectation)
- Crystallization of large license fee liability
- Changing competitive dynamics in the market

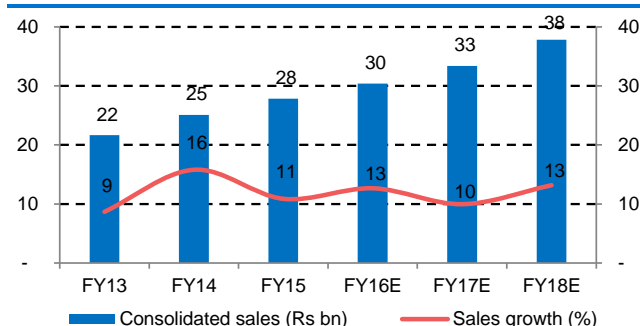
Source: Investec Securities research

Figure 111: Dish TV revenue breakup, FY15 (%)



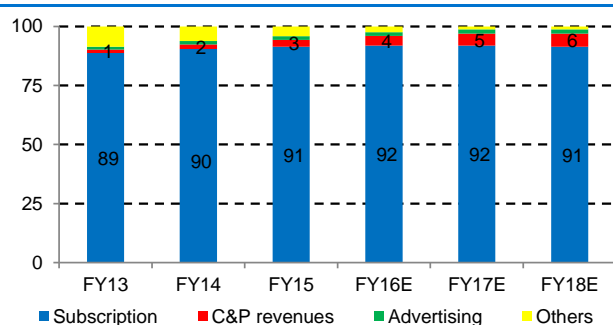
Source: Company data, Investec Securities research

Figure 112: Dish TV consolidated sales and growth, FY13-18E



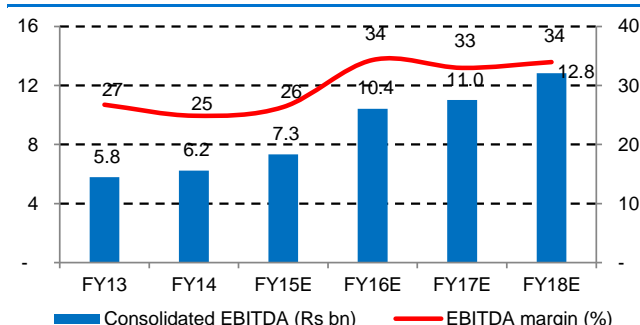
Source: Company data, Investec Securities research * adjusted for change in a/c policy of recharge commissions

Figure 113: Dish TV revenue breakup, FY13-18 (%)



Source: Company data, Investec Securities estimates

Figure 114: Dish TV consolidated EBITDA and margin, FY13-18E



Source: Company data, Investec Securities estimates

Summary Financials (INRm)

