

## Investment themes for 2007

**We see growing polarisation, even as demand looks buoyant. Scale levers should help larger players manage margins. We believe consolidation will pick up among mid/small tiers, as global players scale up their offshore capacities. Buy Infosys, TCS and Wipro.**

### Key recommendations & forecasts

	Reuters	Year end	Recom	Price	Target price	EPS 1fcst	PE 1fcst
Infosys Tech <sup>1</sup>	INFY.BO	Mar 2007	Buy	Rs2,260.70	Rs2,660.00	66.56	34.0
Tata Consultcy <sup>1</sup>	TCS.BO	Mar 2007	Buy	Rs1,305.05	Rs1,680.00	42.89	30.4
Wipro <sup>1</sup>	WIPR.BO	Mar 2007	Buy	Rs634.75	Rs758.00	19.45	32.6
HCL Tech <sup>1</sup>	HCLT.BO	Jun 2007	Buy	Rs651.05	Rs760.00	34.22	19.0
Satyam Computer <sup>1</sup>	SATY.BO	Mar 2007	Buy	Rs489.20	Rs545.00	20.75	23.6
Patni Computer <sup>1</sup>	PTNI.BO	Dec 2006	Hold	Rs457.60	Rs445.00	17.83	25.7
Tech Mahindra <sup>1</sup>	TEML.BO	Mar 2007	Sell	Rs1,763.00	Rs1,560.00	45.18	39.0
NIIT Tech <sup>1</sup>	NITT.BO	Mar 2007	Buy	Rs402.55	Rs520.00	30.09	13.4
KPIT Cummins <sup>1</sup>	KPIT.BO	Mar 2007	Buy	Rs156.15	Rs115.00	5.79	27.0

1. Normalised EPS - Post-goodwill amortisation and pre-exceptional items  
Source: Company data, ABN AMRO forecasts

### Volumes should remain buoyant, but don't discount pricing growth yet

We raise our IT services exports revenue CAGR to 32.5% over 2006-10 on better-than-expected FY07 performance, a growing pipeline of large-size deals for Indian vendors, and an expected increased share of non-ADM services. However, we believe growth will remain volume-led. Despite the reported MSA renewals at 3-5% higher price points, we believe average blended realisation growth will be muted.

### Our primary survey indicates an increasing fight for resources

Initial findings from our primary survey of 150 engineering colleges in India indicate that while the supply is there to meet resource demand, the trend for fresher hiring is growing across players. Importantly, global companies are also joining in, and with average campus salary offers 7% higher than the top-tier Indian companies, we expect fresher salaries to now see annual hikes, unlike in the past.

### Investment theme #1: Stay safe, get richer

Outperformance of tier-1 players should continue, in our view, from the perspectives of both business and stock. Deal momentum remains strong, and given the wider services portfolio of tier-1 players, we expect higher realisation growth for them vs the industry. More importantly, scale is emerging as a critical differentiator. Medium term, we see 2 key scale levers: staffing mix and utilisation, besides the broadening employee pyramid. We expect stock returns to track forward earnings growth.

### Theme#2: Time for consolidation?

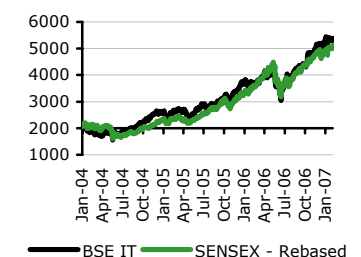
We expect industry consolidation to pick up in 2007 with the growing intensity of drivers and as valuations become attractive. Inorganic activity in the initial phase should be centered around the 'global player-Indian mid-cap player' theme. The operating environment for mid-tier players is becoming tough, while global players are under pressure from clients and investors to expand offshore capacities. Our analysis of recent acquisitions suggests the initial inorganic activities could centre around players who have: 1) a significant shareholding of strategic (non-client) financial investors/group that is not involved in operational management; 2) a manpower base of 5,000-15,000; and 3) a stable operating metric with moderate profitability. Our screen test on these criteria indicates 10 potential profile matches.

### India

#### Sector performance

	(1M)	(3M)	(12M)
Absolute	43.3	626.6	1749.7
Absolute %	0.8	13.2	48.1
Rel market %	-3.7	2.4	-0.6

Source: Bloomberg



India Bse 30 Sensitive: 14403.77  
BSE IT: 5392.29

### Researched by

ABN AMRO Institutional Equities Team

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*"Now, here, you see,  
it takes all the running you can do,  
to keep in the same place.  
If you want to get somewhere else,  
you must run at least twice as fast as that."*

– From 'Through the Looking-glass' by Lewis Carroll

## Investment themes for 2007

**We see growing polarisation, even as demand environment looks buoyant. Scale levers should help larger players manage margins. Consolidation may pick in the mid/small tiers as global players scale up offshore capacities.**

### 3Q07 results: cues for expectations from FY08

The US\$ revenue growth was in line with or ahead of the CQGR reported over the last four quarters. All players reported a strong deal pipeline (8-10 US\$50m+ deals). Average realisation growth of 1-2% qoq and the positive view of managements on absolute pricing implies the trend could be sustained over next two or three quarters. Client rationalisation is also at play, again indicative of this increasingly becoming a seller's market. However, we remain cautious about building in aggressive realisation growth.

A modest margin expansion despite 3.6% rupee appreciation in 3Q07 indicates flexibility on managing effective costs. However, growing attrition worries us. Most of the players have implemented (or have announced plans to implement) a non-cash/variable compensation scheme. Furthermore, given the 10-15% hikes effected for freshers joining in next year and the likely resultant increase for employees recruited in FY07 (at a lower salary level) on confirmation next year, we expect the effective wage hike in FY08 to be higher than last year across the players.

### Sector outlook: volumes should remain buoyant...

We continue to see a strong macro environment for offshore IT services and raise our IT services exports revenue CAGR forecast to 32.5% over 2006-10. Our upgrade is due primarily to better-than-expected growth in FY07 and the growing traction in large deal wins for the major Indian players. We expect this to continue, along with growing non-ADM services share for India, from 0.8% in 2005 to 3.2% by 2010F. The top six companies have announced at least 15 US\$50m+ multi-year deal wins over 9M07, compared with eight deal wins of similar size in FY06. We believe larger players (TCS, Infosys and Wipro) will grow ahead of the industry. The strong 27% headcount addition by the top five players in 9M07 (after 39% addition in FY06) gives us confidence.

### ... but don't discount pricing growth yet

Despite the reported MSA (master service agreement) renewals at 3-5% higher price points, we believe average blended realisation growth will be muted. The change in average blended realisation depends on 10 different variables at least, such as the frequency of MSA renewals, contract mix and service mix. Thus, there could be a qoq/yoy decline in average blended realisation despite a pricing increase on MSA renewals, depending on the interplay between different variables. We also understand from our channel checks that there is a growing trend, especially among large clients, of engaging professional outsourcing consultants such as TPI for MSA negotiations. We have build in 2-3% CAGR in average blended realisation for the top three companies over FY07-09. For the rest, we have been more conservative, projecting -1% to + 1% CAGR over FY07-09, given their limitations on the various factors outlined.

**8.8% qoq volume growth for our coverage universe**

**We raise our effective wage hike assumption by 50bp for FY08 and FY09**

**3Q07 saw six US\$70m+ deal wins from the top-five players, besides the US\$1bn deal from BT GS for Tech Mahindra**

**For top three players (ex-TCS), qoq realisation growth was flat at only 0.6%; TCS reported 4.5% growth**

## 'Large deals, low margins' fear comes unstuck

The earlier investor concerns that margins will come under pressure with the increasing number of large deal wins have come unstuck. Despite at least 23 US\$50m+ deal wins over the last seven quarters, EBITDA margins for the top five players have remained largely flattish. Our analysis indicates that while billing rates for the large-size deals are clearly lower than the corporate average, operating leverages are higher. Even assuming a rapid acquisition of such large deals, we believe EBITDA margins for these deals will be broadly in line with those in the generic IT services business. However, the timelines of breakeven may vary depending on the specific deal structure.

**HCLT reported EBITDA margins from the six large deals won in FY06 to be ahead of corporate average**

## Our primary survey indicates an increasing fight for resources

Initial findings from our primary survey of 150 engineering colleges in India indicate that while the supply is there to meet resource demand, the trend for fresher hiring is growing across players. Importantly, global companies are also joining in, and with average campus salary offers 7% higher than the top-tier Indian IT services companies, we expect fresher salaries to now see annual hikes, unlike the past. This could affect the effective salary hikes across players.

**Average campus salary hikes ranged 11-13% across all companies, including global and non-IT Indian players**

## Investment themes for 2007 #1: Stay safe, get richer

We expect the outperformance of tier-1 players to continue from business and stock perspectives. The deal momentum remains strong, and given the wider services portfolio of tier-1 players, we expect higher realisation growth for them compared with the industry. While big-ticket deals would be positive for sentiment, we believe growth (at least over the next two years) will be driven by increased client mining as offshoring expands to newer services. The number of US\$10m+ clients across the top four players increased 28% over FY06 in 9M07, indicating a steady ramp up. In the meanwhile, the revenue share of the top-10 clients declined from 33% to 29%, implying reducing client dependency. Importantly, mining of new clients has improved, with revenue from non-top-10 clients for the top four vendors growing 44% yoy in FY06 and by 43% for 9M07 (over 9M06). We also see client rationalisation at play, especially at TCS and Infosys, which should boost average realisation (and thereby margins). More importantly, we believe scale is emerging as a critical differentiator in cost management, and see two key scale levers: staffing mix and utilisation, besides managing the effective wage hike by broadening the employee pyramid at the base. We thus forecast a US\$ revenue CAGR of 32.1% for the top three players with a limited 18bp decline in EBITDA margin on a consolidated basis, implying a PAT CAGR of 28.8% over FY07-09. Improved visibility and consistent news flow on deal wins and inorganic activities (as these players get more aggressive on expansion plans) should help to sustain valuations around current levels, in our view.

**We have built in 40-50bp pa expansion in utilisation for the top three companies**

## Investment theme #2: Time for consolidation?

We expect industry consolidation to pick up in 2007 with the growing intensity of drivers and as valuations become attractive. We believe the inorganic activity in the initial phase is likely to be centered on the 'global player/Indian mid-cap player' theme. We believe domestic acquisitions by larger Indian IT services players will be limited and opportunistic. The operating environment for mid-tier players is becoming tough. A limited service portfolio restricts their client-mining capability, while high client concentration restricts pricing flexibility. A high attrition rate and limited resource requirement visibility is driving manpower costs and limiting flexibility on operating levers such as utilisation. This implies growing pressures on margins. The global players are under pressure to expand offshore capacities from clients and investors, even as deal sizes are reducing from both quantum and duration perspectives.

**Top10 client concentration for mid-tier companies is typically 50%+ vs around 30% for larger players**

**EBITDA margins are 15-20% vs 28-33% for tier-1 players**

Our analysis of recent acquisitions in the Indian IT services space suggests that initial inorganic activities could centre around players with: 1) significant shareholding of strategic (non-client)/financial investors that is not involved in operational management; 2) a manpower base of 5,000 to 15,000 (sub 5,000 for a niche player); and 3) stable operating metrics with moderate profitability. Our screen test based on these criteria indicates 10 potential profile matches.

### Maintain Overweight, with TCS, Infosys and Wipro as our top picks

The BSE IT Index is up only 44% ytd, vs a 53% gain for the BSE Sensex since the beginning of 2006. We believe this is the historical trend playing out and expect IT stocks to outperform the market over the next nine months, in line with the trend. We maintain our Overweight rating on the sector and our view that the larger players should present the best investment opportunities. Among the large caps, we prefer TCS, Infosys and Wipro, in that order. Among the second tiers, we prefer HCL Tech to Satyam, given the former's relatively attractive valuation discount and better near-term operating levers. Among the mid caps, NIIT Tech is our key Buy idea and Tech Mahindra is our key Sell idea. We maintain our Hold rating on Patni.

**Table 1 : Relative valuations of our coverage universe**

Company	BB code	Rec.	Current	52-week	Chg	Target price	Upside	ABN AMRO		EPS CAGR -FY07-09F	
			price (Rs)	high		(Rs)	(%)	EPS-FY08F	PE (x)	Consensus	ABN AMRO
Infosys	INFO IN	Buy	2,260	2,401	-6%	2,660	18%	91.4	24.7	28.1%	30.4%
TCS	TCS IN	Buy	1,299	1,399	-7%	1,680	29%	57.2	22.7	26.7%	28.1%
Wipro	WPRO IN	Buy	643	660	-3%	758	18%	25.4	25.3	25.1%	27.2%
Satyam	SCS IN	Buy	491	525	-6%	545	11%	25.5	19.3	22.9%	20.0%
HCL Tech	HCLT IN	Buy	654	707	-7%	760	16%	40.8	16.0	19.2%	20.5%
Patni	PATNI IN	Hold	446	511	-13%	445	0%	18.1	24.7	30.2%	38.3%
Tech Mahindra	TECHM IN	Sell	1,788	2,050	-13%	1560	-13%	72.1	24.8	41.2%	33.9%
KPIT Cummins	KPIT IN	Buy	153	181	-15%	115	-25%	9.9	15.6	30.2%	20.7%
NIIT Tech	NITEC IN	Buy	403	443	-9%	520	29%	36.0	11.2	21.1%	17.2%

Source: Bloomberg, ABN AMRO estimates and IBES estimates

Note: Stock price data as on 2 Feb 2007

## 3Q07 results: business as usual

The uptick in both the size and the number of large deal wins seen in 3Q07 reconfirms the strong demand environment. However, trends in fundamental metrics suggest a higher effective wage hike in FY08.

### 3Q07: results review and cues for FY08

The 3Q07 story was the same: volume-led growth, talks of pricing stability and rupee appreciation affecting margins. The 3Q07 results point to business as usual for the sector. Key highlights were the 4.6% qoq realisation growth reported by TCS and at least six US\$70m+ deal wins announced by the top five players, besides the US\$1bn contract win from BT Global Services for Tech Mahindra.

