IDFC SSKI

INDIA RESEARCH

30 November 2007

BSE Sensex: 19363

Initiating coverage

Max India

Rs230
OUTPERFORMER

'Max'imum cover

Mkt Cap: Rs51.0bn; US$1.3bn

Having formidable presence in insurance and healthcare, two of the fastest growing sectors, Max India (Max) is a unique play on India's economic prosperity. We expect the buoyant economy to provide a strong growth momentum to the hitherto under-served/ underpenetrated life insurance and healthcare sectors. The life insurance venture, armed by industry's most productive agency force, is set to reclaim market share led by a multi-channel distribution approach and an enhanced ULIP portfolio. With hospital beds likely doubling in the next 4-5 years, superior margins (20-22%) and a strong brand, healthcare business (MHC) too is a robust model. Initiating coverage with Outperformer and an SOTP price target of Rs316/ share (37% upside).

Life insurance – the value creator: Max New York Life Insurance (MNYL) has had a rollercoaster ride of late! Due to emphasis on profitable growth, MNYL's market share among private players fell from 6.3% in FY04 to 4.7% in FY07. But YTD FY08, market share has bounced back to 6.7% driven by a multi-channel distribution approach and higher share of ULIP in product portfolio. Predominantly an agency-driven model, MNYL has the industry's most productive agency force. At 18x FY10E NBAP and adding Embedded Value to it, we value MNYL at Rs230/ share of Max, assuming 50% promoter ownership and 10% holding company discount.

A strong healthcare franchise: The Indian private healthcare sector is estimated to grow to US $35.9bn by 2012 ($15.5bn in 2006). With its specialty focus, Max is well placed to participate in this opportunity. The business has broken even in FY08 and profitability will continue to improve as operational capacity is doubled to 1,223 beds by FY11 and operating margins touch 20-22%. Max's superior profitability vis-à-vis peers (Fortis and Apollo), creates a strong platform for the next leg of growth.

Attractive valuations; Outperformer: Our SOTP valuation reveals significant undervaluation in Max's current valuation, which ignores the strong business model and the opportunity pie available in subsidiaries. Max India's stake in MNYL is valued at Rs230/share for its 50% economic interest and in MHC at Rs36/ share for a 75.6% equity stake. Valuing the plastics business at Rs20/share and accounting for Rs30/share of cash, we arrive at our target price of Rs316 per share on SOTP basis.

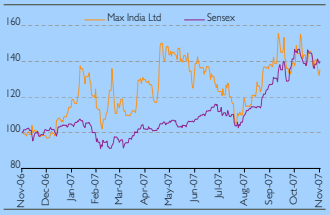
Key financials

As on 31 March(Rs. m)	FY06	FY07	FY08E	FY09E	FY10E
Net Sales	1,248	1,554	2,642	3,182	3,819
Net Profit	59	142	456	645	781
Shares in issue	175	180	222	222	222
Adj. EPS (Rs)	0.3	0.8	2.1	2.9	3.5
% growth	*(23.8)*	*134.5*	*160.3*	*41.3*	*21.0*
PER (x)	681.3	290.6	111.6	79.0	65.3
Price/Book (x)	4.2	4.2	2.5	2.4	2.3
EV/EBITDA (x)	(865.9)	(476.8)	1,391.1	819.6	377.2
ROE (%)	0.8	1.5	3.0	3.1	3.6
ROCE (%)	(1.1)	(1.2)	(0.3)	(0.2)	0.0
EV/CE (x)	3.6	3.4	1.9	1.9	1.9

Stock data

Reuters	MAXI.BO
Bloomberg	MAX IN
1-yr high/low (Rs)	290/163
1-yr avg daily volumes (m)	0.064
Free Float (%)	66.6

Price performance



Performance (%)

	3-mth	6-mth	1-yr	3-yr
Max India	9.9	(5.9)	35.4	374.1
Sensex	24.7	31.0	39.6	208.6

Pathik Gandotra
pathik@idfcsski.com
91-22-6638 3304

Nitin Agarwal
nitinagarwal@idfcsski.com
91-22-6638 3325

Nilesh Parikh, CFA
nilesh@idfcsski.com
91-22-6638 3325

IDFC-SSKI Securities Pvt Ltd
701-702 Tulsiani Chambers,
7th Floor (East Wing),
Nariman Point,
Mumbai 400 021.
Fax: 91-22-2204 0282

INVESTMENT ARGUMENT

Max India is the best proxy to capitalize on the growing insurance and healthcare sectors at home. It is a holding company for stakes in Max New York Life (MNYL) and Max Healthcare (MHC). We see big potential in India for life-insurance penetration and per capita healthcare spending, with both metrics below world averages. The life insurance venture, armed by industry's most productive agency force, is set to reclaim market share led by a multi-channel distribution approach and an enhanced ULIP portfolio. With hospital beds likely doubling in the next 4-5 years, superior margins (20-22%) and a strong brand, healthcare business (MHC) too is a robust model. Using the sum-of-parts methodology, we arrive at a target price of Rs316 per share offering upside of 37% and initiate coverage on Max India with Outperformer rating.

INSURANCE: THE BIGGEST VALUE CREATOR

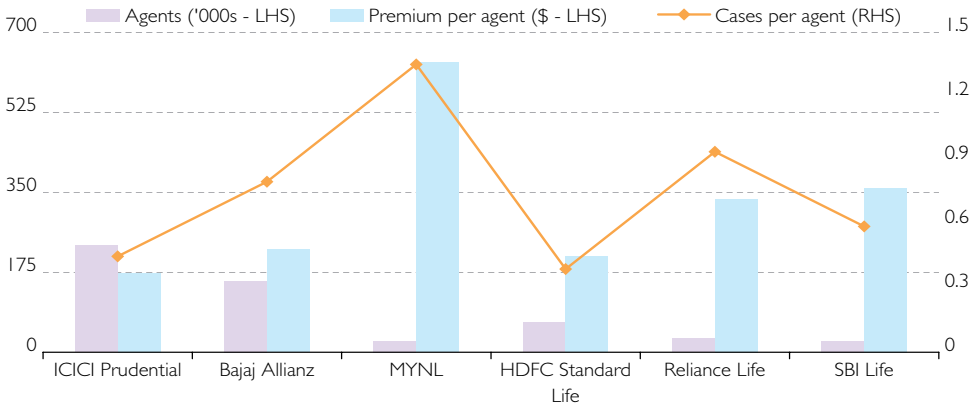
MNYL is a JV between Max India (a 74% stake) and New York Life (26%). MNYL has the distinction of having the most productive agent force in the industry with a remarkable lead over competitors. Though MNYL temporarily lost foothold in FY07 due to the need for fine-tuning the product and distribution mix, market share has recovered for YTD FY08. Historically only an agency driven model, MNYL is increasingly adopting a multi-channel approach to grow aggressively in existing and under-penetrated markets. Further, the increased ULIP portfolio has led to margin expansion over the endowment policy mix. However, the portfolio continues to be relatively well-balanced as against that of peers. Going forward, MNYL needs to focus on its branding strategy to gain recognition in semi-urban and rural areas – the future growth engines.

❑ Differentiating through productivity and product mix:

MNYL's premium per agent of ~Rs25,360 is 76% higher than the closest competitor, SBI Life

MNYL has the most productive agent force in the industry with premium per agent of ~Rs25,360 against an average of ~Rs12,920 for other private sector players. High-quality in-house training, coupled with a narrower span of control (sales manager: agent ratio of 1:15-18 as against 1:30 of competitors), is the key differentiating factor.

Exhibit 1: Agent productivity – a comparison



Source: IRDA

MNYL gaining economies of scale, operating costs on a downward trend

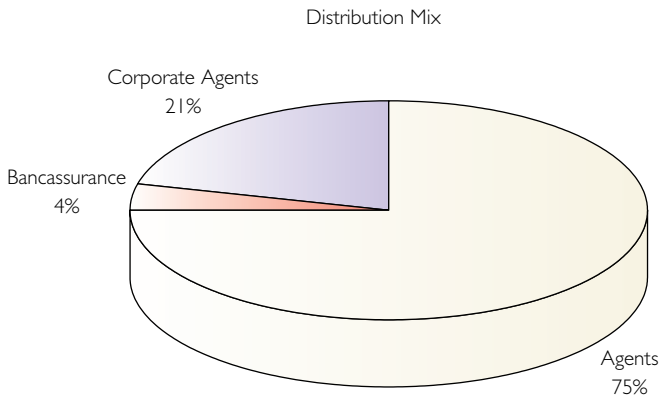
Also, MNYL's product portfolio is biased towards longer-tenor ULIP policies and traditional products, wherein margins earned are better. However, the benefits are offset due to MNYL's expensive business model that entails higher employee and infrastructure costs, and lacks economies of scale. Nevertheless, operating costs have been consistently showing a southward trend on the back of economies of scale, as reflected in the decline in expense to premium ratio (down to 50% in three years from the inception levels of >100%).

❑ Changing gears

Adoption of multi-channel distribution approach helps MNYL claim the lost market share

To regain market share, MNYL has adopted a multi-channel distribution approach with bancassurance and corporate agents contributing 25% to GWP against virtually nothing in 2001. MNYL has also sized up the ULIP portfolio, which is growing at 75%, though it still forms a relatively smaller proportion of the total book. This change in strategy has yielded results with market share bouncing back to 6.7% for YTD FY08.

Exhibit 2: Distribution mix



Source: Company

❑ Fighting the brand battle

Penetration into B&C towns and rural areas key to future growth

In its existing markets, MNYL gains from leveraging the promoter brands: Max India is a prominent industrial house with interests in Healthcare and Clinical Research as well, and New York Life is a Fortune 100 company with over US $200bn of assets under management. However, for MNYL to achieve its vision of being a top quartile insurance player, gaining access to B & C towns and rural areas will be a key challenge.

❑ Valuations and view

We have valued the life insurance business at Rs230 per share of Max India

We have valued the life insurance company using the Appraisal Value, which is a combination of Embedded Value and Structural Value (as defined by a multiple of NBAP). In the initial years of operations, majority of the value of the company is derived from Structural Value. We expect MNYL's NBAP to show a 46% CAGR over FY07-10 to reach Rs5bn by FY10. We have valued MNYL at 18x FY10E NBAP and added Embedded Value to arrive at a value of Rs230 per share of Max India.

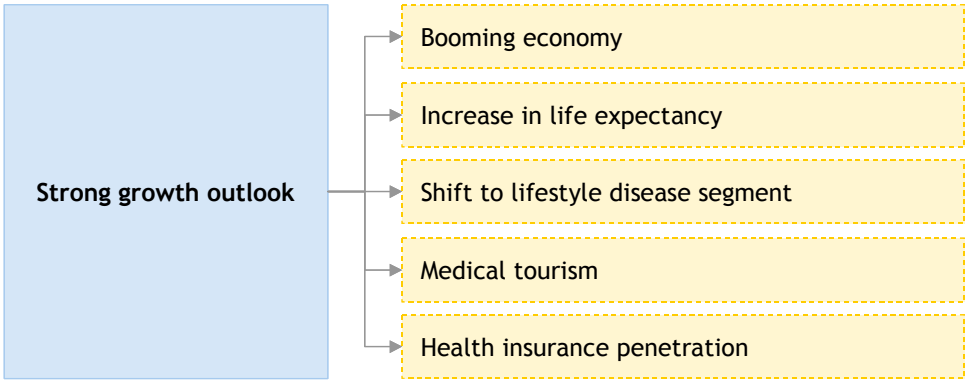
MAX HEALTHCARE (MHC): IN THE PINK OF HEALTH

❑ Indian private healthcare sector – strong growth outlook

There exists a wide demand-supply gap for quality tertiary care

We are very positive on the prospects of the Indian healthcare industry given the significant demand-supply gap for quality tertiary care. A confluence of booming economy, rising life expectancy, shift in disease profile to lifestyle-related ones, medical tourism opportunity and growing health insurance penetration are poised to drive an accelerated growth in India's healthcare sector.