Year end: 31 March

Income Statement	2014	2015	2016E	2017E	2018E
Revenue	25,090	27,818	30,365	33,391	37,790
EBITDA	6,240	7,331	10,420	11,011	12,833
Depreciation and amortisation	5,974	6,138	5,849	6,297	6,565
Operating profit	266	1,193	4,572	4,714	6,268
Other income	-	-	-	-	-
Net interest	-678	-1,119	-1,614	-1,430	-1,213
Share-based-payments	-	-	-	-	-
PBT (normalised)	-412	74	2,957	3,284	5,055
Impairment of acquired intangibles	-	-	-	-	-
Non-recurring items/exceptionals	-1,164	0	0	0	0
PBT (reported)	-1,576	74	2,957	3,284	5,055
Taxation	0	-42	0	-657	-1,011
Minorities & preference dividends	0	0	0	0	0
Discontinued/assets held for sale	-	-	-	-	-
Net Income (normalised)	-1,576	32	2,957	2,627	4,044
Attributable profit	-1,576	32	2,957	2,627	4,044
EPS (reported)	(1.5)	0.0	2.8	2.5	3.8
EPS (norm., cont.) – FD (INR)	(0.4)	0.0	2.8	2.5	3.8
EPS (norm., cont., IAS19R adj.) – FD	-	-	-	-	-
DPS (INR)	0.0	0.0	0.0	1.0	2.0
Average number of group shares - FD (m)	1,065	1,066	1,067	1,068	1,069
Average number of group shares (m)	1,065	1,066	1,067	1,068	1,069
Total number of shares in issue (m)	1,065	1,066	1,067	1,068	1,069
Cash Flow	2014	2015	2016E	2017E	2018E
Operating profit	266	1,193	4,572	4,714	6,268
Depreciation & amortisation	-5,974	-6,138	-5,849	-6,297	-6,565
Other cash and non-cash movements	693	1,059	1,614	774	202
Change in working capital	1,964	404	-211	564	701
Operating cash flow	7,115	7,774	10,210	11,575	13,534
Interest	-187	-198	-1,614	-1,430	-1,213
Tax paid	-60	-99	0	-657	-1,011
Dividends from associates and JVs	-	-	-	-	-
Cash flow from operations	6,868	7,477	8,596	9,488	11,310
Maintenance capex	-2,986	-7,058	-6,963	-5,963	-6,455
Free cash flow	4,231	391	1,632	3,524	4,855
Expansionary capex	-	-	-	-	-
Exceptionals and discontinued operations	-	-	-	-	-
Other financials	-1,638	-418	0	0	0
Acquisitions	-349	28	0	0	0
Disposals	-	-	-	-	-
Net share issues	3	35	1	1	1
Dividends paid	0	0	0	-1,250	-2,501
Change in net cash	-584	-2,034	1,633	2,276	2,355
Net cash/(debt)	-17,024	-19,058	-17,425	-15,149	-12,794
FCFPS - FD (INR)	4.0	0.4	1.5	3.3	4.5
Balance Sheet	2014	2015	2016E	2017E	2018E
Property plant and equipment	17,721	19,400	20,514	20,180	20,070
Intangible assets	76	111	111	111	111
Investments and other non current assets	2,000	2,000	2,000	2,000	2,000
Cash and equivalents	3,426	4,286	5,919	8,195	10,550
Other current assets	3,989	5,130	4,919	5,276	5,670
Total assets	27,702	31,663	34,273	36,654	39,381
Total debt	-22,450	-25,344	-25,344	-25,344	-25,344
Preference shares	0	0	0	0	0
Other long term liabilities	-	-	-	-	-
Provisions & other current liabilities	-147	-230	-253	-278	-306
Pension deficit and other adjustments	-	-	-	-	-
Total liabilities	-30,827	-34,796	-34,447	-35,450	-36,633
Net assets	-3,125	-3,133	-175	1,204	2,747
Shareholder's equity	-3,125	-3,133	-175	1,204	2,747
Minority interests	0	0	0	0	0
Total equity	-3,125	-3,133	-175	1,204	2,747
Net working capital	-3,898	-3,586	-3,375	-3,939	-4,640
NAV per share (INR)	(2.9)	(2.9)	(0.2)	1.1	2.6

Source: Company accounts, Investec Securities estimates

Calendarised Valuation

Year end: 31 March

	2014	2015	2016E	2017E
Calendar PE (x)	(1,378.5)	48.0	39.4	29.0
Calendar Price/NAVPS (x)	(34.1)	(118.3)	124.0	45.3
EV/sales (x)	4.6	4.2	3.8	3.4
EV/EBITDA (x)	17.6	12.9	11.4	10.0
FCF yield (%)	1.3	1.2	2.9	4.2
Dividend yield (%)	0.0	0.0	0.8	1.7

Source: Company accounts, Investec Securities estimates

Ratios and Metrics

Year end: 31 March

Ratios and metrics	2014	2015	2016E	2017E	2018E
Revenue growth (y-on-y) (%)	15.8	10.9	9.2	10.0	13.2
EBITDA growth (y-on-y) (%)	7.7	17.5	42.1	5.7	16.6
Net income (normalised) growth (yoy)			9,142.1	(11.2)	54.0
EPS (normalised) growth (y-on-y) (%)			9,133.4	(11.3)	53.8
FCFPS growth (y-on-y) (%)		(90.8)	317.1	115.7	37.6
NAVPS growth (y-on-y) (%)					128.0
DPS growth (y-on-y) (%)	-	-	-		100.0
Interest cover (x)	0.4	1.1	2.8	3.3	5.2
Net debt/EBITDA (x)	2.7	2.6	1.7	1.4	1.0
Net debt/equity (%)	(544.8)	(608.3)	(9,984.9)	1,258.5	465.7
Net gearing (%)	122.5	119.7	101.0	92.6	82.3
Dividend cover (x)	n.m.	n.m.	n.m.	2.5	1.9
EBITDA margin (%)	24.9	26.4	34.3	33.0	34.0
EBITA margin (%)	1.1	4.3	15.1	14.1	16.6
ROE (%)	50.4	(1.0)	(1,694.6)	218.2	147.2
ROCE (%)	-	-	-	-	-
NWC/revenue (%)	(15.5)	(12.9)	(11.1)	(11.8)	(12.3)
Tax rate (normalised) (%)	-	-	-	-	-
Tax rate (reported) (%)	0.0	56.8	0.0	20.0	20.0

