



HONG KONG



992 HK

Outperform

Price (at 10:08, 02 Mar 2015 GMT)

HK\$12.00

Valuation	HK\$	11.90-14.50
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- PER

12-month target	HK\$	13.20
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Upside/Downside	%	+10.0
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12-month TSR	%	+12.1
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Volatility Index	Medium
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GICS sector

Technology Hardware & Equipment

Market cap	HK\$m	133,308
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Market cap	US\$m	17,332
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Free float	%	100
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30-day avg turnover	US\$m	63.2
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Number shares on issue	m	11,109
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Investment fundamentals

Year end 31 Mar		2014A	2015E	2016E	2017E
Revenue	m	38,707	46,914	57,518	62,380
EBIT	m	1,082	1,116	1,448	1,920
EBIT growth	%	35.1	3.2	29.8	32.6
Reported profit	m	817	808	1,008	1,405
Adjusted profit	m	963	1,114	1,490	1,887
EPS rep	¢	7.9	7.5	9.1	12.6
EPS rep growth	%	27.7	-4.2	20.4	39.4
EPS adj	¢	9.3	10.4	13.4	17.0
EPS adj growth	%	26.9	12.4	28.7	26.6
PER rep	x	19.7	20.5	17.1	12.2
PER adj	x	16.7	14.9	11.5	9.1
Total DPS	¢	3.1	2.5	3.3	4.8
Total div yield	%	2.0	1.6	2.1	3.1
ROA	%	6.1	4.8	5.1	6.5
ROE	%	33.9	31.4	33.8	36.5
EV/EBITDA	x	9.5	9.0	6.8	5.5
Net debt/equity	%	-115.6	-29.7	-33.0	-43.5
P/BV	x	5.3	4.2	3.6	3.1

Source: FactSet, Macquarie Research, February 2015
(all figures in USD unless noted, TP in HKD)

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3 March 2015

Macquarie Capital Securities Limited,
Taiwan Branch

Lenovo Group

From strength to strength

Initiate coverage of Lenovo with Outperform Rating

Our TP is HK\$13.2, based on 16x 2QFY16E-1QFY17E PER. Lenovo currently trades at 17x/12x FY16E/FY17E earnings, vs its historical PER range of 9x-18x. We estimate Lenovo's EBIT growth at 30%/33% in FY16E/FY17E. We think its solid execution could mitigate integration pain, and its mid- to long-term market share gains/profitability improvement opportunities could justify a valuation premium vs global peers. Risks include decelerating PC market growth, lower share gains, and slower profit improvement in mobile/enterprise business. 2015 remains a transforming year for Lenovo – post its strong 3QFY15 results, its 4QFY15 (EPS est. of US\$0.71, down 69% QoQ and 53% YoY) could be a trough quarter. Similar to its success in PC market, we expect Lenovo replicates its supply chain management capability to drive its scale and profitability for its new acquired two new businesses. We list Lenovo's three major growth drivers:

#1 Motorola + Lenovo: leverage scale + IP to grow overseas

We expect that Lenovo global smartphone share can grow from 5.6% in FY15 up to 6.9% and 7.4% in FY16 and FY17. Lenovo is on track to increase emerging market and overseas sales by strengthening Motorola's position and leveraging its IP portfolio advantage over other China peers. Its high concentration on the carrier market in China is a main risk but Lenovo addresses these challenges: 1) Increase online sales efforts/set up "fancy maker" affiliate to build e-commerce ecosystem; 2) migrate its product mix towards mid-high end smartphones. We factored in only US\$185m/US\$300m for FY16/17E (vs. guidance of US\$400-500m/year) material cost savings. We expect its mobile OPM will gradually improve and turn profitable seven quarters (1QFY17) from the merger.

#2 Enterprise business group also improving

Post the IBM x86 server acquisition, we believe Lenovo's target of US\$5bn sales in server business (assuming ~10% revenue market share) is achievable and we expect Lenovo's enterprise business sales to grow over 88% YoY and 9% YoY in FY16 and FY17. Lenovo's targets: 1) to solidify its China server market position backed by cross-selling its server solution to its enterprise PC customers; 2) address the growing China/and US hyperscale data center customer base; 3) the Lenovo/EMC tie-up could generate \$100m in server sales opportunities in two years. We estimate its enterprise OPM improves from -2.0% in FY16E to 1.0% in FY17E vs 3QFY15 pretax margin of -3.4%, thanks to component procurement synergies/manufacturing efficiency, accelerated time-to-market for IBM product offerings backed by Lenovo's speedy and flexible decision process.

#3 Further strengthen its PC share gains/profitability

Lenovo has captured ~20% global PC market share but it still has room to gain share as North/Latin America and emerging Asia market share still fell behind the 15% share mark. We expect Lenovo's PC market share could still expand to 21.1% in FY16E and 21.9% in FY17E versus 19.7% in FY15E, post PC industry consolidation. Lenovo is focused on driving PC business profitability by: 1) increasing its mid- to high-end consumer product mix; 2) enhancing profit margins on rising scale. It aims to maintain PC pretax margin >5%. Overall, we expect Lenovo PC OPM of 5.2% and 4.8% in FY16 and FY17. In 3QFY15, its pretax margin for the PC group reached 5.4% (peak levels), however, we note America/EMEA OPM (-0.5%/3%) was far behind China/APAC (5.7%/5.4%).

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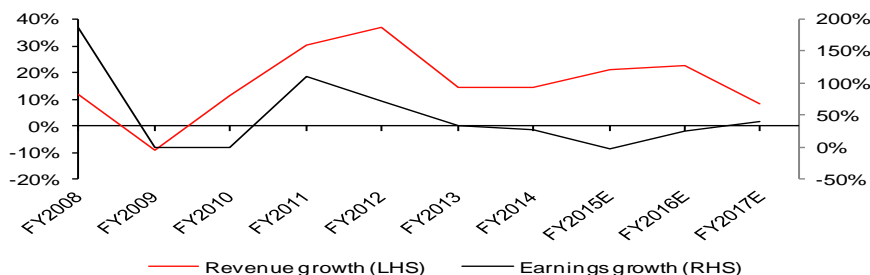
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From strength to strength

Company profile

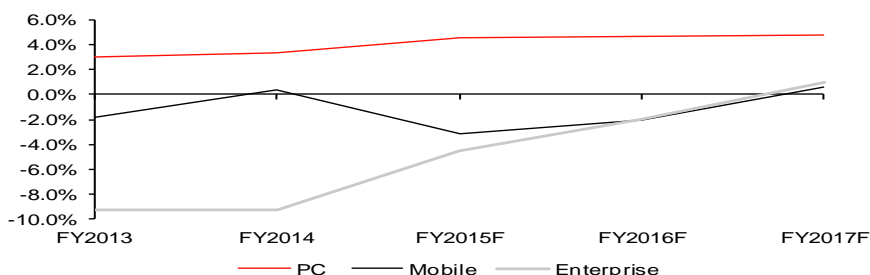
- Lenovo was founded in Beijing as Legend Holdings back in 1984, and the company was listed on Hong Kong Stock Exchange in 2000. It renamed itself to 'Lenovo' in 2004 and later acquired the former PC division of IBM in 2005. Since then, Lenovo has grown into a leader in the worldwide PC market with ~20% market share, ranking as the #1 PC brand globally, based on 4Q14 IDC data. Lenovo also ranked #3 in the global smartphone market and ranked #3 in the global tablet market (in terms of shipments), based on 4Q14 IDC data.
- Lenovo's growth comes from its global PC share gain as well as its strategic M&A efforts. Lenovo's earnings registered a CAGR of 53% in FY10-FY14, while its ROE also improved from 8% in FY10 to 27% in FY14. Lenovo's recent closure of Motorola Mobility and IBM x86 acquisitions indicates that its efforts in diversifying its growth scope beyond the mature but stabilized PC business.

Fig 1 Lenovo revenue/earnings growth, FY08-FY17E



Source: Company data, Macquarie Research, March 2015

Fig 2 Lenovo OPM by product segment, FY13-17E



Source: Company data, Macquarie Research, March 2015

Fig 3 992 HK rel HSI performance, & rec history



Note: Recommendation timeline - if not a continuous line, then there was no Macquarie coverage at the time or there was an embargo period.

Source: FactSet, Macquarie Research, March 2015(all figures in USD unless noted, TP in HKD)

From strength to strength

We initiate coverage on Lenovo with an Outperform rating and a target price of HK\$13.2 based on 16x 2QFY16-1QFY17 PER. Lenovo has diversified beyond its successful PC business into smartphones+tablets (mobile) and enterprise (server); it has also expanded geographically. It has started to increase its profit contribution from EMEA/APAC aside from its lucrative China market. We expect the company to have a high chance to succeed in the mid to long term in gaining global smartphone/server share and driving profitability but we believe its execution and pace of improvement remain key.

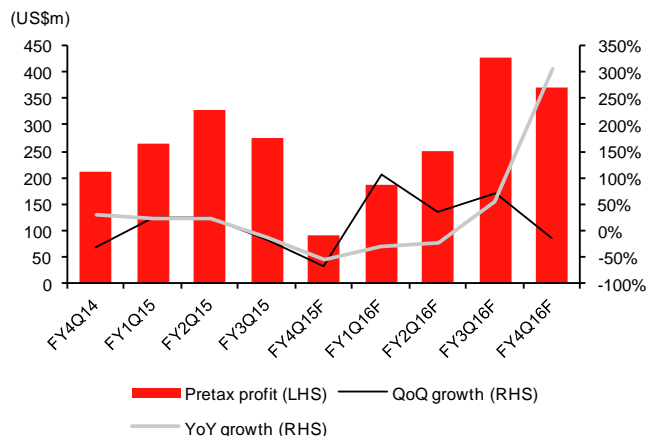
Transforming year, more patience required

2015 remains a key transforming year for Lenovo; its 4QFY15 could be a trough quarter given the low season and limited profitability improvement in the mobile/server business. We estimate 4QFY15 net profit of US\$79mn, down 69% QoQ and 50% YoY. Despite 3QFY15 results coming in stronger than market expectations due to 1) stronger PC profitability at a 5.4% pretax margin; 2) reduced Motorola loss as Motorola saw a quantum jump in CY4Q15 smartphone shipments (10.6m vs CY1-3Q's total 15m), Lenovo only booked 80% of Motorola shipments in the quarter and only two-thirds of the loss. Lenovo's share price has rallied by ~17% post its earnings release on February 3rd vs 1.4% for HSI, and we think the slow March quarter result, coupled with integration pains in4Q FY15E-1QFY16E could see its share price push back, which presents a more attractive entry point as we are optimistic on its mid- to long-term growth opportunities.

We expect a trough quarter for 4QFY15 on estimated sales to decline 15% QoQ (+28% YoY on integration of the two new businesses) due to seasonality. As a result, we expect pretax profit of \$91m (-67% QoQ/-57% YoY); this suggests that investors need to be patient and go through the lukewarm slow quarter and await synergies from integration of the newly acquired businesses to bear fruit.

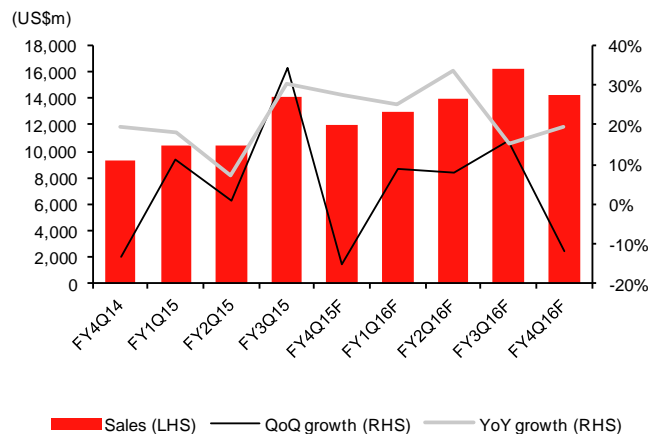
We list Lenovo's key earnings growth drivers in the sections that follow:

Fig 4 Lenovo's pretax profit growth trend



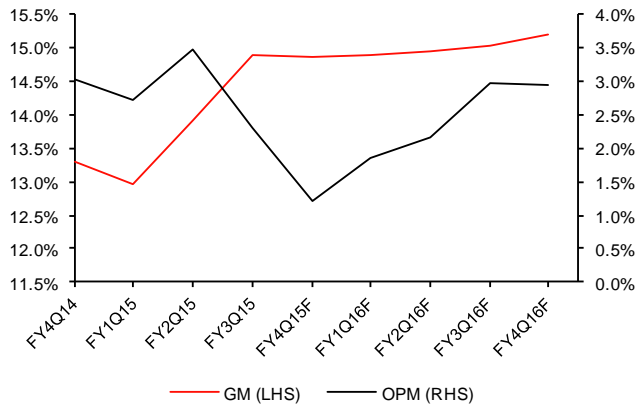
Source: Company data, Macquarie Research, March 2015

Fig 5 Lenovo's sales growth trend



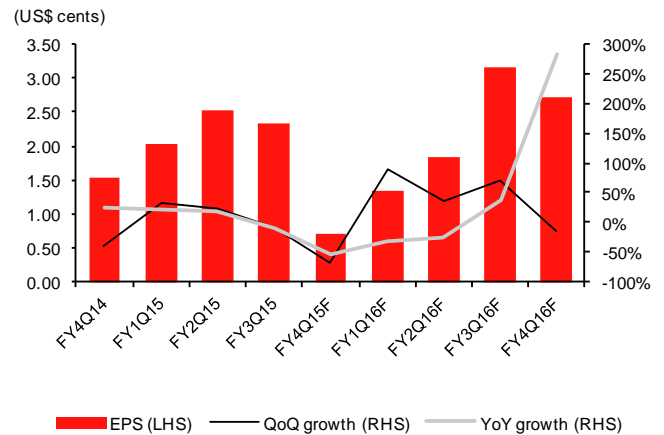
Source: Company data, Macquarie Research, March 2015

Fig 6 Lenovo's GM/OPM trend



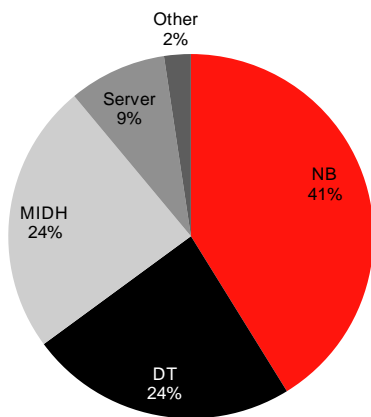
Source: Company data, Macquarie Research, March 2015

Fig 7 Lenovo's EPS growth trend



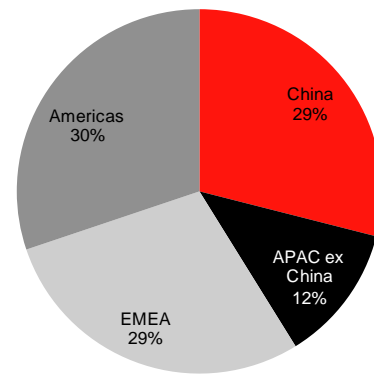
Source: Company data, Macquarie Research, March 2015