Exhibit 3: Multiple factors to drive private sector hospital industry in India

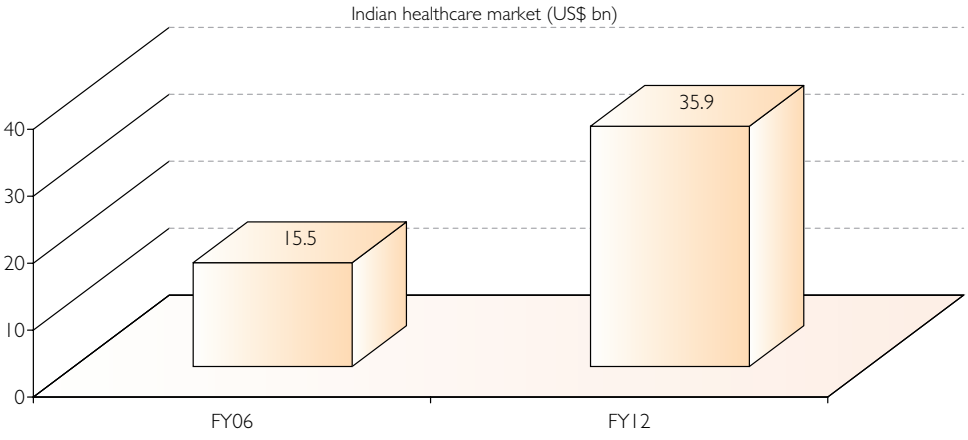


Source: SSKI Research

Private healthcare sector to almost triple in size to US $35.9bn by 2012E

The private healthcare sector is expected to grow to $35.9bn in size by 2012 from $15.5bn in FY06. The growth will be driven by increased hospitalization cases as well as higher average billing per case.

Exhibit 4: Private healthcare industry – expect 15% CAGR over FY06-12



Source: Ernst & Young

❑ Corporate hospitals well placed; MHC among the leading players

Max currently operates six hospitals and two specialty medical centres

We believe established and well funded corporate hospitals like Apollo, Fortis, Max, Wockhardt, etc will garner a substantially higher market share of the private healthcare market. Max Healthcare (MHC) is the healthcare subsidiary of Max India, and currently operates six hospitals and two specialty medical centers in the National Capital Region (area in and around Delhi).

❑ MHC's focus on super specialty tertiary care paying off

MHC's twin super specialty hospitals, Max Devki Devi (MDDHVI) and Max Super Specialty (MSSH), are central to its hub-and-spoke strategy. MHC's focus on specialty tertiary care, combined with high brand recall facilitating fairly high occupancy rates, has created a significantly superior business model as compared to peers. Consequently, while the industry norms indicate a 4-5 year breakeven period for a tertiary specialty hospital, MHC has been able to achieve the same within two years of operations for MSSH and Max Patparganj hospitals.

Max aims to achieve operating margins of 20-25% by FY11-12 on the back of expansion to 1,223 beds by 2009 in the NCR

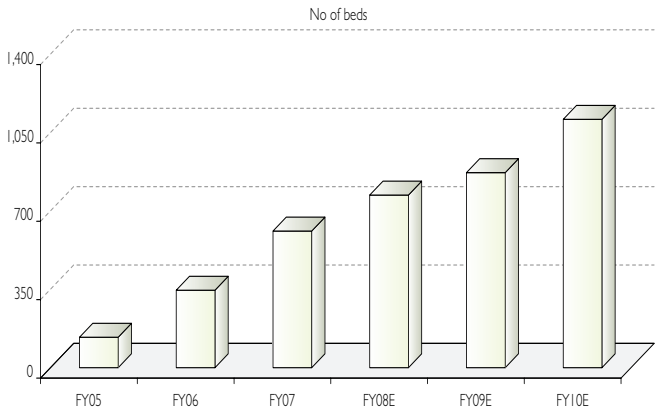
❑ Focus on consolidation and profitability – a key differentiator

MHC has opted for a steadier growth strategy relative to peers like Fortis and Apollo, and the company strives to achieve operating margins of 20-22% by FY11. MHC's current expansion plans envisage an expansion to 1,223 beds by 2009 (entire capacity to be operational by FY11) in the NCR. Before embarking on an aggressive medium-term expansion plan to build a pan India footprint, MHC aims to consolidate this network.

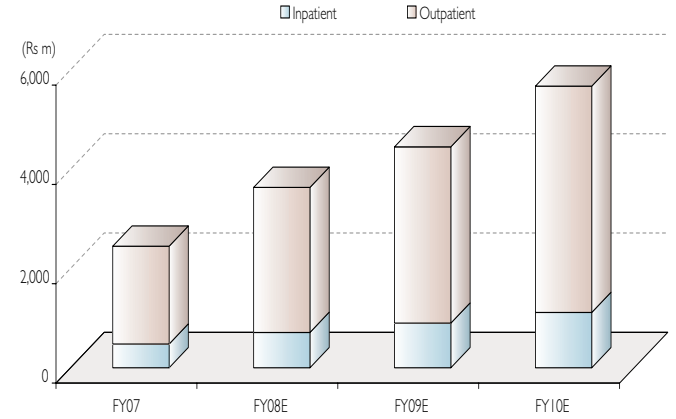
❑ Expect 32% revenue CAGR, sharp margin expansion over FY07-10

Over FY07-10, we expect MHC to sharply grow the number of operational beds in its network to 1,109 from ~700 currently. This would drive a 32% CAGR in MHC's consolidated revenues over FY07-10. We expect MHC's overall margins to be positive in FY08, and thereupon grow to 10% in FY09 and 18% in FY10. MHC targets EBITDA margins of 20-25% for this network by FY11-12.

Exhibit 5: Expect near doubling of beds over the next three years



Revenues expected to record 32% CAGR over FY07-10



Source: SSKI Research

Max India's MHC stake is valued Rs36/share

❑ We value Max India's equity interest at Rs36 per share

Given the exciting outlook beyond FY10 and its strong competitive position with respect to peers like Apollo and Fortis, we value MHC at 15x EV/EBITDA (FY10), which implies an equity value of Rs37 per MHC share.

Exhibit 6: MHC – valuation methodology

		MHC Valuation
EBITDA (FY10)	Rs m	993
EV/EBITDA	x	15
EV	Rs m	14,898
Net Debt	Rs m	4250
Equity value	Rs m	10648
# of Shares	m	291
Value per share	**Rs**	**37**

Source: SSKI Research

Assuming Max India's shareholding in MHC to be 75.57%, Max India's equity value in MHC is worth Rs8bn, or Rs36 per share of Max India.

OTHER BUSINESSES: PLASTICS IS THE MAIN CONTRIBUTOR

We have valued MSP's equity at Rs4.6bn or Rs20 per share of Max India

In addition to Life Insurance and Healthcare, Max India has three other business lines, viz. Specialty Plastics (MSP), Clinical Research and Healthcare Staffing. While the Clinical Research and Healthcare Staffing businesses offer exciting growth potential, they are in early stages of their growth lifecycle. We have not attached any value to these businesses at this stage.

MSP is one of the leading producers of BOPP products with an extensive portfolio of value added specialty films that find various packaging applications. Given the high growth rate on the back of a huge capacity expansion undertaken in FY07, we have valued MSP's equity at Rs4.6bn. Value of Max India's stake in MSP works out to Rs20 per share.

INITIATING COVERAGE WITH OUTPERFORMER

Max India a unique play on India's economic growth prospects; Outperformer

With its formidable presence in two of the fastest growing industry segments of insurance and healthcare, Max India is a unique play on the Indian economic growth story. We have valued Max India on an SOTP basis by aggregating the value of Max India's equity interests across the three key business segments – Insurance, Healthcare and Specialty Plastics. This translates into an SOTP valuation of Rs Rs316 per share.

Exhibit 7: Sum of parts valuations

	Valuation basis	Rs per share
Max NY Life Insurance (50% economic interest)		230
Max Healthcare (75.6% economic interest)	15x EV/EBITDA (FY10E	36
Max Specialty Plastics (100% economic interest)	7x EV/EBITDA (FY10E)	20
Cash on hand	Net Cash	30
SOTP value		**316**

This represents an upside of 37% from the current stock price. Initiating coverage on the stock with an Outperformer rating.

MNYL: VALUE CREATOR

MNYL is a JV between Max India (a 74% equity stake) and New York Life (26%). MNYL has the distinction of having the most productive agent force in the industry with a remarkable lead over competitors. Though MNYL temporarily lost foothold in FY07 due to need for fine-tuning the product and distribution mix, market share for YTD FY08 has recovered. Historically only an agency driven model, MNYL is increasingly adopting a multi-channel approach to grow aggressively in existing and under-penetrated markets. Further, the increased ULIP portfolio has led to margin expansion over the endowment policy mix. The portfolio continues to be relatively well-balanced as against that of peers. Going forward, MNYL needs to focus on its branding strategy to gain recognition in semi-urban and rural areas – the future growth engines.

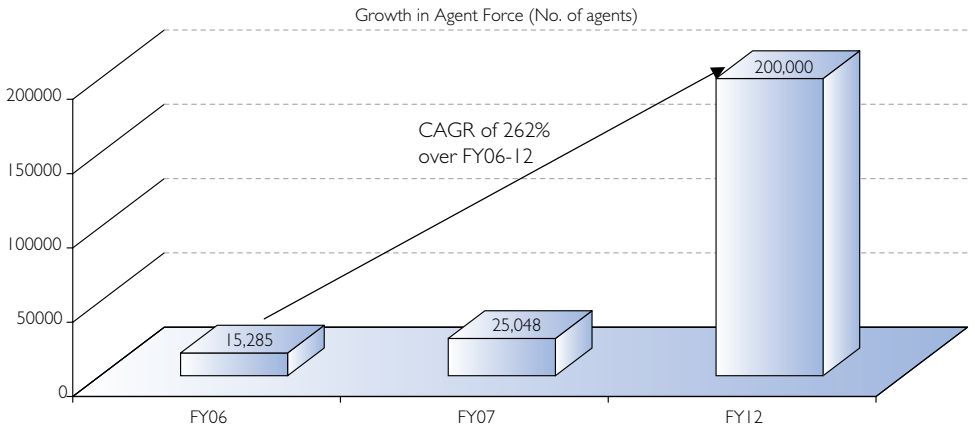
DIFFERENTIATING THROUGH PRODUCTIVITY AND PRODUCT PORTFOLIO

❑ The most productive agent force

Agency force estimated to increase from 29,000 to 200,000 over the next five years

MNYL's agency network spreads over 175 field offices across 122 locations with around 29,000 exclusive sales agents, expected to increase to 200,000 over the next five years. Although limited in number, the agent force is the most productive in the insurance industry. However, this highly productive agent force comes at a cost, and exerts downward pressure on margins.

Exhibit 8: Growing agent force

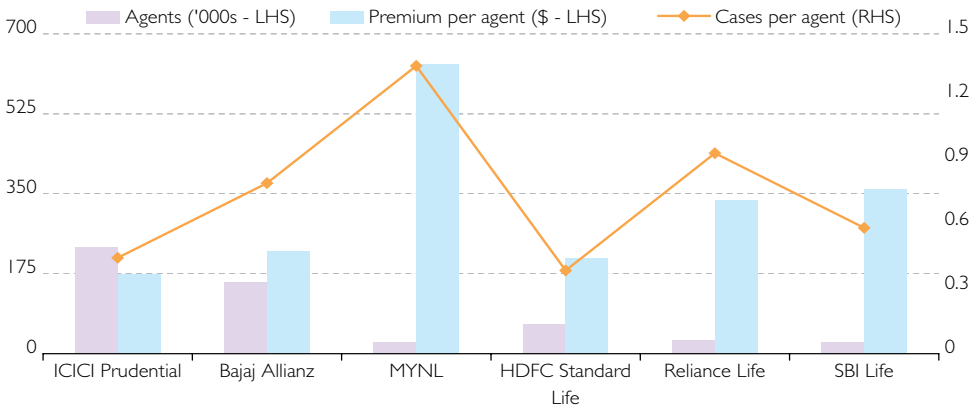


MNYL generates premium per agent of Rs25,360, 76% higher than closest competitor, SBI Life

A simple peer analysis, based on data as on 30 June 2007, reveals that MNYL's premium per agent stands at ~Rs25,360, which is 76% higher than the closest competitor, SBI Life. Another metric corroborates the above inference with the number of cases per agent at MNYL being 44% higher than the closest competitor, Reliance Life. A corresponding measure at MNYL is the number of active agents, defined as agents closing at least 12 cases per annum. Currently, 60% of the agents qualify as active, which explains MNYL's lead in the productivity charts.

Another credential which substantiates the quality of agents is the fact that 346 of the agents qualified for the Million Dollar Round Table (MDRT) membership in 2006, making MNYL move up in the MDRT Top 50 global list.