Source: Company accounts, Investec Securities estimates

Target Price Basis

DCF valuation

Key Risks

(1) Delays in Phase-III digitization, (2) license fee liability, (3) competitive dynamics in the market and (4) higher-than-expected subs churn

Hathway Cable & Datacom (HAWY.NS)

India | Media

HOLD

Up against a wall of expectations

Hathway is the largest national Cable MSO in India with reported 12mn subs universe and 8.7mn Digital subs. It is also the largest Cable broadband provider with 2.6mn homes passed and >0.5mn subs. Hathway will be a key beneficiary of Phase-III digitization, but the street fears a repeat of Phase-I/II where strong operating performance did not translate into financials. We disagree: (1) bargaining power with c.11mn+ paid Digital subs, (2) content cost reset already (in FY15) and (3) operating leverage on Digital opex from Phase-I/II. So why Hold? Premium valuations are sustainable given (1) early-stage Digital operations (<3years versus >10years for Dish TV) and (2) option value of broadband – but not balance sheet (c.5x Net-debt/EBITDA).

■ **Cable is up against the wall of expectations from digitization.** Digitization was billed as the paradigm shift for Cable MSOs (1) giving them a central role in the value chain, (2) improved control over subs base and (3) improved share of consumer ARPUs from LMOs. Strong operational performance (Cable subs share of c.70%; Hathway alone c.19%) fanned expectations, but did not translate into financial performance. Cable MSOs have struggled to deliver on 'something for everyone' promise (government taxes, broadcaster revenues). The overhang of fragmented value chain continues.

■ **Phase-III digitization can make a difference to strong franchise.** Hathway already has a strong franchise with 6.7mn Digital subs from Phase-I/II. It can be conservative in Phase-III (c.10% subs share) yet achieve robust c.11mn+ Digital subs. With significant per-sub content cost reset already in FY15, this will add to bargaining power. Ahead-of-the-curve Digital opex (overheads) will provide operating leverage. Premium high-speed broadband services will be ramped-up in Metro markets. However, managing consumers (quality of service) and LMOs (share of ARPUs) key challenge.

■ **Initiate at Hold with Rs50 target price, and key risks.** We initiate on Hathway stock with DCF-based fair value of Rs50. Premium valuation at c.11.3x FY18E EV/EBITDA, to Dish TV and global comps, can be justified: (1) early stage of Digital operations (<3years old) and (2) long-term option value of broadband. However, Phase-I/II under-performance reflected in present balance sheet (c.5x Net-Debt/EBITDA) is unsustainable. Key risks: (1) delayed Phase-III digitization, (2) continued LMO/broadcaster disputes driving (3) higher-than-expected churn and (4) pressure on C&P revenues.

Price: INR43.65

Target: INR50.00

Forecast Total Return: 14.5%

Market Cap: INR36bn

EV: INR55bn

Average daily volume: 441k

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Financials and valuation

Year end: 31 March

Price Performance

	2014A	2015A	2016E	2017E	2018E
Revenue (INRm)	15,830	18,317	19,950	24,265	28,230
EBITDA (INRm)	3,014	2,600	3,466	3,844	4,822
EBITA (INRm)	102	-638	-217	-519	-393
PBT (normalised) (INRm)	-1,138	-1,902	-1,460	-2,250	-2,544
Net Income (normalised) (INRm)	-1,111	-1,804	-1,241	-1,912	-2,163
EPS (norm. cont.) – FD (INR)	(1.4)	(2.8)	(1.5)	(2.3)	(2.6)
FCFPS - FD (INR)	(9.7)	(3.0)	(8.6)	(6.4)	(5.9)
DPS (INR)	0.0	0.0	0.0	0.0	0.0
PE (normalised) (x)	(32.2)	(15.5)	(29.2)	(19.0)	(16.8)
EV/sales (x)	3.5	3.0	2.7	2.3	1.9
EV/EBITDA (x)	18.2	21.0	15.8	14.2	11.3
FCF yield (%)	(22.3)	(6.9)	(19.7)	(14.8)	(13.4)
Dividend yield (%)	0.0	0.0	0.0	0.0	0.0