**8.8% qoq volume growth for our coverage universe**

**Table 2 : Coverage universe - Key financial and operating metrics – 3Q07**

	TCS	Infosys	Wipro	Satyam	HCLT	Tech M	NIIT T	KPIT
<b>Financial Metrics</b>								
qoq US\$ revenue growth - 3Q07	12.6%	10.1%	8.8%	6.7%	10.2%	13.4%	7.2%	4.0%
CQGR - US\$ revenues (TTM)	9.4%	10.1%	7.9%	7.4%	9.0%	23.3%	10.0%	9.3%
EBITDA margin - 3Q07	28.3%	32.7%	27.8%	25.6%	22.1%	26.9%	21.2%	15.2%
qoq change - EBITDA margin expansion	87bp	59bp	-26bp	240bp	46bp	156bp	234bp	-44bp
<b>Operational Metrics</b>								
Qoq growth - billed effort - 3Q07	7.9%	9.7%	9.3%	9.2%	7.0%	17.0%	5.3%	4.8%
Avg. realisation (US\$/person-month) - blended	6,538	6,924	6,378	5,116	5,250	5,389	6,113	4,526
Qoq growth - avg blended realisation - 3Q07	2.6%	1.4%	0.1%	-0.8%	2.1%	-3.1%	0.9%	-0.7%
CQGR - avg blended realisation - TTM	0.6%	1.3%	0.6%	-0.8%	1.7%	3.9%	2.5%	-1.4%
<b>Manpower Metrics</b>								
Net manpower addition - 3Q07	5,472	3,282	4,997	3,125	1,865	2,694	51	310
Net additions - delivery manpower - TTM	18,338	18,909	13,850	10,804	9,195	9,532	798	1,023
- As % of opening base	34.4%	40.7%	28.9%	49.6%	36.5%	126.5%	31.4%	58.0%
<b>Client Metrics</b>								
Revenue/active client (US\$ m, annualised) - 3Q07	5.26	6.73	3.97	2.74	5.76	8.74	n.a.	1.21
CQGR - revenue/active client (US\$ m, annualised) - TTM	11.1%	8.1%	2.8%	3.5%	n.a.	14.0%	n.a.	-12.7%
Net clients addition - 3Q07	12	12	-1	19	11	8	n.a.	4
US\$1m+ clients (as a % of total base)	38.2%	52.5%	42.7%	31.4%	63.0%	28.2%	n.a.	n.a.
US\$10m+ clients (as a % of total base)	9.8%	13.7%	11.8%	6.1%	9.6%	6.4%	n.a.	n.a.
US\$50m+ clients (as a % of total base)	2.0%	2.3%	n.a.	n.a.	1.3%	1.3%	n.a.	n.a.
<b>Stock Metrics</b>								
P/12-month FEPS	23.7x	25.7x	26.2x	19.8x	19.4x	28.7x	11.5x	17.3x
Change in stock price (yoy)	59%	59%	22%	35%	9%	223%	130%	127%

Source: Company data, ABN AMRO forecasts

Note: Stock price data as on 2 Feb. 2007

The blended realisation was up 1.3% qoq in 3Q07, the highest increase in the past four quarters. However, this was primarily from TCS, which reported a 4.6% qoq improvement. Excluding TCS, it remained flattish – up only 0.6% qoq. All large players, especially TCS, spoke strongly of improved pricing, a 3-5% price increase in renewals and 5-10% increase in new contracts.

### Cues for FY08

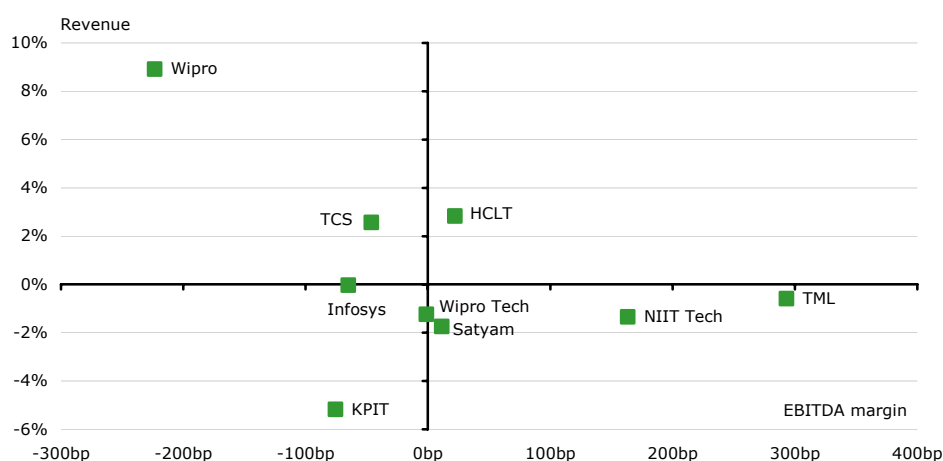
The US\$ revenue growth was in line with or ahead of the CQGR reported over the last four quarters. Each player reported a strong deal pipeline (8-10 US\$50m+ deals). Average realisation growth of 1-2% qoq with a positive view on absolute pricing implies this could be sustained over the next two or three quarters. Client

rationalisation is also at play, again indicative of this increasingly becoming a seller’s market.

Modest margin expansion despite 3.6% rupee appreciation in 3Q07 (which affected margins by 60-200bp across players) suggests flexibility to manage costs effectively. However, growing attrition is a worry. Satyam, HCL Tech and Wipro to a limited extent, have effected restricted stock unit (RSU) grants, while Infosys has announced a deferred payout scheme for its middle and senior management. Other players such as Tech Mahindra are contemplating such schemes to control attrition. Given the 10-15% hikes effected for freshers joining in next year and the likely resultant increase for employees recruited this year (at a lower level) and getting confirmation next year, we expect the effective wage hike to be higher than FY07 across the players.

**We raise our effective wage hike assumption by 50bp for FY08 and FY09 across players**

**Chart 1 : Coverage universe – revenue and margin outperformance – 3Q07**



Source: Company data, ABN AMRO estimates

**Our coverage universe reported 10.4% qoq top-line growth in US\$ terms, in line with our estimates**

**Growth was marginally lower in Rs terms, due to lower-than-estimated effective US\$/Rs rate**

**Top four players had 8.6% qoq growth in billed effort, ahead of 7.6% for our coverage universe, excluding Tech Mahindra (17% qoq volume growth)**

**Table 3 : 3Q07 – Key margin movers for the top4 players**

	Infosys	Wipro	Satyam	TCS
<b>Margin dilutors</b>				
Rupee appreciation	-200bp	-80bp	-110bp	-137bp
Salary increase	-	-180bp	-	-
SG&A leverage	-	-	-104bp	-
Blended realisation	-	-20bp	-	-
Accounting norms	-	-20bp	-	-
<b>Total margin dilution</b>	<b>-200bp</b>	<b>-300bp</b>	<b>-214bp</b>	<b>-137bp</b>
<b>Margin additives</b>				
Blended realisation	80bp	-	-	174bp
Offshore shift	10bp	-	50bp	28bp
Operational efficiency	-	-	170bp	14bp
SG&A leverage	50bp	50bp	-	-
Wage costs (mainly lower provisions)	-	-	200bp	-
Net supply chain advantage	-	160bp	-	-
Improved profitability in acquisitions/BPO	-	20bp	-	-
Product revenue growth	80bp	-	-	-
<b>Total margin addition</b>	<b>220bp</b>	<b>230bp</b>	<b>420bp</b>	<b>216bp</b>
<b>Net expansion/(Dilution) to margins</b>	<b>20bp</b>	<b>-70bp</b>	<b>206bp</b>	<b>79bp</b>

Source: Company data

**Three of the top four players expanded margins despite the 3.8% Rs appreciation during the quarter, contracting margins by an average 132bp**

**Wipro’s margins declined due to the added impact of wage hikes**

**Ability to manage margins through various operating levels (utilisation, pricing, offshoring, SG&A) was impressive**



**Table 4 : Combined client metrics of top four players**

(US\$ m)	1Q06	2Q06	3Q06	4Q06	1Q07	2Q07	Last 4 quarters		
							3Q07	Change	CQGR
<b>Revenue Distribution</b>									
Top10 clients - revenues	521	539	565	606	658	731	795	-	8.9%
Growth	4.2%	3.4%	4.8%	7.3%	8.5%	11.1%	8.7%	-	-
Non Top10 clients - revenues	1,114	1,236	1,355	1,460	1,585	1,760	1,963	-	9.7%
Growth	9.5%	10.9%	9.6%	7.7%	8.5%	11.1%	11.5%	-	-
Total revenues	1,635	1,775	1,920	2,066	2,243	2,491	2,758	-	9.5%
Growth	7.8%	8.5%	8.2%	7.6%	8.5%	11.1%	10.7%	-	-
<b>Revenue run-rate</b>									
Overall	0.84	0.86	0.89	0.95	0.98	1.08	1.17	-	7.1%
Top10 clients	13.02	13.47	14.12	15.15	16.45	18.27	19.87	-	8.9%
non-Top10 clients	0.58	0.61	0.64	0.69	0.71	0.77	0.85	-	7.3%
Difference	12.44	12.86	13.48	14.47	15.74	17.50	19.02	-	9.0%
Share of top10	32%	30%	29%	29%	29%	29%	29%	-61bp	-
Total active clients	1,954	2,071	2,157	2,171	2,287	2,315	2,357	200	2.2%
<b>Growth in client profile</b>									
US\$1m+	712	774	801	848	854	903	961	160	4.7%
US\$5m+	265	280	298	305	336	358	377	79	6.1%
US\$10m+	154	173	183	190	212	228	243	60	7.3%
<b>Share of total</b>									
US\$1m+	36%	37%	37%	39%	37%	39%	41%	364bp	-
US\$5m+	14%	14%	14%	14%	15%	15%	16%	218bp	-
US\$10m+	8%	8%	8%	9%	9%	10%	10%	183bp	-

Source: Company data

**Table 5 : Combined manpower and execution metrics of top four players**

(Numbers)	1Q06	2Q06	3Q06	4Q06	1Q07	2Q07	Last 4 quarters		
							3Q07	Change	CQGR
<b>Manpower base</b>									
<b>Total Manpower</b>									
Closing base	155,626	172,497	188,421	201,213	215,673	239,462	256,338	67,917	8.0%
Net addition	10,774	16,871	15,924	12,792	14,460	23,789	16,876	-	-
Addition- % of opening base	7.4%	10.8%	9.2%	6.8%	7.2%	11.0%	7.0%	-218bp	-
<b>IT services manpower</b>									
Closing base	132,190	148,816	163,000	172,692	186,057	208,050	222,554	59,554	8.1%
Net addition	13,066	16,626	14,184	9,692	13,365	21,993	14,504	-	-
Addition- % of opening base	11.0%	12.6%	9.5%	5.9%	7.7%	11.8%	7.0%	-256bp	-
<b>Delivery manpower (IT services)</b>									
Closing base	119,925	135,695	148,646	157,582	169,832	190,542	203,660	55,014	8.2%
Net addition	10,347	15,770	12,951	8,936	12,250	20,710	13,118	-	-
Addition- % of opening base	9.4%	13.2%	9.5%	6.0%	7.8%	12.2%	6.9%	-266bp	-
Non delivery-% of IT svcs	9.3%	8.8%	8.8%	8.7%	8.7%	8.4%	8.5%	-32bp	-
<b>Recruitment mix (net addition)</b>									
- Laterals	66.2%	25.2%	37.4%	53.9%	46.4%	40.7%	6.6%	-3073bp	-
- Freshers	33.8%	74.8%	62.6%	46.1%	53.6%	59.3%	5.6%	-5701bp	-
<b>Execution metrics</b>									
Average attrition	11.9%	12.0%	12.7%	14.1%	14.8%	14.9%	14.5%	181bp	-
Average utilization	76.0%	76.6%	76.2%	76.5%	76.9%	76.2%	74.7%	-152bp	-
<b>BPO services (does not include TCS)</b>									
	19,981	19,945	21,733	24,873	25,956	27,577	30,039	8,306	8.4%
Net addition	-1,025	-36	1,788	3,140	1,083	1,621	2,462	-	-
Addition- % of opening base	-4.9%	-0.2%	9.0%	14.4%	4.4%	6.2%	8.9%	-4bp	-

Source: Company data

We saw secular growth in top 10 client revenues in the last four quarters, unlike the historical trend where non-top-10 grew faster; this indicates growing offshore penetration in non-traditional services

Faster growth in the client base with 5m+ and 10m+ revenues: CQGR of 6.1% and 7.3% vs 2.2% for total client base; we believe this reflects client rationalisation among top three players

Deal pipeline traction – at least 10 US\$50m+ deals (including one US\$ 200m+, two US\$100m+ and three US\$70m+) for top five players in 3Q vs eight US\$50m+ multi-year deal wins in FY06

All large players indicated a pipeline of around 10 US\$50m+ deals

Top four players added 7% this quarter to their period opening base (27% ytd); at this level, they are in line to match the 39% addition in FY06

Importantly, even mid caps added a healthy 8.4% to their opening 3Q base

Mixed trends in attrition was seen among big players – while Wipro and Satyam reported a qoq decline, TCS and Infosys reported increases

Tier-2 companies, HCL Tech and Tech Mahindra, reported a significant pick up in attrition, at 1.2-1.3%



**Table 6 : Peer comparison**

	Infosys	TCS	Wipro	Satyam	HCL T	Tech Mah	Mphasis	NIIT Tech	Polaris	iGate	Info. E.	KPIT	Geometric
<b>Financial matrices</b>													
Revenue (Rs m)	36,550	48,605	28,873	16,611	14,651	7,698	3,060	2,315	2,740	2,107	1,430	1,171	1,067
Share of IT services (%) (E)	90.8%	93.9%	91.8%	96.0%	73.3%	100.0%	71.4%	93.9%	78.3%	89.5%	100.0%	100.0%	90.3%
IT services revenue (\$ m) (E)	745.5	1,030.8	587.5	358.0	242.7	170.5	49.0	48.2	47.0	42.1	31.4	26.0	21.5
QoQ change (%) (E)	8.9%	11.7%	8.9%	7.7%	9.2%	13.4%	10.2%	7.4%	6.4%	8.5%	9.7%	4.0%	43.2%
Gross margin	47.0%	47.0%	36.8%	41.7%	37.8%	41.2%	30.6%	n.a.	38.1%	31.2%	33.6%	37.3%	30.9%
EBITDA margin	32.7%	28.3%	27.8%	24.7%	22.1%	26.9%	13.9%	21.2%	17.3%	12.7%	22.6%	15.2%	15.9%
QoQ change (bps) (E)	59bp	87bp	-26bp	205bp	46bp	156bp	269bp	234bp	-60bp	276bp	95bp	-44bp	-290bp
PAT (Rs m)	9,830	11,047	7,450	3,372	2,863	1,667	357	351	279	160	188	137	105
Latest Cash position (\$m)	415	221	940	825	403	40	26	42	20	14	n.a.	14	n.a.
EPS (TTM)	61.0	38.4	18.6	19.8	29.7	45.1	6.8	26.5	8.0	10.2	16.5	31.6	6.5
<b>Client matrices</b>													
Share of top client (%)	6.9%	5.7%	3.5%	6.3%	n.a.	65.0%	12.0%	n.a.	11.4%	29.5%	n.a.	40.0%	n.a.
Revenues from top client - QoQ change (%)	15.1%	32.0%	5.9%	1.9%	n.a.	15.1%	1.7%	n.a.	3.4%	8.8%	n.a.	-1.0%	n.a.
New client added	43	55	37	34	23	n.a.	n.a.	5	18	5	8	4	14
Qtrly. revenue per active client (\$ m)	1.68	1.31	0.99	0.68	1.44	2.19	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
<b>Execution matrices</b>													
Share of offshore effort (%)	67.3%	n.a.	68.3%	70.1%	73.4%	26.4%	75.8%	58.9%	70.5%	79.2%	n.a.	77.4%	78.9%
Utilization - offshore (%)	76.4%	78.2%	67.0%	77.6%	74.6%	n.a.	75.0%	74.6%	74.5%	68.0%	n.a.	69.8%	84.0%
Total business volume (person-months) (E)	107,679	n.a.	88,825	66,961	46,231	31,639	9,914	7,291	14,329	11,295	9,850	5,742	5,282
QoQ change (%) (E)	7.4%	7.9%	9.3%	9.0%	7.0%	17.0%	13.8%	5.3%	3.5%	4.3%	7.2%	4.8%	27.6%
Billing rate - Onsite (\$/hr)	65.1	n.a.	62.6	56.5	57.3	46.4	67.0	57.9	59.8	62.1	n.a.	57.4	44.6
QoQ change (%) (E)	1.9%	n.a.	-0.4%	0.4%	1.7%	-1.7%	1.5%	-2.2%	0.4%	1.0%	n.a.	0.3%	-9.6%
Billing rate - Offshore (\$/hr)	26.9	n.a.	23.8	23.1	19.9	25.0	22.0	18.6	19.3	19.6	n.a.	16.5	15.9
QoQ change (%) (E)	1.7%	n.a.	-0.4%	0.1%	3.3%	-4.9%	4.8%	5.7%	0.1%	1.6%	n.a.	1.3%	3.0%
Billing rate - Blended (\$/hr)	39.3	37.1	36.2	29.1	29.8	30.6	28.1	34.7	23.8	28.5	18.1	25.7	23.1
QoQ change (%) (E)	1.4%	2.6%	0.1%	-0.8%	2.1%	-3.1%	-3.2%	0.9%	5.5%	1.0%	2.4%	-0.7%	16.1%
<b>Manpower matrices</b>													
Total manpower (nos)	69,432	83,500	66,176	37,230	38,317	17,774	4,389	4,199	8,408	5,821	4,943	3,119	2,431
Net addition (nos)	3,282	5,472	4,997	3,125	1,865	2,694	301	51	569	301	409	310	670
As % of base (beginning of quarter)	5.0%	7.0%	8.2%	9.2%	5.1%	17.9%	7.4%	1.2%	7.3%	5.5%	9.0%	11.0%	38.0%
Net addition - LQ (nos)	7,741	6,838	4,744	4,466	3,826	2,714	418	300	755	138	460	265	237
As % of base (beginning of quarter)	13.3%	9.6%	8.4%	15.1%	11.7%	21.9%	11.4%	7.8%	10.7%	2.6%	11.3%	10.4%	15.6%
Employee attrition - IT services (%)	13.5%	10.8%	16.0%	17.6%	17.8%	22.0%	17.0%	n.a.	14.4%	n.a.	14.0%	n.a.	20.4%
<b>Stock matrices Feb 2<sup>nd</sup>, 2007)</b>													
P/E (FY07F)*	33.2	30.3	32.7	23.0	19.1	34.8	36.6	13.3	20.0	24.0	21.9	20.0	19.4
P/E (FY08F)*	24.7	22.7	25.3	19.3	16.0	24.8	25.0	11.2	16.3	13.0	16.2	15.5	12.6
PEG	0.96	0.91	1.12	1.18	0.99	0.86	0.79	0.70	0.88	0.28	0.62	0.69	0.36
Free float (%)	63.7	17.5	17.8	71.2	31.0	12.5	48.9	59.9	72.1	18.2	71.3	74.0	71.8
Average daily volume (000 shs)	241.95	349.48	210.32	721.37	164.67	846.91	384.60	181.57	599.10	33.55	70.28	310.38	165.14