Exhibit 9: Agent productivity – a comparison



Source: IRDA

MNYL sales manager: agent ratio is 1:15-18 against the industry norm of 1:30

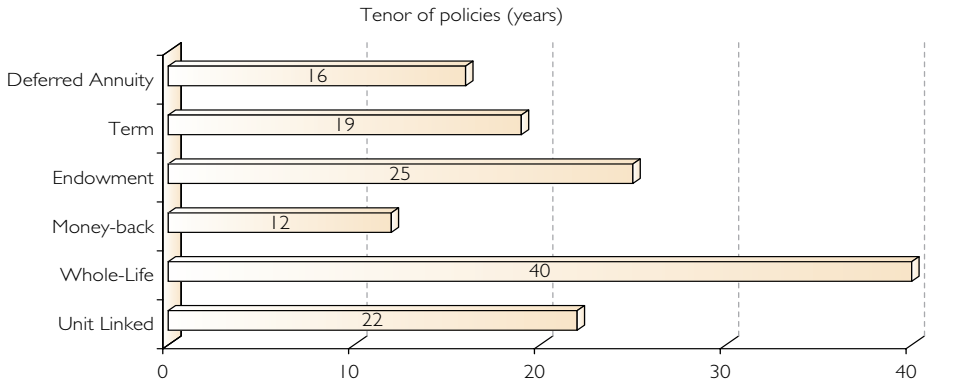
The productive agent force is a function of two primary factors. First, the high-quality continuous in-house training provided to all agents – and more significantly, the 400 hours invested in training at MNYL against the mandatory 100 hours stipulated by the IRDA, which gives MNYL its cutting edge. Second, the management style adopted at MNYL tilts towards a narrower span of control, indicated by a sales manager: agent ratio of 1:15-18 as against 1:30 of competitors. A lower sales manager: agent ratio contributes to making the agent force one of the most motivated in the industry. Going forward, though productivity may decline marginally with increased scale and span of control reducing the competitive advantage, it would remain higher than for competition.

❑ A well-balanced product mix

MNYL gaining economies of scale, operating costs on a downward trend

At MNYL, the product portfolio is biased towards protection-oriented traditional policies and longer-tenor ULIP products. The inference from this portfolio composition is that despite charges being aligned with competition, MNYL should earn better margins. However, the benefits are offset due to MNYL's expensive business model entailing higher employee costs, higher infrastructure costs and lack of economies of scale. Nevertheless, operating costs have been consistently showing a southward trend as the premium growth picks up, reflecting in the decline in expense to premium ratio, which is down to 50% in three years from the inception levels of >100%.

Exhibit 10: Tenor of policies

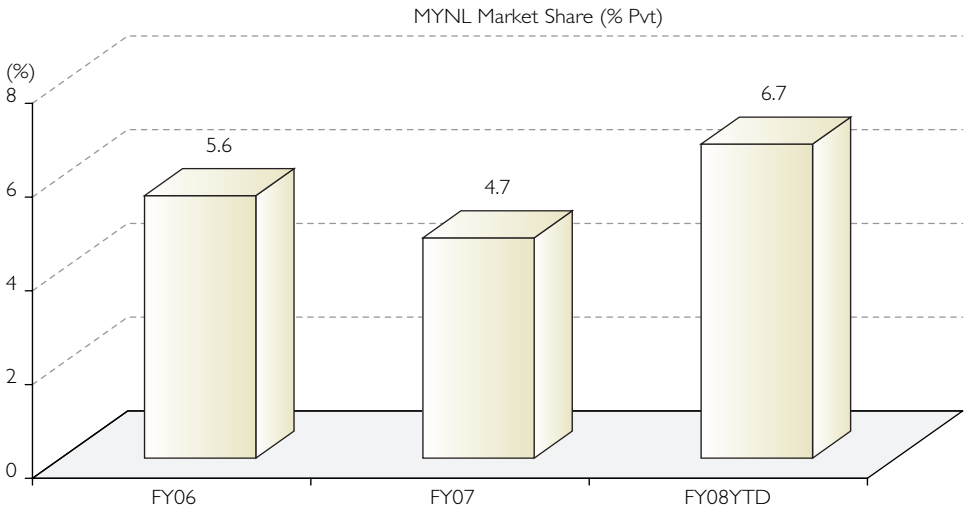


Source: Company

CHANGING GEARS

To achieve MNYL's vision of being a top quartile life insurance company in India, the management undertook the following steps to regain a foothold:

Exhibit 11: Regaining lost market share by changing gears



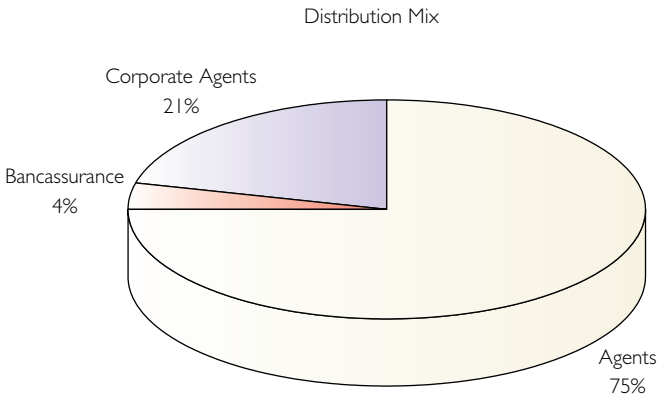
Source: IRDA

❑ Adopting a multi-channel distribution strategy

From being 100% agent driven, MNYL diversifies mix with alternate channels

Since inception, MNYL has focused on individual agents as its primary channel of distribution. Being almost 100% agency-driven, MNYL has shifted gears to identify alternate distribution channels. Currently, ~75% of the business is attributable to agents, and the remainder 25% is split between bancassurance and corporate agents. Out of the 25% sales, 4-5% comes from bancassurance. Currently, MNYL has partnerships with 17 banks having presence across 40 locations to cross-sell its insurance products (Yes Bank is a sizeable bank with others being rural cooperative banks). The remaining 21% is attributable to corporate agents such as Amsure (a JV between Amway and Hollard Life Assurance of South Africa), Indiabulls, Citi-financial and Peerless Abasan Finance (an NBFC).

Exhibit 12: Distribution mix



Source: Company

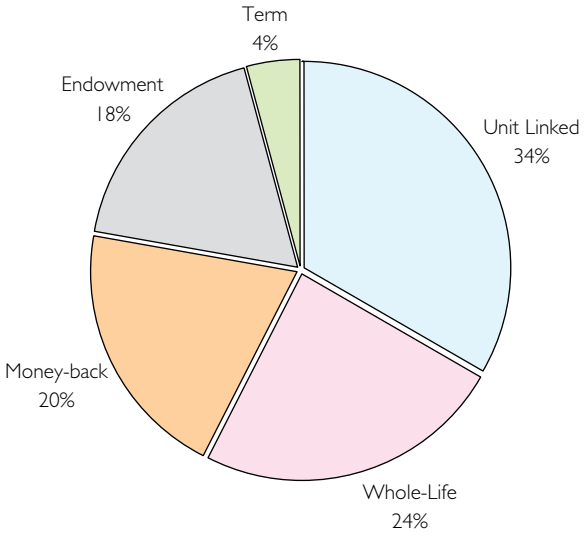
Going forward, the company has lined up substantial investment to scale up both agency and bancassurance, while maintaining the proportion at 70:30. However, in absolute terms, this expansion will lag behind that of top players, posing challenges to MNYL's market position.

❑ Transition from traditional product to unit-linked policies

MNYL a late entrant in ULIP; though growing, proportion of ULIP still lower than peers

Unit linked products comprised 33% of MNYL's portfolio as on 30 June 2007, with the remainder being in traditional policies such as whole-life (24%), money-back (20%), endowment (18%) and term (4%). With the first products on the ULIP platform launched in 2003, MNYL was a late entrant in the ULIP space, primarily because New York Life globally writes traditional long-tenor policies. Though there is a margin trade-off, this transition to a relatively higher ULIP basket corresponds with the high growth in gross premium. The ULIP component for MNYL is growing at 100% yoy, which is higher than the industry average.

Exhibit 13: Product portfolio – June 2007



Source: Company

FIGHTING THE 'BRAND' BATTLE

MNYL pitted against well-recognized brands like LIC, SBI and ICICI in the new growth markets

As competition intensifies in the urban areas, penetration beyond metros into 'B' and 'C' towns, and rural areas will be a key survival challenge for MNYL. The company has lower brand recognition in these remote areas when compared to the likes of LIC, SBI Life and ICICI Prudential Life. In essence, to continue growing, MNYL will have to fight the brand battle. It will have to offer a greater value proposition to customers than competition with customized high-quality service by leveraging the trained, efficient and motivated insurance agent base.

❑ Calculation of NBAP margins

We have attempted to calculate NBAP margins of a popular ULIP policy of Max NewYork Life. Considering the long tenor of the policy, margins are higher than the competitors' products

Exhibit 14: Key features of the ULIP policy

MaxNewYork	
Policy Type	ULIP Life
Policy name:	Classic
Fund	Equity
Age	30 years
Premium	100
Sum assured	2000
Allocation Rate 1st	75%
Allocation Rate: 2nd year onward	80%
Alocation rate: 3rd year onwards	95%
Return assumed	12%
Mortality	As per LIC table applicable for Sum at Risk
Fund Management fees	1.25%
Operating expenses	2.00%
Inflation on expenses	5.00%
First year charge	2.00%
Mortality Spread	10%
Persistency Rate	90%

Exhibit 15: Margin calculation

Year (Rs)	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Funds A/C															
Op Balance	0.0	38.7	117.8	197.2	289.9	384.7	482.4	584.2	691.0	804.1	924.5	1053.5	1192.5	1343.2	1508.4
Addition															
Allocation	75.0	72.0	64.8	69.3	62.3	56.1	50.5	45.4	40.9	36.8	33.1	29.8	26.8	24.1	21.7
Investment Income	9.0	12.8	21.4	31.5	41.7	52.3	63.4	75.0	87.2	100.3	114.3	129.4	145.7	163.7	183.2
Expenses															
Mortality charge	2.2	2.3	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.1	1.9	1.7	0.0	0.0
Admin fees	2.0	1.9	2.0	2.1	2.2	2.3	2.4	2.5	2.7	2.8	2.9	3.1	3.2	3.4	3.6
Fund management fees	1.1	1.5	2.6	3.7	4.9	6.2	7.5	8.8	10.2	11.8	13.4	15.2	17.1	19.1	21.4
First year charge	40.0														
Closing Balance	38.7	117.8	197.2	289.9	384.7	482.4	584.2	691.0	804.1	924.5	1053.5	1192.5	1343.2	1508.4	1688.4
Technical A/C															
Income															
Premium	100.0	90.0	81.0	72.9	65.6	59.0	53.1	47.8	43.0	38.7	34.9	31.4	28.2	25.4	22.9
Mortality fee	2.2	2.3	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.1	1.9	1.7	0.0	0.0
Admin fee	2.0	1.9	2.0	2.1	2.2	2.3	2.4	2.5	2.7	2.8	2.9	3.1	3.2	3.4	3.6
Fund management fees	1.1	1.5	2.6	3.7	4.9	6.2	7.5	8.8	10.2	11.8	13.4	15.2	17.1	19.1	21.4
First year charge	40.0														
Total	145.3	95.7	87.8	80.9	75.0	69.7	65.2	61.4	58.1	55.5	53.3	51.5	50.2	47.9	47.9
Expenses															
Commission/Cost of Acqn	20.0	6.8	6.1	3.6	3.3	3.0	2.7	2.4	2.2	1.9	1.7	1.6	1.4	1.3	1.1
Allocation	75.0	72.0	64.8	69.3	62.3	56.1	50.5	45.4	40.9	36.8	33.1	29.8	26.8	24.1	21.7
Operating expenses	45.0	17.5	15.0	10.0	7.5	5.0	5.0	5.0	5.0	5.0	5.0	3.0	3.0	3.0	3.0
Claims	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	1.9	1.7	1.5	0.0	0.0
Total	142.0	98.3	87.9	84.9	75.1	66.1	60.2	54.8	50.0	45.7	41.7	36.1	32.7	28.4	25.9
Profit/(loss)	3.3	(2.6)	(0.1)	(4.0)	(0.2)	3.7	5.1	6.6	8.1	9.8	11.5	15.4	17.5	19.5	22.0
Profit / (loss) post tax	2.8	(2.6)	(0.1)	(4.0)	(0.1)	3.2	4.4	5.7	7.1	8.5	10.0	13.4	15.2	17.0	19.1
PV-15 years	**23.3**														
Margins	**23.3%**														

Source: SSKI Research

Margins expected to remain stable

FUTURE OUTLOOK

❑ Growth in business

We expect MNYL's APE to grow by 48% over FY07-10 on the back of substantial investment planned to scale up distribution and the company's increasing focus on ULIP.