	1m	3m	12m
Price	(2.1)	17.5	(37.4)
Price rel to India S&P BSE 500 - BSE	(2.9)	19.9	(35.3)

Source: Company accounts/Investec Securities estimates

Source: FactSet

Figure 115: Company description of Hathway

Hathway Cable and Datacom, part of the Rajan Raheja Group, is the largest MSO & Cable Broadband operator in India. It was the first Indian MSO to roll out Digital Cable in India and the first to reach the milestone of 1 mn Digital Cable subs. Hathway serves 160+ towns with 11.8mn Cable TV subs and 8.5mn Digital Cable subs. It has established 23 digital head-ends and high-quality HFC (Hybrid Fibre Coaxial) backbone and Fibre network spanning 16,000km. Hathway holds pan-India ISP license and is the first Cable MSO to offer broadband services. Currently, its Broadband operations span 20 cities with 2.6mn home-passes and 0.5mn subs. It launched high-speed DOCSIS3 broadband technology in India in 2013, which currently has 0.2mn subs.

Source: Investec Securities research

Figure 116: Catalysts for Hathway

Positive Catalysts

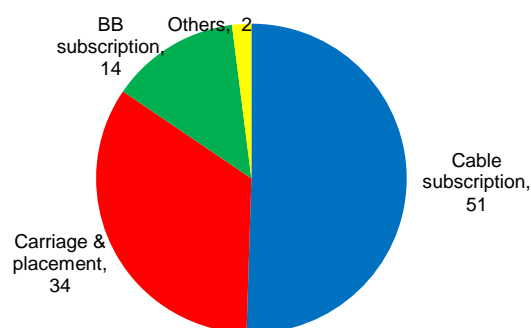
- Long-term TV/Pay-TV penetration opportunity
- Robust ARPU growth potential from low base
- Market consolidation driven by digitization
- VAS services such as HD and Bollywood-on-Demand

Negative Catalysts

- Delayed Phase-III digitization (beyond our expectation)
- Continued LMO/broadcaster disputes
- Pressure on C&P revenues and ad environment

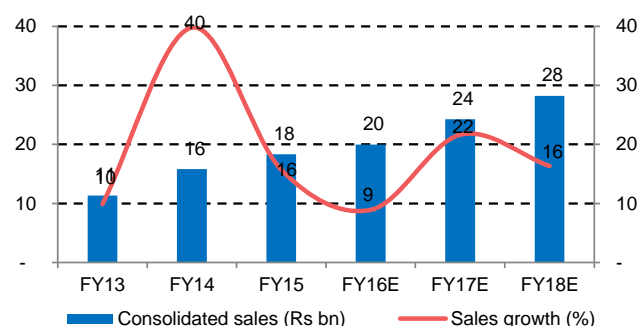
Source: Investec Securities research

Figure 117: Hathway revenue breakup, FY15 (%)



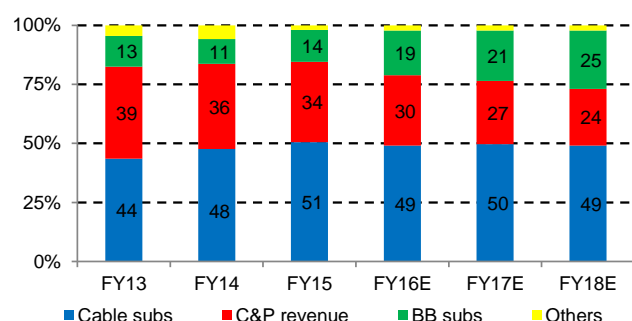
Source: Company data, Investec Securities research