Fig 8 Lenovo's sales mix by product (3QFY15)



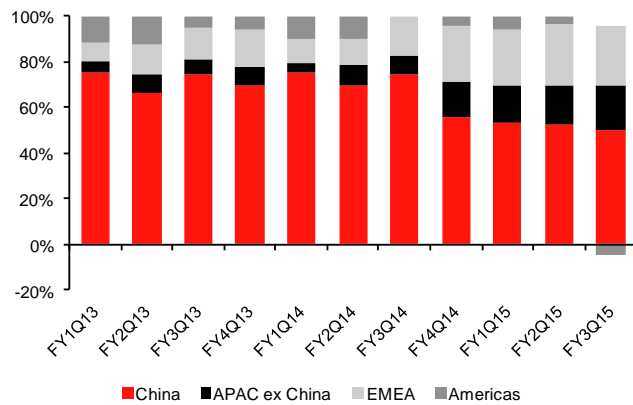
Source: Company, Macquarie Research, March 2015
*MIDH=smartphone+tablet *server represents Enterprise group

Fig 9 Lenovo revenue by geography (3QFY15)



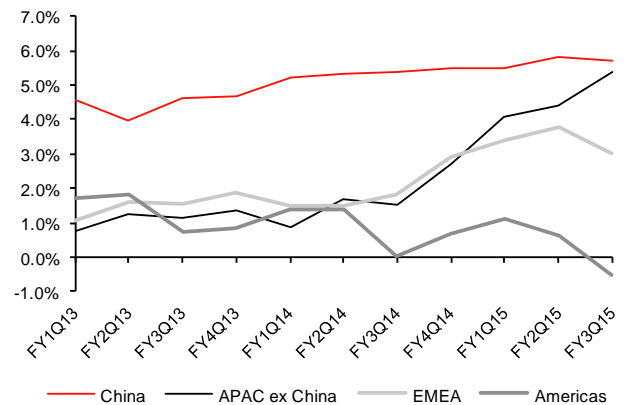
Source: Company, Macquarie Research, March 2015

Fig 10 Lenovo: operating profit by geography



Source: Company data, Macquarie Research, March 2015

Fig 11 Lenovo: Operating margin trend by geography



Source: Company data, Macquarie Research, March 2015

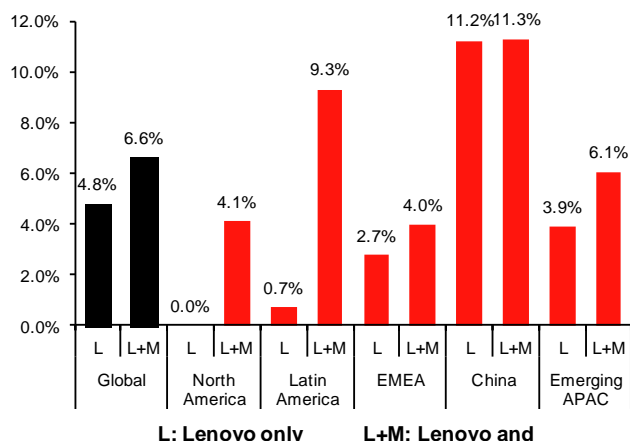
#1 Motorola + Lenovo: Leverage scale + IP to grow overseas

Market share gains in smartphones and reducing loss in the mobile division remain key focus

Improving scale and reducing losses in the Motorola business remain Lenovo's key focus. After Lenovo's acquisition of Motorola, we expect that Lenovo's global smartphone market share can grow from 5.6% in FY15E to 6.9% in FY16E and further to 7.4% in FY17E. This, we estimate, should translate to total smartphone shipment growing from 73.5m in FY15 to 100m in FY16 and 119m in FY17. We believe Lenovo is on track to increase sales in emerging and other overseas markets by strengthening Motorola's brand franchise and leveraging its IP portfolio advantage over other China peers to increase its global market share in smartphones. A high dependence on the carrier channel in China represents a risk to this plan to increase sales, but Lenovo's plan is to: 1) step up its online sales effort and set up an affiliate programme to sell its Fancy Maker smartphones and to build an e-commerce ecosystem; 2) migrate its product mix toward mid-high end smartphones.

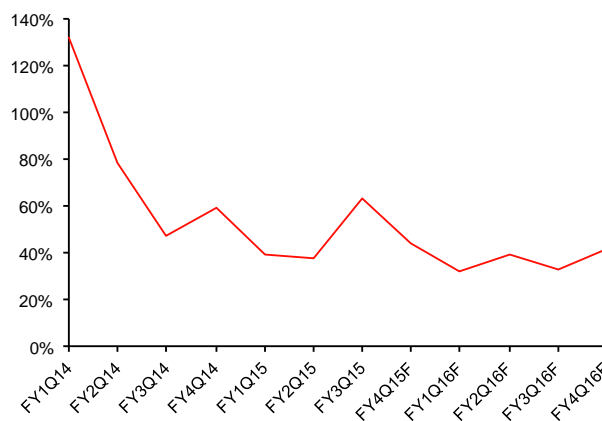
Lenovo reported a pretax margin of -2.6% in the mobile business in 3QFY15, on a loss of \$89m (this included only two months of the Motorola business). We believe material cost savings of \$400m-500m as a result of growing scale over the next 12 months should help trim losses and possibly translate to earnings surprises. We have factored in a more conservative material cost saving for its mobile division, at US\$185m/US\$300m for FY16/FY17. Annualised, this translates to ~US\$2 per unit of material cost savings, which should gradually improve OPM in the mobile business from -2.1% in FY16E to 0.6% in FY17E.

Fig 12 Lenovo global smartphone market share



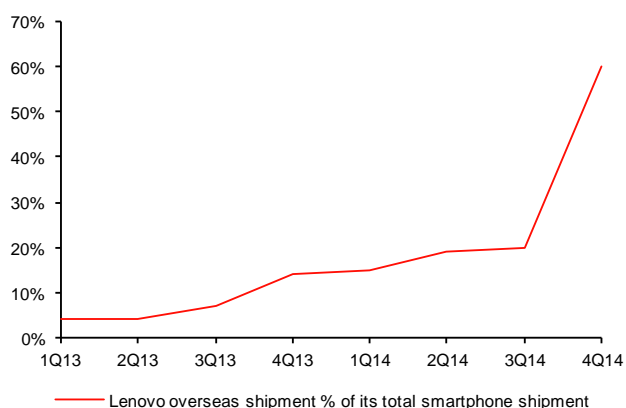
Note: 4Q14 data including shipment from Motorola
Source: IDC, Macquarie Research, March 2015

Fig 13 Lenovo smartphone YoY growth rate



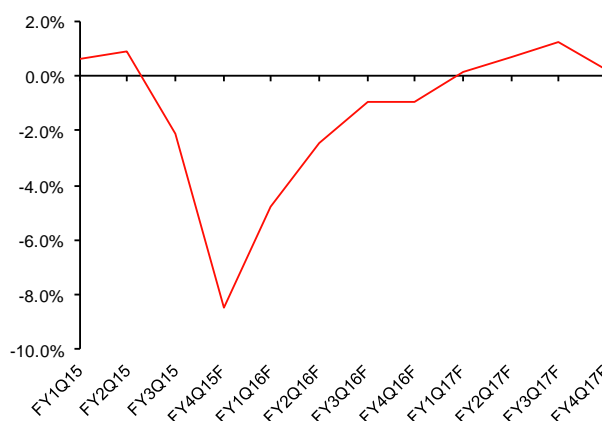
Note: 3QFY15 data including shipment from Motorola
Source: IDC, Macquarie Research, March 2015

Fig 14 Lenovo's smartphone overseas shipment % of its total smartphone shipment



Note: 4Q14: Adding Motorola smartphone shipment
Source: Gartner, IDC, Company, Macquarie Research, March 2015

Fig 15 Lenovo mobile division OP margin



Source: Company data, Macquarie Research, March 2015

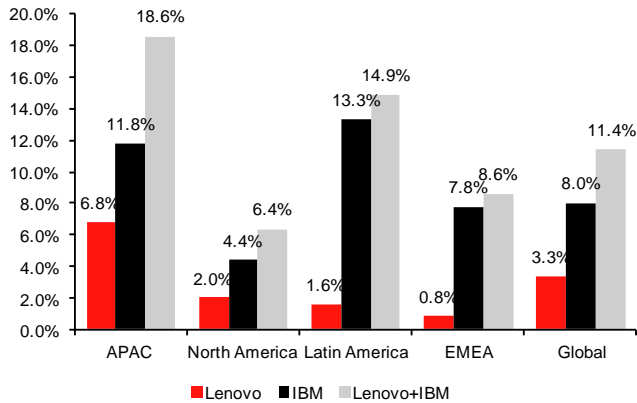
#2 Enterprise business group turning lights

We expect Lenovo's server market share to stabilize after integration of IBM System X; the business should be breakeven in six quarters

Following acquisition of the IBM x86 server business, we believe Lenovo's target of \$5bn sales in server business is achievable in FY16, assuming ~10% revenue market share (based on Gartner's global server sales projection of \$54bn in 2015). We expect Lenovo's enterprise business revenue to grow over 88% in FY16 and 9% in FY17 as the IBM x86 business acquisition brings in large scale. Lenovo aims to: 1) solidify its position in China's domestic server market, backed by cross-selling its server solutions to enterprise PC customers; and 2) tap the growing 'hyperscale' customer base in China and the US. 3) The Lenovo/EMC tie-up could generate \$100m in server sales opportunities in two years.

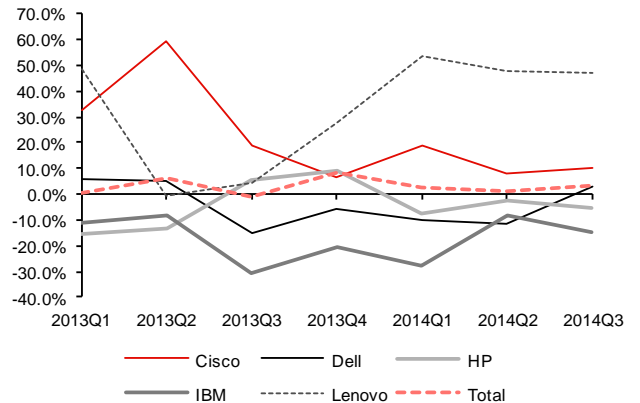
Lenovo's enterprise division reported 3QFY15 pretax margin of -3.4% on a loss of \$42m. We believe a turnaround is possible by FY17, aided by improved efficiency in supply chain management following the acquisition of IBM's X86 server business. We estimate its enterprise business should also turn profitable seven quarters after the merger or 1QFY17, as operating leverage improves enterprise operating margin from -2.0% in FY16E to 1.0% in FY17E.

Fig 16 Lenovo/IBM x86 server shipment market share by region (1H14)



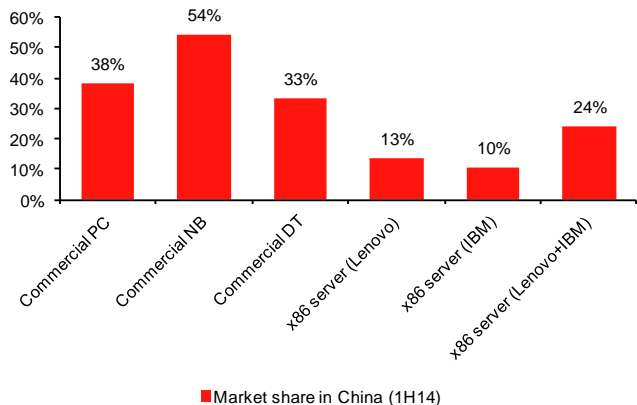
Source: IDC, Macquarie Research, March 2015

Fig 17 x86 server shipment YoY growth by vendors



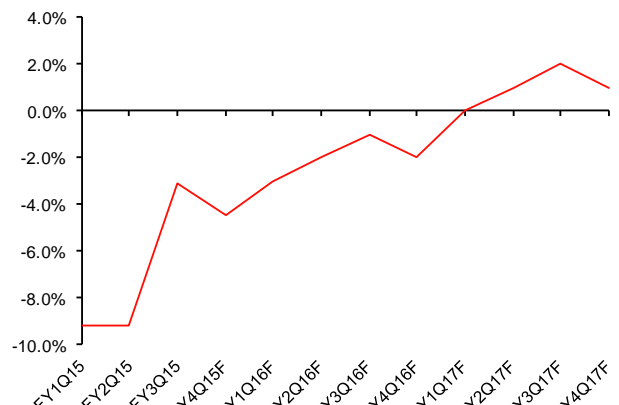
Source: IDC, Macquarie Research, March 2015

Fig 18 Lenovo's commercial PC market share vs IBM/Lenovo x86 market share in China (1H14)



Source: IDC, Macquarie Research, March 2015

Fig 19 Lenovo: Enterprise division OP margin



Source: Company data, Macquarie Research, March 2015

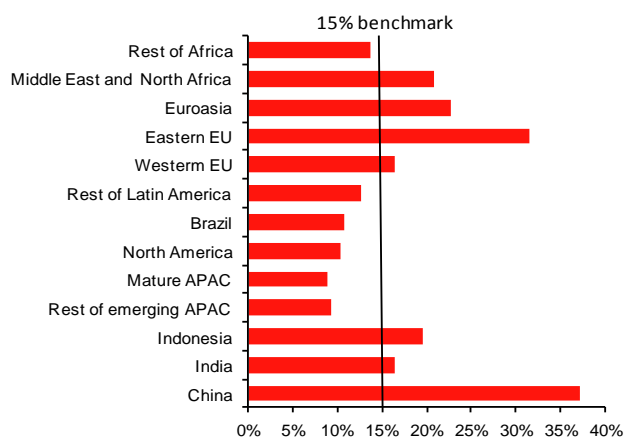
#3 Further improve profitability and market share of PC business

We believe Lenovo can still grow its global PC market share albeit at slower pace than previous years; improving profitability in the PC business should help drive earnings growth

Although Lenovo has captured ~20% global PC market share, we believe the company has room to increase it further as its market share in North America/Latin America/emerging Asia is still below 15%. We believe the company will gain market share after the PC industry has consolidated (following, among other things, Toshiba’s possible withdrawal from the consumer PC business). We factor in Lenovo’s market share in PCs expanding to 21.1% in FY16 and 21.9% in FY17 versus 19.7% in FY15. In the long term, Lenovo aims to grow shipment at a rate 5pts to 10pts faster vis-à-vis the PC market’s growth. The company’s aim is to grow its market share in PCs to 25% in three years (vs 20% in 4Q14), implying 1-2pts increase in market share annually. While this is lower than its 2-3pts increase annually in its PC market share over 2010-2014, we think it is still impressive considering the higher base and global slowdown in the PC market.