❑ Assumptions on margins

Margins are expected to remain stable as the benefit of increasing share of ULIP is undone by slightly lower margins on newer ULIP policies.

Exhibit 16: Business mix

(%)	FY07	FY08	FY09	FY10
ULIP	67.6	80.0	82.5	82.5
Participating	31.1	18.5	16.5	16.5
Non-participating	1.3	1.5	1.0	1.0
Total	100.0	100.0	100.0	100.0
Margins				
ULIP	22.0	21.5	20.5	20.5
Participating	17	17	17	17
Non- participating	45	45	45	45
Weighted Average	20.7	21.0	20.2	20.2

Source: SSKI Research

❑ Valuations and view

We expect MNYL's NBAP to show 46% CAGR over FY07-10 to reach Rs5bn by FY10. We have valued MNYL at 18x FY10E NBAP and after adding the Embedded Value, have arrived at a value of Rs230 per share of Max India.

Exhibit 17: Valuation

(Rs m)	FY04	FY05	FY06	FY07	FY08	FY09	FY10
Opening Balance of Value in Force (VIF)	213	511	1,042	2,111	3,975	7,071	11,577
APE	1,255	2,162	4,445	7,667	12,267	17,787	24,901
NBAP Margins	22	22	21	21	21.0	20.2	20.2
NBAP	270	465	933	1,590	2,578	3,587	5,022
In force unwinding (13%)	28	66	135	274	517	919	1,505
Estimated VIF at close of year	511	1,042	2,111	3,975	7,071	11,577	18,104
Shareholders Funds			5,632	7,324	9,574	13,574	17,574
less: debit balance			(3,923)	(4,528)	(6,278)	(9,528)	(12,778)
Net			1709	2796	3296	4046	4,796
Embedded Value: {A}			3819	6771	10367	15623	22,900
Structural Value: {B}							
NBAP							5,022
Multiple							18
Value							90,396
Appraisal Value: {A} +{B}							113,296
Appraisal Value: {A} +{B} (in USD)							2,763
Value of Max India's Stake (50%)							56,648
Less: 10% Holding company discount							5,665
Value of Max India Stake (50%)							50,983
Value per share of Max India (Rs)							230

Source: Company, SSKI Research

Exhibit 18: Financial summary

(Rs m)	FY04	FY05	FY06	FY07	FY08	FY09	FY10
FYP	1,242	2,143	4,415	7,505	12,021	17,431	24,403
RP	780	1,798	3,168	5,882	10,040	16,546	25,483
SP	131	193	299	1,616	2,453	3,557	4,980
GPI	2,153	4,134	7,882	15,003	24,515	37,535	54,867
Reinsurance	(32)	(47)	(85)	(149)			
NPI	2,121	4,087	7,797	14,854	24,515	37,535	54,867
10% of SP	13.1	19.3	29.9	162	245.3	355.7	498.0
APE-New Buss	1,255	2,162	4,445	7,667	12,267	17,787	24,902
APE- Tot Buss	2,035	3,960	7,613	13,548	22,307	34,333	50,384
YoY growth (%)							
FYP	116	73	106	70	60	45	40
RP	166	131	76	8	71	65	54
SP	34	47	55	440	52	45	40
GPI	123	92	91	90	63	5	46
APE-New Buss	115	72	106	72	60	45	40
APE- Tot Buss	132	95	92	78	65	54	47
Persistency (%)	90	89	80	78	75	75	75

Source: Company, SSKI Research

MHC: HIGH-END HEALTHCARE

We are very positive on the prospects of the Indian healthcare industry given the significant demand-supply gap for quality tertiary care and anticipated demand acceleration owing to factors like a booming economy, increasing life expectancy, a shift to life style diseases, etc. Organized private sector players are expected to cater to 90% of the incremental healthcare demand over FY07-12. MHC, with its high-end tertiary care focus, is one of the preferred stocks to play this opportunity. We like MHC's focus on profitability and its approach to consolidate the existing network before embarking on an accelerated growth path in the medium term. In line with this strategy, we expect MHC's beds under operation to almost double over FY07-10 and drive a 32% CAGR in revenues over this period. We value Max India's equity interest in MHC at Rs36 per share.

INDIAN HEALTHCARE SECTOR: IN THE PINK OF HEALTH

With national healthcare spending at 5.2% of GDP (~US $34.9bn) in 2004, healthcare is one of the largest industries in India. The sector is also one of the largest employers in the country with around 4m employees across the sector.

❑ Healthcare the domain of private sector in India

In India, government spending on healthcare at only ~1% of GDP

Globally, healthcare provision is typically provided by a largely government-funded public healthcare system. In contrast, the Indian healthcare industry is dominated by the private sector with government spending at only ~1% of GDP, as compared to 3.2% of GDP for Brazil and 1.8% for Korea. In India, almost 80% of the overall spending on healthcare is accounted for by the private sector, which is among the highest globally.

❑ Unorganized sector rules the roost

Organized healthcare gradually gaining relevance in India

In India, the private healthcare sector is highly fragmented with the unorganized component accounting for ~90% of the private healthcare sector. To put this into perspective, of ~1.05m beds in the country (Crisil estimates), Apollo (the largest organized healthcare player in India) has only ~7,000 beds under management including owned (by the company and its associates) as well as managed beds.

However, organized healthcare (corporate hospitals) has been slowly gaining relevance over the last few years with the emergence of corporate healthcare hospitals like Apollo, Fortis, Max, Wockhardt, etc.

❑ Indian healthcare scenario – way short of global standards

Life expectancy, infant mortality as also average beds per person quite lower than for comparable economies

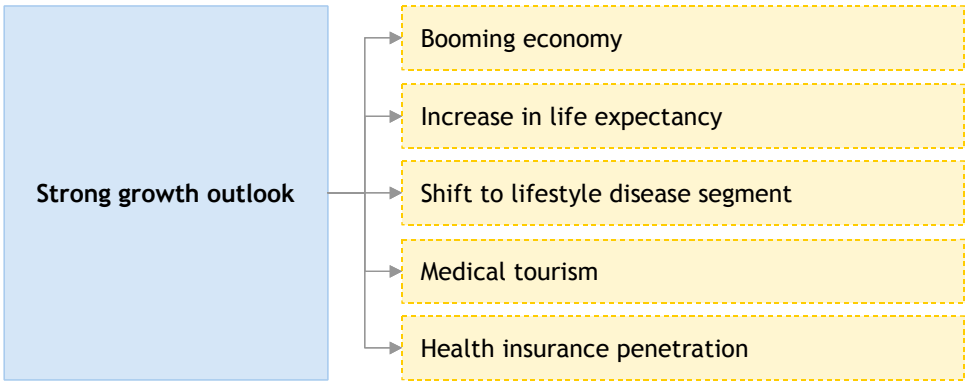
While the healthcare system has progressed on several counts, India continues to significantly lag on key healthcare indicators like life expectancy, infant mortality, etc. Life expectancy in India is 63 years compared to 78 years in developed countries while infant mortality rate stands at 70 deaths per 1,000 births as compared to 6 deaths in developed countries.

Further, India has only 1.5 beds per 1,000 people while countries like China, Brazil, Korea, etc have an average of 4.3 beds per 1,000 people. Similarly, the ratio of registered doctors per person is also fairly short of the global benchmark.

❑ Strong growth outlook – private sector to be the bedrock

A combination of booming economy, rising life expectancy, shift in disease profile to lifestyle-related ones, medical tourism opportunity and growing health insurance penetration are poised to drive an accelerated growth in India's healthcare sector.

Exhibit 19: Multiple factors to drive private sector hospital industry in India

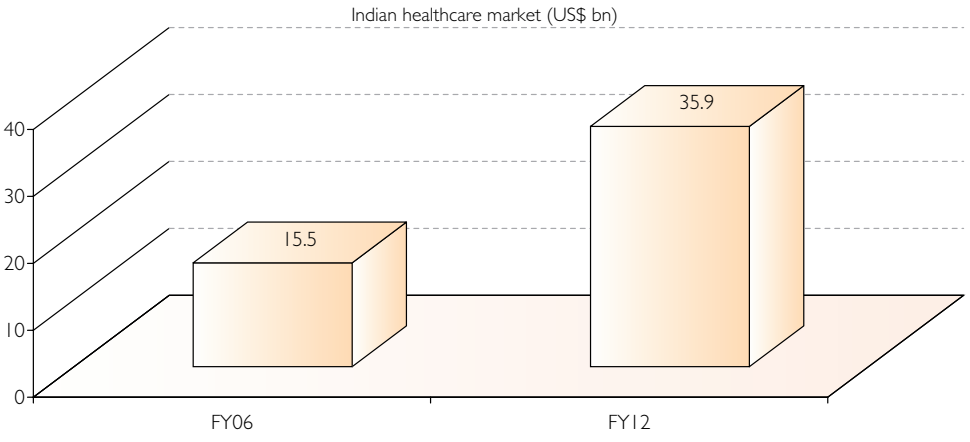


Source: SSKI Research

Expect 15% CAGR for the Indian healthcare industry, driven by private sector

Ernst & Young (E&Y) estimates the Indian healthcare industry to register a CAGR of 15% over FY06-12, driven primarily by the private sector. E&Y estimates the private sector to account for 90% of the incremental revenues of the healthcare sector over these years, which implies a significant expansion in the private healthcare industry. The private healthcare sector is expected to grow to $35.9bn in size by 2012 from $15.5bn in 2006. The growth will be driven by increased hospitalization cases as well as higher average billing per case.

Exhibit 20: Private healthcare industry – expect 15% CAGR over FY06-12



Source: Ernst & Young

Per capita healthcare spend expected to inch higher, particularly on tertiary care

Growing affluence – combined with increasing health insurance – will lead to expanded demand for tertiary care hospitalization in particular, thereby leading to higher per capita healthcare spend. It is estimated that tertiary care currently accounts for 15-20% of the overall hospital spend, and we expect it to grow faster than primary and secondary care in the coming years.

❑ Huge opportunity for corporate hospitals

With limited public sector funding and high costs involved, private healthcare players in a sweet spot

Crisil estimates that India requires 632,000 additional beds over the next 10 years, ~60% higher than the current base of 1.05m beds (~20% of which will be required for complex medical procedures in cardiac and oncology segments). In our view, hospitals is a high gestation business requiring significant upfront investments and entailing long payback periods. Construction of a new hospital bed costs Rs2.5m-3m on an average with a high-end tertiary hospital bed costing Rs5m-5.5m. This implies an overall capital expenditure of ~$40bn over the next 10 years for setting up the incremental 632,000 beds required. As the government is hardly in a position to fund this growth, it presents an attractive opportunity for private sector players.

Going forward, we believe the already established and well funded corporate hospitals like Apollo, Fortis, Max and Wockhardt will garner a substantially higher market share. Other than their much stronger financial capabilities, these organized players provide for complex procedures as also superior service levels, which significantly enhance their competitiveness.

Given the huge demand of incremental hospital beds in the private sector and negligible current share of corporate hospitals, we believe the growth trajectory of corporate hospital players in India is only limited by their ambitions and ability to manage growth.

❑ Health insurance – catalyzing growth for corporate hospitals

An expanding upper middle class and rising healthcare insurance penetration to benefit tertiary care

We believe increasing penetration of health insurance would further aid the growth of corporate hospitals in India. Currently, less than 10% of the population is covered under health insurance in some form or the other, which leaves enough scope for penetration levels to rise. Swiss Re estimates that the health insurance premium market in India can be $7.7bn by 2015. Health insurance grew 44% during FY07 and is expected to pick up further pace with increased interest from private insurance players that are targeting this potentially huge opportunity.

As almost 70% of the medical expenses are "out of pocket" (i.e. borne by the patients themselves), affordability of expenses in high-end tertiary hospitals is a key issue. While there is a burgeoning middle-upper class which can afford to pay for the fees in the high-end corporate hospitals, we believe growing awareness and penetration of health insurance will significantly enhance the target patient pool for this segment of hospitals.