Figure 118: Hathway consolidated sales and growth, FY13-18E



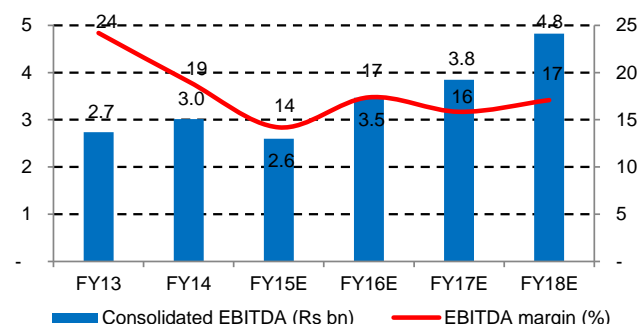
Source: Company data, Investec Securities estimates

Figure 119: Hathway revenue breakup, FY13-18E (%)



Source: Company data, Investec Securities estimates

Figure 120: Hathway consolidated EBITDA and margin, FY13-18E



Source: Company data, Investec Securities estimates

Summary Financials (INRm)

Year end: 31 March

Income Statement	2014	2015	2016E	2017E	2018E
Revenue	15,830	18,317	19,950	24,265	28,230
EBITDA	3,014	2,600	3,466	3,844	4,822
Depreciation and amortisation	2,912	3,238	3,683	4,363	5,215
Operating profit	102	-638	-217	-519	-393
Other income	-	-	-	-	-
Net interest	-1,240	-1,264	-1,244	-1,731	-2,152
Share-based-payments	-	-	-	-	-
PBT (normalised)	-1,138	-1,902	-1,460	-2,250	-2,544
Impairment of acquired intangibles	-	-	-	-	-
Non-recurring items/exceptionals	-107	437	0	0	0
PBT (reported)	-1,245	-1,465	-1,460	-2,250	-2,544
Taxation	-162	-280	0	0	0
Minorities & preference dividends	296	-59	219	337	382
Discontinued/assets held for sale	-	-	-	-	-
Net Income (normalised)	-1,111	-1,804	-1,241	-1,912	-2,163
Attributable profit	-1,111	-1,804	-1,241	-1,912	-2,163
EPS (reported)	(1.5)	(2.3)	(1.5)	(2.3)	(2.6)
EPS (norm., cont.) – FD (INR)	(1.4)	(2.8)	(1.5)	(2.3)	(2.6)
EPS (norm., cont., IAS19R adj.) – FD	-	-	-	-	-
DPS (INR)	0.0	0.0	0.0	0.0	0.0
Average number of group shares - FD (m)	741	797	831	831	831
Average number of group shares (m)	741	797	831	831	831
Total number of shares in issue (m)	760	831	831	831	831
Cash Flow	2014	2015	2016E	2017E	2018E
Operating profit	102	-638	-217	-519	-393
Depreciation & amortisation	-2,912	-3,238	-3,683	-4,363	-5,215
Other cash and non-cash movements	1,251	1,178	1,244	1,731	2,152
Change in working capital	-955	-669	-305	295	131
Operating cash flow	2,701	2,745	3,161	4,139	4,953
Interest	-1,147	-1,204	-1,244	-1,731	-2,152
Tax paid	-361	-482	0	0	0
Dividends from associates and JVs	-	-	-	-	-
Cash flow from operations	1,193	1,059	1,917	2,408	2,802
Maintenance capex	-8,369	-4,371	-8,153	-7,756	-7,665
Free cash flow	-7,215	-2,386	-7,126	-5,348	-4,864
Expansionary capex	-	-	-	-	-
Exceptionals and discontinued operations	-	-	-	-	-
Other financials	-344	-86	0	0	0
Acquisitions	39	-926	891	0	0
Disposals	-	-	-	-	-
Net share issues	2,477	4,466	0	0	0
Dividends paid	0	0	0	0	0
Change in net cash	-4,938	2,000	-6,235	-5,348	-4,864
Net cash/(debt)	-14,238	-12,238	-18,473	-23,822	-28,685
FCFPS - FD (INR)	(9.7)	(3.0)	(8.6)	(6.4)	(5.9)
Balance Sheet	2014	2015	2016E	2017E	2018E
Property plant and equipment	19,029	19,447	23,917	27,310	29,761
Intangible assets	4,839	4,953	4,953	4,953	4,953
Investments and other non current assets	87	1,040	149	149	149
Cash and equivalents	440	1,056	712	363	500
Other current assets	4,225	4,563	4,793	4,860	5,159
Total assets	34,123	36,850	41,159	45,032	48,346
Total debt	-14,680	-14,185	-19,185	-24,185	-29,185
Preference shares	0	0	0	0	0
Other long term liabilities	-	-	-	-	-
Provisions & other current liabilities	-7,599	-8,142	-8,911	-10,033	-10,892
Pension deficit and other adjustments	-	-	-	-	-
Total liabilities	-22,279	-22,327	-28,096	-34,218	-40,077
Net assets	11,844	14,523	13,063	10,813	8,269
Shareholder's equity	9,593	12,104	10,863	8,951	6,788
Minority interests	2,251	2,419	2,200	1,863	1,481
Total equity	11,844	14,523	13,063	10,813	8,269
Net working capital	2,129	2,212	2,517	2,223	2,092
NAV per share (INR)	16.0	18.2	15.7	13.0	10.0