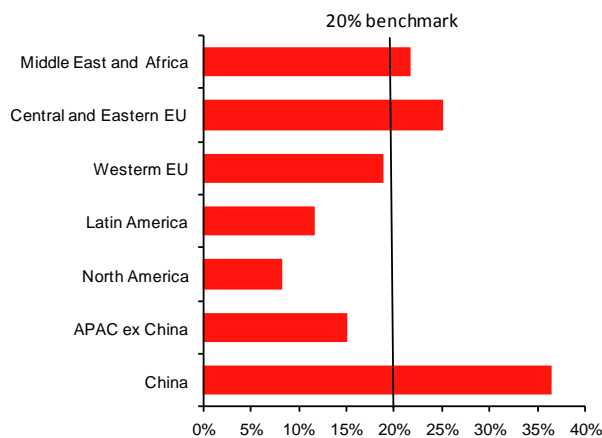
Lenovo also aims to drive PC business profitability via: 1) increasing the contribution of mid-to-high-end consumer products in its shipments; 2) enhancing profit margin on rising scale. It aims to maintain pretax margin at above 5%. Overall, we estimate Lenovo will maintain its operating margin in PCs at 5.2% in FY16 and increase it to 4.8% in FY17. In 3QFY15, its pretax margin for the PC group reached 5.4%. This would seem to be a multi-year peak, but geographic performance shows that there is scope for improvement in the US, where its OPM was -0.5%—far lower than 5.7% in China, 5.4% in APAC, and 3% in EMEA. Even excluding the adverse OPM impact of the Motorola smartphone business acquisition in America, PC OP margin could still fall short of 1%.

Fig 20 Lenovo’s PC market share in key regions/countries in 3Q14 vs 15% benchmark to breakeven



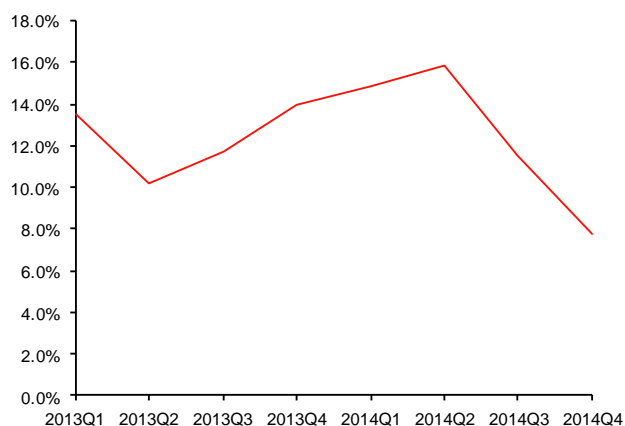
Source: Gartner, Macquarie Research, February 2015

Fig 21 Lenovo’s consumer PC market share in key regions/countries in 4Q14 vs 20% benchmark to breakeven



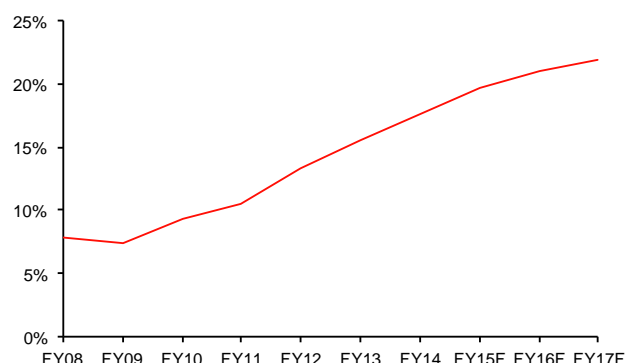
Source: IDC, Macquarie Research, February 2015

Fig 22 Lenovo PC shipment YoY growth has outperformed global PC growth by 8%-15% since 1Q13



Source: IDC, Macquarie Research, March 2015

Fig 23 Lenovo global PC market share gains



Source: IDC, Macquarie Research, March 2015

Fig 24 Lenovo's segment shipment/revenue/market share and key assumptions

	FY12	FY13	FY14	FY15	FY16F	FY17F
PC						
Global shipment (m)	367	337	312	304	300	305
Lenovo market share %	13%	16%	18%	20%	21%	22%
Volume (m)	49	52	55	60	63	67
Seq %	31	7	5	9	5	6
Revenue (US\$m)	26,575	28,460	30,677	33,435	34,820	36,168
Seq %	31	7	8	9	4	4
Mobile						
Smartphone						
Global smartphone shipment (m)	546	792	1,079	1,319	1,453	1,604
Lenovo market share %	1.1%	3.7%	4.6%	5.6%	6.9%	7.4%
*Volume (m)	6	29	50	73	100	119
Seq %	1,020	374	72	47	36	19
Revenue (US\$m)	1,171	2,644	4,717	8,076	14,996	17,756
Seq %	46	126	78	71	86	18
Tablet						
Global tablet shipment (m)	89	172	221	250	273	299
Lenovo market share %	1%	1%	4%	5%	5%	4%
Volume (m)	1	2	9	12	12	12
Seq %	0	74	313	29	4	-1
Revenue (US\$m)	312	396	1,055	1,032	999	995
Seq %	0	27	167	-2	-3	-0
Enterprise						
Global x86 server shipment (k)	8,506	8,546	8,895	9,323	10,185	10,658
Lenovo market share %	2%	2%	3%	7%	12%	12%
Volume (k)	160.4	204.7	233.9	687.5	1,171.5	1,305.6
Seq %	57	28	14	194	70	11
Revenue (US\$m)	358	463	527	2,691	5,066	5,535
Seq %	65	29	14	411	88	9

Note: FY15 included 2 months' performance of Moto sales and full quarter of IBM System X sales; * we add Motorola smartphones from 3QFY15 onward

Source: IDC, Company data, Macquarie Research, March 2015.

Valuation and recommendation

We set Lenovo's PT at HK\$13.2 based on a PER of 16x on 2QFY16-1QFY17E

Lenovo has typically traded at a PER multiple of 9x-18x on 1-yr forward earnings forecasts, at a premium over PC brands such as HP and Asustek, mainly due to: 1) strong global PC market share gains; 2) higher exposure to the fast-growing China market; 3) diversification to other new segments such as smartphones and servers, which offer mid-long-term growth potential. We set our PT at HK\$13.2 based on 16x 2QFY16-1QFY17 PER.

We estimate Lenovo's EBIT growth at 30%/33% in FY16/FY17. After the 17% rise in its stock price after the 3QFY15 result, Lenovo is trading at 17.1x/12.2x FY16E/FY17E (FY ending in March) EPS, we reckon the stock is not particularly cheap versus global peers such as HP's 9.5x and Samsung's 11.0x for FY15E or even Apple's 14.6x. However, we think solid execution and potential market share gains and profitability increases over the medium to long term argue for a valuation premium. Outperform.

Applying multiple to adjusted EPS yields more attractive valuation

While we base our target price on reported EPS, our front-page financial summary also includes adjusted EPS (B), which does not factor in non-cash elements related to M&A and amortization. As Fig 25 shows, Lenovo's implied PER of 9.4x/7.9x on FY16E/17E on adjusted EPS (B), does not look so stretched compared to peers. (Fig 28)

Adjusted EPS excludes its non-cash-related amortisation; Lenovo trades at 9.4x/7.9x adjusted FY16E and FY17E PER

In light of the gap between Lenovo's reported EPS and adjusted EPS (excluding non-cash amortization due to acquisitions), we include a table below (Fig 25) to illustrate the differences due to non-cash M&A charges and other amortization. During 3QFY15, including full quarter of IBM and 2 months of Motorola results, the total amortization for IBM and Motorola was US\$58m which is recurring basis. And during the quarter, Lenovo also incurred imputed interest (non-cash) of US\$7m for the US\$1.5bn promissory note issued to Google (due to Oct 30, 2017). Adding other non-cash M&A expenses, the total non-cash M&A charges for 3QFY15 was US\$74m, which will increase to ~US\$90m for the future quarters considering full quarter results of Motorola. While Lenovo reported pretax profit of US\$274m in 3QFY15, including these non-cash M&A charges in OPEX, it also disclosed adjusted pretax profit of US\$348m (A in Fig 25) excluding these charges for better understanding of company's profit without non-cash items. But to compare with quarters before these two acquisitions, we further exclude other amortization (US\$31m) to arrive another adjusted pretax profit of US\$379m (B in Fig 25).

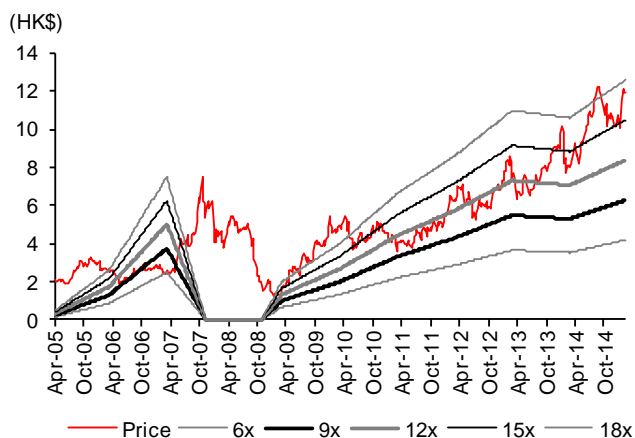
Fig 25 Lenovo non-cash M&A charges breakdown and adjusted EPS

(US\$m) Year ended March 31	1QFY15	2QFY15	3QFY15	4QFY15E	FY15E	FY16E	FY17E	Note
Non-cash M&A charges								
Amortization								
Motorola	-	-	24	36	61	146	146	Recurring
IBM x86	-	-	34	34	67	135	135	Recurring
Total Amortization (Motorola+IBM x86)	-	-	58	70	128	281	281	Recurring
Imputed interest for promissory note to Google *	-	-	7	11	18	42	42	Recurring, till Oct 30 2017
Others	-	-	9	9	18	36	36	Recurring
Total Non-cash M&A charges	-	-	74	90	164	359	359	
Other Amortization	41	40	31	31	143	124	124	Recurring
Reported pretax profit	264	329	274	91	808	1,008	1,405	
(A) Adjusted pretax profit excluding non-cash M&A charges-disclosed by Lenovo	264	329	348	180	959	1,305	1,702	
(B) Adjusted pretax profit excluding non-cash M&A charges and other amortization	305	369	379	211	1,082	1,408	1,805	
Reported net profit	214	262	253	79	808	1,008	1,405	
Adjusted net profit (A)	214	262	323	161	959	1,305	1,702	
Adjusted net profit (B)	246	295	351	190	1,082	1,408	1,805	
Reported EPS (US\$ cents)	2.03	2.53	2.32	0.71	7.60	9.07	12.64	
Adjusted EPS (A) (US\$ cents)	2.03	2.53	2.96	1.45	8.97	11.75	15.32	
Adjusted EPS (B) (US\$ cents)	2.34	2.85	4.10	3.47	12.77	16.54	19.70	The adjusted EPS shown in our financials in the front page.
PER (x) for reported EPS					20.4	17.1	12.2	
PER (x) for adjusted EPS (A)					17.3	13.2	10.1	
PER (x) for adjusted EPS (B)					12.1	9.4	7.9	

* Deferred consideration of US\$1.5bn in the form of a promissory note, issued to Google on Oct 30 2014 when the Motorola acquisition was completed, payable in cash on the third anniversary of the completion date (Oct 30 2017)

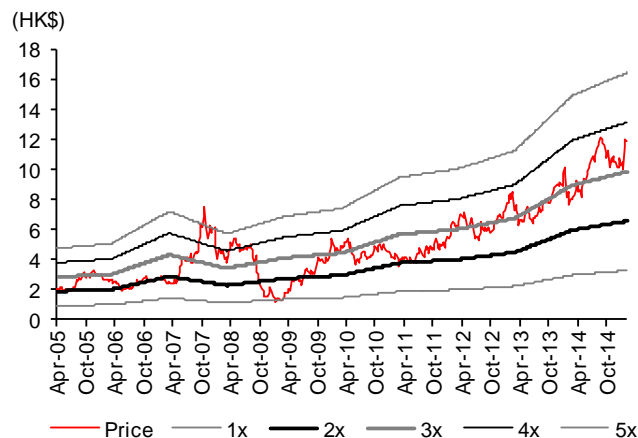
Source: Company data, Macquarie Research, March 2015, PER calculated using close price on 2 March 2015