Source: Company data, (E) ABN AMRO estimates, Bloomberg

Notes:

- Infosys' execution metrics are for consolidated IT services business.
- Share of IT services in TCS refers to revenues excluding CMC. It includes revenues from BPO operations. All execution metrics for TCS are as indicated by management
- For Wipro all metrics are for Global IT business except for PAT, EPS and latest cash position is for consolidated business
- Satyam figures are for the consolidated entity.
- Utilisation figures are for overall including trainees, except for TCS, Infosys and Wipro Tech (overall ex trainees), and Satyam (offshore ex trainees)
- Financials in US\$ terms for companies are estimated for KPIT Cummins, NIIT Tech and Mphasis, Polaris and Infotech Enterprises
- Pricing data is based on the closing price as on 2 Feb 2007 on the BSE
- \*PE is based on IBES consensus estimates for FY07/08 EPS for Mphasis, Polaris, iGate, Infotech and Geometric, rest are based on ABN AMRO estimates
- KPIT Cummins PE estimates are pre-amortisation.

# On a roll

**We raise our revenue CAGR to 32.5% over 2006-10. On the supply side, our survey of engineering colleges indicates quality resources are available to meet our demand projections, but mid-tiers are getting marginalised.**

## We raise our industry CAGR to 32.5% for 2006-10F

We raise our industry revenue CAGR to 32.5% over 2006-10F from our earlier estimate of 30.4% over 2005-09F on strong demand trends for offshore. IDC estimates global offshore IT services spend at US\$15.4bn for 2006 and projects a 17.5% CAGR (vs 14% CAGR earlier) to US\$29.4bn through 2010, vs 5.4% for overall IT services. Nasscom's provisional number for export revenue of US\$31.3bn from IT and BPO services is also marginally ahead of our estimate. Furthermore, the uptick in large deal wins for the larger players – at least 15 US\$50m+ deal wins in 9M07 – increases our confidence. We expect the trend to be sustained, as players expand into areas that have seen little offshoring traditionally (such as consulting, IT infrastructure management, testing and IT outsourcing). Even on our conservative assumptions for India's market share in emerging services (up from 1% in 2006 to 3.2% by 2010F) and for core application development and maintenance services (30% CAGR vs 36% yoy growth in 2006), we estimate Indian IT services will grow 32.5% over 2006-10, comparable with the 32% growth achieved in 2001-05.

**Table 7 : Indian IT services exports: addressable market and share**

US\$ billion	2003	2004	2005	2006F	2007F	2008F	2009F	2010F	CAGR (%)	
									2003-06	2006-10F
<b>WW IT services market</b>										
<b>Core services</b>										
Application management	14.8	18.1	20.4	22.5	24.7	27.0	29.6	32.2	15.0%	9.4%
Custom appln. development	20.1	22.1	23.5	24.4	25.5	26.6	27.9	29.3	6.7%	4.6%
<b>Total core markets</b>	<b>34.9</b>	<b>40.2</b>	<b>43.9</b>	<b>46.9</b>	<b>50.1</b>	<b>53.6</b>	<b>57.4</b>	<b>61.5</b>	<b>10.4%</b>	<b>7.0%</b>
<b>Emerging markets</b>										
Network consulting and integration	22.2	24.2	28.5	30.7	33.3	36.2	39.3	42.3	11.4%	8.4%
Infrastructure outsourcing	152.0	165.3	172.4	180.6	188.9	197.4	205.8	214.3	5.9%	4.4%
IT consulting	21.6	23.1	24.0	25.1	26.4	27.8	29.4	29.4	5.1%	4.0%
System integration	67.2	72.0	74.8	78.3	82.1	86.2	90.4	90.4	5.2%	3.6%
Support & training	69.9	75.3	78.4	82.9	87.7	92.6	97.5	102.2	5.8%	5.4%
<b>Total emerging markets</b>	<b>332.9</b>	<b>359.9</b>	<b>378.0</b>	<b>397.6</b>	<b>418.3</b>	<b>440.1</b>	<b>462.2</b>	<b>478.6</b>	<b>6.1%</b>	<b>4.7%</b>
<b>Total addressable market</b>	<b>367.8</b>	<b>400.1</b>	<b>421.9</b>	<b>444.5</b>	<b>468.4</b>	<b>493.7</b>	<b>519.7</b>	<b>540.1</b>	<b>6.5%</b>	<b>5.0%</b>
<b>Indian IT services exports</b>										
IT services exports	7.3	10.0	13.2	17.7	23.9	31.7	42.0	55.7	34.6%	33.2%
<b>India's market share</b>										
- Core markets	17.1%	19.1%	23.6%	30.0%	36.5%	44.3%	53.8%	65.3%	-	-
- Emerging markets	0.4%	0.6%	0.8%	0.9%	1.3%	1.8%	2.4%	3.2%	-	-
Engg. and R&D services exports	2.5	3.1	4.0	4.9	6.1	7.7	9.6	12.0	25.1%	25.0%
BPO services exports	3.1	4.6	6.3	8.3	11.2	15.1	20.4	27.6	38.9%	35.0%
<b>TOTAL IT &amp; BPO SERVICES EXPORTS</b>	<b>12.9</b>	<b>17.7</b>	<b>23.5</b>	<b>30.9</b>	<b>41.3</b>	<b>54.5</b>	<b>72.0</b>	<b>95.2</b>	<b>33.9%</b>	<b>32.5%</b>

Source: IDC, Nasscom, ABN AMRO estimates

Note: India's market share is based on revenues in the corresponding financial year (eg. 2004-05 for 2004)

## Strong volume growth prospects for the medium term

We believe the strong volume momentum seen by top-tier Indian IT services over the last seven quarters will be sustained over the medium term. We see this coming from increasing client penetration (as services portfolio grows) and larger deals wins. Indirect indicators, such as headcount addition, support this view. The top four players have added 23-32% in 9M07, after 27-43% increases to their base in FY06. The campus offers made for FY08 recruits at 13,000+ each for Infosys and TCS are in

line with the FY07 numbers. Furthermore, hiring has not been all anticipatory – 40% of hiring is need-based (lateral and off-campus), indicating a strong business pipeline, in our view. We have built in about 25% net addition to base each year over FY07-09 across the top three players.

### Entering the big league

We believe Indian companies have developed to the stage where they are now being seriously considered for US\$150m+ multi-year IT outsourcing deals, which have traditionally gone to global system integrators such as EDS, IBM Global Services and CSC. (The average deal size for Indian vendors is usually less than US\$50m.) These deals typically include services such as IT infrastructure (desktop and server) management, data-centre management, helpdesk services and application development and maintenance services. They also involve re-badging of resources (ie, transfer of employees from the client’s IT department to the vendor).

### Offshore players are gaining as clients re-evaluate outsourcing options

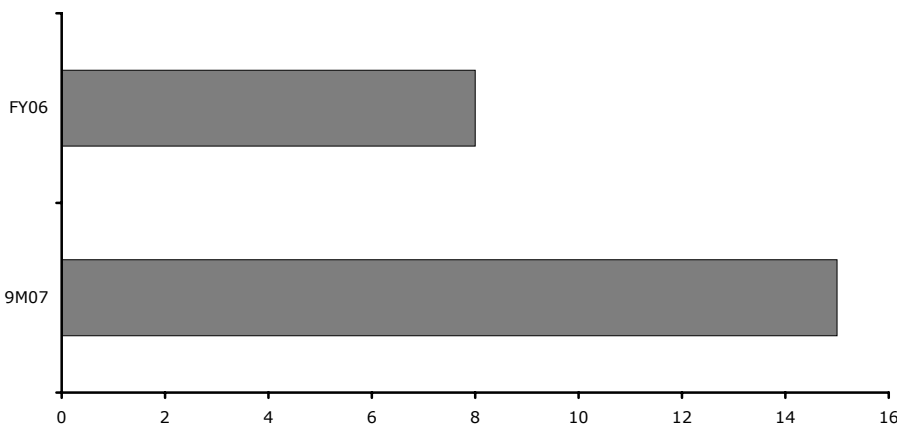
The trend of multi-vendor deals is catching on, in our view, with a growing number of clients switching from a total outsourcing model (where the entire/bulk of non-discretionary IT services is handed over to a single system integrator such as EDS, IBM GS or CSC) to a blended outsourcing model (where the internal IT department hands out parts of the requirement to multiple vendors selectively). At least eight multi-vendor deals with a total value of over US\$21bn have been announced in the past two years.

We believe there is also growing realisation among clients that large all-inclusive deals have not achieved the expected cost savings or operational efficiency. Furthermore, typical contracts by global system integrators have a high degree of rigidity and lock-ins with severe termination penalties. We expect this to feed a trend towards smaller outsourcing agreements with specific business goals. The recent results at IBM GS and EDS indicate a shrinking of deal sizes and durations. As such, the pipeline for the two vendors has been shrinking in value terms. We expect Indian offshore players to be the beneficiaries of this trend.

Over the last seven quarters, the top five Indian IT companies announced a total of at least 23 multi-year deal wins of at least US\$50m each. Our talks with various players reveal a pipeline of about 8-10 additional deals are likely to be finalised over the next four quarters.

**Our earlier analysis had revealed a potential pipeline of at least 11 multi-year deals, with a total size at around US\$35bn (read our report, *Myths vs realities*, published May 2006)**

**Chart 2 : Large deal (50m+) announcements by top five players**



**According to TPI, the big six global IT companies maintained a 48% share of top 100 commercial contracts in 2006...**

**... while Indian companies' share increased to 6%, from 5% in 2005**

Source: Companies' data, ABN AMRO

**Table 8 : Large outsourcing deals: quick analysis**

	2004	2005	2006
Total contract value (US\$bn)	87.6	84.9	77.9
Total no of contracts	312	341	350
Average contract size (US\$bn)	0.28	0.25	0.22
<b>Mega contracts (value &gt;US\$1B)</b>			
Total contract value (US\$bn)	36.7	28.6	23.8
Total no of contracts	22	19	16
Average contract size (US\$bn)	1.67	1.51	1.49
<b>Restructured contracts (value &gt;US\$50m)</b>			
Total contract value (US\$bn)	17.1	22.2	20.2
- Share of total contracts (value terms)	20%	26%	26%
Total no of contracts	53	68	72
- Share of total contracts (value terms)	17%	20%	21%
Average contract size (US\$bn)	0.32	0.33	0.28
<b>Player-wise distribution - Total contract value (value&gt;US\$50m)</b>			
Top six US players	45%	45%	46%
Top five European players	22%	20%	13%
Indian players	1%	4%	7%
Others	33%	31%	35%
<b>Player-wise distribution - No of contracts (value&gt;US\$50m)</b>			
Top six US players	46%	44%	37%
Top five European players	13%	13%	13%
Indian players	2%	8%	11%
Others	39%	35%	39%
Multi-sourcing deals - share of total deals	23%	n.a.	n.a.

Source: TPI

# Myths vs realities

**Our analysis – and the 3Q07 results – underline our belief that fears of large deals affecting margins are unwarranted. Second, we remain cautious on realisation growth despite industry reports of improved pricing.**

## Large deals do not necessarily mean lower margins

Our analysis indicates that our initial fear that large deals generate low margins is unfounded. While billing rates for large-size deals are lower than the corporate average, operating leverages are higher. For instance, utilisation is high (typically 90%, and as high as 95% for offshore), given the strong visibility on skill and headcount requirements. Similarly, we estimate the offshore delivery component is higher at 70%, going as high as 80% in the steady state (with the project at full ramp up). In addition, average manpower expenses are relatively low, given the broader staffing model. Even assuming a rapid acquisition of such large deals, we believe EBITDA margins for these deals will be broadly in line with those in the generic IT services business. However, the timelines of breakeven may vary depending on the specific deal structure.