Source: Company accounts, Investec Securities estimates

Calendarised Valuation

Year end: 31 March

	2014	2015	2016E	2017E
Calendar PE (x)	(17.8)	(24.0)	(20.7)	(17.3)
Calendar Price/NAVPS (x)	2.5	2.7	3.2	4.1
EV/sales (x)	3.1	2.8	2.4	2.0
EV/EBITDA (x)	20.3	16.9	14.6	11.9
FCF yield (%)	(10.7)	(16.5)	(16.0)	(13.7)
Dividend yield (%)	0.0	0.0	0.0	0.0

Source: Company accounts, Investec Securities estimates

Ratios and Metrics

Year end: 31 March

Ratios and metrics	2014	2015	2016E	2017E	2018E
Revenue growth (y-on-y) (%)	39.8	15.7	8.9	21.6	16.3
EBITDA growth (y-on-y) (%)	10.0	(13.7)	33.3	10.9	25.4
Net income (normalised) growth (yoy)					
EPS (normalised) growth (y-on-y) (%)					
FCFPS growth (y-on-y) (%)					
NAVPS growth (y-on-y) (%)	14.6	14.0	(13.7)	(17.2)	(23.5)
DPS growth (y-on-y) (%)	-	-	-	-	-
Interest cover (x)	0.1	(0.5)	(0.2)	(0.3)	(0.2)
Net debt/EBITDA (x)	4.7	4.7	5.3	6.2	5.9
Net debt/equity (%)	120.2	84.3	141.4	220.3	346.9
Net gearing (%)	54.6	45.7	58.6	68.8	77.6
Dividend cover (x)	n.m.	n.m.	n.m.	n.m.	n.m.
EBITDA margin (%)	19.0	14.2	17.4	15.8	17.1
EBITA margin (%)	0.6	(3.5)	(1.1)	(2.1)	(1.4)
ROE (%)	(11.6)	(14.9)	(11.4)	(21.4)	(31.9)
ROCE (%)	-	-	-	-	-
NWC/revenue (%)	13.4	12.1	12.6	9.2	7.4
Tax rate (normalised) (%)	-	-	-	-	-
Tax rate (reported) (%)	(13.0)	(19.1)	0.0	0.0	0.0

Source: Company accounts, Investec Securities estimates

Target Price Basis

DCF valuation

Key Risks

(1) Delays in Phase-III digitization, (2) continued LMO/broadcaster disputes, (3) higher-than-expected subs churn and (4) pressure on C&P revenues

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Stock ratings for European/Hong Kong stocks

	Expected total return 12m performance	Count	All stocks % of total	Corporate stocks Count	% of total
Buy	greater than 10%	185	59%	81	44%
Hold	0% to 10%	102	32%	13	13%
Sell	less than 0%	28	9%	1	4%

Source: Investec Securities estimates

Stock ratings for Indian stocks

	Expected total return 12m performance	Count	All stocks % of total	Corporate stocks	
				Count	% of total
Buy	greater than 15%	37	59%	0	0%
Hold	5% to 15%	14	22%	0	0%
Sell	less than 5%	12	19%	0	0%

Source: Investec Securities estimates

Stock ratings for African* stocks

	Expected total return		All stocks		Corporate stocks	
	12m performance	Count	% of total	Count	% of total	
Buy	greater than 15%	31	43%	5	16%	
Hold	5% to 15%	24	33%	2	8%	
Sell	less than 5%	17	24%	3	18%	

Source: Investec Securities estimates

*For African countries excluding South Africa, ratings are based on the 12m implied US dollar expected total return (ETR). This is derived from the expected local currency (LCY) ETR by making assumptions on the 12month forward exchange rates for the respective currencies. For South African stocks, ratings are based on the ETR in rand terms. For European and Hong Kong stocks, within the Hold banding, an Add rating may be (optionally) applied if the analyst is positive on the stock and the ETR is greater than 5%; a Reduce rating may be (optionally) applied if the analyst is negative on the stock and the ETR is less than 5%.