Fig 26 Lenovo's 12-month forward PE band chart



Source: TEJ, Macquarie Research, March 2015

Fig 27 Lenovo's 12-month forward PB band chart



Source: TEJ, Macquarie Research, March 2015

Fig 28 Lenovo comparable valuation

Ticker	Company	Rating	Mkt Cap (US\$m)	Last Close	Target Price	TSR (%)	EPS (local \$/¢)			PER (X)			P/BV (X)			ROE (%)			Div yield (%)		
							13A	14E	15E	13A	14E	15E	13A	14E	15E	13A	14E	15E	13A	14E	15E
EMS/ODM																					
2317 TT	Hon Hai	O	41,010	87.1	115.0	36%	7.30	8.31	9.50	11.9	10.5	9.2	1.7	1.6	1.4	15.1	15.4	16.1	2.1	3.3	3.8
2382 TT	Quanta	N	9,774	79.5	72.0	-5%	4.84	4.80	5.41	16.4	16.6	14.7	2.5	2.7	2.5	15.1	15.6	17.7	4.8	4.2	4.8
2356 TT	Inventec	N	2,780	24.4	18.6-18%		1.97	1.91	1.74	12.2	12.6	13.9	1.6	1.7	1.6	13.5	13.0	12.0	6.6	6.4	5.8
4938 TT	Pegatron	O	6,474	85.9	70.0-13%		4.17	6.12	6.51	20.7	14.1	13.2	1.8	1.9	1.8	9.4	13.1	14.4	3.2	4.8	5.1
2324 TT	Compal	N	3,674	26.1	26.6	9%	0.57	1.63	2.64	42.9	14.9	9.2	1.1	1.1	1.1	2.4	7.3	11.7	4.1	10.0	7.2
3231 TT	Wistron	O	2,341	29.8	36.0	26%	2.42	1.95	3.01	12.3	15.2	9.9	1.0	1.1	1.0	8.9	7.1	11.0	6.2	3.3	5.1
Average										19.4	14.0	11.7	1.6	1.7	1.6	10.7	11.9	13.8	4.5	5.3	5.3
PC brands																					
992 HK	Lenovo	O	17,133	11.96	13.20	13%	0.08	0.08	0.09	19.6	20.3	17.0	5.3	4.0	3.6	27.0	19.6	21.2	2.0	1.7	2.1
2353 TT	Acer	U	2,023	20.6	17.0-17%	(7.44)	0.41	0.41		nfm	50.2	50.7	1.0	1.0	1.0	-31.3	2.0	1.9	0.0	0.0	0.0
2357 TT	Asustek	O	7,709	326.5	354.0	15%	28.56	26.21	30.27	11.4	12.5	10.8	1.8	1.7	1.6	16.4	14.1	15.5	5.9	5.5	6.3
AAPL US	Apple	O	748,247	128.5	130.0	3%	5.68	6.45	8.77	22.6	19.9	14.6	6.6	6.9	5.4	30.6	33.6	41.2	1.3	1.4	1.5
HPQ US	HP	NR	63,670	34.84	NR	NA	3.61	3.74	3.68	9.6	9.3	9.5	2.4	2.4	2.2	20.2	19.5	23.8	2.1	2.2	2.1
Average										15.8	15.5	13.0	3.4	3.2	2.8	12.6	17.8	20.7	2.2	2.2	2.4
Handset brands																					
992 HK	Lenovo	O	17,133	11.96	13.20	13%	0.08	0.08	0.09	19.6	20.3	17.0	5.3	4.0	3.6	27.0	19.6	21.2	2.0	1.7	2.1
AAPL US	Apple	O	748,247	128.46	130.0	3%	5.68	6.45	8.77	22.6	19.9	14.6	6.6	6.9	5.4	30.6	33.6	41.2	1.3	1.4	1.5
005930 KS	Samsung	O	181,294	1,357,000	1,600,000	19%	1,791	1,375	1,238	7.6	9.9	11.0	1.5	1.4	1.2	22.4	14.7	11.8	1.1	1.5	1.5
066570 KS	LG Elec	O	9,173	61,800	110,000	78%	12	48	76	50.2	12.9	8.1	1.0	0.9	0.8	1.8	7.1	10.2	0.3	0.3	0.5
6758 JP	Sony	O	33,355	3414.5	4025.0	18%	0.43	(1.25)	(1.62)	80.2	nfm	nfm	1.6	1.6	1.9	2.0	-5.7	-8.5	0.7	0.7	0.0
2618 HK	TCL Comm	O	1,160	7.4	11.02	54%	0.27	0.83	1.16	27.0	8.8	6.3	3.0	2.3	1.8	12.0	30.1	31.9	1.4	3.0	4.1
2369 HK	Coolpad	U	809	1.5	1.18-18%		0.04	0.16	0.12	36.0	8.9	12.4	4.4	1.8	1.6	13.6	23.1	14.1	0.7	2.3	1.7
763 HK	ZTE	NR	10,615	17.28	NR	NA	0.41	0.78	0.95	33.8	17.7	14.6	2.1	1.9	1.7	6.2	11.4	12.5	0.2	0.9	1.2
2498 TT	HTC	NR	4,061	153.00	NR	NA	(1.60)	1.80	3.07	n.a.	85.0	49.9	1.6	1.6	1.6	-1.7	1.5	3.1	0.0	0.1	0.4
Average										34.6	22.9	16.7	3.0	2.5	2.2	12.7	15.1	15.3	0.8	1.3	1.4

Note: Lenovo's 14E/15E are years ended March 31, 2015/2016; HP fiscal year ends on October 31.

Source: Bloomberg, Company data, Macquarie Research, March 2015, priced as of 2 March 2015

Our earnings scenario analysis

Our bull-case earnings scenario represents 27.9%/14.5% upside to our current estimates for FY16 and FY17

One of the key earnings swing factors for Lenovo is its margin performance for its mobile and enterprise divisions, as these are new acquired business which still need considerable effort in cost-cutting to generate synergy. We believe its PC business profitability is relatively stable as PCs were the only profitable product division (pretax) in 3QFY15. During the latest earnings conference, Lenovo projected US\$400-500m material costs saving for its mobile division given increasing bargaining power in material purchases for larger scale after acquiring Motorola. If the company executes this well, it could translate into higher gross margin as most of the cost savings will come in COGS of the mobile division. Lenovo also guided to improving operating leverage for its mobile and enterprise businesses when scale grows. Specifically, the company is focussed on making the mobile business profitable 4-6 quarters after the merger.

We provide a scenario analysis (Fig 29) showing how Lenovo's EPS could be affected by material cost savings for its mobile division and OPM margin improvement for mobile and enterprise divisions.

- ⇒ **Base case:** We factor in more conservative material cost savings for the mobile division, at US\$185m/US\$300m for FY16/17E, or annualized ~US\$2 per unit of material savings, which leads to a higher gross margin of 14.8%/15.2% for the mobile division. (vs. ~13.5% for 3QFY15 the first quarter after merge as it had not assumed cost savings for the quarter). In our base case scenario, its mobile OPM will gradually improve and turn profitable seven quarters after the merger or 1QFY17 – we estimate its mobile OPM to recover from -2.1% in FY16E to 0.6% in FY17E. We estimate that its enterprise business will also turn profitable after six quarters from the merger, with improving operating leverage (i.e., lower OPEX ratio on rising scale) – we factor in its enterprise OPM improving from -2.1% in FY16E to 0.6% in FY17E. In our base case, we derive FY16/FY17E EPS of US\$0.091 and US\$0.126.

- ⇒ **Bull case:** We factor in a more bullish material savings scenario for the mobile division at US\$500mn for both FY16E and FY17E, or ~US\$4 per unit of material savings, which leads to gross margin of 16.7%/16.3% for the mobile division. Given higher gross profit for the mobile division and relatively stable opex, we estimate that its mobile division would turn profitable four quarters after the merger or 2QFY16. We estimate its mobile OPM to be breakeven in FY16E to 2% in FY17E. Mobile division operating profit would contribute 17% of Lenovo's total operating profit for FY17E. In this bull case, EPS of US\$0.119 and US\$0.150 for FY16/FY17E would be 31.3%/18.9% higher than our base case FY16E and FY17E earnings scenario.
- ⇒ **Bear case:** In our bear case scenario, we assume no material cost savings at all for the entire forecast period so the gross margin for the mobile division would stay stable at 13.6%, a similar level as 3QFY15 in the first quarter after merger. Although the operating leverage is gradually improving for both its mobile and enterprise divisions, we estimate that its mobile segment could not reach breakeven by end of FY17 while enterprise would not break even in FY17. For the full year FY16/17E, we estimate mobile OPM is -4.3%/-1.0% while enterprise OPM is -2.3%/-1.7%. In this bear case scenario, EPS of US\$0.06 and US\$0.09 would be 34%/28% lower than our current (base case) FY16 and FY17 estimates.

Fig 29 Lenovo Earning Scenario analysis

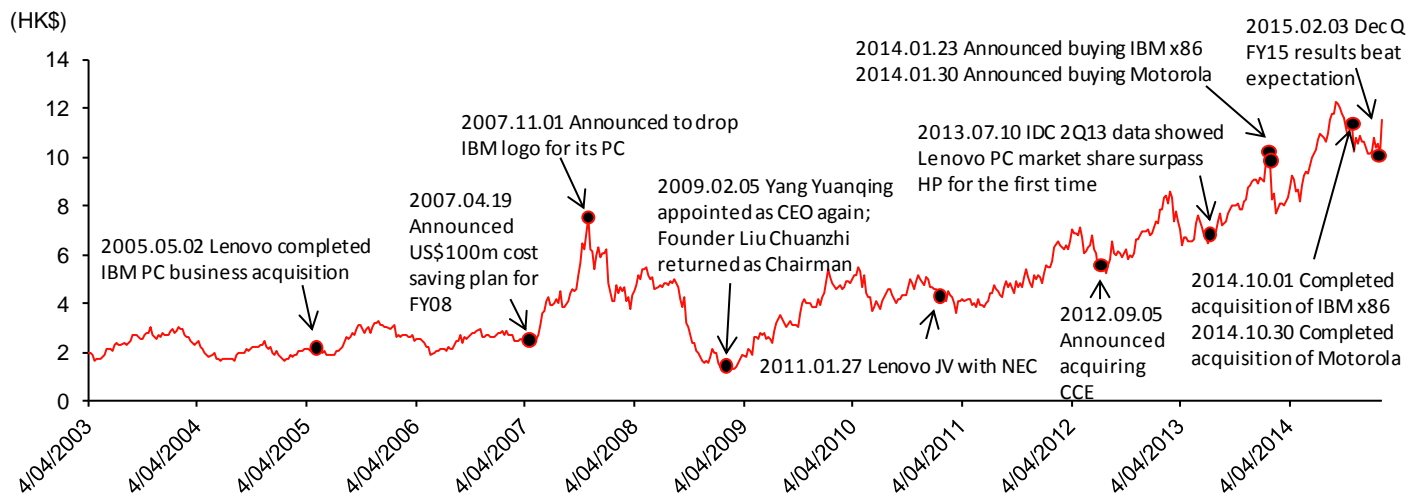
	Bear		Base		Bull	
	FY16E	FY17E	FY16E	FY17E	FY16E	FY17E
Material cost saving for Mobile segment (US\$m)	0	0	185	300	500	500
Gross margin for Mobile segment	13.6%	13.6%	14.8%	15.2%	16.7%	16.3%
Operating margin						
PC	5.2%	4.8%	5.2%	4.8%	5.2%	4.8%
Mobile	-4.3%	-1.0%	-2.1%	0.6%	0.0%	2.0%
Enterprise	-2.3%	-1.7%	-2.0%	1.0%	-0.5%	1.8%
Total	1.8%	2.3%	2.5%	3.1%	3.2%	3.6%
EPS (US\$ cents)	6.0	9.1	9.1	12.6	11.9	15.0
EPS Difference	-34.0%	-28.0%	0.0%	0.0%	31.3%	18.9%

Source: Macquarie Research, March 2015

Lenovo Catalysts – key items to watch

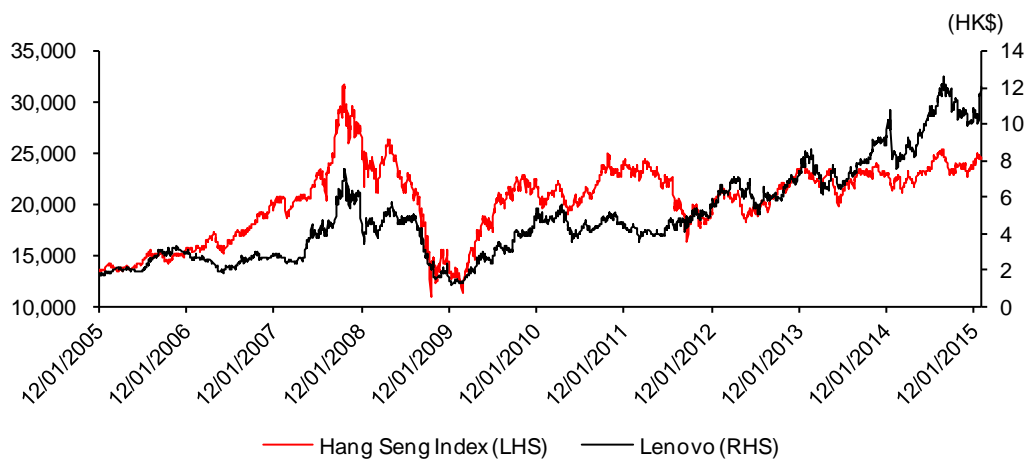
Over the past few years, Lenovo stock has reacted to its aggressive M&A efforts either positively or negatively. Moreover, its quarterly earnings releases, in early Feb/mid May/mid/Aug/early Nov, also serve as key catalysts to its stock performance. We list upcoming catalysts in Fig 30.

Fig 30 Lenovo: Share price chart versus key events



Source: Company data, Macquarie Research, March 2015

Fig 31 Lenovo's share price correlation with Hang Seng Index



Source: Bloomberg, Macquarie Research, March 2015

Fig 32 Upcoming Lenovo stock catalysts

Segment	Catalyst	Timing	Implication
PC	Lenovo PC share gains: IDC 1Q15 PC shipment/market share data	Released in early April	We expect Lenovo's PC market share could trend up to 21.1% in FY16, versus 19.9% in 4Q14.
	Lenovo PC segment profitability 4QFY15	Earnings conference in mid-May	We expect PC pretax margin of 4.3%+ in 4QFY15 (vs. 5.4% in 3QFY15), if Lenovo can sustain at 5% level- this shall be key catalysts.
	Intel's guidance on PC outlook	Earnings conference in mid-April	PC demand outlook, and Intel expectation on Core M processor which can trigger more thinner form factor NBs/2-1 NBs.
	HP's guidance on PC outlook	Earnings conference in mid-May	We expect further PC industry consolidation, which will benefit the leading players. HP profitability in PC business which can be read as industry profitability indicator too.
	Computex 2015	June 2-6	We expect Lenovo to showcase PCs with more innovative form factor.
	HP's split into HP Inc (PC/Printer) and HP Enterprise	Expected to be completed by end of October 2015	Expect HP Inc. to focus on driving PC profitability and thus less pricing pressure.
Mobile	IDC 1Q15 smartphone shipment/market share data	Released in late-April	Expect to see smartphone market share upward trend from 6.6% in 4Q14, We expect that Lenovo global smartphone share can grow up to 6.9% and 7.4% in FY16 and FY17.
	IDC 1Q15 tablet shipment/market share data	Released in late April/early-May	Expect more overseas shipment contribution from the growth of Motorola. (vs. ~60% overseas exposure for Lenovo+Motorola in 4Q14).
	Mobile segment profitability 4QFY15	Earnings conference in mid-May	Expect higher YoY unit growth than its peers amid tablet market slow down.
	MWC 2015	March 2-5	We expect mobile pretax margin in 4QFY15 to come in at <-6.4% - or this is worse than -2.6% in 3QFY15 due to seasonality and factoring full quarter of Motorola's losses (vs 2 months in 3QFY15), before it reviving in upcoming quarters. Any faster improvement will be key driver.
	Fancy Maker online selling platform	Officially online on April 1	Expect Lenovo to showcase its new flagship smartphone models, in particular, renewing Motorola's line-ups. Expect more efficient and customer-friendly ecosystem, and also online sub-brand smartphones to support Lenovo's smartphone shipment growth.
Enterprise	IDC 4Q14 x86 server shipment/market share data	Released in late February	Expect milder market share decline for IBM+Lenovo. (IBM+Lenovo 3Q14 x86 server market share was 10.7%, declining from 11.9% in 2Q14).
	IDC 1Q15x86 server shipment/market share data	Released in May	Expect market share stability in 2Q15 onwards
	Enterprise segment profitability 4QFY15	Earnings conference in mid-May	Expect enterprise pretax margin to fell in 4QFY15 to <-5.3% due to seasonality vs -3.4% in 3QFY15. Before its improvement on cost synergies materialize in upcoming quarters.
	Intel & HP's guidance on server outlook	Earnings conference in mid-April/ May	Expect stronger growth for China server/data center market, where Lenovo is well positioned.
	HP's split into HP Inc (PC/Printer) and HP Enterprise	Expected to be completed by end of October 2015	Expect HP Enterprise to be more aggressive in growing data center businesses, thus more competition for Lenovo.

Source: Macquarie Research, March 2015

Can Lenovo replicate success in highly competitive smartphone market?

Lenovo is ranked the #3 smartphone player with 6.6% share and aims to grow its overseas market more aggressively.