**We estimate a change in project staffing mix to 1:3:6 from 1:3:5 could have a one-time 75bp impact on project's EBITDA margins**

**Table 9 : Large deals - economics**

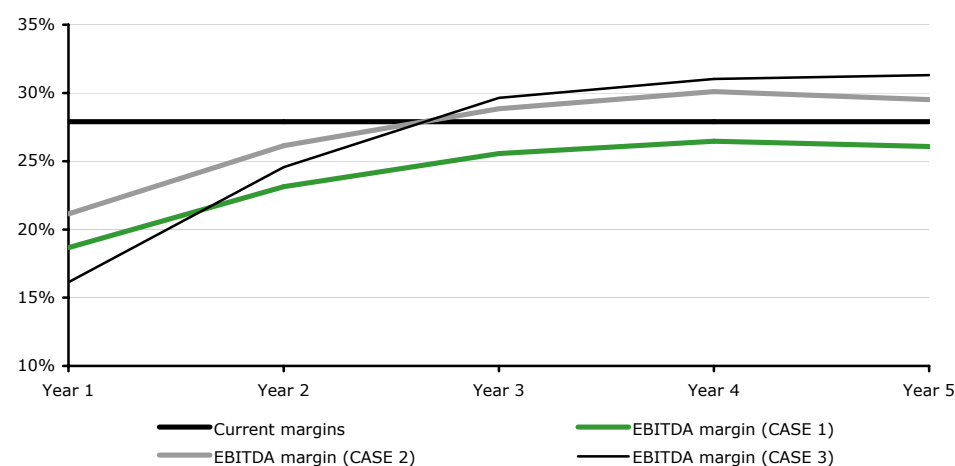
	Generics business			Large deals		
	Year 1	Year 2	Year 3	Year 1	Year 2	Year 3
Revenue share	97%	92%	84%	3%	8%	16%
<b>Key operating parameters</b>						
Utilization - onsite	95%	95%	95%	95%	95%	95%
Utilization - offshore	66%	67%	68%	90%	90%	90%
Effort share - onsite	42%	42%	42%	30%	30%	30%
Effort share - offshore	58%	58%	59%	70%	70%	70%
Blended realisation (discount to corp. avg.)	0%	0%	0%	-25%	-24%	-23%
<b>Key financial parameters</b>						
Cost of revenues - as % of revenues						
Manpower costs	46%	47%	47%	46%	46%	47%
Other direct costs	8%	8%	8%	8%	8%	8%
Gross margins	46%	45%	45%	46%	46%	45%
Operating costs as % of revenues	19%	19%	18%	19%	19%	18%
<b>EBITDA margins</b>	<b>27%</b>	<b>27%</b>	<b>27%</b>	<b>27%</b>	<b>27%</b>	<b>27%</b>

Source: ABN AMRO estimates

**By definition, these deals should have a higher offshore mix, given the client's main objective to save costs**

**As staffing pyramid broadens over the deal duration, the effective annual wage hike is lower than corporate average**

**Chart 3 : EBITDA margin movement under various large deal scenarios**



Source: ABN AMRO estimates

**Case 1: building constant realisation over deal duration, but with flexibility to vendor on operating parameter (offshoring/ staffing profile)**

**Case 2: allowing annual increase in realisation, but with limited flexibility on operating parameters**

**Case 3: building in takeover of onsite staff**

## Higher MSA pricing does not necessarily mean higher realisations

Despite the reports of improving pricing across players, we believe average blended realisation growth will be muted. Our cautious view is based on factors such as: 1) the frequency of MSA renewals, as typically they are for a three-year period; thus, only one-third of MSAs on average come for renewal each year; 2) new clients coming in at higher price points only for pilot projects, and generally negotiating for lower rates on ramp ups; 3) increasing trend, especially among large clients (with a relationship size of US\$20m+ pa), of hiring outsourcing consultants (such as TPI) for MSA negotiations even in non-transaction-based contracts; and 4) faster growth in services such as infrastructure management and independent-application testing that typically have lower rates. A change in average blended realisation depends on 10 different variables at least and thus there could be a qoq/yoy decline in average blended realisation despite a 5% increase in pricing in MSA renewals (refer to illustration in Table 10).

**Larger players have maintained their view of MSA renewals at 3-5% higher price points and the entry of new clients at 7-10% higher price points than current levels since the last three quarters**

We have thus built in a 2-3% CAGR in average blended realisation for the top three companies over FY07-09. For the rest, we have been more conservative, forecasting -1% to +1% CAGR over FY07-09, given their limitations on the various factors outlined.

We attempt to illustrate the interplay of some factors in the example below. We assume MSA rates will increase 3% for onsite and 5% for offshore across all levels for two technology platforms and also assume no change in the rates for platform A. In the example, while the client agrees for higher rates, he now wants more offshoring; hence, the blended realisation shows a decline of 0.3%.

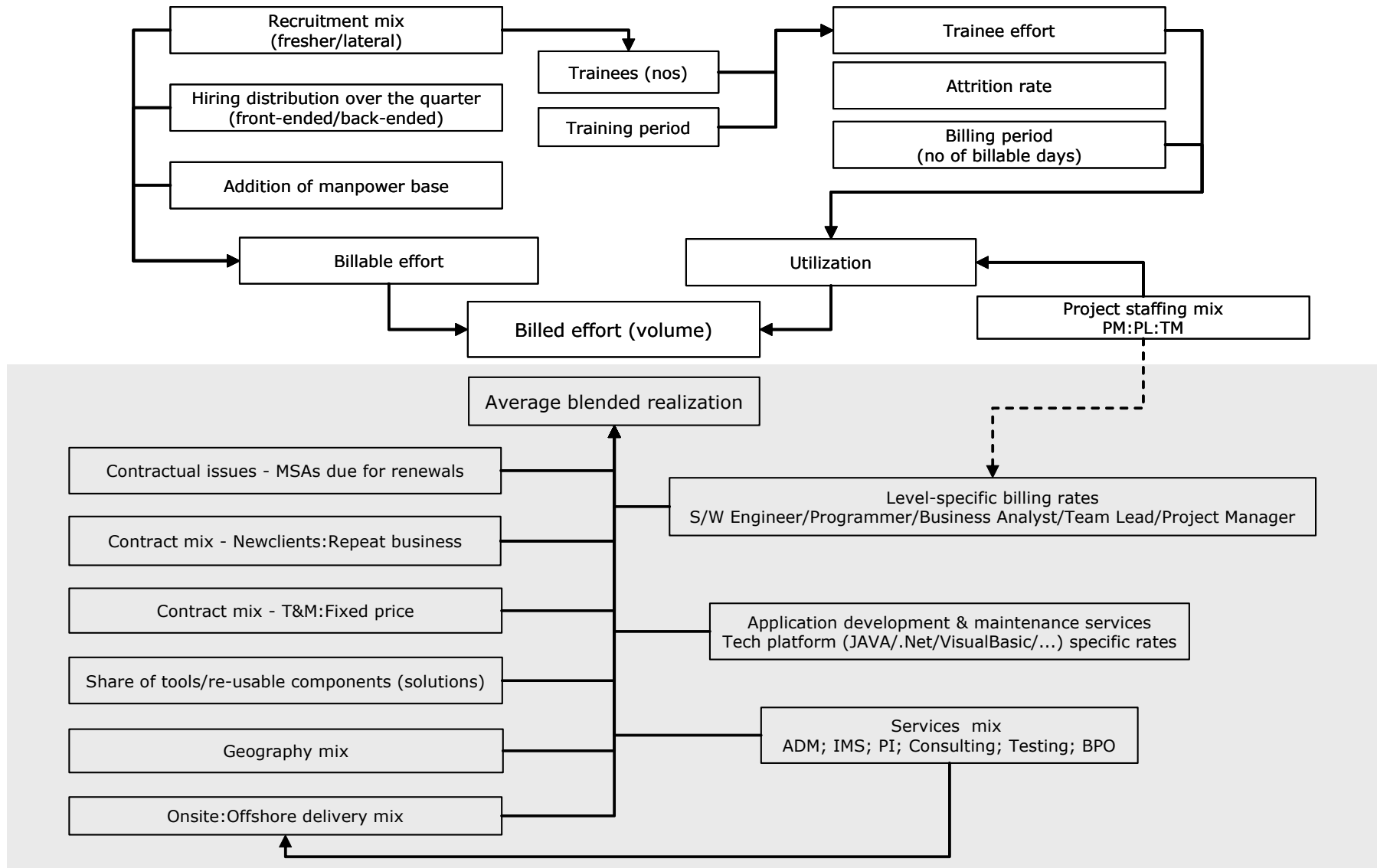
A further complication arises with the introduction of service rates (we assume only development services) and the mix of T&M (time and material) and fixed-price contracts. Also, the share of contracts coming for renewals in a particular period; the number of new clients ramping up (and negotiating for volume discount) will also impact the realisation movement.

**Table 10 : Illustration: How a 3-5% increase in MSA pricing may not affect the average blended realisation**

Rate card (US\$/hour)	Existing MSA						Revised MSA					
	Onsite			Offshore			Onsite			Offshore		
	Tech A	Tech B	Tech C	Tech A	Tech B	Tech C	Tech A	Tech B	Tech C	Tech A	Tech B	Tech C
Software engineer	35.0	38.0	40.0	15.0	16.0	17.0	35.0	39.1	41.2	15.0	16.8	17.9
Project lead	39.0	42.0	44.0	17.0	18.0	19.0	39.0	43.3	45.3	17.0	18.9	20.0
Project manager	43.0	46.0	48.0	19.0	20.0	21.0	43.0	47.4	49.4	19.0	21.0	22.1
<b>Project staffing mix</b>	<b>Onsite</b>			<b>Offshore</b>			<b>Onsite</b>			<b>Offshore</b>		
TOTAL	60.0%	30.0%	10.0%	50.0%	30.0%	20.0%	63.5%	27.5%	9.0%	46.5%	32.5%	21.0%
Software engineer	58%	50%	42%	71%	70%	64%	58%	51%	44%	71%	69%	66%
Project lead	30%	35%	40%	26%	25%	30%	30%	35%	40%	26%	26%	28%
Project manager	12%	15%	18%	3%	5%	6%	12%	14%	16%	3%	5%	6%
Total billed manpower	50,000						50,000					
Manpower distribution	70%			30%			68%			32%		
<b>Average billed manpower</b>	<b>Onsite</b>			<b>Offshore</b>			<b>Onsite</b>			<b>Offshore</b>		
Software engineer	12,180	5,250	1,470	5,325	3,150	1,920	12,522	4,769	1,346	5,282	3,588	2,218
Project lead	6,300	3,675	1,400	1,950	1,125	900	6,477	3,273	1,224	1,934	1,352	941
Project manager	2,520	1,575	630	225	225	180	2,591	1,309	490	223	260	202
<b>Revenues (US\$ m)</b>	<b>Onsite</b>			<b>Offshore</b>			<b>Onsite</b>			<b>Offshore</b>		
Software engineer	225	105	31	42	27	17	231	99	29	42	32	21
Project lead	130	81	33	18	11	9	133	75	29	17	13	10
Project manager	57	38	16	2	2	2	59	33	13	2	3	2
<b>Total billed effort (person-hours), in m</b>	<b>26</b>						<b>26</b>					
<b>Total revenues (US\$ m)</b>	<b>847</b>						<b>844</b>					
<b>Blended realisation (US\$/hour)</b>	<b>32.1</b>						<b>32.0</b>					
<b>Effective change in blended realisation</b>							<b>-0.3%</b>					

Source: ABN AMRO estimates

**Chart 4 : Factors driving change in average realisation and billed effort**



Source: ABN AMRO



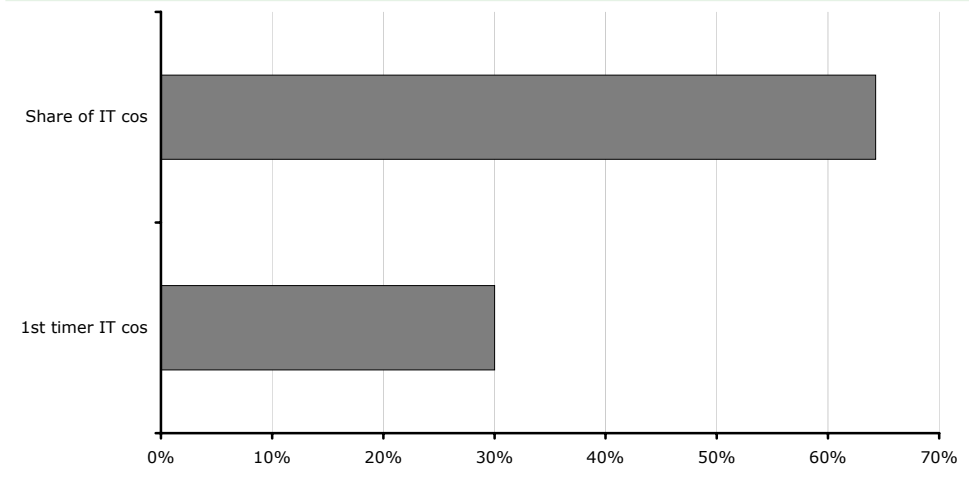
# Supply-side story

**Our survey of 150 engineering colleges indicate that supply is there to meet resource demand. But, with global companies increasing their fresher intake, we expect fresher salaries to now see annual hikes, unlike the past.**

## Survey highlights: on-the-ground realities

Initial findings of our survey of top 150 engineering colleges in India showed several interesting ground-level realities.

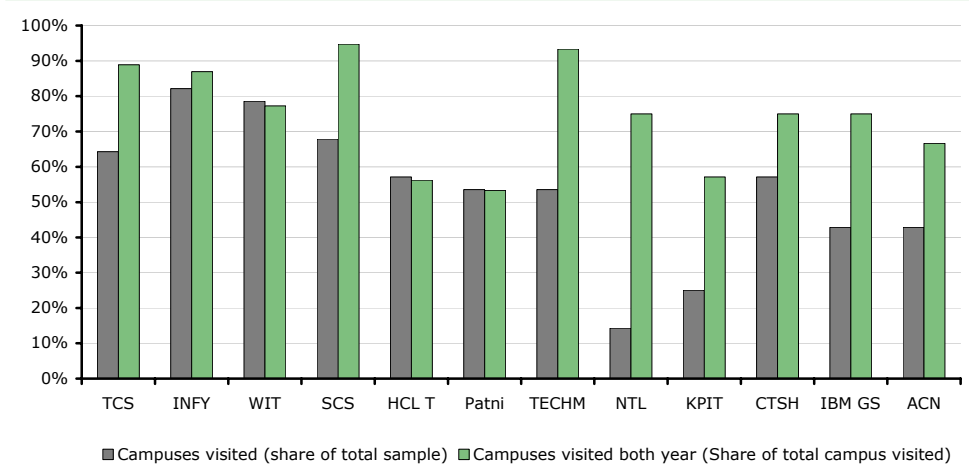
**Chart 5 : Share of IT companies among campus recruiters**



Source: ABN AMRO survey/ sample size:30 engineering colleges  
 Share of IT companies is expressed as a percentage of total companies recruiting from campuses  
 Share of 1<sup>st</sup> timer IT companies is expressed as a percentage of total number of IT companies recruiting from campuses

**Our inference:** The IT companies continue to dominate campus recruitments in engineering colleges. A significant share of first timers indicates the entry of new players looking to leverage fresher intake to reduce costs and traditional players spreading out to a higher number of colleges.