❑ "Medical Tourism" – adding to the luster

McKinsey estimates medical tourism to be a $2.2bn opportunity for Indian corporate hospitals by 2010

"Medical tourism" refers to the opportunity of catering to overseas patients coming to Indian hospitals. McKinsey estimates that medical tourism can potentially be a $2.2bn opportunity for Indian corporate hospitals by 2010. The value proposition for patients from developed countries is lower cost, high levels of quality and service in Indian tertiary hospitals and availability of superior medical facilities for patients from the developing countries in Asia and Africa. In particular, it is an exciting proposition for patients from developed countries like USA and Europe – e.g., there are around 50m uninsured people in USA who are potential targets for this opportunity. Undergoing a complex medical procedure in India costs as less as one-tenth of the cost in those countries accompanied with very high quality standards as a topping.

India's cost competitiveness is further established by the wide cost difference for various procedures between India and Thailand, the erstwhile "Medical Tourism Hub" in Asia.

India well-placed to become Asia's next "Medical Tourism Hub"

Exhibit 21: Indian healthcare cost advantage is clearly established

(US $)	USA	Thailand	India
Cardiac surgery	50,000	14,250	4,000
Bone marrow transplant	62,500	62,500	30,000
Liver transplant	500,000	75,000	45,000
Orthopaedic surgery	16,000	6,900	4,500

❑ Attractive but definitely not an easy business

Though a tertiary hospital can make operating margins of 20-25%, it takes 4-5 years to break even

While the tertiary corporate hospital segment presents a lucrative opportunity, it is a relatively complex business owing to multiple challenges on account of shooting land procurement costs, high upfront equipment and building capex requirements, ensuring high occupancy, managing people issues and regulatory issues governing the sector as well as the sensitivity associated with patient care. A widening shortage of reasonably priced land parcels at desired locations and restricted availability of qualified medical personnel have been adding to the complexity of this business.

On the financial front, we believe that while a successful tertiary hospital can make 20-25% operating margins on a steady basis, it will typically take 4-5 years for a successful hospital to reach that milestone.

We believe the successful tertiary hospital players will be efficient at procuring well located land at attractive prices, have a strong referral network, can effectively manage people issues to attract and retain high quality medical personnel while being capable of establishing high quality standards on a sustained basis to attract patients.

❑ Lead operating indicators for a successful tertiary hospital

While land acquisition at a strategic location and at reasonable costs goes a long way towards laying the foundation of a successful tertiary hospital, we believe some of the following operating parameters help to get a complete picture.

Exhibit 22: Indicators for a healthy tertiary hospital

Low "Average Length of Stay" (ALOS)	Occupancy rates	Average daily revenue per occupied bed	Strong OPD (Outpatient Department) patient flow /revenues	Diagnostic and dispensing related revenues
• Inpatient revenues are dependent upon the Average Length of Stay (ALOS) • ALOS indicates average time for which patient occupies a hospital bed. • As maximum inpatient revenues are generated within first 48-72 hours of admission, reduction in ALOS to closer to 2-3 days will lead to higher profitability for a tertiary hospital	• Given high fixed costs associated with tertiary hospitals, ensuring high occupancy rates is critical. • Typically a tertiary hospital starts breaking even at 60-65% occupancy	• An important indicator for the financial health of a tertiary hospital • Indicative of the complexity of average procedures undertaken in the hospital	• While the Outpatient revenues contribute a relatively smaller component of overall revenues for a tertiary hospital (20-25%), it is a critical revenue stream • Outpatient revenues act as a strong pull for Inpatient revenues and creates a solid base for a hospital • Also, operating margins in outpatient revenues are significantly higher due to very low operating costs	• Hospitals with a higher component of the high margin diagnostic services related and drug dispensing related revenues are able to achieve superior operating margins

❑ Competitive landscape – still evolving

Indian corporate hospitals industry relatively nascent

The corporate hospitals industry in India is relatively nascent as most of the corporate groups, barring Apollo, have entered the business over the last few years and are in still very early phases of their growth.

Currently, there are three major listed players in the space:

- Apollo Hospital Group
- Fortis
- Max Healthcare (subsidiary of Max India – a listed entity)

Wockhardt Hospitals, another large hospital group, has filed an application to launch an IPO.

Corporate hospital chains have adopted diverse strategies

While all the players - Apollo, Fortis and Max- have a hub-and-spoke model based around tertiary hospitals, we notice there are variations in their strategies.

- Apollo is the largest and the oldest corporate hospital player in India with ~7,000 operational beds after two decades of being operational. Apollo has chosen a strategy of establishing multi-specialty tertiary hospitals across multiple locations and to scale-up gradually.
- Fortis commenced operations in 2000 with a hospital in Mohali, Punjab. Fortis has opted for an aggressive growth strategy and is aiming to acquire a national footprint over the next few years with a mix of organic and inorganic growth. In line with this vision, Fortis aims to operate 7,000 beds by 2010 in 40 hospitals across the country.
- Max Healthcare started operations in 2000. Max Healthcare's strategy focuses on leveraging its two single specialty tertiary hospitals and consolidating its existing hospital network in the NCR before seeking to expand nationally. According to

current expansion plans, Max is likely to have 1,223 hospital beds in NCR by 2009 (entire capacity to be operational by FY11) up from 771 beds currently.

Given that the corporate hospital industry is in an early growth phase, we believe it will take some time before the implications of their diverse strategies get crystallized and start becoming evident to investors.

MAX HEALTHCARE: AT THE FOREFRONT

❑ Overview – one of the leading healthcare players in India

MHC is the healthcare subsidiary of Max India and is among the leading healthcare players in the country. MHC currently operates six hospitals and two specialty medical centers in the NCR (area in and around Delhi). MHC's growth strategy is based on the hub-and-spoke model with its two super specialty hospitals in Saket, NCR acting as the hub.

MHC's growth strategy based on the hub-and-spoke model

Exhibit 23: MHC's existing hospital network

Hospital	No. of beds
MDDHVI (Max Devki Devi Heart and Vascular Institute)	200
MSSH (Max Super Specialty Hospital)	188
MBH (Max Balaji, Patparganj)	146
Max Gurgaon, multi specialty	108
MHP (Max Hospitals, Pitampura)	90
MHN (Max Hospitals, Noida)	39
Total	**771**

Source:

Max has organically scaled up capacity to 771 beds within a short time

MHC commenced operations in 2000 and has scaled up its capacity to around 771 beds within a short period of time. This entire network is either owned by MHC/ subsidiaries or operated by MHC/ subsidiaries as part of service agreements. Currently, the network does not include any managed properties. Max Devki Devi Heart & Vascular Institute (MDDHVI) and Max Balaji Hospital are operated as part of service agreements with Devki Devi Foundation and Balaji Medical and Diagnostic Research Center respectively. Although Max's reported revenues reflect only service fees from these hospitals as part of the legal structure, the economic interest of these hospitals will flow to MHC's fold. Therefore, MHC's consolidated revenues comprise full revenues from these two hospitals too.

A key feature of MHC's network is the institutionalization of the entire management process, which ensures that a hospital/ network is not dependent on select individuals. The strategy also creates a strong engine for future expansion.

❑ Strategic roadmap – readying for a take-off

Steady growth with focus on consolidation in the near term

MHC envisages an expansion to 1,223 beds by 2009 with a network of nine hospitals in NCR…

MHC has opted for a steadier growth strategy relative to peers like Fortis. MHC's plans envisage an expansion to 1,223 beds by 2009 with a network of nine hospitals in the NCR. This capacity will be entirely operational by FY11. Over the next 2-3 years, MHC aims to work on consolidating this network before embarking on an aggressive expansion plan. The company targets EBITDA margins of 20-25% for this network by FY11-12.

... with accelerated pace of growth to acquire a national footprint in the next phase of growth

Aggressive expansion in the medium term

In the next phase of growth, MHC aims to step up the pace of growth and acquire a national footprint through a combination of owned and managed properties. MHC has created strong brand equity in the healthcare arena with its superb execution of super-specialty and secondary care hospitals in the NCR. We believe an established brand would create opportunities for Max to manage hospitals across the country. In fact, MHC is in talks with several players for such management contracts as well as greenfield / brownfield hospitals. We expect some of these discussions to yield results over the next 12-18 months.

MHC's relatively conservative growth approach implies reduced business risk

Positive on MHC's strategic intent

We like MHC's relatively conservative growth strategy as it will enable the company to identify and plug operational gaps that emerge in the first round of expansion and significantly reduce the risk in the business. We believe it will enhance MHC's capabilities to target aggressive growth in the second phase of expansion.

Healthcare-related education – a possible diversification

Over the medium to long term, MHC seeks to leverage its strong capabilities and experience in hospital management to tap the various healthcare related education opportunities. This will involve establishing facilities for training nurses, emergency medical technicians, paramedics, etc. While the contours of this opportunity are still hazy, we are quite optimistic about the potential in the backdrop of a growing scarcity of trained healthcare professionals and Max's competencies in this arena.

❑ Focus on the fast growing specialties

As is evident from the therapy-wise analysis of procedures performed by MHC's hospitals, they have a strong specialty focus with emphasis on cardiology, neurosciences, orthopedics and oncology.

MHC has a clear focus on chronic therapies

Exhibit 24: Cardiac is the primary focus for MHC

Procedure	FY05	FY06	FY07
Cardiac care	439	3202	5595
Orthopedics	723	1096	1601
Neurosciences	27	141	498
Obs & Gyn	1026	1557	3103
Others	2194	4403	5924

The high-end specialty focus is also reflected in the lower average length of stay, higher realization per bed as well as higher proportion of ICUs to total beds when compared with peers like Apollo.

Exhibit 25: MHC's high end specialty focus stands out

		Max	Apollo
Total beds	#	770	7076
ICU beds	#	188	341
Average revenue per day per occ. bed	Rs / day	15540	7563
Average length of stay	days	3.5	5.5

We believe this specialty focus will lead to quicker breakeven and higher profitability for MHC's network.

❑ Specialty focus drives superior profitability

MHC's business model is superior to that of peers

MHC's focus on specialty tertiary care, combined with a high brand recall facilitating fairly high occupancy rates, has created a significantly superior business model as compared to peers. Consequently, while the industry norms indicate a 4-5 year breakeven period for a tertiary specialty hospital, MHC has been able to achieve the same within two years of operations. The company remains confident of replicating this feat even with the newer tertiary hospitals.

Broadly, for any tertiary hospital, MHC aims to achieve breakeven by the second year of operations with ~25% operating margins by the fifth or sixth year as the operations enter a steady state. This sharp margin expansion is primarily facilitated by the steady ramp-up in occupancy rates from about 40% in the first year to 75-80% by the sixth/ seventh year of operations.

Below, we give an illustrative model that indicates the profitability progression targeted in a typical Max tertiary hospital.

Exhibit 26: Typical scale-up scenario in tertiary hospital in MHC network

MHC expects a tertiary hospital to break even by 2nd year with ~25% operating margins by 5th/ 6th year as operations enter steady state

Year of operation	1	2	3	4	5	6
Occupancy rates (%)	40	50	60	65	70	75
Revenues	53	67	80	87	93	100
Material as % of revenues	36%	36%	34%	32%	30%	30%
Material cost	19	24	27	28	28	30
Doctors as % of revenues	23%	22%	18%	16%	15%	15%
Doctor cost	12	15	14	14	14	15
Total Variable cost	31	39	42	42	42	45
Fixed costs	27	28	30	31	32	32
Operating profit/ (loss)	(5)	0	8	14	19	23
Operating margin	-	0%	11%	16%	21%	23%

❑ MHC's twin hubs of success

MHC's super specialty hospitals central to its hub-and-spoke strategy

MHC's super specialty hospitals, MDDHVI and MSSH, are central to its hub-and-spoke strategy. These hospitals provide high-end tertiary care across various specialties to patients. Our positive impression from the site visit to these hospitals and their financial performance clearly indicate that these hubs are on track to successfully implement MHC's growth strategy. We expect these two high end tertiary hospitals to contribute around 52% of MHC's consolidated revenues by FY10 with operating margins of 21-22%.

Max Devki Devi Heart and Vascular Institute

MDDVHI, with 64% occupancy levels, expected to double its revenues over FY07-10 on an expanded capacity

MDDVHI is a super specialty hospital dedicated to heart and vascular diseases, and offers high standards of cardiac care. The hospital is located in Saket, New Delhi and is operated by MHC as part of a service agreement with Devki Devi Foundation. The hospital currently has 200 beds with a planned expansion of 84 beds to be executed by June 2009.

The hospital, established in December 2004, has achieved 63% average occupancy levels within 30 months of being operational and average per day revenue of Rs27,464 per occupied bed for FY07. This has been accompanied by a steady increase in outpatient flow, which is reflective of the hospital's strength.

We expect MDDHVI to double its revenues over FY07-10 upon implementation of the extension and to achieve 20-21% operating margins by FY10.