We believe Lenovo has a competitive edge over many China smartphone brands

China domestic market smartphone growth deceleration and increased market shift towards open-market and on-line sales are Lenovo's key challenges

We expect Lenovo's mobile division OPM to recover from -2.1% in FY16E to 0.6% in FY17E

Lenovo, post the acquisition of Motorola, ranks as the #3 smartphone player, with 6.6% share in 4Q14 globally, and aims to grow its smartphone shipments to 100m in FY16E. Motorola brand smartphone shipments, in fact, have seen growth in multiple overseas markets in 4Q14 as it is now covers over 50+ countries, and has been successfully strengthening its position in multiple emerging countries such as Brazil and India. In 4Q14, Motorola shipped 10.6m smartphones versus CY1-3Q14 of 15m, indicating a quantum jump, chiefly in its geographic expansion. We expect that Lenovo's global smartphone share can grow from 5.6% in FY15E up to 6.9% and 7.4% in FY16E and FY17E. Or we expect its total smartphone shipment could grow from 73.5m in FY15 to 100m in FY16 and 119m in FY17.

While we believe that the competitive landscape is intensifying in the global smartphone market, in particular, with Samsung tightening its focus on emerging markets coupled with more China brands entering the domestic/overseas market, Lenovo could have better advantages vs other China players in overseas markets, thanks to 1) its solid IP portfolio post integration; 2) its superior supply chain management; 3) leverage well-established Motorola brands.

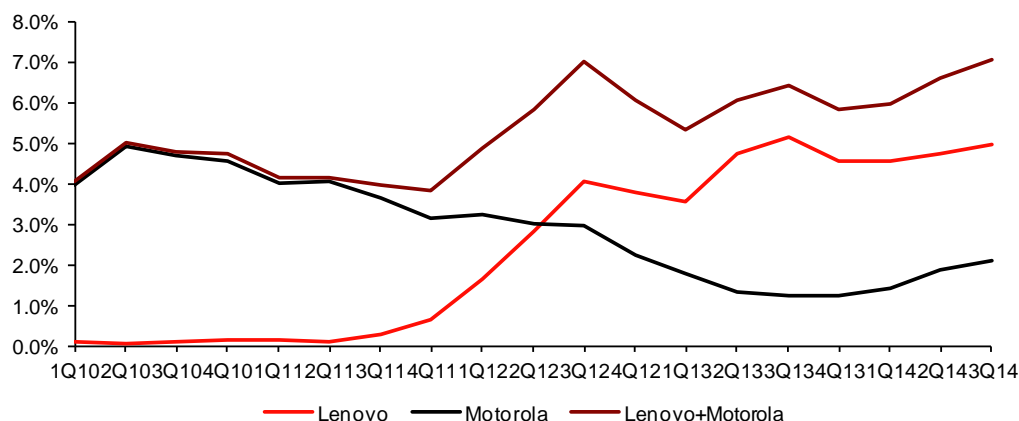
Despite the challenges Lenovo faces in the China market as the market shifts from carriers to open market channels and on-line sales, Lenovo has outlined a new plan to address its transformation: 1) increase its mid- to high-end smartphone sales such as Vibre and the re-introduction of Motorola into China; 2) set up a new affiliate "fancy maker" to focus on an online platform and ecosystem. While we believe the domestic market could remain challenging, we also do not believe market expectations are high, so any positive progress made should translate into upside, in our view. On our shipment estimate of 100m in FY16, we expect domestic demand to make up 60% while overseas would contribute 40%.

The scale of expansion has helped to improve profitability at a faster pace despite still reporting a loss. Lenovo targets reaching breakeven in 4-6 quarters by reducing \$400-500m component procurement costs in the next 12 months via its supply chain management. Moreover, while it reported mobile business pretax margin of -2.6% in 3QFY15 on a loss of \$89m (only two months of Motorola performance), on rising scale, we think Lenovo's target to trim \$400-500m material cost savings in next 12 months via supply chain management (ie, procurement negotiation power etc) should help reduce the loss. We have factored in a more conservative material cost savings for its mobile division, at US\$185m/US\$300m for FY16/17E, or annualized ~US\$2 per unit of material savings, we expect its mobile OPM will gradually improve and turn profitable seven quarters after the merger or 1QFY17, from -2.1% in FY16E to 0.6% in FY17E.

Increasing overseas/EM exposure via Motorola acquisition

According to Gartner 1Q-3Q14 data, Samsung and Apple collectively controlled ~40% of global smartphone market share, while Lenovo, Huawei, LG, and Xiaomi were tied with each other, with 4-5% global market share. Post the acquisition, the combined market share for Lenovo and Motorola would have reached 6.6%, making it No.3 globally despite the considerable market share gap with both Samsung and Apple. We believe Apple mainly dominates in premium high-end market segments.

Fig 33 Lenovo/Motorola global smartphone market share trends

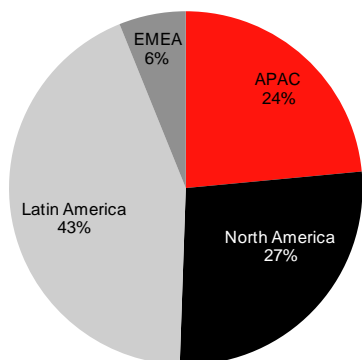


Source: Gartner, Macquarie Research, March 2015

Post integration, Lenovo will increase its overseas market exposure. Lenovo itself used to generate 80% of its smartphone shipments from the domestic China market, as it was traditionally stronger in China, capturing 11.2% market share in 1Q-3Q14, next to Samsung and Xiaomi. By contrast, Motorola had higher smartphone shipment exposure to both Latin America (43%) and North America (27%) (Fig 34). Post integration, Lenovo will reduce its China market concentration, as its global presence should increase. Motorola ranks fourth in both North American and Latin American smartphone markets.

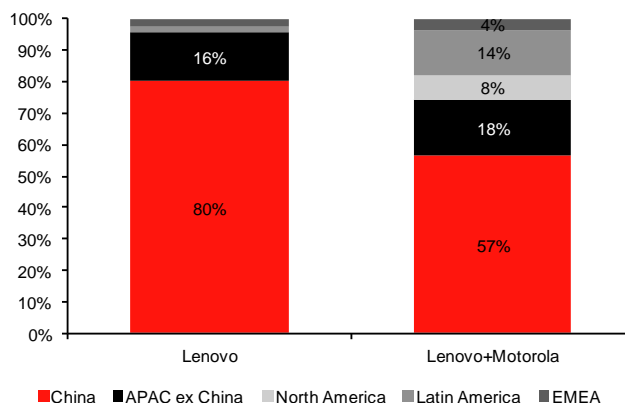
Both Lenovo and Motorola were aggressive in Asia emerging markets such as India and Southeast Asia. Combined market share (6.1%) ranks it third, despite there being many local makers. In 4Q14, post integration, from a unit shipment standpoint, Lenovo’s overseas shipment ratio increased to 60%, indicating rising penetration (Fig 40).

Fig 34 Motorola smartphone shipments by region (3Q14)



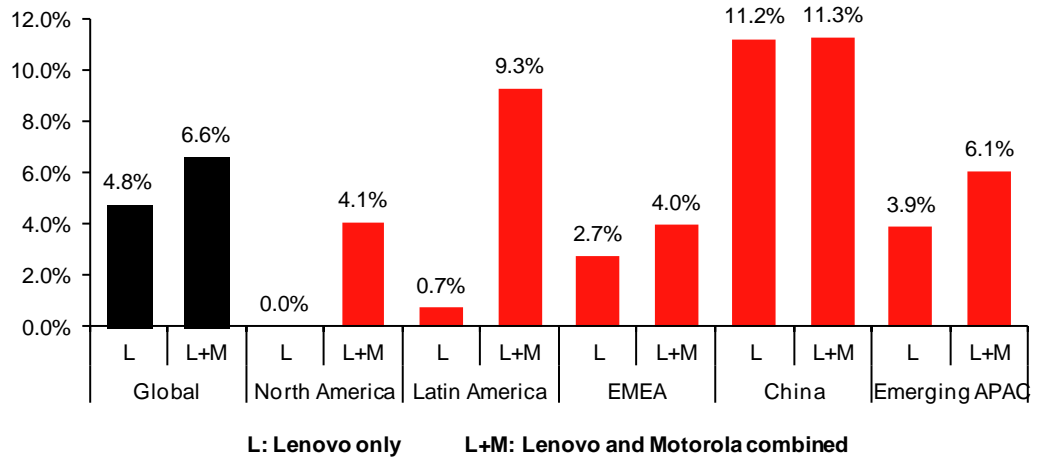
Source: Gartner, Macquarie Research, March 2015

Fig 35 Lenovo+Motorola shipment mix by region (3Q14)



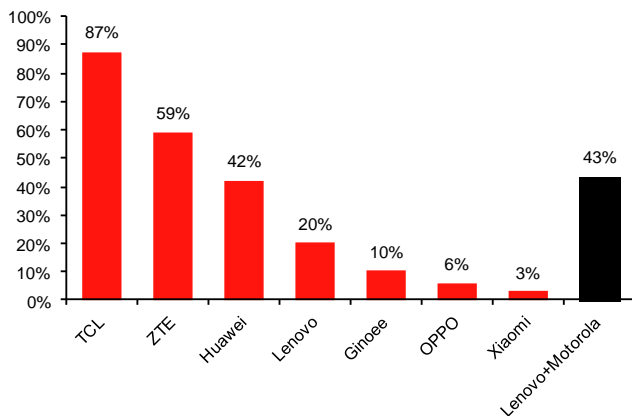
Source: Gartner, Macquarie Research, March 2015

Fig 36 Lenovo only vs. Lenovo+Motorola smartphone market share by region in 1Q-3Q14



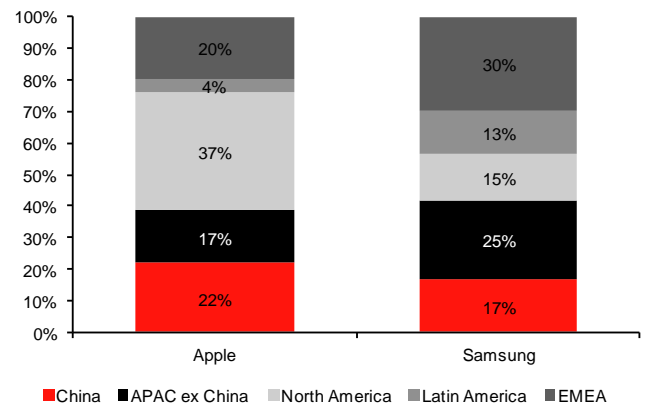
Source: IDC, Macquarie Research, March 2015

Fig 37 Chinese smartphone vendors' overseas exposure by unit (3Q14)



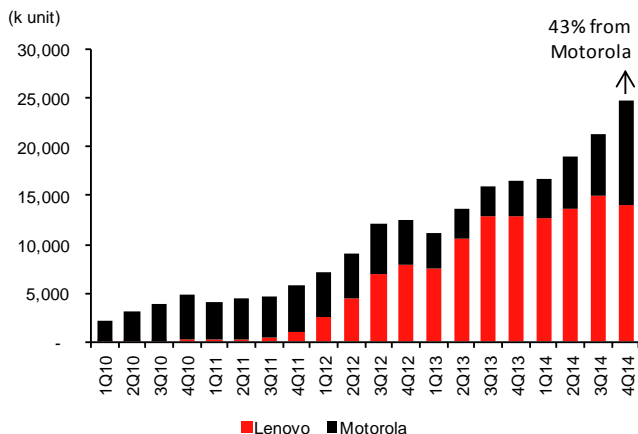
Source: Gartner, Macquarie Research, March 2015

Fig 38 Apple & Samsung shipment by region (3Q14)



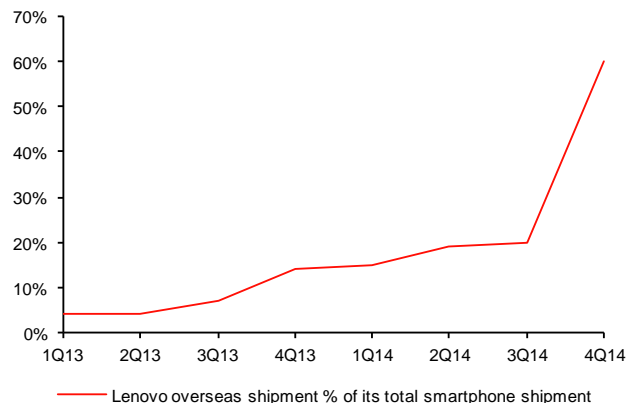
Source: Gartner, Macquarie Research, March 2015

Fig 39 Lenovo and Motorola smartphone shipment trends



Note: Lenovo's Motorola acquisition was effective on October 30, 2014, while the chart shows separate shipment for Lenovo and Motorola for 4Q14.
Source: Gartner, IDC, Company data, Macquarie Research, March 2015

Fig 40 Lenovo's overseas smartphone shipments % of total smartphone shipments



Note: 4Q14: Lenovo+ Motorola
Source: Gartner, IDC, Company data, Macquarie Research, March 2015

Lenovo should have an advantage over other China brands thanks to its IP portfolio

Ticket to overseas expansion: Richer IP portfolio

One of key benefits Lenovo addresses via the Motorola acquisition is that in addition to the Motorola brand, R&D and sales & marketing force, the acquisition also brings Lenovo over 2,000 patents and 21,000 patent cross authorizations from Google. This gives Lenovo the advantage of fewer royalty costs (likely ~5-10% savings) and less risk of legal dispute in overseas expansion.

Lenovo claims that currently, among the Chinese smartphone vendors, Huawei and ZTE have the largest number of IP patents thanks to earlier R&D development and operations in telecom infrastructure supply. For the rest, the quickest way to gain IP protection is via acquisition or buying from patent organizations. Take Lenovo for example, in addition to the Motorola acquisition, it spent US\$100m on 21 patents including essential ones for 3G/LTE and 2,500 cross authorizations from Unwired Planet in Mar 2014. It also bought over 3,800 patents including for smartphone design/manufacturing from NEC in Apr 2014.

As Chinese smartphone makers are turning more aggressive in overseas expansion, the importance of IP protection has increased, in particular, for penetrating into more developed countries which have stricter law enforcement and are home to most of the biggest patent owners such as Apple, Google, Alcatel and Ericsson. This is part of the reason why Chinese smartphone makers target emerging markets when taking their first steps into the global footprint.