**Chart 6 : Campus visits by IT companies**

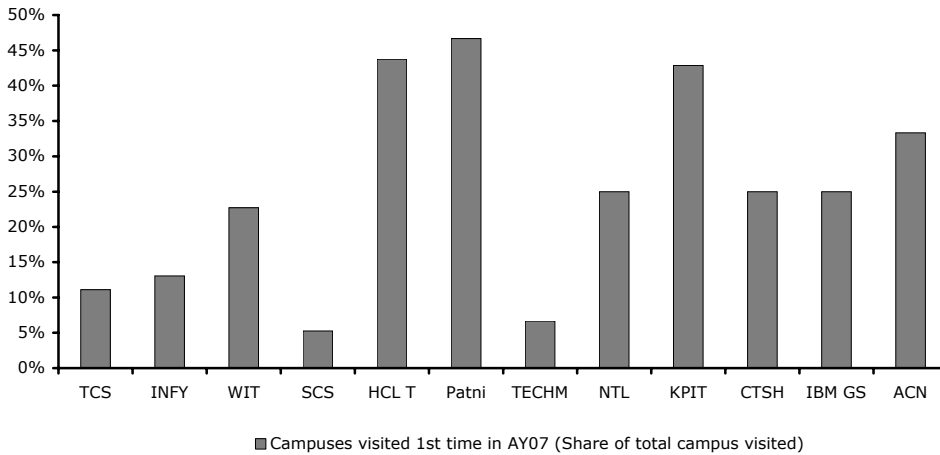


Source: ABN AMRO survey; sample size:30 engineering colleges

**Our inference:** The initial findings corroborate the dominance of top three players in campus recruitments. We see clear evidence of HCL Tech and Patni’s intention of leveraging the employee pyramid to manage margins. (Note the high share of first-time visits by these two players in Chart 7.) This should be positive for the margins of

both the players, with a traditionally concentrated employee mix. The modest presence of global players surprises us.

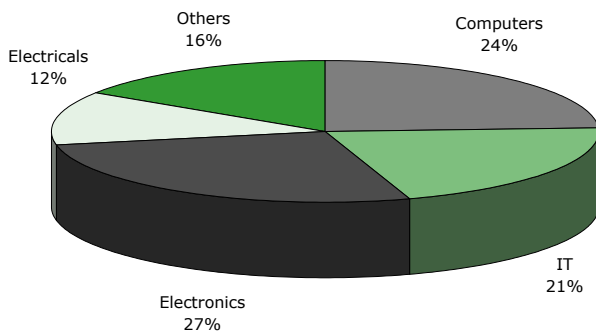
**Chart 7 : First-time campus visits by IT companies**



Source: ABN AMRO survey; sample size:30 engineering colleges

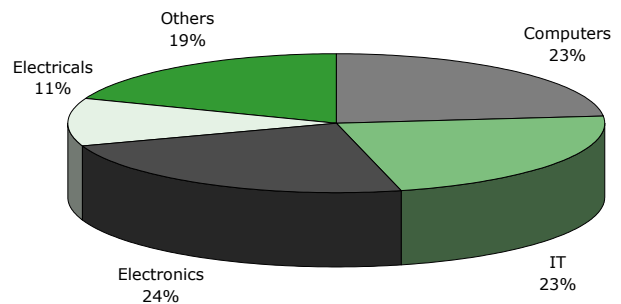
**Our inference:** A high share of first-time campus visits by MNC players could indicate toughening times ahead, given their aggressive headcount plans. For instance, Accenture has announced plans to increase India headcount to 35,000 by August 2007, from 27,000 as of January 2007.

**Chart 8 : Recruitment profile, academic year 2007**



Source: ABN AMRO survey; sample size:30 engineering colleges

**Chart 9 : Recruitment profile, academic year 2006**



Source: ABN AMRO survey; sample size:30 engineering colleges

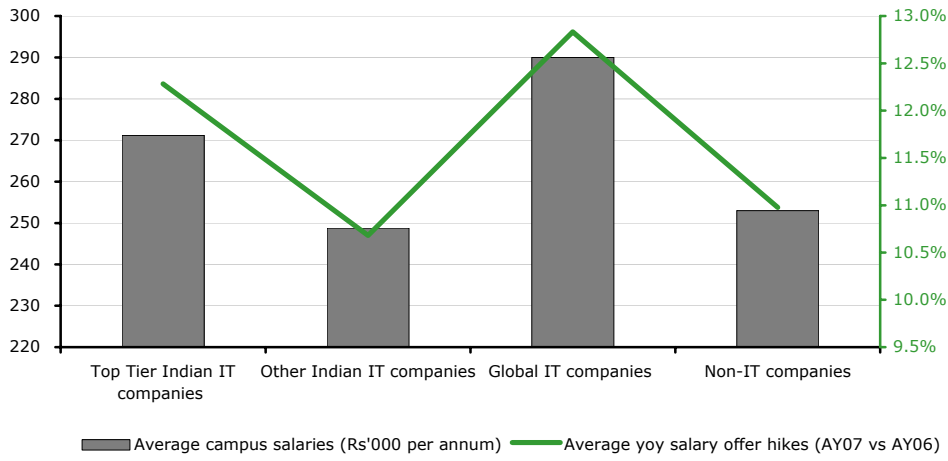
**Our inference:** The recruitment of engineers from non-IT compatible branches indicates the generic skill requirements, though the share has come down by 3% from 2006. We attribute this to the increased seats for IT-related branches.

**Table 11 : Trend in campus salaries**

(Rs 000/annum)	Campus salary offer			Yoy hikes (2007/2006)		
	High	Low	Avg	High	Low	Avg
Top tier Indian IT companies	300+	200-250	271	15%+	5%-	12.30%
Other Indian IT companies	300+	200-	249	15%+	5%-	10.70%
Global IT companies	300+	200-250	290	15%+	10%-15%	12.80%
Non-IT companies	300+	200-	253	15%+	5%-	11.00%

Source: ABN AMRO survey; sample size:30 engineering colleges

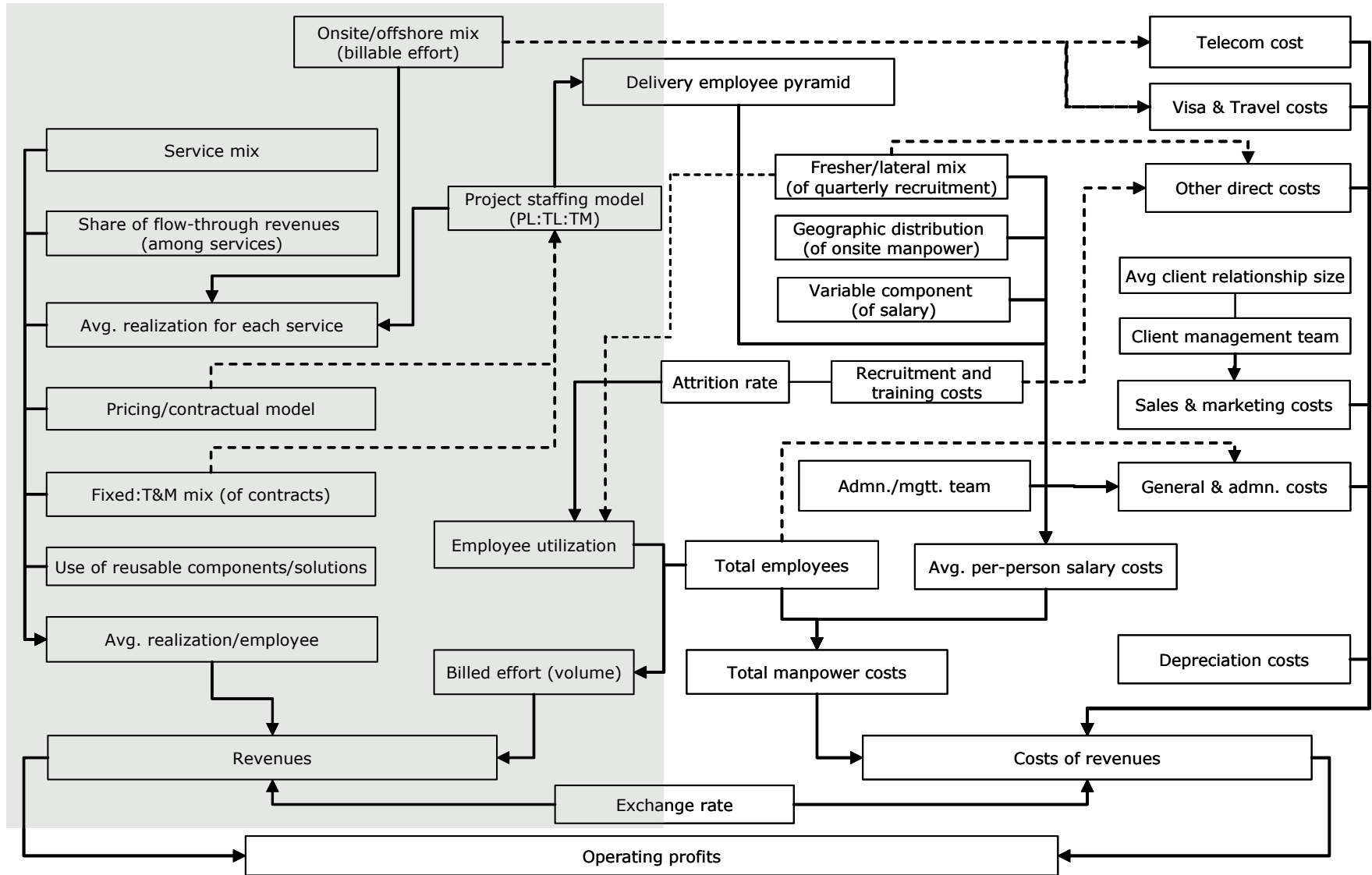
**Chart 10 : Trends in campus salaries**



Source: ABN AMRO survey

**Our inference:** The data on campus salaries are in line with those reported by companies. Average salaries by global companies are 7% higher than top-tier Indian IT companies and over 17% to other IT companies. The 2006 campus salary hikes are also in line with the reported numbers. However, average hikes by global players are marginally higher than by tier-1 Indian companies.

**Chart 11 : Operating and financial dynamics for an IT services player - Factors driving volume and realisation**



Source: ABN AMRO

## Investment themes for 2007

**Even as demand remains buoyant, we see growing polarisation. Scale levers should help larger players to manage margins. We expect consolidation to pick up among mid/small tiers as global players scale up their offshore capacities.**

### Theme#1: Stay safe, get richer

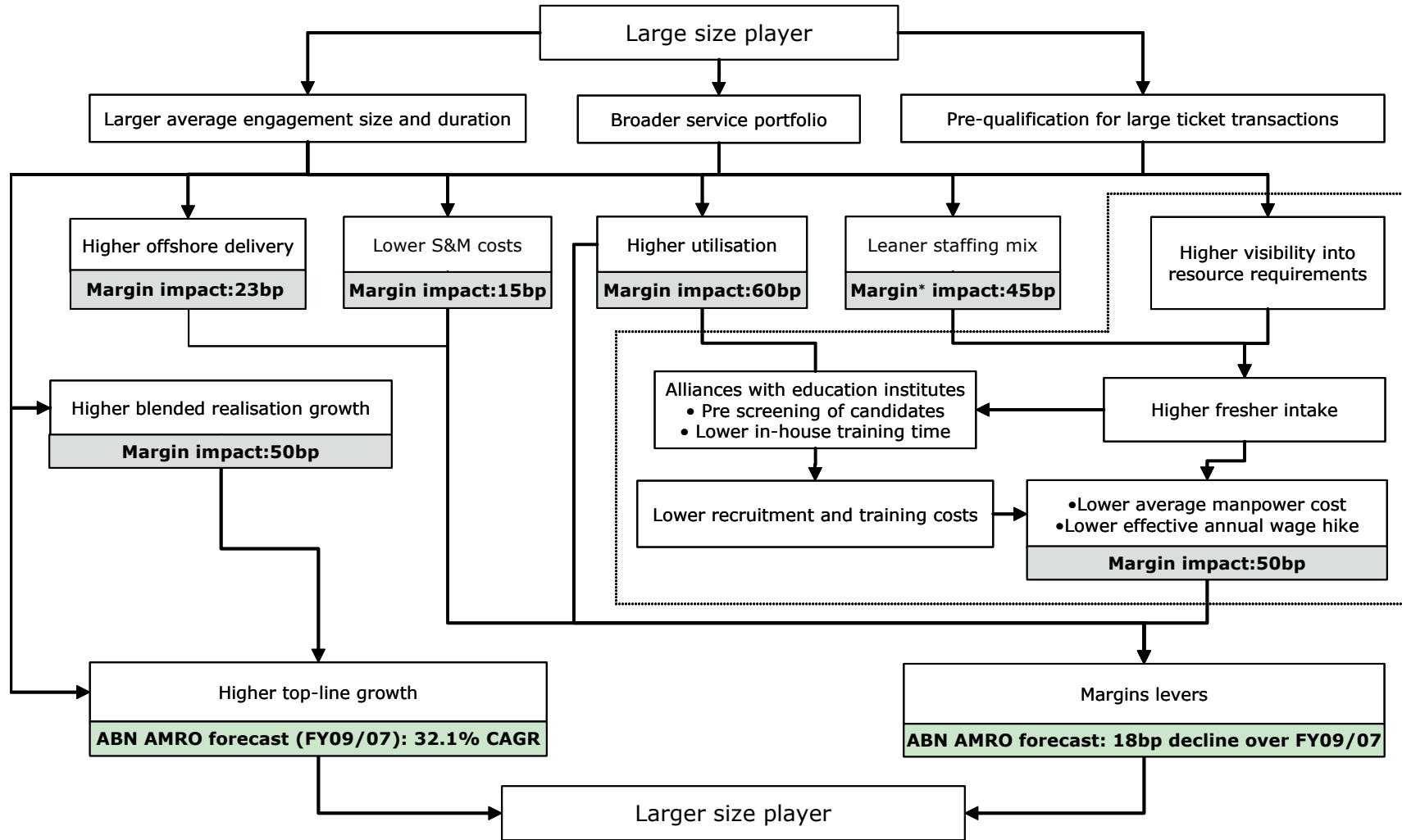
We expect the outperformance of tier-1 players to continue, from both a business and stock perspective. As discussed earlier, scale is becoming a critical differentiator in the Indian IT services sector for top-line growth and for margin management (Chart 11).

We anticipate higher realisation growth for tier-1 players than for industry, as deal momentum remains strong and given their wider services portfolio. Furthermore, while big-ticket deals should be positive for sentiment, we believe growth (at least over the next two years) will be driven by increased client mining as offshoring expands to newer services. The directional trends seem to support this. The number of US\$10m-plus clients across the top four players increased 28% in FY06, indicating a steady ramp up, while the share of the top 10 clients declined from 33% to 29%, implying reduced client-dependency. Importantly, mining of new clients has improved: revenue from the non-top-10 clients for the top four vendors grew 44% yoy in FY06 and by 43% in 9M07 over 9M06. We also see client rationalisation at play, especially at TCS and Infosys, which should boost average realisation (and thereby margins).

More importantly, we believe scale is emerging as a critical differentiator in cost management. We see two key scale levers: staffing mix and utilisation, besides managing the effective wage hike by broadening the employee-pyramid at the base.

With the changing profile of projects for the larger players – the average project team size has increased to about 200 from 50-60 two years back, while the average duration has increased to over 18 months from 10-12 months earlier. We expect a concurrent change in the project management structure. Different players use different staffing mix among project managers/project leaders/team members. We estimate a shift in the staffing ratio of project manager:project leaders:team members from 1:3:5 to 1:3:6 could have a 45bp positive impact on EBITDA margins. We see significant scope for a leaner project staffing mix; long-term maintenance projects typically use 1:20 ratio, while some players are experimenting with a single project manager overseeing two projects.

Chart 12 : Scale levers – why big is getting bigger?