Max Super Specialty Hospital

MSSH has broken even within just eight months of launch

MSSH commenced operations in May 2006 and is owned and operated by MHC. It has 188 patient beds with 63 ICUs. The hospital offers super specialty facilities for neurosciences, obstetric & gynecology, orthopedics, pediatrics and a range of other specialties. MHC is also evaluating the opportunity to introduce oncology care services in MSSH.

MSSH has broken even within a year of operations, which is unusual for a high-end tertiary hospital with very high upfront investments. Operating margins too have been steadily improving and we expect MSSH to achieve margins of 22-23% by FY10.

Max Balaji Hospital (MBH), Patparganj – the third upcoming pillar

Plans to expand the capacity at MBH to 414 beds by FY11

MHC is also working on significantly enhancing capacity at Max Balaji Hospital (MBH) by 268 beds and making it its third super specialty hospital with focus on oncology, infertility, cardiac, orthopedics, neurosciences and critical care. The expansion, to around 414 beds, is likely to be completed by March 2009. We expect MHC to have around 300 operational beds by FY10 with the entire 414 beds operational by FY11. This will make it the largest hospital in MHC's network and a critical component of its future growth strategy.

Further, MBH is located in Patparganj, New Delhi and is currently the only multi specialty hospital in Eastern Delhi, which significantly enhances its value proposition. It will also lead to very high occupancy levels, and thus leading to early breakeven. To put it in context, the initial 146 bed capacity in MBH had started making operating profits from the 10$^{th/}$ 11th month of operations and achieved 76% occupancy in the first full year of operations.

We expect MBH to contribute another 23% of consolidated revenues in FY10. Along with MSSH and MDDVHI, this will account for ~75% of MHC's FY10 revenues.

❑ Financial analysis

The past

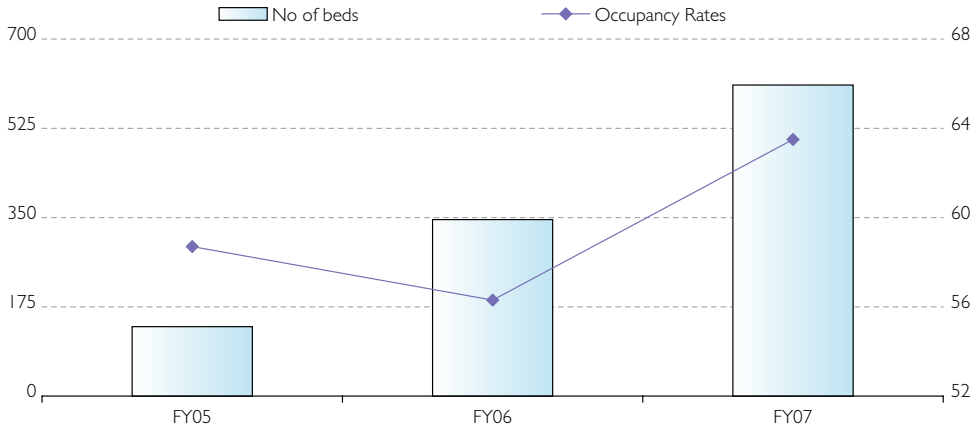
At MHC, average number of beds up 4x over FY05-07 to 610

MHC has been in a rapid scale-up mode since its inception in FY01. With the commencement of the two key tertiary hospitals in FY05, the operations have gained further momentum.

Over FY05-07, the average number of beds has grown ~4x from 136 in FY05 to 610 in FY07 (771 by H1FY08). Overall occupancy rates too have improved steadily despite the consistent addition of new beds, which is very encouraging.

Average Occupancy rates across MHC up by500 bps over FY05-07

Exhibit 27: Sharp scale-up over the last three years

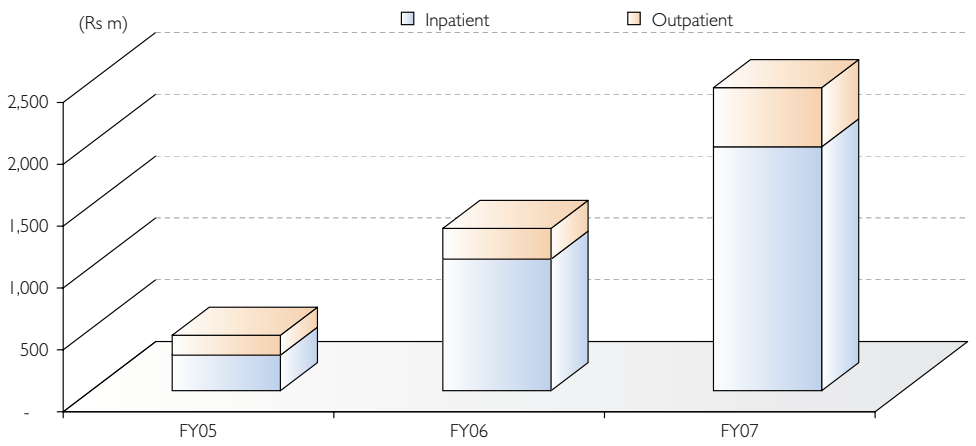


Source: SSKI Research

Over FY05-07, overall revenues grew 5.5x to Rs2,450m, driven by a 7x jump in inpatient revenues to 1,971m. During this period, outpatient revenues grew 3x to Rs479m in FY07.

Revenues up 5.5x over FY05-07 to Rs2,450m

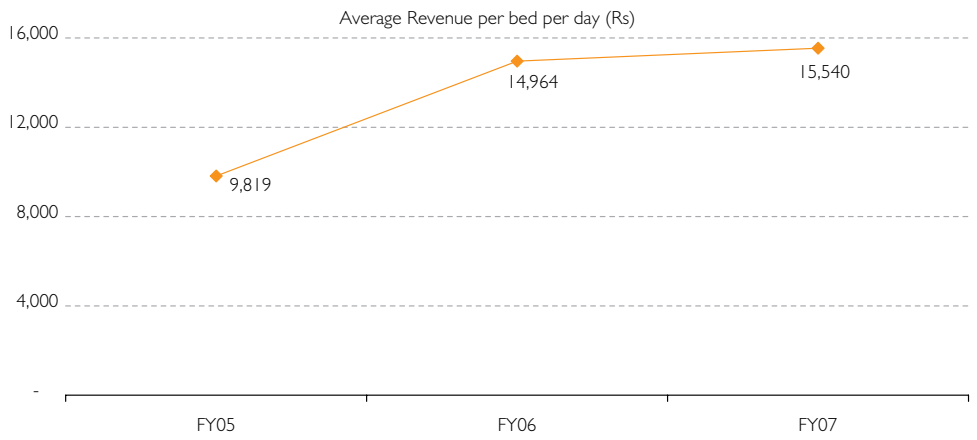
Exhibit 28: Both inpatient and patient revenues have grown multi-fold



Source: SSKI Research

Another key feature is the sharp ramp-up in average revenue per day per occupied bed for MHC network over FY04-07. This compares well with peers and is indicative of the high-end specialty focus of MHC's business model.

Exhibit 29: Average revenue per bed per day has been scaling up



Source: SSKI Research

Average revenues per bed per day grew from 9819 in FY05 to15540 in FY07

MHC close to breakeven level in FY07; profits likely to grow rapidly from here

Given the early stage of operations of most hospitals in MHC's network and high gestation period associated with hospitals, MHC had been incurring operational losses during the period. On a consolidated basis, MHC was close to EBITDA breakeven in FY07 and profits are expected to scale up sharply going forward.

The way forward

Over FY07-10, we expect MHC to increase the number of operational beds by ~45%, to 1,109 from ~700 currently. The capacity expansion will be driven by expansion in MBH and MDDHVI, and commencement of Dehradun hospital.

Further, given that ~29% of the beds will be added over FY10-11, the revenue scale-up from this expanded capacity will be effectively visible only in the later years.

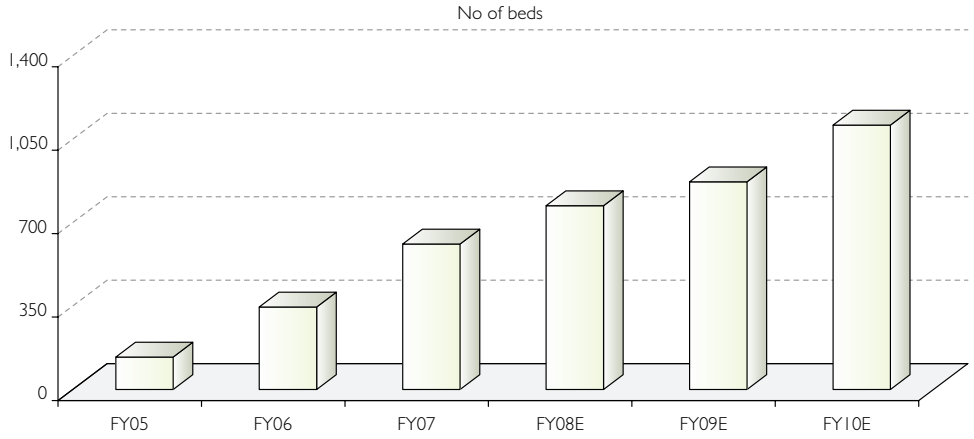
Over FY07-10, we expect the number of beds under operations to sharply grow to 1,109 beds by FY10

Exhibit 30: Expected expansion in MHC's network

	FY05	FY06	FY07	FY08E	FY09E	FY10E
MDDHVI	61	106	167	190	200	284
MSSH	0	0	165	180	180	180
MBH (Patparganj)	0	93	128	145	145	300*
MHP (Max Hospitals, Pitampura)	68	88	90	90	90	90
MHN (Max Hospitals, Noida)	34	40	38	39	39	39
Max Gurgaon, multi specialty	0	0	0	108**	108	108
Max Dehradun	0	0	0	0	100	100
Total operational beds	**179**	**346**	**610**	**771**	**871**	**1,109**

*Source: Company, SSKI Research * Partial commissioning of the 268 bed expansion ** Phased operationalization in FY08*

Exhibit 31: Beds under operations to increase sharply in FY10 with MBH expansion



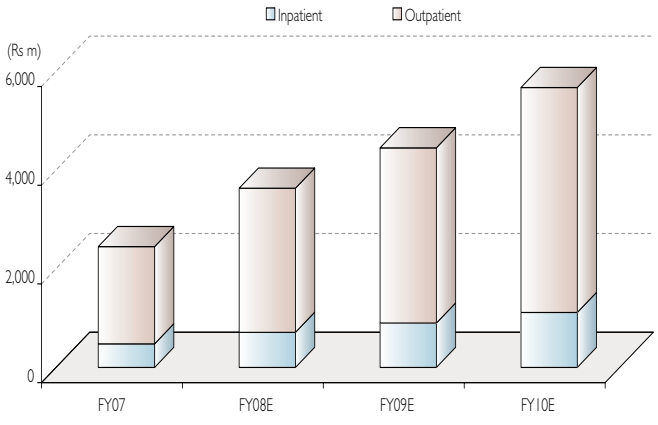
Source: SSKI Research

We expect MHC network's occupancy rates to improve to 63% by FY10…

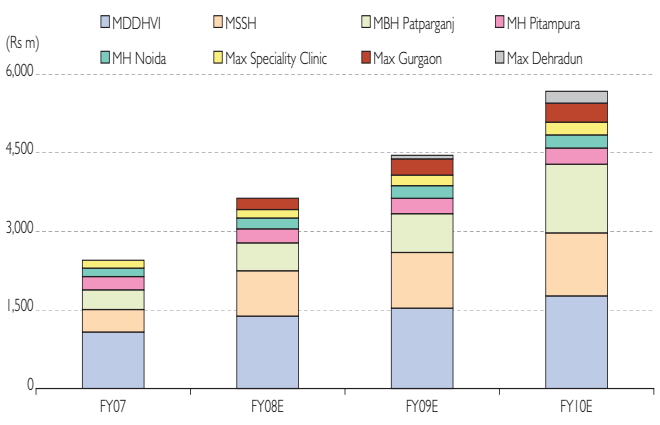
We expect average occupancy rates of ~63% for MHC network by FY10 with peak occupancy levels of 75-80% for beds that have been in existence for more than two years. Further, we expect average revenue per day per occupied bed to marginally improve to ~Rs16,600 in FY10 from Rs15,600 in FY07. This would drive a 32% CAGR in inpatient revenues over FY07-10. Given MHC's strong focus on growing outpatient flow and commencement of new facilities, we expect 33% CAGR in outpatient revenues over the period.