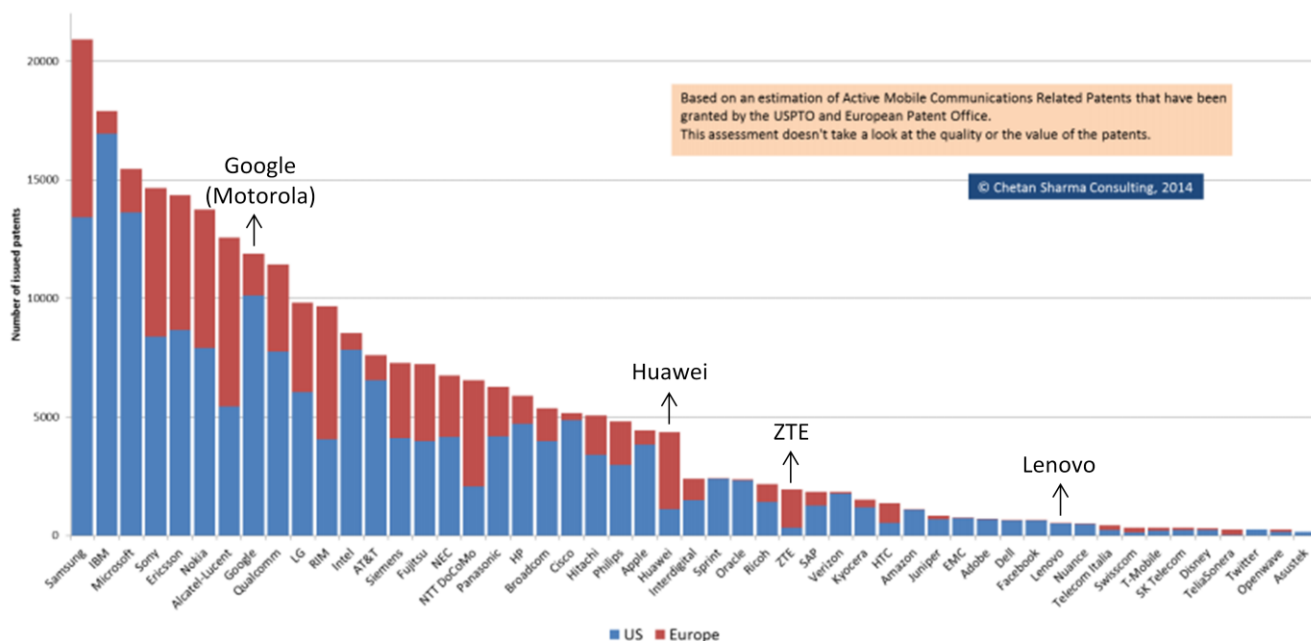
But recently, patent lawsuits have also occurred emerging countries, such as Ericsson suing Xiaomi in India for not paying royalty fees and asking the court to prohibit Xiaomi from selling in India. Ericsson has also asked Indian local smartphone vendors Micromax and Intex to pay 1% of sales as royalty fees. We believe the cases will become common in more countries as shipments from these Chinese smartphone makers to overseas grow. This is a negative for those smartphone brands with less patent protection as their costs could be higher in the future.

China NRDC ruling could change future competition landscape

In addition to royalty fees paid to individual patent owners, most Chinese smartphone makers are under the protection of Qualcomm's patent licensing policy, ruling that phone companies which intend to use its chip products must also cross-license their own patents to Qualcomm and cannot levy royalties on Qualcomm's clients either. Although the smartphone makers need to pay 5% of the selling price of each smartphone to Qualcomm, they enjoy the protection of big patent pools under this mandatory cross-licensing agreement. Nonetheless, China's National Development and Reform Commission (NDRC) recently finalized the investigation into monopolistic practices by Qualcomm, and Qualcomm has been fined US\$975m and forced to reduce royalty charges by 35% per phone (from the prior 5% royalties on smartphone pricing to 5% royalties on 65% of the smartphone price). Qualcomm also needs to cancel its policy of mandatory cross-licensing agreements. This will benefit Lenovo, Huawei, ZTE and those who have their own IP patent pools as they could also start charging other smartphone brands without patent protection.

Fig 41 shows the rank of the amount of mobile related patents owned by mobile /telecom /infrastructure related players. These patents cover fields related to multiplex communication, telecommunication, data processing, multicomputer data transferring, computer graphic processing, etc. While owning more patents doesn't guarantee success in the smartphone market due to efforts in product design/promotion/cost control, having patent protection would certainly reduce costs for royalty fees or bypassing-patent designs, and risks for legal disputes.

Fig 41 Mobile related issued patents in US and Europe (1995-2014)

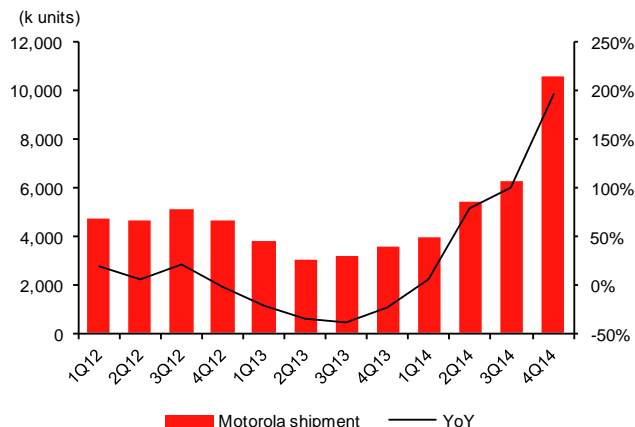


Source: Chetan Sharma Consulting, Macquarie Research, March 2015

Motorola loss was reducing in 3QFY15, look for further improvement

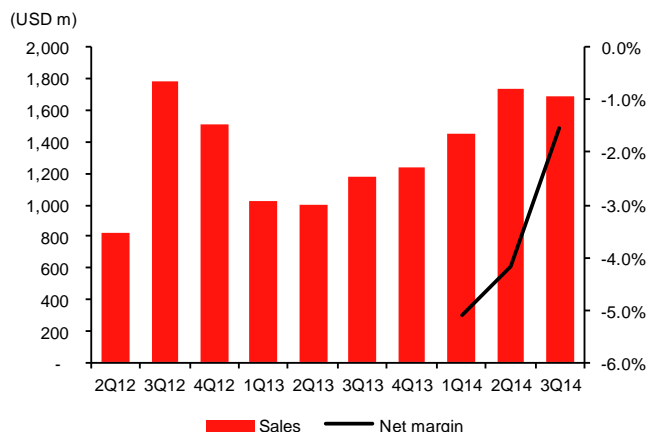
Thanks to the success of Motorola G and Motorola E, Motorola’s smartphone shipment scale has been improving since 4Q14 and thus net loss has been decreasing. According to Gartner, Motorola’s smartphone shipment increased from 3.6m in 4Q13 to 6.3m in 3Q14 and 10.6m in 4Q14 (4Q14 based on IDC data), lifting global market share from 1.3% to 2.1% and 2.8%.

Fig 42 Motorola’s smartphone shipment YoY trend



Source: Gartner, IDC, Macquarie Research, March 2015

Fig 43 Google’s Motorola Mobile sales and net margin



Source: Google Inc, Macquarie Research, March 2015

We expect its smartphone market share to grow from 5.6% in FY14 to 6.9% and 7.4% in FY16E and FY17E

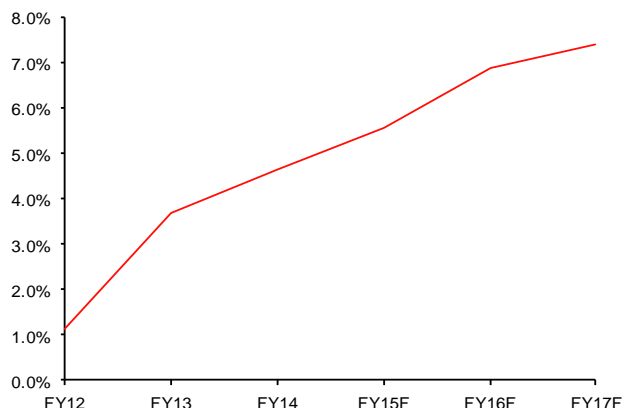
Lenovo has guided to ship 100m smartphones and tablets (including Motorola products) in the year after the deal closes. With market share gain/penetration and increasing opex leverage, we expect Motorola to further improve on both the top and bottom lines. We expect Lenovo global smartphone share can grow from 5.6% in FY15 to 6.9% and 7.4% in FY16E and FY17E. We expect its total smartphone shipments could grow from 73.5m in FY15E to 100m in FY16E and 119m in FY17E. Overseas markets could contribute 60%, in our view.

We expect Lenovo mobile division OPM to recover from -2.1% in FY16E to 0.6% in FY17E

In the meantime, as Motorola’s ASP is higher than Lenovo, the merger also helps improve the overall product portfolio. While Lenovo’s smartphone business is currently hovering around breakeven levels due to severe pricing competition in the Chinese market, lower losses at Motorola in 3QFY15 could enhance market confidence on Lenovo’s execution.

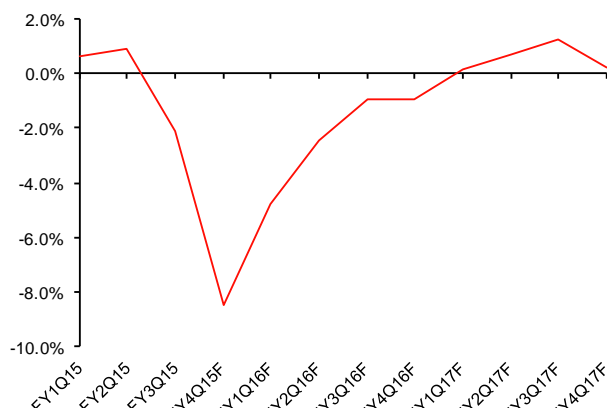
The scale expansion has improved profitability at a faster pace despite still reporting a loss. Lenovo targets to reach breakeven in 4-6 quarters by reducing \$400-500m in component procurement costs in the next 12 months via its supply chain management. Moreover, while it reported its mobile business pretax margin of -2.6% in 3QFY15 on a loss of \$89m (two months Motorola performance only), on rising scale, we think Lenovo’s target to trim \$400-500m material cost savings in the next 12 months via supply chain management (ie, procurement negotiation power etc) will help to reduce the loss, thus translating to an earnings surprise. We factor in a more conservative material cost savings for its mobile division, at US\$185m/US\$300m for FY16/17E, or annualized ~US\$2 per unit of material savings, we thus expect its mobile OPM will gradually improve and turn profitable six quarters after the merger, from -2.1% in FY16E to 0.6% in FY17E.

Fig 44 Lenovo's smartphone market share gains



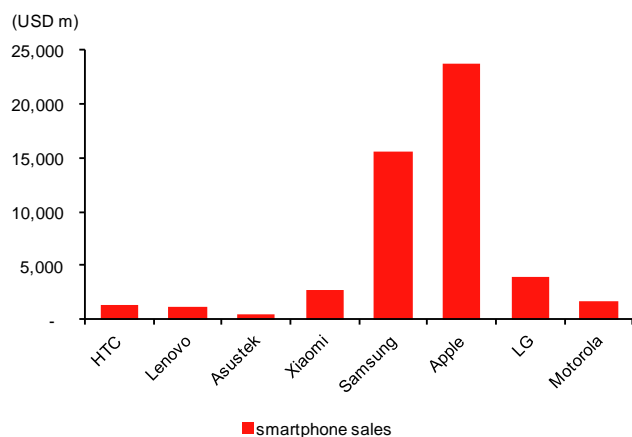
Source: IDC, Macquarie Research, March 2015

Fig 45 Lenovo mobile division OP margin



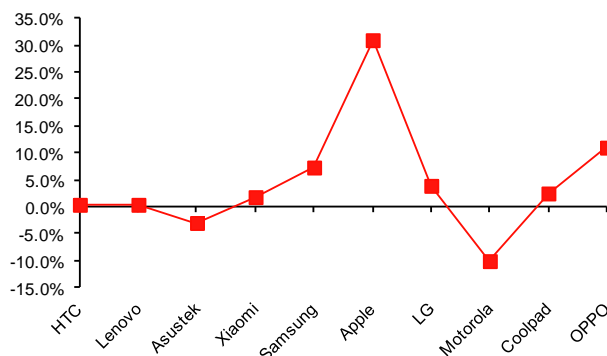
Source: Macquarie Research, March 2015

Fig 46 Smartphone sales comparison (3Q14)



Source: Company data, Macquarie Research, March 2015

Fig 47 Smartphone OPM comparison (3Q14)



Source: Company data, Macquarie Research, March 2015

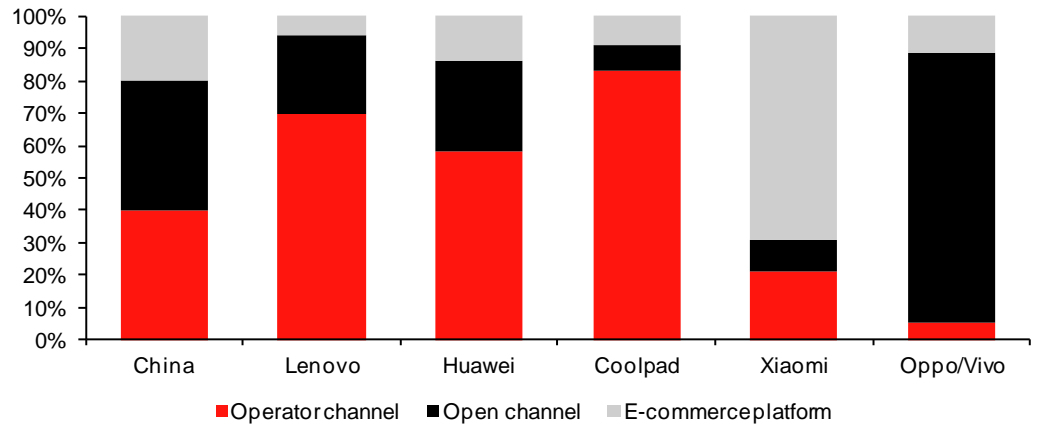
China domestic smartphone market face a couple new challenges

The Chinese smartphone market is more fragmented as the top two players captured only 26% market share, compared to the top two brands in North America with ~64%, 49% in Latin America, 40% in EMEA. Given intensified local competition, many of the Chinese smartphone brands are more aggressive in overseas penetration, including Lenovo, Huawei, ZTE, and Xiaomi. Moreover, the mature supply chain has also lowered smartphone entry barriers given availability from turn-key solution from chipset makers. In addition to fragmented market nature, we believe Lenovo will also face several key challenges in China domestic market.