Note: Margin impact refers to impact of 1% change each variable on the EBITDA margin except \*Gross margin  
Source: ABN AMRO

**Table 12 : Staffing model**

	Mode 1	Mode 2
<b>Total project size (people)</b>	<b>50</b>	<b>145</b>
Utilization (ex trainees)	75%	75%
Onsite effort share	30%	30%
<b>Average realisation (US\$/hr)</b>		
- Onsite	65.0	65.0
- Offshore	26.0	26.0
Total revenues (US\$ m)	0.7	2.2
<b>Total revenues (Rs m)</b>	<b>33.2</b>	<b>96.3</b>
Onsite utilization	93%	93%
Average onsite manpower costs (US\$)	6,640	6,640
<b>Total onsite manpower costs (Rs m)</b>	<b>10.7</b>	<b>31.1</b>
<b>Offshore staffing distribution</b>		
- Project manager	1	1
- Project/team leader	3	3
- Team member	5	6
Total team size	19	22
<b>Average salary (Rs/month)</b>		
- Project manager	125,000	125,000
- Project/team leader	75,000	75,000
- Team member	33,000	33,000
<b>Total offshore manpower cost (Rs m/month)</b>	<b>3.1</b>	<b>8.2</b>
Other direct costs (as % of revenues)	12%	12%
SG&A expenses (as % of revenues)	12%	12%
EBITDA	11.44	33.90
<b>EBITDA margin</b>	<b>34.4%</b>	<b>35.2%</b>
<b>Improvement in EBITDA margin</b>		<b>75bp</b>

Source: ABN AMRO

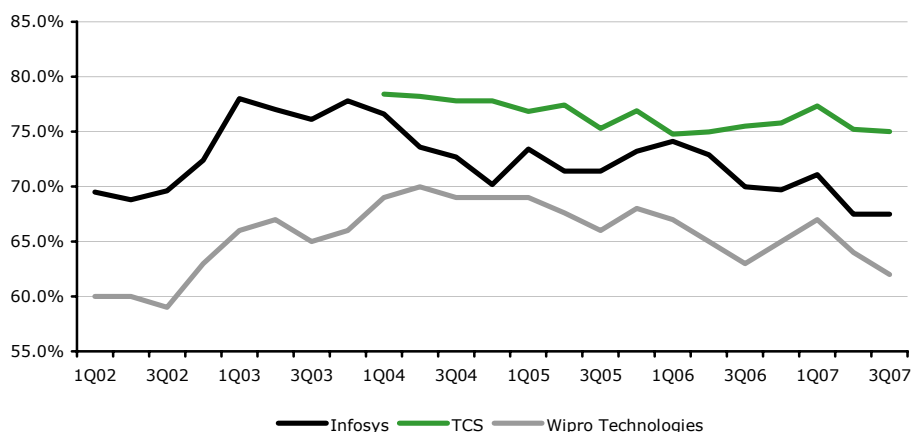
We estimate changing the staffing model from 1:3:5 to 1:3:6, could lead to 75bp one-time impact on EBITA margin, other metrics being same

We believe this comes into play with larger size and longer duration projects

The sensitivity of change is highest for average manpower cost at the middle level

We see utilisation as another lever that could come into play in the near term. Both Infosys and TCS have seen a decline in gross utilisation over the last several quarters, due to increased fresher intake. For instance, Infosys’s gross utilisation has declined to 69% in 9M07 from 73% in FY04, while the fresher share of gross adds has remained consistent at around 75% and attrition has risen from 11% to 17%. We believe players are increasing their focus on this. TCS, for instance, has reduced the number of annual leaves for offshore employees to 16 (from 22) from 3Q07, while Wipro is working on measures to reduce the lead-time to billing for freshers.

**Chart 13 : Utilisation trends of Top three players**



Source: Company data, ABN AMRO estimates

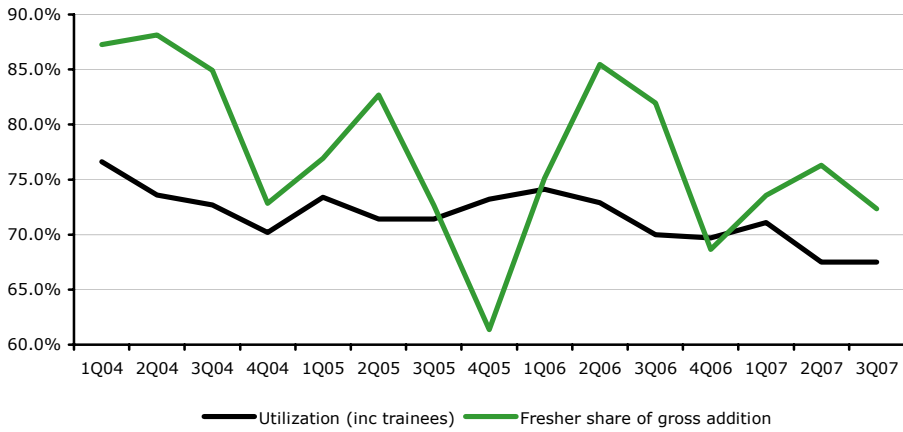
Gross utilisation for all the top three companies have come off peak

We attribute this to the increasing share of freshers and a pick-up in attrition

We sense an increasing player focus; for instance, TCS has lowered the number of days of leave for its offshore staff to 16 from 22 effective 3Q07



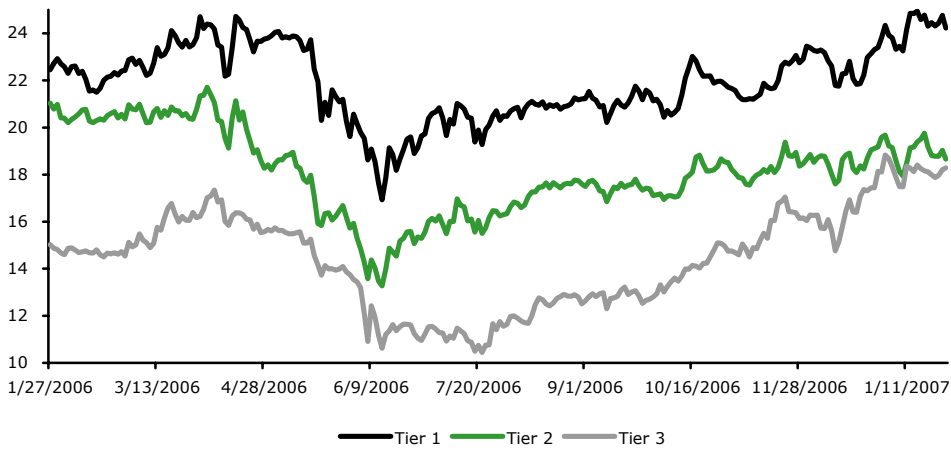
**Chart 14 : Infosys utilisation and fresher hiring trends**



Source: Company data, ABN AMRO estimates

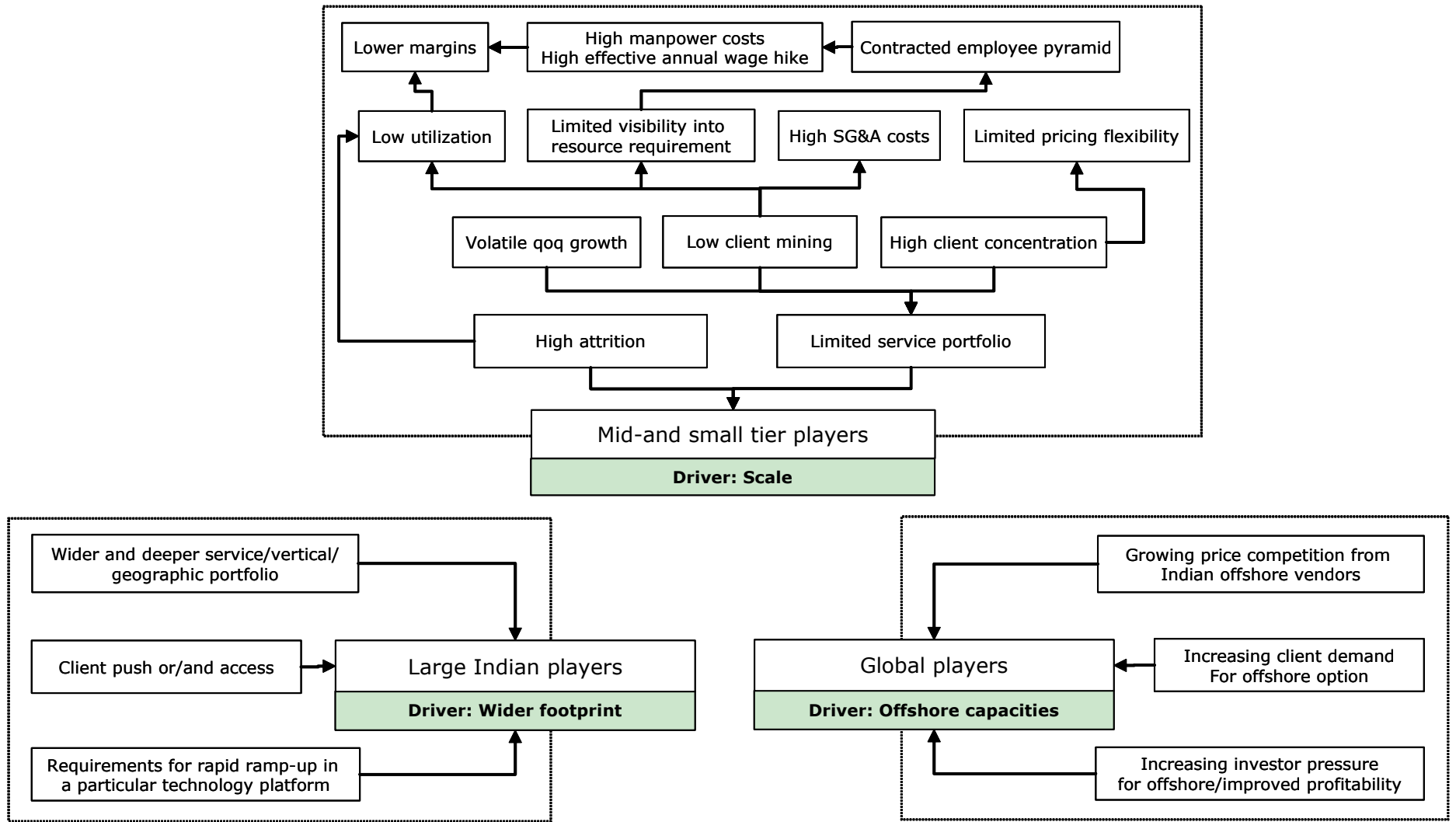
We forecast a US\$ revenue CAGR of 32.1% for the top three players, with only a 18bp decline in EBITDA margins over FY07-09. This implies an EPS CAGR of 28.8% over this period. We believe improved visibility and consistent news flow on deal wins and inorganic activity (as these players get more aggressive on expansion plans) should help to sustain valuation at around current levels.

**Chart 15 : PE valuation trends of tier 1, 2 and 3 companies**



Source: Bloomberg, ABN AMRO estimates, IBES consensus tier-3 companies (Polaris, Geometrix, Mphasis, Hexaware, Info Enterprises iGate)  
 Note: Stock price data as on 2 Feb. 2007

Chart 16 : Operating and financial dynamics for an IT services player - Scale levers – Why big is getting bigger?



Source: ABN AMRO

## Theme#2: Time for consolidation?

We expect industry consolidation to pick up in 2007 with the growing intensity of drivers and as valuations (at least for select players) become attractive. The drivers and their intensity vary based on the profile of players – mid-tier Indian IT services companies; large Indian IT services companies and global IT services players.

### Operating environment for mid-tier players is becoming tough...

Scale is becoming increasingly critical for mid-tier companies, from both demand and supply perspectives. With growing confidence in offshoring, clients are looking for players with ability to quickly ramp up resources. A limited services portfolio, typical for these players, restricts client mining, thus increasing their client base. A high client concentration restricts pricing flexibility and increases quarterly volatility for top-line growth. The scale differentiators are more evident from a supply perspective. A high attrition rate and limited resource requirement visibility is driving up manpower costs, while limited flexibility on operating levers such as utilisation implies growing pressures on margins. We believe the intensity is growing for mid tiers, as cost pressures are increasing. As highlighted by the initial findings of our survey of engineering colleges, the global players already present in India are now increasing their campus intake that should affect salary levels across the board.

### ... while global players are under pressure to expand offshore capacities

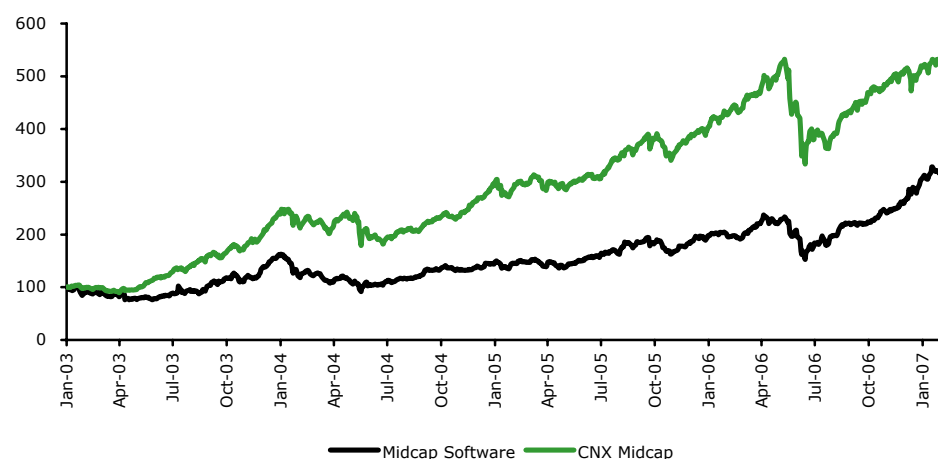
The global IT services companies are under pressure from clients and investors to increase offshore delivery capacities, even as deal sizes are reducing in quantum and duration. According to TPI, the total contract value (TCV) declined to US\$77.9m in 2006 (from US\$84.9m in 2005) and the average contract duration has come down to six years (from eight). We assume these were some of the key drivers for EDS's acquisition of Mphasis and CapGemini's acquisition of Kanbay in 2006. The offshore presence of several global majors, especially European companies such as Atos Origin, Logica and TietoEnator, as well as second-tier US-based IT services companies such as ACS, Bearing Point and Keane are still nascent.

### Domestic acquisitions by Indian majors would be opportunistic, in our view

We believe inorganic activity is likely to be centred around the 'global player/Indian mid-cap player' theme. Domestic acquisitions by larger Indian IT services players would be limited and opportunistic, in our view. Inorganic activism of these players would likely be driven by the need to expand services portfolio and gaining/deepening access to a client. Thus, we believe global players are more likely to look for acquisitions of generic mid-tier Indian players, while Indian players looking at domestic firms would be more focused on niche players.

### Relative underperformance could reduce the valuation disconnect

The underperformance of mid-tier IT services companies compared with the CNX Midcap Index is indicative of the growing business polarisation in the sector, in our view. We expect the trend to continue on a consolidated basis, given the operational challenges discussed above, though individual companies may buck the trend due to player-specific issues. This should help to bridge any valuation disconnect between buyers and sellers.