This will drive a 32.2% CAGR in consolidated revenues for MHC over FY07-10 to Rs5.7bn in FY10. The three tertiary hospitals – MSSH, MDDHVI and MBH – will contribute an estimated 75% to the revenues in FY10.

Exhibit 32: Revenues expected to record 32% CAGR over FY07-10



Tertiary care hospitals to drive growth



Source: SSKI Research

…and overall margins to improve sharply over FY07-10

❑ Expect overall operating margin of 18% by FY10

We believe MHC's superior business model will start reflecting in the sharp improvement in operating margins over FY07-10. With a rapid pick-up in revenue growth and management focus on consolidation of the existing network, we expect MHC's overall operating margins to be positive in FY08 and to climb up sharply in the subsequent years.

Overall, we expect MHC's operating profit to improve to 18% in FY10 with an operating profit of Rs993m

MHC's financial performance is well on track with our estimates. MHC broke even in Q1FY08 and achieved operating margin of 5% in Q2FY08. This is quite commendable given that MHC's two tertiary hospitals have been operational for only about two years. We expect overall margins to keep improving steadily with higher operating margins in the tertiary hospitals (MSSH and MDDVI).

In FY10, we expect MSSH and MDDHVI to generate operating margin of 22-23%. However, profitability at the Patparganj hospital will be subdued by commencement of new capacities with margins of ~13%. We expect MHC's existing secondary care facilities in Pitampura and Noida to generate operating margins of 18%. Margins will be significantly lower at the newer facilities in Gurgaon and Dehradun as also the Panchsheel Specialty Clinic.

Overall, we expect MHC's operating profit to improve to 18% in FY10 with an operating profit of Rs993m. The management is aiming for an operating margin of 20-22% for the network by FY11.

Exhibit 33: Expected FY10 EBITDA margins across MHC network

Margins to be significantly lower at new facilities in Gurgaon and Dehradun as also the Panchsheel Specialty Clinic

	EBITDA margins (%)
MDDHVI	22
MSSH	23
MBH (Max Balaji, Patparganj)	13
MHP (Max Hospitals, Pitampura)	18
MHN (Max Hospitals, Noida)	18
Max Specialty Clinic	10
Max Gurgaon, multi specialty	8
Max Dehradun	0
Consolidated	18

MHC plans to enhance its capacity by ~40% over FY10-11 with revenue / profit contribution from this expanded capacity building up gradually. Given that the full impact of this expansion will be reflected only in the later years (i.e. after FY10), we expect overall operating margins to continue expanding post FY10.

❑ Valuations and view

The existing network expected to enter a steady phase from FY11

Given the long gestation period of hospital business and that most of the hospitals in MHC network are in an early growth phase, we believe the existing network will enter a steady phase from FY11 onwards (with operationalization of the entire Patparganj expansion). MHC's success in generating positive EBITDA from FY08 is a clear indicator of its superior operating model.

In view of the projected 32% CAGR in MHC's revenues over FY07-10, ~30% new capacity additions over FY10-11 (impact not effectively reflected in the FY10 financials) and significant scale-up plans to capitalize on the demand potential, we believe MHC's FY10 operating profits are not entirely reflective of the true profitability potential of the business.

Given exciting profitability outlook beyond FY10 and competitiveness vis-à-vis peers, we value MHC at 15x EV/EBITDA (FY10E)

Peers like Apollo Hospitals and Fortis Healthcare currently trade at 10-11x EV/EBITDA (FY10). Given its superior profitability profile, we believe MHC deserves to trade at a premium to these players. Considering the exciting profitability expansion outlook beyond FY10 and MHC's competitive positioning with respect to peers, we value MHC at 15x EV/EBITDA (FY10). We have assumed that MHC will be able to fund the incremental capex plan for the existing network through internal accruals and recent issuance of preference shares to International Finance Corporation (IFC). We have assumed net debt to be Rs4,250m in FY08.

Exhibit 34: Valuation methodology for MHC

		MHC Valuation
EBITDA (FY10)	Rs m	993
EV/EBITDA	x	15
EV	Rs m	14898
Debt	Rs m	4250
Equity value	Rs m	10648
Shares	# of shares	291
Value per share	Rs/ share	37

Source: SSKI Research

MHC's equity value is worth Rs37/share

In July 2007, IFC invested in 9.09m shares of MHC at a price of Rs55 per share, implying a valuation of Rs16bn. Our valuation implies a discount of 33% to the price paid by IFC.

❑ We value Max India's equity interest per share at Rs36 per share

We estimate Max India's shareholding in MHC to be 75.56% (assuming exercise of 53.5m outstanding warrants on par by Max India). This translates into an equity value of Rs8bn, or Rs36 per share, for Max India.

OTHER BUSINESSES

In addition to Life Insurance and Healthcare, Max India has three other businesses, viz. Specialty Plastics, Clinical Research and Healthcare Staffing. The healthcare staffing business seeks to build on the competency of the hospitals business. Max Specialty Plastics (MSP) is one of the leading players in the BOPP films segment and has undertaken a significant expansion recently. While the Clinical Research and Healthcare Staffing operations have exciting growth outlook, the businesses are in fairly early stages of their growth lifecycle and are limited in size. We value Max India's equity interest in MSP at Rs20 per share. We have not attached any value to the Clinical Research and Healthcare Staffing businesses at this stage.

❑ Max Specialty Products (MSP)

MSP currently has around 8% share in the fairly competitive BOPP market

MSP is one of the leading producers of BOPP products with an extensive portfolio of value added specialty films that find extensive packaging applications. MSP also manufactures leather finishing foils, which have applications in finishing of leather goods.

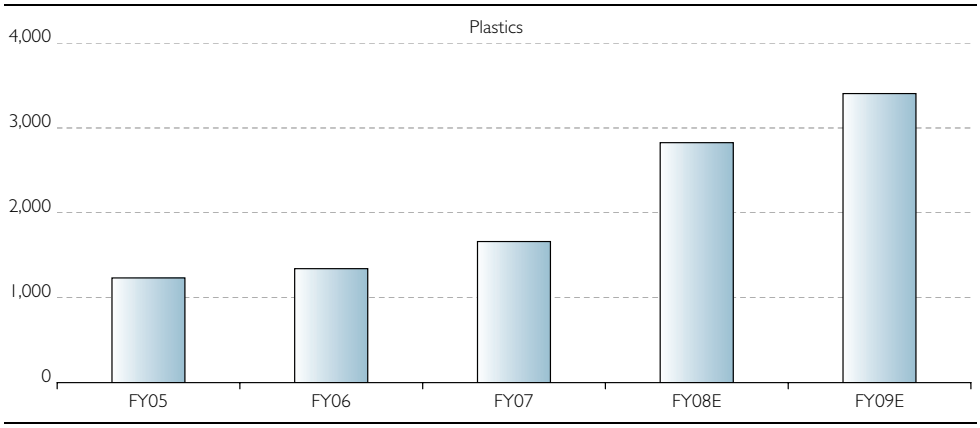
MSP is the traditional business for Max India and forms part of the listed entity. MSP currently has around 8% share in the fairly competitive BOPP market. With the advent of technologically advanced converters in India and growth in organized retail, the demand for BOPP films is expected to grow sharply. In a clear demonstration of its competitiveness, MSP has some of the largest consumer product companies in India like Unilever, Pepsi Foods, etc as its customers.

BOPP film capacity more than trebled form 9000 tpa to 29,000 tpa

MSP has recently expanded its BOPP film production capacity to 29,000 tonnes per annum from 9,000 tonnes per annum earlier. The expanded capacity has started production from March 2007 and the impact of increasing utilization on profitability is expected to be visible from FY08 onwards. Additionally, MSP has installed a second thermal coating line with a capacity of 144m sq meters, which will provide further growth impetus.

In FY07, MSP recorded revenues of Rs1,662m with domestic sales accounting for 79% of these sales. Prior to the capacity expansion, MSP had been operating at close to 100% capacity utilization, which left limited scope for growth. Given these constraints, MSP sales registered a CAGR of 16% over FY05-07.

Exhibit 35: Capacity expansion to drive growth at MSP



Expect sales CAGR of 35% over FY07-10

On the back of these new capacities, 1HFY08 revenues have grown 81% yoy with EBITDA margins at 16%.

Going forward, the new capacity is expected to drive a significant acceleration in MSP's growth rate (35% CAGR estimated over FY07-10) to gross sales of Rs4.1bn by FY09. We expect MSP to maintain EBITDA margins of 15% over the period. Given the high growth rate and steady operating profitability, we believe MSP's business should be valued at 7-8x EV/EBITDA (FY10E). This implies an equity value of Rs4.6bn. Given that Max India owns 100% equity interest in MSP, we value Max India's MSP business stake at Rs20 per share.

❑ Clinical Research – Neeman Medical Institute

NMI has seen sharp improvement in its performance in the recent past

Max India's clinical research business entity, called Neeman Medical International (NMI), provides Phase II to IV clinical trial management services. NMI was one of the earliest entrants in the clinical research outsourcing business in India. NMI has had a few challenging years since the inception of its Indian operations in 2001, which has impeded its growth. During this period, NMI has undergone significant strategic shifts over the last few years including restructuring of its US operations to convert it to a business development unit.

In its new avatar, NMI has now become a full fledged CRO offering a whole suite of services as opposed to only Site Management services earlier. NMI is now aggressively targeting the more lucrative monitoring services to grow its business.

After a prolonged tumultuous phase, we believe Max India's investments in NMI have finally started to deliver – as is evident in the sharp improvement in the performance of this business.

- Over the last six months, NMI's order book has doubled to $4m; the business has a pipeline of another $7m worth of contracts
- Number of clients has also grown by ~50% over the period
- NMI has formed strategic partnerships with mid-sized CROs in Italy and Russia, and is negotiating with CROs in other regions of the EU. Given the multi-centric nature of global clinical trial industry, we believe this significantly enhances NMI's value proposition. The impact of these measures will be visible in the coming years.

NMI offers the potential for significant value creation

We remain positive on the contract research opportunity for Indian pharma companies and, therefore, believe that NMI can create significant value in the coming years (subject to effective execution of its business plan).

NMI generated revenues of Rs53m in FY07, a 39% decline yoy, and incurred losses at the operating level. These losses have been largely on account of the restructuring undertaken in US operations. With the improving traction in revenue growth, we expect a sharp improvement in NMI's performance in the coming years.

While it remains an exciting opportunity, we have not assigned any value to NMI's business currently and will watch out for stabilization of the business model in order to have better visibility on the operating outlook.

❑ Healthcare Staffing Services

MHS, providing placement solutions for healthcare resources in USA, in a rapid scale-up mode

Max HealthStaff International (MHS) provides placement solutions for healthcare resources in USA. MHS has formed alliances with multiple healthcare staffing companies in the US and provides services related to placement of nurses from India. This business seeks to leverage the opportunity arising from the shortage of trained nursing personnel in USA and a growing demand for the same in a graying population. Max India's strong presence in the high-end hospital care business further enhances MHS's credentials to operate in this space.

As part of this business, MHS recruits nurses from various parts of India, trains them and assists them in obtaining immigration for working in a healthcare set-up in USA. These nurses are employed by MHS's healthcare staffing partners in USA, which place them in various healthcare facilities on long-term contracts ranging between 18-36 months.

MHS has already placed around 60 nurses in USA; 670 nurses in the pipeline

This is a relatively new business segment but has been scaling up rapidly. MHS has already placed around 60 nurses in USA with over 670 nurses in different stages of the pipeline (including 175 nurses in the immigration process).

To drive further growth, MHS is looking at multiple options like expanding beyond USA, exploring new resourcing models as well as exploring strategic tie-ups to establish a pan India nurses training network.

Over the medium term, we believe MHS will become the vehicle for Max Group's plan of aggressively tapping the healthcare education segment.

Significant shortage of nurses in geographies like USA, Middle East, Europe, etc heralds high growth potential for this business

Given the significant shortage of nurses in multiple geographies like USA, Middle East, Europe, etc, we are quite optimistic about the potential of this business. MHS generated revenues of Rs25m in FY07 and will scale up sharply in the coming years on the low base. However, given the limited scale of current operations, we are not assigning any value to this business and will wait till we have further visibility on its scalability.

VALUATIONS AND VIEW

With its formidable presence in two of the fastest growing industry segments of insurance and healthcare, we believe Max India is a unique play on the Indian economic growth story. We have valued Max India on an SOTP basis by aggregating its economic interests across the three key businesses. Initiating coverage with an Outperformer rating and a price target of Rs316 per share.