Lenovo's higher smartphone exposure via carriers market will be under more pressure

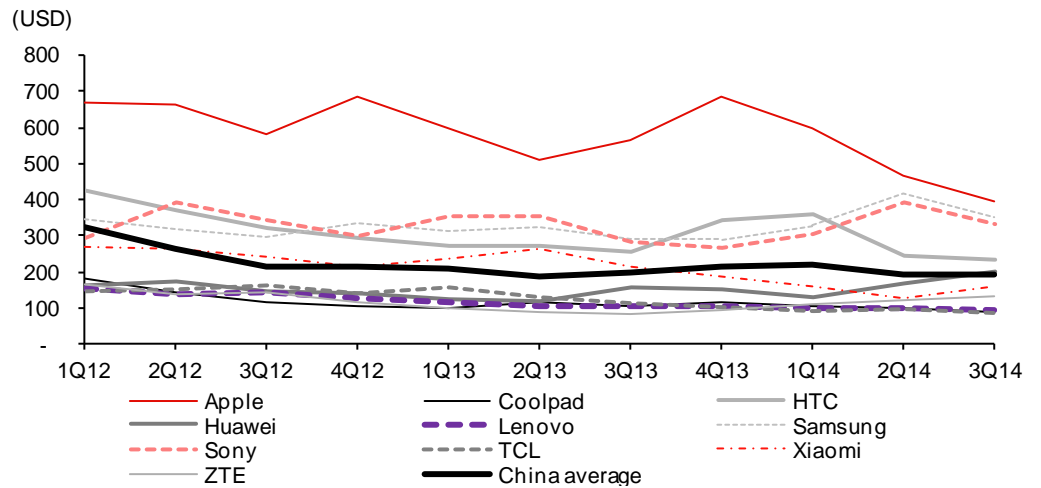
- **Operator handset subsidy cut triggers increasing exposure to open channel and e-commerce platform:** Our telecom team led by Danny Chu has observed that, starting from 2H14, China operators made a significant change to their terminal subsidy strategy. Instead of subsidizing contracted-bundled smartphones, they started to offer more data rebates and aggressively promote the unbundled subscription plans. Hence, there will be merely no difference in buying smartphones from operators, open channel, or online. The number of bundled packages offered has been dropping since 2H14, which adversely impacted those who used to dominate this segment, such as Lenovo, Huawei, Coolpad and ZTE. Moreover, Lenovo's smartphone ASP in China was lower than peers average (US\$96 in 3Q14 vs. China average of US\$192 and Huawei's US\$201 and ZTE's US\$135, according to IDC). We believe that operator handset subsidy cut will thus have more adverse impact on Lenovo because operators shift more focus on subsidizing mid-to-high end smartphones.

Fig 48 China smartphone brands' shipment breakdown by channels, 2014



Source: Company data, Sina –Media, Macquarie Research, March 2015

Fig 49 China smartphone ASP comparison: Lenovo vs other smartphone brands



Source: IDC, Macquarie Research, March 2015

Fig 50 China: Lenovo's product line with prices (US\$) and comparison with peers

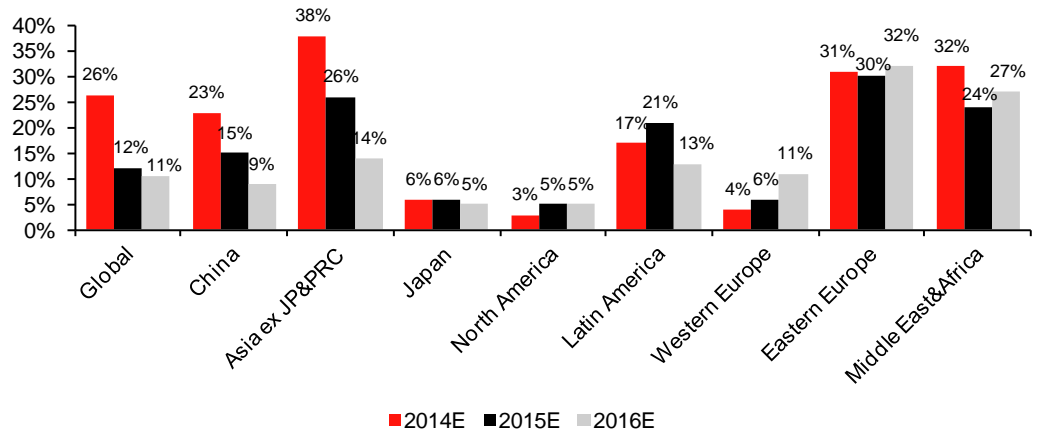
Low End		Mid End				High End		
Lenovo A320T	Lenovo A360T	Lenovo K3	Lenovo A936	Lenovo A858t	Lenovo S90 Sisley	Lenovo Vibe X2	Lenovo Vibe Z2	Lenovo Vibe Z2 Pro
\$51	\$74	\$96	\$160	\$209	\$321	\$399	\$429	\$769
								
Coolpad 8021	Coolpad 8702	Huawei Honor Free play 4	Huawei Honor Free play 4X	ZTE S2003	Huawei Honor 6 Plus	Huawei Ascend G7	Gionee ELIFE E7L	Huawei Ascend P7 Sapphire
\$64	\$77	\$112	\$160	\$209	\$321	\$353	\$433	\$752
								
ZTE Q507T	Xiaomi Redmi 1S	ZTE V5 MAX	TCL S838M	Xiaomi Mi4	Huawei Mate 7	Coolpad Dagan 4		
\$58	\$96	\$160	\$209	\$321	\$481	\$703		
								
	Coolpad F1 Plus	ZTE Star 1						
	\$96	\$321						
								
		Gionee ELIFE S5.1						
		\$321						
								

Note: All smartphones are 4G supportive
 Source: Company data, Macquarie Research, March 2015

China smartphone growth is also slowing its pace

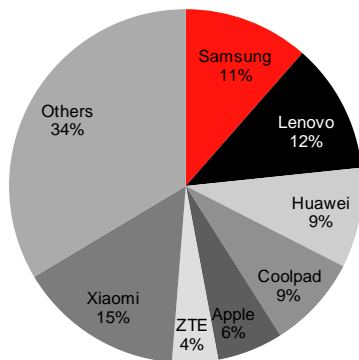
- **Slower domestic China market growth but intensifying market competition landscape:** According to IDC, China smartphone market shipment growth will slow down to 15% YoY/9% YoY in 2015/2016 from 23%YoY in 2014 – which implies the China smartphone growth rate will not outperform the global market in 2016. China market smartphone penetration, in terms of smartphone shipment % as of total handset shipment, has surged to 92% in 3Q14, which indicates less upside for upgrade demand from feature phones to smartphones.

Fig 51 Smartphone shipment growth YoY in different regions



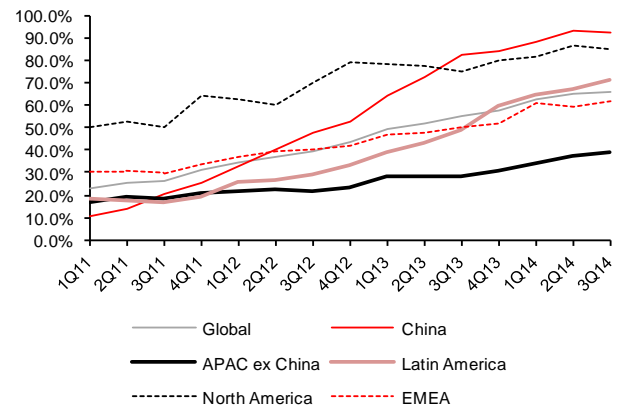
Source: IDC, Macquarie Research, March 2015

Fig 52 Smartphone brand market share in China (3Q14)



Source: Gartner, Macquarie Research, March 2015

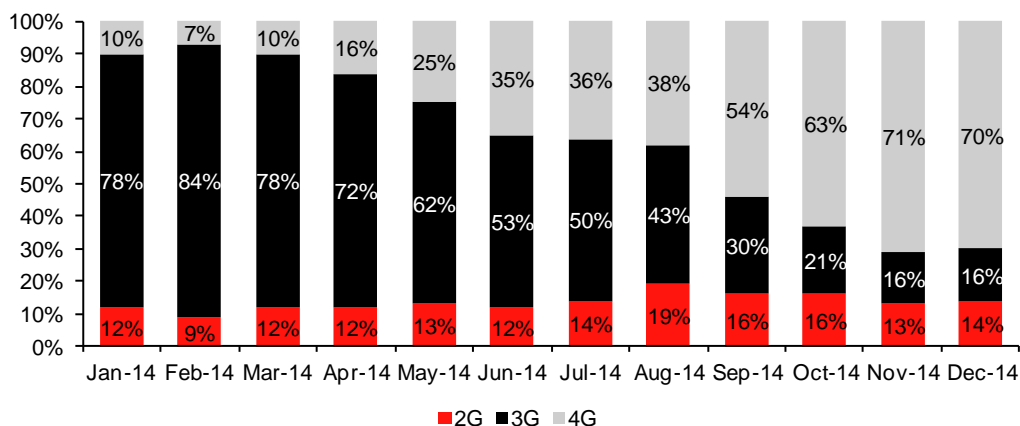
Fig 53 Smartphone penetration by geography



Source: Gartner, Macquarie Research, March 2015

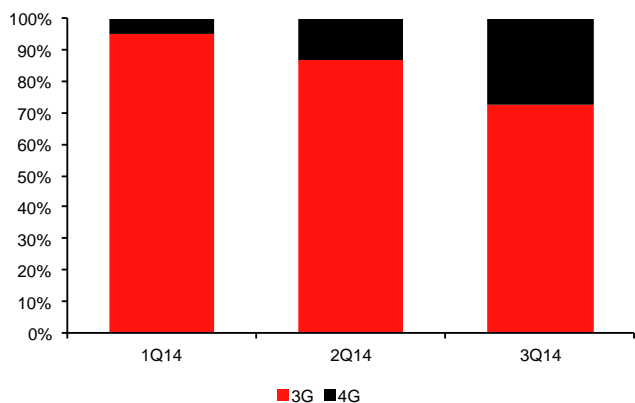
- Lenovo was not early in the pack in migrating to 4G either:** According to MIIT, China handset shipment breakdown by air interface in the month of December 2014 reached 70% for 4G, 16% for 3G and 14% for 2G, from 10%/78%/12% for 4G/3G/2G in January 2014. Lenovo has been relatively late in marketing its 4G models versus its peers, as Lenovo 4G smartphone shipment only accounts for 13% in CY2Q14, and likely accounts for 27% in CY3Q14, according to IDC. Moreover, a handful of 4G smartphone model launched in 2H14 also priced even cheaper than 3G smartphones with similar specs- which suggest 4G smartphones ASP premium has been narrowing down sharply.

Fig 54 China handset monthly shipment by air interface



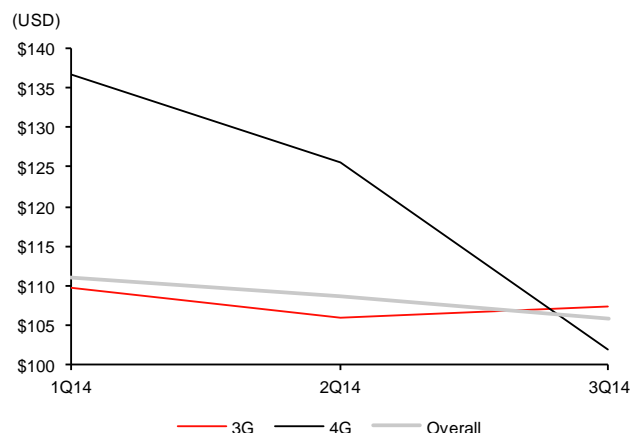
Source: MIIT, Macquarie Research, March 2015

Fig 55 Lenovo’s smartphone shipment split by air interface (3G/4G)



Source: IDC, Macquarie Research, March 2015

Fig 56 Lenovo’s smartphone ASP by 3G/4G models



Source: IDC, Macquarie Research, March 2015

Lenovo outlines its plan to overcome these challenges

Acknowledging aforesaid market dynamic challenges, Lenovo has aim to address these market concern via a series of strategic focus:

1) “Fancy Maker” – the new online platform – a late entrant but aims to stand out

Lenovo used to rely highly on operator channels, accounting for ~70% of its total smartphone shipments. As operators started to cut handset subsidies and promote unbundled data rebate plans in 2H14, Lenovo aimed to reduce its reliance on operator channels and explore opportunities in online and open channels to compete against Xiaomi etc.

On October 2014, Lenovo announced a new subsidiary for online selling and service, with an independent company name and sub-brands. The name of the company was later revealed as “Fancy Maker” and the platform will start operating from April 2015. According to the chief executive of Fancy Maker, Chen Xudong, who also oversees Lenovo’s China and Asia Pacific emerging markets, Fancy Maker will enjoy a bit of autonomy while leveraging Lenovo’s supply chain resources. Lenovo’s CEO, Yang Yuanqing said that Fancy Maker will create a more intimate platform facing its end customers like Xiaomi does, and will establish a stronger ecosystem bonding hardware, software and service. Lenovo currently generates ~6-7% of smartphone sales from e-commerce, and expects 20-30% YoY growth this year driven from the new online platform off a low base.

Lenovo focus on new online platform a late entrant, but aims to leverage its supply chain resources

Similarly, Huawei and Coolpad have all introduced online platforms lately – competition in online sales also heating up, implying execution complexity for Lenovo

There are likely high set-up costs for Lenovo for its online platform which could further dilute its margin

Lenovo's move is not new to the Chinese smartphone market, as many have established sub-brands for an online platform to seize rapidly growing opportunities. Huawei was the first to respond to Xiaomi's e-commerce wave by launching its e-commerce platform, VMall in 2H12, followed by Coolpad in 2H13. To avoid the conflict between online vs. offline pricing, Huawei and Coolpad both introduced a standalone brand and product series for their online platform, namely "Honor" and "Dazen" in 4Q13 and 1Q14, respectively. According to Huawei, Honor brand smartphones shipped 20m in 2014, representing for 27% of Huawei's total smartphone shipments of 75m in 2014. Huawei also expects to double Honor smartphone shipments in 2015 to 40m. We believe the online market is also getting even more crowded with these sub-brands' efforts, as a late comer to market Fancy Maker/Lenovo will also require superior execution to stand out from its peers.

The e-commerce channel could carry the lowest gross margins vs operator and open channels as online customers tend to be more demanding in cost performance as they are also more knowledgeable of both specifications and pricing. However, e-commerce should also have a lower opex ratio on rising scale benefits. We note the key to profitability via online platforms is a streamlined smartphone model portfolio with meaningful economics of scale. In the case of Lenovo, we believe the initial set-up costs and initial operation could lower its smartphone margin profile, while the speed of Lenovo's online platform ramping still remains uncertain in 2015, in our view.

Fig 57 Margin comparison among different distribution channels (2014E)

	Gross Margin %	Adjusted opex %
Operator channel	12-15%	15-20%
Open channel	23-25%	15-20%
E-commerce channel	8-10%	7-15%

Source: Macquarie Research, March 2015

2) Open channel: Increase its open channel presence via cooperation with carriers

Lenovo is also working on improving its open channel distribution, including the responsiveness, localization, etc. Lenovo also cooperates with Gome, Suning, Dixintong and other consumer electronics retailers to promote their smartphones offline and online. Moreover, leveraging off its well-established PC distribution channel in China, Lenovo will also offer telco operators to provide subscription or payment service for its carriers customers at Lenovo shops which aim to provide mutual benefits for both itself and operators. As the open channel sales normally carry higher gross margin than mass-market priced or high cost-performance products in operator channel or e-commerce channels, any rising mix from open channel sales could also help lift its smartphone profitability. While Lenovo's distribution channels requires less further expansion, the potential marketing expense will become key swing factor.