**Chart 17 : Price performance of Midcap Software Index vs CNX Midcap Index**

Source: Bloomberg

The CNX MidCap Index currently trades at 17x TTM EPS compared to 19x TTM EPS for our sample universe of mid-cap IT services players

Importantly, the CNX MidCap Index trades at a 20% discount to the Sensex (14% to NIFTY) while our sample mid-cap IT services universe is at a 42% discount to the CNX IT Index

### Who will go first?

Our analysis of recent acquisitions in the Indian IT services space suggest that any potential initial inorganic activities could centre on players that satisfy the following filters (though a single entity may not satisfy all the parameters):

- Significant shareholding of strategic (non-client) financial investors/group that is not involved in operational management.
- A manpower base of 5,000-15,000 for a generic player; less than 5,000 for a niche player. This is based on: 1) the size of recent acquisitions; and 2) our belief that integration challenges for a player with 15,000+ employee base would be significantly higher. In revenue terms, this should translate to players with a top line of US\$150m-600m pa.
- Stable operating metrics with moderate profitability. For instance, a high attrition rate would dilute the premise of acquisition, while a high onsite rate could primarily signify the staffing nature of the business contracts.

Besides, individual cases may have additional criteria. For instance, we believe European IT services companies would be more likely to consider acquiring an Indian player with a similar geographical revenue profile (that is, concentrated on Europe) because of minimal integration risks.

**Table 13 : Recent acquisitions in Indian IT services space**

Acquirer	EDS		Oracle			Cap Gemini Kanbay
	Mphasis BFL 1 <sup>st</sup> offer	2 <sup>nd</sup> offer	1 <sup>st</sup> offer	2 <sup>nd</sup> offer	3 <sup>rd</sup> offer	
Date of announcement	4-Apr-06	19-Oct-06	2-Aug-05	14-Sep-06	7-Dec-06	26-Oct-06
Offer price (Rs/share)	204.50	204.50	882.62	1,475.00	2,100.00	1,317.77
Valuation (US\$ m)	739	730	1580	2655	3,808	1,250
Valuation (Rs m)	32,927	33,135	68,809	122,875	170,065	56,801
PER (TTM)	23.6	28.7	32.7	42.6	50.8	32.2
PER (12-mth forward)	27.7	21.6	26.4	27.3	30.6	27.0
Price to TTM revenue	3.5	3.2	5.7	7.4	9.8	3.5
<b>Market premium</b>						
- on prev day closing	-5.2%	-0.7%	6.6%	2.5%	20.3%	15.9%
- on prev six mth average	30.0%	16.8%	29.5%	18.0%	53.6%	71.7%
Revenue - TTM (US\$ m)	212	231	275	360	388	355
Number of employees	11,414	12,535	5,500	7,763	8,546	6,875
Revenue per employee (US\$)	18,606	18,455	50,060	46,413	45,402	51,702
Valuation per employee (US\$)	64,703	58,276	287,273	342,007	445,532	181,818

Source: Company data, Bloomberg

## Our screen test indicates 10 potential profile matches

We applied the above criteria on a partial list of publicly-traded IT services companies. The list included 41 companies with TTM revenues of less than US\$600m.

Out of these, there are 10 companies with non-promoter management profile, according to our analysis of reported shareholding patterns (see table below).

**Table 14 : Select IT services companies**

	Key stakeholders	Last 4 quarters				EPS (Rs)	CMP (Rs)	CMP/TTM EPS
		Revenue CQGR	EBITDA margin	PAT CQGR				
3i Infotech	ICICI Group (48%) Emirates Bank (4.3%)	13%	23%	31%	17.7	283.5	16	
Allsec Technologies	Calryle Group (31%)	2%	32%	3%	20.9	365	17	
Aztecsoft	.e4e Holdings (33%)	9%	22%	2%	10.3	145.8	14	
Blue Star Infotech	Blue Star Ltd (29%)	0%	10%	n.m.	7.9	119.8	15	
Four Soft	Kotak SEAF India Fund (11%)	9%	17%	n.m.	4.3	71.8	17	
Geometric Software	Godrej & Boyce (18%) ICICI Ventures (6%)	19%	21%	0%	6.5	124.5	19	
NIIT Technologies	NIIT Ltd. (25%)	12%	20%	21%	26.5	407	15	
Polaris Software	Citigroup (44%)	11%	14%	147%	8.3	229.3	28	
Ramco Systems	Ramco Industries (31%) Madras Cement (14%)	-18%	17%	n.m.	n.m.	192	n.m.	
Zensar Technologies	Fujitsu Group (29%) Electra Partners (22%) RPG Group (9%)	6%	14%	n.m.	24.3	303.9	13	

Prices as on 2 Feb 2007

Source: Companies' data, Bloomberg

Table 15 : IT universe – Key financial data

No. Company	BB Code	Free float (%)	FII holding (%)	CMP (Rs)	Shares O/S (m)	Mkt cap		Key financials - Last four quarters				PE TTM PE	Abs perf. (%)		Perf Rel -Sensex (%)				
						Rs bn	US\$ m	Revenue (Rs m)	Revenue (US\$ m)	PAT (Rs m)	TTM EPS		1-mth	3-mth	12-mth	1-mth	3-mth	12-mth	
1	3i Infotech	III IN	51.7	4.9	282.7	53.0	15.0	339.7	5651	128.1	1010.5	17.7	16.0	33.5	57.9	63.7	30.1	47.7	15.2
2	Afttek	AFTK IN	79.2	3.8	77.0	75.0	5.8	130.9	3091	70.0	1106.4	12.8	6.0	47.7	45.6	-24.1	47.7	45.6	-24.1
3	Aptech	APTR IN	81.6	39.2	201.0	37.6	7.6	171.4	1725	39.1	174.8	5.1	39.8	22.9	28.4	71.7	22.9	28.4	71.7
4	Aztecsoft	AZTEC IN	61.3	24.2	145.7	44.0	6.4	145.4	2537	57.5	424.1	10.3	14.1	-13.0	-5.8	-26.1	-13.0	-5.8	-26.1
5	Blue Star Infotech	BLSI IN	45.0	0.0	117.0	10.0	1.2	26.5	1108	25.1	78.5	7.9	14.9	22.8	23.5	-3.9	22.8	23.5	-3.9
7	Cambridge Solutions	CAMB IN	40.9	0.4	139.1	30.1	4.2	94.9	11684	264.7	319.6	-1.7	-81.3	9.3	25.4	-26.2	9.3	25.4	-26.2
6	C M C	CMC IN	48.9	11.5	1,117.1	15.2	16.9	383.5	10686	242.1	584.5	38.6	29.0	57.8	67.2	121.7	57.8	67.2	121.7
8	Cranes Software	EDC IN	62.3	38.8	99.2	113.7	11.3	255.5	2477	56.1	759.3	6.8	14.7	-6.7	2.1	-7.1	-6.7	2.1	-7.1
9	Datamatics Tech	DATA IN	31.3	0.0	80.1	40.6	3.3	73.7	1473	33.4	209.8	5.2	15.5	57.8	47.5	2.7	57.8	47.5	2.7
10	Educomp Solutions	EDSL IN	35.1	17.7	971.7	16.0	15.5	351.4	820	18.6	218.2	13.7	70.8	-3.2	48.8	266.6	-3.2	48.8	266.6
11	Financial Technologies	WWTC IN	52.4	30.0	1,775.9	44.0	78.2	1,770.9	881	20.0	574.7	12.1	146.5	0.5	5.4	34.0	0.5	5.4	34.0
12	Four Soft	FOUR IN	64.8	1.9	71.5	31.9	2.3	51.6	1566	35.5	147.6	4.3	16.8	-1.4	12.5	16.9	-1.4	12.5	16.9
13	Geodesic Information	BVH IN	74.9	51.5	240.2	58.6	14.1	318.8	1481	33.6	700.7	8.6	28.0	25.4	22.6	20.1	25.4	22.6	20.1
14	Geometric Software	GMSS IN	71.8	13.6	124.2	56.7	7.0	159.4	3227	73.1	376.5	6.5	19.3	-0.1	3.1	25.8	-0.1	3.1	25.8
15	H C L Infosystems	HCLI IN	45.3	29.1	169.8	168.7	28.7	649.2	119975	2,718.5	2975.3	17.6	9.6	7.2	36.0	-23.3	7.2	36.0	-23.3
16	H C L Technologies	HCLT IN	31.0	13.9	654.0	323.4	211.5	4,792.7	52203	1,182.9	9674.0	29.7	22.0	3.2	7.6	11.9	3.2	7.6	11.9
17	Helios & Matheson	HMIT IN	55.7	1.1	160.0	20.0	3.2	72.5	2011	45.6	339.9	113.3	1.4	12.8	-0.7	-29.0	12.8	-0.7	-29.0
18	Hexaware Technologies	HEXW IN	74.3	53.2	166.5	119.4	19.9	450.2	7820	177.2	1152.2	9.1	18.4	-14.7	-2.5	31.2	-14.7	-2.5	31.2
19	Hinduja T M T	MTMF IN	34.0	20.7	708.1	40.9	29.0	656.3	3402	77.1	7003.7	171.2	4.1	-7.5	35.5	107.3	-7.5	35.5	107.3
20	I-Flex Solutions	IFLEX IN	45.2	0.0	1,970.9	76.3	150.4	3,406.9	19163	434.2	3160.5	41.0	48.0	0.5	28.9	82.6	0.5	28.9	82.6
21	Igate Global Solutions	IGS IN	18.2	6.1	344.0	31.1	10.7	242.3	7624	172.7	293.6	10.2	33.7	-2.2	49.4	28.2	-2.2	49.4	28.2
22	Infosys Technologies	INFO IN	63.7	33.9	2,259.9	551.1	1,245.4	28,220.2	127450	2,887.9	33960.0	61.0	37.1	-0.6	8.4	61.9	-0.6	8.4	61.9
23	Infotech Enterprises	INFTC IN	71.3	11.6	390.5	45.7	17.8	404.0	4992	113.1	753.6	32.5	12.0	17.7	54.8	117.4	17.7	54.8	117.4
25	Kale Consultants	KALE IN	64.8	0.0	113.6	12.8	1.5	33.0	737	16.7	87.0	6.6	17.3	-8.0	12.8	25.0	-8.0	12.8	25.0
24	K P I T Cummins	NKPIT IN	74.0	14.3	153.0	72.8	11.1	252.4	4236	96.0	411.1	5.7	26.9	9.1	22.8	128.4	9.1	22.8	128.4
26	Mastek	MAST IN	59.4	29.4	364.4	28.1	10.3	232.3	7687	174.2	868.1	27.7	13.2	-3.8	7.0	12.5	-3.8	7.0	12.5
27	Moschip	MCST IN	74.2	1.6	29.3	43.4	1.3	28.7	252	5.7	-43.6	0.0	NM	14.7	26.6	-14.7	14.7	26.6	-14.7
28	Moser Baer India	MBI IN	79.3	23.5	365.1	111.5	40.7	922.4	19644	445.1	704.1	6.3	57.9	16.8	56.7	69.4	16.8	56.7	69.4
29	Mphasis	MPHL IN	48.9	13.8	302.6	161.0	48.7	1,104.0	11091	251.3	1094.1	6.8	44.6	-0.3	38.5	78.1	-0.3	38.5	78.1
30	N I I T	NIIT IN	65.9	39.7	577.8	19.3	11.2	253.0	5438	123.2	556.0	28.7	20.1	10.7	65.6	104.8	10.7	65.6	104.8
31	N I I T Technologies	NITEC IN	59.9	10.4	403.1	38.6	15.6	353.0	8086	183.2	1056.0	26.5	15.2	30.1	58.7	137.4	30.1	58.7	137.4
32	Nucleus Software	NCS IN	39.9	4.0	864.7	16.1	13.9	315.5	2031	46.0	520.9	32.3	26.7	24.4	82.4	152.2	24.4	82.4	152.2
33	Patni	PATNI IN	30.2	20.6	446.5	137.8	61.5	1,394.0	24877	563.7	2179.8	16.2	27.6	7.0	10.6	-7.8	7.0	10.6	-7.8
34	Polaris Software Lab	POL IN	72.1	5.0	230.1	98.2	22.6	512.0	9604	217.6	817.9	8.3	27.6	32.1	78.5	117.7	32.1	78.5	117.7
35	R S Software	RSST IN	75.7	0.0	77.9	5.0	0.4	8.8	976	22.1	82.0	16.7	4.7	7.8	0.1	-6.5	7.8	0.1	-6.5
36	Ramco Systems	NRSL IN	37.4	5.1	189.6	15.4	2.9	66.0	1051	23.8	-180.7	0.0	NM	-14.2	4.2	-36.6	-14.2	4.2	-36.6
37	Satyam	SCS IN	71.2	48.2	490.9	648.9	318.5	7,217.9	60196	1,364.0	12958.7	24.3	20.2	-3.4	15.2	36.1	-3.4	15.2	36.1
38	Sonata Software	SSOF IN	54.6	1.7	61.6	105.2	6.5	146.8	7233	163.9	323.2	3.3	18.4	-6.9	80.6	71.0	-6.9	80.6	71.0
39	Subex Azure	SUBX IN	56.9	17.7	714.0	21.8	15.5	352.0	2596	58.8	407.0	13.4	53.2	7.8	23.1	77.3	7.8	23.1	77.3
41	Tata Elxsi	TELX IN	61.8	4.9	301.0	31.1	9.4	212.3	2898	65.7	476.4	15.3	19.7	12.9	25.8	68.6	12.9	25.8	68.6
40	TCS	TCS IN	17.5	7.0	1,299.4	978.6	1,271.6	28,813.4	172104	3,899.7	37833.2	38.4	33.9	4.3	20.6	60.4	4.3	20.6	60.4
42	Tech Mahindra	TECHM IN	12.5	3.0	1,787.6	102.5	183.2	4,152.2	24757	561.0	5053.4	39.1	45.8	7.0	78.3	NA	7.0	78.3	NA
43	Wipro	WPRO IN	17.8	5.0	643.5	1,425.8	917.4	20,787.4	136628	3,095.9	26157.1	18.6	34.5	5.2	20.6	23.2	5.2	20.6	23.2
44	Zensar Technologies	ICIM IN	41.6	0.7	247.1	23.4	5.8	131.2	5597	126.8	571.9	24.3	10.2	5.9	3.4	25.2	5.9	3.4	25.2
45	Allsec Tech	ALLT IN	73.1	6.1	358.6	15.226	5.5	123.7	1117	25.3	274.7	20.9	17.1	23.0	41.0	55.9	23.0	41.0	55.9
46	California Soft.	CFSC IN	61.6	1.2	66.6	8.366	0.6	12.6	1602	36.3	9.6	2.1	32.5	-7.8	-2.6	-28.6	-7.8	-2.6	-28.6
47	Trigyn Techno.	LES IN	59.9	0.0	36.6	14.85	0.5	12.3	889	20.1	379.0	2.8	13.1	42.5	104.8	191.9	42.5	104.8	191.9