❑ Max India – a unique play on the India growth story

We believe continued economic prosperity in India will provide a strong growth momentum in the hitherto under-served/ under-penetrated sectors of life insurance and healthcare.

Rising demand for quality tertiary care a lucrative opportunity for private healthcare providers

Increasing life expectancy in India and growing incidence of lifestyle diseases are generating considerably strong demand for quality tertiary care. This demand growth will be further fuelled by the economic prosperity and growing penetration of health insurance. The constraints faced by government in scaling up tertiary care provide an extremely attractive opportunity for private healthcare players; and we believe that sufficiently funded corporate players like MHC, Apollo, Fortis, Wockhardt, etc are well placed to leverage this opportunity. With its focus on high-end specialty tertiary healthcare and significantly superior profitability profile, we believe MHC is among the most competitive healthcare players in India. While MHC's current growth phase envisages consolidation in the NCR region, it has created a solid platform for undertaking an aggressive pan-India expansion over the medium term.

❑ SOTP price target of Rs316

Our target price of Rs316/ share offers 37% upside from the current price

We have valued Max India on an SOTP basis by aggregating the value of Max India's equity interests across the three key business segments – Insurance, Healthcare and Specialty Plastics. This translates into an SOTP valuation of Rs316 per share.

Exhibit 36: SOTP valuation summary for Max India

	Valuation basis	Rs per share
Max NY Life Insurance (50% economic interest)		230
Max Healthcare (76.5% economic interest)	15x EV/EBITDA (FY10E	36
Max Specialty Plastics (100% economic interest)	7x EV/EBITDA (FY10E)	20
Cash on hand	Net Cash	30
SOTP value		**316**

This represents an upside of 37% from the current level. Initiating coverage on the stock with an Outperformer rating.

APPENDIX

❑ Classification of hospital services

Hospital services can be broadly split into three levels based on the type of services provided and disease complications catered to:

- **Primary care:** Low-investment facilities like clinics that provide outpatient services and basic treatment for common ailments including cold, fever, etc. They do not have any provision for surgeries, etc.
- **Secondary care:** They are medium-investment facilities that can conduct simple surgeries using basic equipment. This could be in the form of nursing homes, general secondary care or specialty secondary care hospitals.
- **Tertiary care:** High-investment, highly specialized facilities that conduct complex procedures using sophisticated equipment, primarily focused on inpatient care. Most of these hospitals are referral hospitals, largely getting patients from the primary care and secondary care centers.
    - A typical high-end tertiary hospital costs ~Rs3m per bed to set up, making it a highly capital intensive venture (breakeven is typically at ~65% occupancy). Given the high costs involved in setting up these hospitals and the need for high patient flow, the hospitals are typically located in metros and large cities.

❑ Revenue mix

A hospital's revenue composition can be broadly divided into two broad streams – outpatient and inpatient revenues. Outpatient revenues typically contribute 70-75% to a tertiary hospital's revenues. The ratio is higher for secondary and primary healthcare centers.

- **Outpatient revenues:** Refers to the revenue obtained from doctor consultations and patient examinations
- **Inpatient revenues:** Refers to bed charges, ICU charges and operation theater charges

While outpatient revenues contribute a relatively smaller component of a tertiary hospital's overall revenues, it is a critical revenue stream as it acts as a strong pull for inpatient revenues and creates a solid base for a hospital. Further, operating margins in outpatient revenues are significantly higher due to very low operating costs. Given this, the outpatient flow is an important metric to gauge the success of a hospital.

Income statement

Year to 31 March (Rs m)	FY06	FY07	FY08E	FY09E	FY10E
Net sales	**1,248**	**1,554**	**2,642**	**3,182**	**3,819**
% growth	*9.1*	*24.4*	*70.0*	*20.5*	*20.0*
Operating expenses	1,297	1,646	2,609	3,123	3,683
EBITDA	**(48)**	**(92)**	**33**	**59**	**135**
% growth	*(314.7)*	*92.1*	*(135.6)*	*78.8*	*129.9*
Other income	240	404	700	950	1,100
Net interest	(95)	(49)	(150)	(200)	(250)
Depreciation	61	58	86	104	124
Pre-tax profit	35	204	496	705	861
Deferred Tax	(28)	58	-	-	-
Current Tax	4	4	40	60	80
Profit after tax	59	142	456	645	781
Preference dividend	-	-	-	-	-
Non-recurring items	-	-	-	-	-
Net profit after non-recurring items	**59**	**142**	**456**	**645**	**781**
% growth	*(2.4)*	*141.6*	*220.6*	*41.3*	*21.0*

Balance sheet

Year to 31 March (Rs m)	FY06	FY07	FY08E	FY09E	FY10E
Paid-up capital	349	360	443	443	443
Preference share capital	-	-	-	-	-
Reserves & surplus	9,247	9,673	20,046	20,691	21,472
Total shareholders' equity	9,593	9,969	20,426	21,071	21,852
Total current liabilities	287	374	619	733	865
Total Debt	1,552	2,757	3,257	4,257	5,257
Deferred tax liabilities	-	-	-	-	-
Other non-current liabilities	432	63	63	63	63
Total liabilities	2,270	3,194	3,939	5,053	6,184
Total equity & liabilities	**11,863**	**13,163**	**24,365**	**26,123**	**28,036**
Net fixed assets	629	1,714	2,628	2,624	2,600
Investments	10,250	10,583	12,083	15,083	18,583
Total current assets	1,037	976	9,765	8,527	6,964
Deferred tax assets	(52)	(110)	(110)	(110)	(110)
Other non-current assets	-	-	-	-	-
Working capital	750	602	9,145	7,794	6,099
Total assets	**11,863**	**13,163**	**24,365**	**26,123**	**28,036**

Cash flow statement

Year to 31 March (Rs m)	FY06	FY07	FY08E	FY09E	FY10E
Pre-tax profit	35	204	496	705	861
Depreciation	61	58	86	104	124
chg in Working capital	379	(189)	(131)	(93)	(108)
Total tax paid	(4)	(4)	(40)	(60)	(80)
Ext ord. Items	-	-	-	-	-
Operating cash Inflow	471	69	412	656	797
Capital expenditure	(83)	(1,127)	(1,000)	(100)	(100)
Free cash flow (a+b)	388	(1,058)	(588)	556	697
Chg in investments	(3,795)	(333)	(1,500)	(3,000)	(3,500)
Debt raised/(repaid)	(528)	1,205	500	1,000	1,000
Capital raised/(repaid)	77	11	10,000	-	-
Dividend (incl. tax)	-	-	-	-	-
Misc	3,835	208	-	-	-
Net chg in cash	(24)	33	8,412	(1,444)	(1,803)

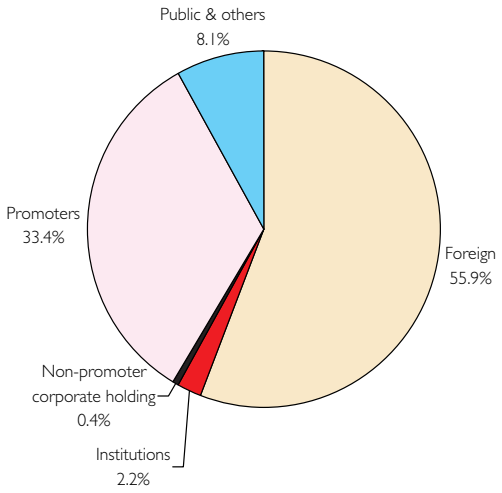
Key ratios

Year to 31 March	FY06	FY07	FY08E	FY09E	FY10E
EBITDA margin (%)	(3.9)	(5.9)	1.2	1.8	3.5
EBIT margin (%)	(8.7)	(9.7)	(2.0)	(1.4)	0.3
PAT margin (%)	4.7	9.2	17.3	20.3	20.4
ROE (%)	0.8	1.5	3.0	3.1	3.6
ROCE (%)	(1.1)	(1.2)	(0.3)	(0.2)	0.0
Gearing (x)	0.2	0.3	(0.3)	(0.1)	0.0

Valuations

Year to 31 March	FY06	FY07	FY08E	FY09E	FY10E
Reported EPS (Rs)	0.3	0.8	2.1	2.9	3.5
Adj. EPS (Rs)	0.3	0.8	2.1	2.9	3.5
PER (x)	681.3	290.6	111.6	79.0	65.3
Price/Book (x)	4.2	4.2	2.5	2.4	2.3
EV/Net sales (x)	33.4	28.4	17.3	15.1	13.3
EV/EBITDA (x)	(865.9)	(476.8)	1,391.1	819.6	377.2
EV/CE (x)	3.6	3.4	1.9	1.9	1.9

Shareholding pattern



As of September 2007

IDFC - SSKI INDIA

Analyst	Sector/Industry/Coverage	E-mail	Tel. +91-22-6638 3300
Pathik Gandotra	Head of Research; Banking, Strategy	pathik@idfcsski.com	91-22-6638 3304
Shirish Rane	Cement, Construction, Power, Real Estate	shirish@idfcsski.com	91-22-6638 3313
Nikhil Vora	FMCG, Media, Retailing, Mid Caps	nikhilvora@idfcsski.com	91-22-6638 3308
Ramnath S	Automobiles, Auto ancillaries	ramnaths@idfcsski.com	91-22-6638 3380
Nitin Agarwal	Pharmaceuticals	nitinagarwal@idfcsski.com	91-22-6638 3395
Ganesh Duvvuri	IT Services, Telecom	ganesh@idfcsski.com	91-22-6638 3358
Varatharajan S	Oil & Gas	varatharajan@idfcsski.com	91-22-6638 3240
Chirag Shah	Textiles, Metals	chirag@idfcsski.com	91-22-6638 3306
Bhoomika Nair	Construction, Power, Logistics, Engineering	bhoomika@idfcsski.com	91-22-6638 3337
Avishek Datta	Oil & Gas, Engineering	avishek@idfcsski.com	91-22-6638 3217
Bhushan Gajaria	FMCG, Retailing, Media, Mid Caps	bhushangajaria@idfcsski.com	91-22-6638 3367
Shreyash Devalkar	IT Services, Telecom	shreyash@idfcsski.com	91-22-6638 3311
Nilesh Parikh, CFA	Banking	nilesh@idfcsski.com	91-22-6638 3325
Ashish Shah	Automobiles, Auto Ancillaries	ashishshah@idfcsski.com	91-22-6638 3371
Salil Desai	Cement, Infrastructure	salil@idfcsski.com	91-22-6638 3373
Rahul Narayan	FMCG, Retailing, Media, Mid Caps	rahulnarayan@idfcsski.com	91-22-6638 3238
Ritesh Shah	Textiles, Metals	riteshshah@idfcsski.com	91-22-6638 3376
Aashiesh Agarwaal	Real Estate	aashiesh@idfcsski.com	91-22-6638 3231
Neha Agrawal	Banking	neha@idfcsski.com	91-22-6638 3237
Swati Nangalia	Mid Caps	swati@idfcsski.com	91-22-6638 3260
Dharmendra Sahu	Database Manager	dharmendra@idfcsski.com	91-22-6638 3382

Equity Sales/Dealing	Designation	E-mail	Tel. +91-22-6638 3300
Naishadh Paleja	CEO	naishadh@idfcsski.com	91-22-6638 3211
Paresh Shah	Head of Dealing	paresh@idfcsski.com	91-22-6638 3341
Vishal Purohit	VP - Sales	vishal@idfcsski.com	91-22-6638 3212
Nikhil Gholani	VP - Sales	nikhil@idfcsski.com	91-22-6638 3363
Sanjay Panicker	VP - Sales	sanjay@idfcsski.com	91-22-6638 3368
V Navin Roy	AVP - Sales	navin@idfcsski.com	91-22-6638 3370
Rohan Soares	AVP - Sales	rohan@idfcsski.com	91-22-6638 3310
Pawan Sharma	AVP - Derivatives	pawansharma@idfcsski.com	91-22-6638 3213
Dipesh Shah	AVP - Derivatives	dipeshshah@idfcsski.com	91-22-6638 3245
Manohar Wadhwa	AVP - Derivatives	manohar@idfcsski.com	91-22-6638 3232
Dharmesh Bhatt	Technical Analyst	dharmesh@idfcsski.com	91-22-6638 3392

Explanation of Ratings:

1. Outperformer: More than 10% to Index
2. Neutral: Within 0-10% to Index
3. Underperformer: Less than 10% to Index

Disclosure of interest:

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