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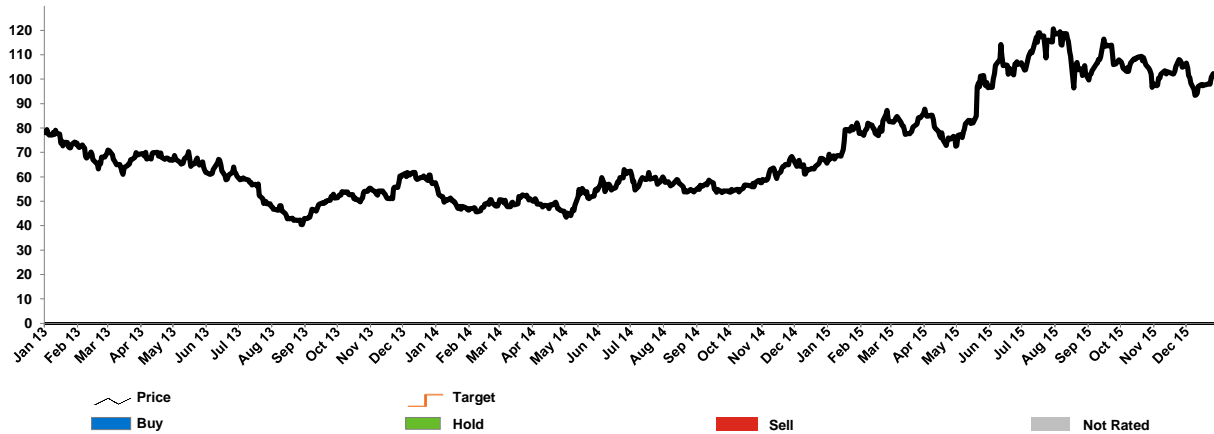
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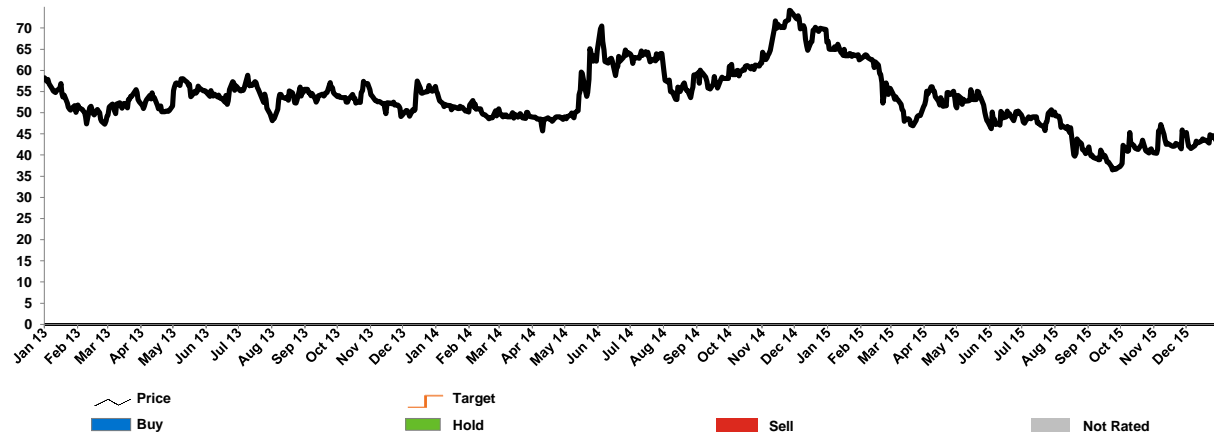
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Dish Tv India (DSTV.NS) – Rating Plotter as at 06 Jan 2016



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