Source: Companies' data, IBES, Bloomberg; Stock price as on 2 Feb 2007

**Table 16 : Select mid/small IT services companies – Key financial data**

Company	Last four quarters			TIM	Market	CMP/TTM
	Rev CQGR	EBITDA margin	PAT CQGR	EPS	price	EPS
3i Infotech	13%	23%	31%	17.7	283.5	16.06
Aftek Ltd	5%	41%	n.m.	12.8	74.55	5.82
Allsec Tech	2%	32%	3%	20.9	365	17.46
Aztecsoft	9%	22%	2%	10.3	145.75	14.10
Blue Star Info.	0%	10%	n.m.	7.9	119.8	15.26
California Soft.	6%	1%	n.m.	2.1	66.6	32.49
Cambridge Solutions	62%	2%	n.m.	n.m.	139.2	n.m.
Datamatics Tech.	3%	18%	2%	5.2	73.65	14.27
Four Soft	9%	17%	n.m.	4.3	71.75	16.84
Geodesic	15%	17%	30%	8.6	237.9	27.73
Geometric Soft.	19%	21%	0%	6.5	124.5	19.30
Helios Matheson	20%	17%	n.m.	17.6	161.45	9.15
Hexaware	9%	19%	12%	9.1	167	18.41
iGate Global Sol	8%	10%	46%	10.2	350	34.31
Infotech Enterprises	10%	20%	4%	32.5	390	11.99
KPIT Cummins	9%	16%	41%	5.7	152.9	26.85
Kale Consultants	3%	29%	n.m.	9.1	114.6	12.64
Mastek	5%	18%	6%	171.2	364.55	2.13
NIIT Tech.	12%	20%	21%	26.5	407	15.34
Nucleus Software	10%	30%	9%	32.3	885	27.37
Patni Computer	8%	19%	16%	16.2	447	27.62
Polaris Software	11%	14%	147%	8.3	229.3	27.53
R S Software	8%	19%	19%	16.7	78.5	4.71
Ramco Systems	-18%	17%	n.m.	n.m.	192	n.m.
Sonata Software	16%	8%	n.m.	3.3	61.7	18.47
Subex Azure	29%	20%	31%	13.4	720	53.61
Trigyn Techno.	26%	39%	n.m.	2.8	36.55	13.05
Zensar Technologies	6%	14%	n.m.	24.3	303.85	12.50

Source: Companies' data, Bloomberg  
Stock price as on 2 Feb 2007

**Table 17 : Select mid/small IT companies with significant financial/strategic stakeholders**

Company	Key financial/strategic stakeholders	Percentage stake
3i Infotech	ICICI Ventures	36.5%
	ICICI Bank	11.8%
	Emirates Bank	4.3%
Allsec Technologies	Calrlyle Group	30.8%
Aztecsoft	E4E Holdings	33.3%
Blue Star Infotech	Blue Star Ltd	29.3%
Four Soft	Kotak SEAF India Fund	10.9%
Geometric Software	Godrej & Boyce	18.4%
	ICICI Ventures	6.3%
NIIT Technologies	NIIT Ltd.	25.0%
Polaris Software	Citigroup	43.5%
Ramco Systems	Ramco Industries	31.4%
	Madras Cement	13.8%
Zensar Technologies	Fujitsu Group	29.2%
	RPG Industries	9.4%
	Electra Partners	21.7%

Source: Company data



## Bias for large caps; NIIT Tech is top pick in mid caps

The BSE IT Index is up only 44% ytd vs a 53% gain for the BSE Sensex since the beginning of 2006. We believe this is the historical trend playing out and expect IT stocks to outperform the market over the next nine months, in line with the trend. We maintain our Overweight rating on the sector and our view that the larger players should present the best investment opportunities.

**Chart 18 : Infosys – historical price movement**



Source: Bloomberg  
Stock price as on 2 Feb 2007

**Table 18 : BSE IT Index and select IT companies – performance relative to Sensex**

	2001	2002	2003	2004	2005	2006 YTD	2007
<b>1 Jan to 20 April</b>							
BSE IT Index	-29%	1%	-27%	-7%	-5%	-15%	-2%
Infosys	-22%	-6%	-27%	-1%	-1%	-19%	-4%
Wipro	-32%	-1%	-34%	-5%	-15%	-8%	3%
Satyam	-11%	12%	-33%	-9%	-2%	-10%	-4%
TCS	-	-	-	-	-11%	-11%	2%
<b>21 April to 31 Dec</b>							
BSE IT Index	12%	1%	4%	26%	0%	10%	
Infosys	19%	21%	-5%	42%	0%	22%	
Wipro	26%	-1%	-4%	28%	-18%	-6%	
Satyam	8%	5%	43%	10%	37%	-3%	
TCS	-	-	-	-	-16%	8%	

Source: Bloomberg, Up to 2 Feb 2007

Among the large caps, we prefer TCS, Infosys and Wipro, in that order. In the second tiers, we prefer HCL Tech to Satyam, given the relatively attractive valuation discount and better near-term operating levers. Among the mid caps, NIIT Tech is our key Buy idea. Tech Mahindra is our key Sell idea. We maintain our Hold rating on Patni.

**Table 19 : Relative valuations of our coverage universe**

Company	BB code	Reco.	MP		TP (Rs)	Upside (%)	ABN AMRO		EPS CAGR -FY07-09F		
			2 Feb	52W H Change (%)			EPS-FY08F	PE (x)	Consensus	ABN AMRO	
Infosys	INFO IN	Buy	2,260	2,401	-6%	2,660	18%	91.4	24.7	28.1%	30.4%
TCS	TCS IN	Buy	1,299	1,399	-7%	1,680	29%	57.2	22.7	26.7%	28.1%
Wipro	WPRO IN	Buy	643	660	-3%	758	18%	25.4	25.3	25.0%	27.2%
Satyam	SCS IN	Buy	491	525	-6%	545	11%	25.5	19.3	22.8%	20.0%
HCL Tech	HCLT IN	Buy	654	707	-7%	760	16%	40.8	16.0	19.2%	20.5%
Patni	PATNI IN	Hold	446	511	-13%	445	0%	18.1	24.7	18.2%	38.3%
TML	TECHM IN	Sell	1,788	2,050	-13%	1,560	-13%	72.1	24.8	41.2%	33.9%
KPIT	KPIT IN	Buy	153	181	-15%	115	-25%	9.9	15.6	28.3%	20.7%
NIIT Tech	NITEC IN	Buy	403	443	-9%	520	29%	36.0	11.2	21.1%	17.2%

Source: Bloomberg, ABN AMRO estimates and IBES estimates

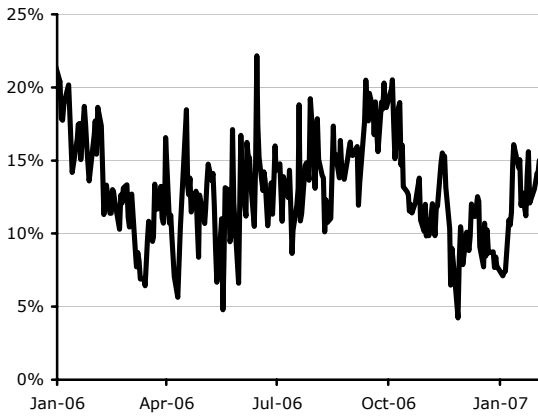
**Table 20 : Our pecking order and rationale**

	<b>CMP</b>	<b>Upside</b>	<b>Potential key triggers/rationale</b>
<b>TCS</b>	Rs1,299	29%	<p><b>Near-term performance could be ahead of expectations</b></p> <ul style="list-style-type: none"> <li>Near-term margin levers (subsidiaries operating performance, increasing shift to offshore delivery and improving profitability in large deals acquired over the last 7 quarters)</li> <li>High realisation growth (we expect the full impact to come in from 4Q07)</li> <li>Continued news flow related to deal wins and acquisitions (given its high inorganic activism)</li> </ul> <p><i>Stock price appreciation – 52-week: 59%</i>  <i>Relative valuation (to Infosys) FY08F EPS – at current price: -8%</i>  <i>Relative valuation (to Infosys) FY08F EPS – at target price: 1%</i></p>
<b>Infosys</b>	Rs2260	18%	<p><b>FY08 guidance ahead of consensus estimates (31%% yoy growth EPS)</b></p> <ul style="list-style-type: none"> <li>Volume growth momentum remains strong (8.3% CQGR over the last four quarters)</li> <li>Average pricing has grown 1.3% over last four quarters</li> <li>Best control among peers on margin levers (EBITDA margins changed (average EBITDA margin qoq change of 32bp over the last four quarters)</li> <li>Limited news flow relative to peers</li> </ul> <p><i>Stock price appreciation – 52-week: 59%</i>  <i>Absolute valuation FY08F EPS – at current price: 25x</i>  <i>Absolute valuation FY08F EPS – at target price: 29x</i></p>
<b>Wipro</b>	Rs643	18%	<p><b>Expect strong news flow but limited scope for outperformance (vs expectations) in the near term</b></p> <ul style="list-style-type: none"> <li>Business flow from large telecom equipment vendors should flow only from 1Q08</li> <li>Onsite wage hike in 4Q07 to affect margins</li> <li>Pending announcement of details of the large contract win</li> <li>Two major contracts from BSNL for Wipro Infotech under final stage of negotiations</li> <li>Continued strong performance by Wipro BPO</li> </ul> <p><i>Stock price appreciation – 52-week: 22%</i>  <i>Relative valuation (to Infosys) FY08F EPS – at current price: 2%</i>  <i>Relative valuation (to Infosys) FY08F EPS – at target price: 2%</i></p>
<b>HCL Tech</b>	Rs654	16%	<p><b>Relative underperformance has brought valuations to attractive levels</b></p> <ul style="list-style-type: none"> <li>Better-than- expected margin expansion and well-spread top-line growth in 2Q07 (June year-end) suggest large deal wins are beginning to have an impact</li> <li>We see margin levers – high support manpower share; growing share of services in the infrastructure management segment, which could offset the rising manpower costs.</li> <li>Quarterly performance likely to remain volatile</li> <li>Valuations relative to Satyam look attractive, given the higher expected earnings growth</li> </ul> <p><i>Stock price appreciation – 52-week: 9%</i>  <i>Relative valuation (to Satyam) FY08F EPS – at current price: -17%</i>  <i>Relative valuation (to Satyam) FY08F EPS – at target price: -13%</i></p>
<b>Satyam</b>	Rs491	11%	<p><b>Near-term performance could remain modest; relative underperformance could be a trigger</b></p> <ul style="list-style-type: none"> <li>Satyam's 9% volume growth in 3Q07 was in line with its peers; we expect the momentum to be sustained, given the 30% manpower addition over 9M07</li> <li>Worry on attrition is receding, implying the RSU scheme is working, in our view. Also, freshers form 71% of net add in 9M07, suggesting average wage hike in FY08 should be in line with peers and effective wage hike should be lower than last year's level. We see utilisation picking up in 4Q07/1Q08, as the impact of fresher hiring wanes</li> <li>Limited flexibility on realisation is the key operational worry</li> </ul> <p><i>Stock price appreciation – 52-week: 35%</i>  <i>Relative valuation (to Infosys) FY08F EPS – at current price: -22%</i>  <i>Relative valuation (to Infosys) FY08F EPS – at target price: -27%</i></p>
<b>NIIT Tech</b>	Rs403	29%	<p><b>Improved business and valuations remain attractive despite the strong appreciation</b></p> <ul style="list-style-type: none"> <li>Our top mid-cap Buy idea</li> <li>Margin expansion in 3Q07 was ahead of our conservative estimates, while top-line growth was in line. We lower our cautious outlook on margins</li> <li>Business pipeline remains healthy – 3Q07 order intake of US\$56m was the highest ever; also had a multi-million-dollar multi-year BPO order win.</li> <li>Current valuations still attractive vs peer group average</li> </ul> <p><i>Stock price appreciation – 52-week: 130%</i>  <i>Absolute valuation FY08F EPS – at current price: 11x</i>  <i>Absolute valuation FY08F EPS – at target price: 14x</i></p>

Source: ABN AMRO estimates and assumptions

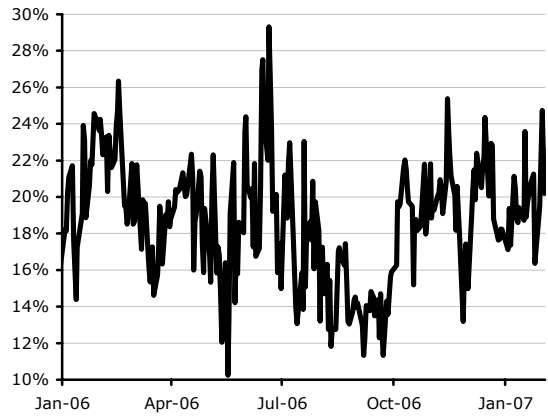
# Appendix

**Chart 19 : Infosys – ADR premium to local**



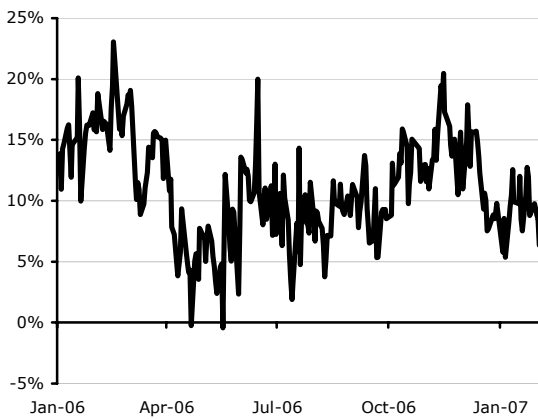
Stock price data up to 2 Feb 2007; Source: ABN AMRO, Bloomberg

**Chart 20 : Wipro – ADR premium to local**



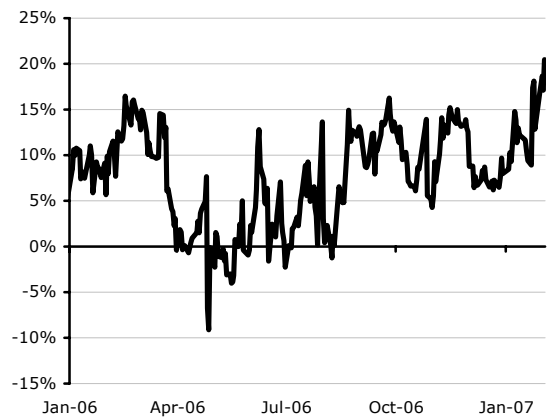
Stock price data up to 2 Feb 2007; Source: ABN AMRO, Bloomberg

**Chart 21 : Satyam – ADR premium to local**



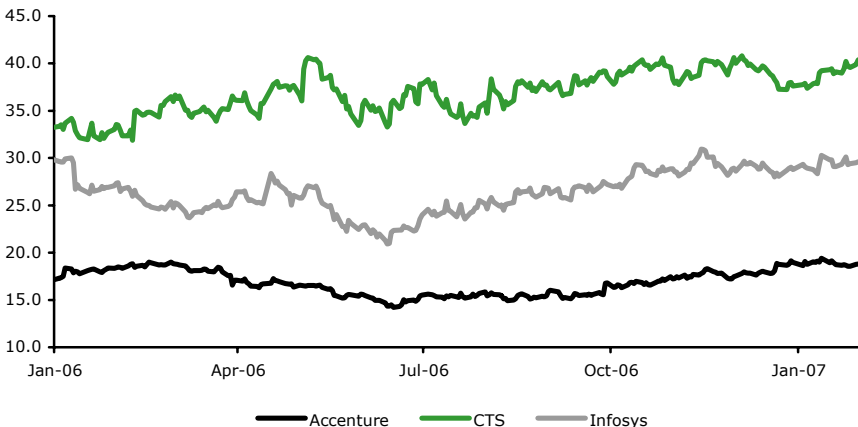
Stock price data up to 2 Feb 2007; Source: ABN AMRO, Bloomberg

**Chart 22 : Patni – ADR premium to local**



Stock price data up to 2 Feb 2007; Source: ABN AMRO, Bloomberg

**Chart 23 : Infosys ADR – comparative valuation vs Accenture and Cognizant**



Stock price data up to 2 Feb 2007; Source: ABN AMRO, Bloomberg

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