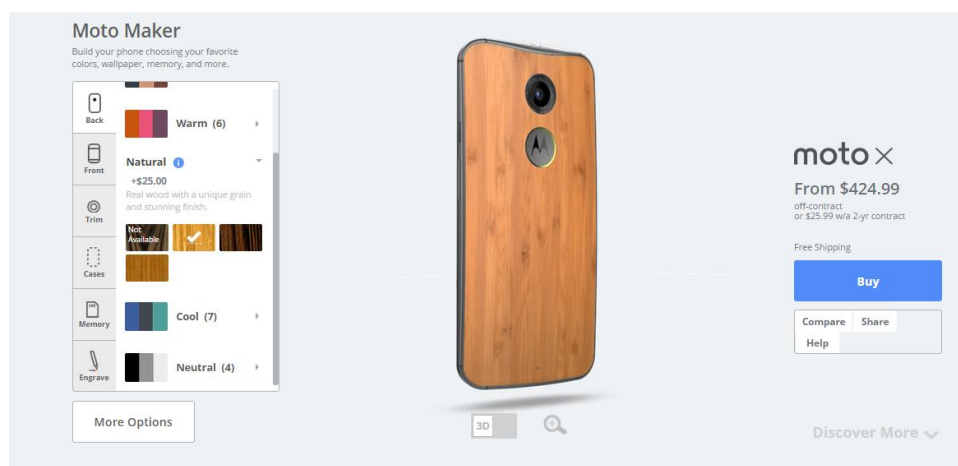
3) Motorola brands re-entering China market, despite it's not easy

One of key barriers is that Lenovo smartphones have been perceived as low-end smartphones as demonstrated by its lower average ASP than peers, Lenovo has aimed to relaunch Motorola smartphones to focus on the mid-to high-end smartphone market, while the Lenovo brand will focus on the mid-to low-end smartphone segment. With ASP ranging around US\$100 for Lenovo and US\$200-300+ for Motorola, there is less concern of product cannibalization.

On Jan 26th 2015, Lenovo launched Motorola G, Motorola X and Motorola X Pro, after it officially withdrew from the Chinese market in 2013. Motorola G will be sold at Rmb1,299 with pre-order starting from February. Available at launch, Motorola X is sold at Rmb3,299 and Rmb3,699 for natural leather, bamboo, or wood casings models. Motorola will introduce Motorola Maker, customized smartphone service first in the US, to China in 1H15 for Motorola X, giving customers more choices to customize their smartphone cases, wallpaper, memory, etc. Motorola X Pro, or Nexus 6 outside China, will be available in China in March, 2015.

Motorola works with open channels such as JD.com, T-mall, Gome, Suning, and DXT to distribute smartphones in China. We believe there are concerns whether Motorola smartphones can differentiate from other Android smartphone offerings in the market. In addition, Motorola's Android user experience, rooted from its history with Google, could also be constrained due to China forbidding some of Google's apps and services. Although Lenovo has the technical ability to alter the user interface to fit China's market requirements, it remains to be seen whether Motorola brands – after disappearing from the market for two years – can regain market position.

Fig 58 Motorola Maker lets customer choose the material and color of the casing



Start with one of these



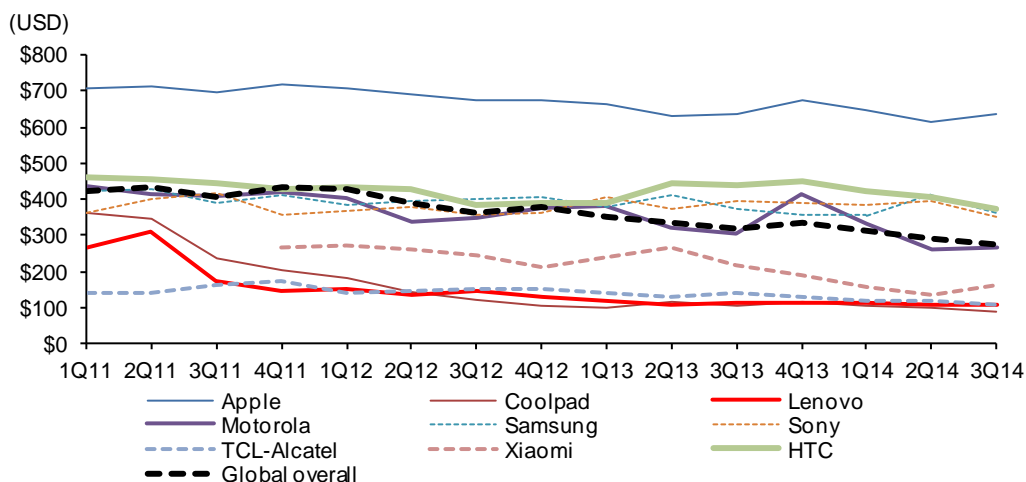
Source: Company data, Macquarie Research, March 2015

4) Co-brand strategy management are complex, but could offer volume cushion if managing correctly

Originally, Motorola brand will only focus on the market share gain in the markets it is originally strong, such as North America and Latin America. However, the penetration into China and expansion in India markets as Lenovo aim to revive its mid to high end smartphone portfolio which could imply have more complex operation to manage in 2015.

While Lenovo has aimed to make these product position clear, or Motorola will continue to focus on high cost-performance ratio but can leverage on larger scale and integrated resources with Lenovo. Lenovo will focus on lower end products than Motorola. Overall, management said that the ASP for Lenovo's smartphone in China would be US\$70-80 and overseas at US\$80-90, while Motorola's ASP could be US\$200-300+. We believe two brands operation, coupled with new "Fancy Maker" brands for its on-line platform could require more management resource to enable the success of Lenovo.

Fig 59 Global smartphone ASP: Motorola vs other smartphone brands



Source: IDC, Macquarie Research, March 2015

Fig 60 Lenovo's smartphone product line-up

Product	Lenovo P90	Lenovo Vibe X2 Pro	Lenovo S90 Sisley	Lenovo Vibe X2	Lenovo Vibe Z2	Lenovo Vibe Z2 Pro	Lenovo A858t
Picture							
OS	Android OS, v4.4 (KitKat)	Android OS, v4.4 (KitKat)	Android OS, v4.4 (KitKat)	Android OS, v4.4 (KitKat)	Android OS, v4.4 (KitKat)	Android OS, v4.4 (KitKat)	Android OS, v4.4 (KitKat)
Display	5.5", 1920x1080	5.3", 1920x1080	5.0", 1280x720	5.0", 1920x1080	5.5", 1280x720	6.0", 2560x1440	5", 1280x720
CPU	Intel Atom Z3560, Quad-core 1.83GHz	Qualcomm Snapdragon 615, Octa-core 1.5GHz	Qualcomm MSM8916 Snapdragon 410, Quad-core 1.2 GHz	Mediatek MT6595m, Octa-core 2.0 GHz	Qualcomm MSM8916 Snapdragon 410, Quad-core 1.2 GHz	Qualcomm MSM8974AC Snapdragon 801, Quad-core 2.5 GHz	Mediatek MT6732, Octa-core 1.5GHz
Memory /Storage	2GB RAM, 32GB ROM	2GB RAM, 32GB ROM	1GB RAM, 16GB ROM	2GB RAM, 32GB ROM	2GB RAM, 32GB ROM	3GB RAM, 32GB ROM	1GB RAM, 8GB ROM
Camera	13MP rear (OIS), 5MP front	13MP rear, 13MP front	13MP rear, 8MP front	13MP rear, 5MP front	13MP rear, 8MP front	16MP rear, 5MP front	8MP rear, 5MP front
Connection	2G/3G/4G, Wi-Fi 802.11 b/g/n, hotspot, Bluetooth	2G/3G/4G, Wi-Fi 802.11 a/b/g/n/ac, dual-band, hotspot, Bluetooth 4.0	2G/3G/4G, Wi-Fi 802.11 b/g/n, hotspot, Bluetooth, NFC	2G/3G/4G, Wi-Fi 802.11 a/b/g/n/ac, dual-band, Wi-Fi Direct, DLNA, hotspot, Bluetooth 4.1	2G/3G/4G, Wi-Fi 802.11 a/b/g/n/ac, dual-band, hotspot, Bluetooth 4.0	2G/3G/4G, Wi-Fi 802.11 a/b/g/n/ac, dual-band, Wi-Fi Direct, DLNA, hotspot, Bluetooth 4.0, NFC	2G/3G/4G, Wi-Fi 802.11 b/g/n, hotspot, Bluetooth
Battery	4000mAh	2410mAh	2300mAh	2300mAh	3000mAh	4000mAh	2150mAh
Announced	Jan-15	Jan-15	Nov-14	Sep-14	Sep-14	Aug-14	Oct-14
Available	Feb-15	Apr-15	Nov-14	Oct-14	Oct-14	Sep-14	Nov-14
Price (USD)	TBD	TBD	321 (Rmb1999)	399	429	769 (Rmb4799)	209 (Rmb1299)

Source: Company data, Macquarie Research, March 2015

Fig 61 Motorola's smartphone product line-up

Product	Motorola Moto Maxx (Motorola Droid Turbo)	Motorola Nexus 6 (Moto X Pro)	Motorola Moto G (Gen 2)	Motorola Moto X (Gen 2)	Motorola Droid Maxx	Motorola Moto E
Picture						
OS	Android OS, v4.4.4 (KitKat), planned upgrade to v5.0 (Lollipop)	Android OS, v5.0 (Lollipop)	Android OS, v4.4.4 (KitKat), upgradable to v5.0 (Lollipop)	Android OS, v4.4.4 (KitKat), upgradable to v5.0 (Lollipop)	Android OS, v4.4.2 (KitKat), upgradable to v4.4.4 (KitKat), planned upgrade to v5.0 (Lollipop)	Android OS, v4.4.2 (KitKat), upgradable to v4.4.4 (KitKat), planned upgrade to v5.0 (Lollipop)
Display	5.2", 2560x1440	5.96", 2560x1440	5.0, 1280x720	5.2", 1920x1080	5.0, 1280x720	4.3", 960x540
CPU	Qualcomm Snapdragon 805, Quad-core 2.7 GHz	Qualcomm Snapdragon 805, Quad-core 2.7 GHz	Qualcomm MSM8226 Snapdragon 400, Quad-core 1.2 GHz	Qualcomm MSM8974AC Snapdragon 801, Quad-core 2.5 GHz	Qualcomm Snapdragon S4Pro, Dual-core 1.7 GHz	Qualcomm Snapdragon 200, Dual-core 1.2 GHz
Memory/Storage	3GB RAM, 64GB ROM	3GB RAM, 32/64GB ROM	1GB RAM, 8GB ROM	2GB RAM, 16/32GB ROM	2GB RAM, 32GB ROM	1GB RAM, 4GB ROM
Camera	21MP rear, 2MP front	13MP rear, 2MP front	8MP rear, 2MP front	13MP rear, 2MP front	10MP rear, 2MP front	5MP rear, no front camera
Connection	2G/3G/4G, Wi-Fi 802.11 a/b/g/n/ac, dual-band, Wi-Fi Direct, DLNA, hotspot, Bluetooth 4.0, NFC	2G/3G/4G, Wi-Fi 802.11 a/b/g/n/ac, dual-band, Wi-Fi Direct, DLNA, hotspot, Bluetooth 4.1, NFC	2G/3G, Wi-Fi 802.11 b/g/n, hotspot, Bluetooth 4.0	2G/3G/4G, Wi-Fi 802.11 a/b/g/n/ac, dual-band, Wi-Fi Direct, DLNA, hotspot, Bluetooth 4.0, NFC	2G/3G/4G, Wi-Fi 802.11 a/b/g/n/ac, dual-band, Wi-Fi Direct, DLNA, hotspot, Bluetooth 4.0, NFC	2G/3G, Wi-Fi 802.11 b/g/n, hotspot, Bluetooth 4.0
Battery Announced Available	3900mAh Nov-14 Nov-14	3220mAh Oct-14 Nov-14	2070mAh Sep-14 Sep-14	2300mAh Sep-14 Sep-14	3500mAh Jul-14 Aug-14	1980mAh May-14 May-14
Price (USD)	879 (BRL2199)	649	179.99 (Rmb1,299 in China)	499 (Rmb3,299 in China)	299.99 with Verizon 2-year contract	129

Source: Company data, Macquarie Research, March 2015

Enterprise business offers mid- to long-term growth potential

We expect Lenovo to stabilize server market share post IBM system X integration and turn breakeven in six quarters

Post the IBM x86 server acquisition, we believe Lenovo’s target of \$5bn sales in the server business is achievable in FY16, assuming 10% revenue market share. We expect Lenovo enterprise business revenue to grow over 88% YoY and 9% in FY16E and FY17E post acquisition as IBM x86 brings in scale to boost its server revenue. Lenovo aims: 1) to solidify its domestic China server market position backed by cross-selling its server solutions to enterprise PC customers; and 2) for opportunities to address growing China as well as US hyperscale customer base.

Its enterprise division reported 3QFY15 pretax margin of -3.4% on loss of \$42m, this indicated room to improve further. We believe that Lenovo supply chain management efficiency could also enhance its cost competitiveness in component procurement synergies/manufacturing efficiency and also accelerate time-to-market for IBM product offering given its more speedy and flexible decision process. We estimate that its enterprise business will also turn profitable seven quarters after merger or 1QFY17, with improving operating leverage (i.e. a lower opex ratio on rising scale), with its enterprise OPM improving from -2.0% in FY16E to 1.0% in FY17E.

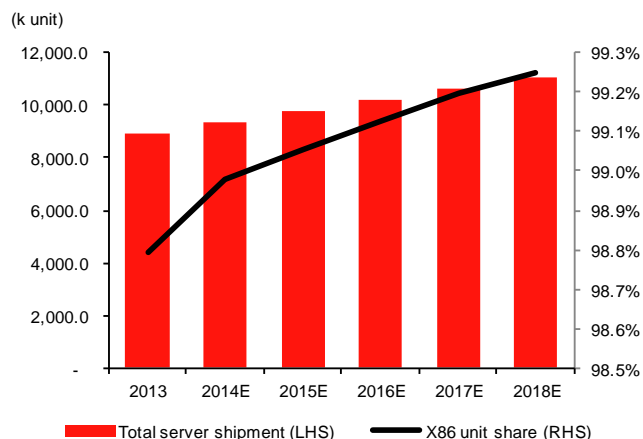
Server market is stabilizing segment, but offers organic growth opportunities for Lenovo

IDC estimates that global server revenue will grow at only 1.3% CAGR during 2013-2018 or reach US\$56bn market size by 2018, and global server unit will grow at 4% CAGR in 2013-2018. While the overall server market growth rate is not substantially high, the x86 server market should outperform the rest of segment and dominate largest share in the global server market, growing at 3% in revenue or 4.4% CAGR in shipment in 2014-2018E (Fig 64-65).

Lenovo has been growing its server share rapidly itself off a low base

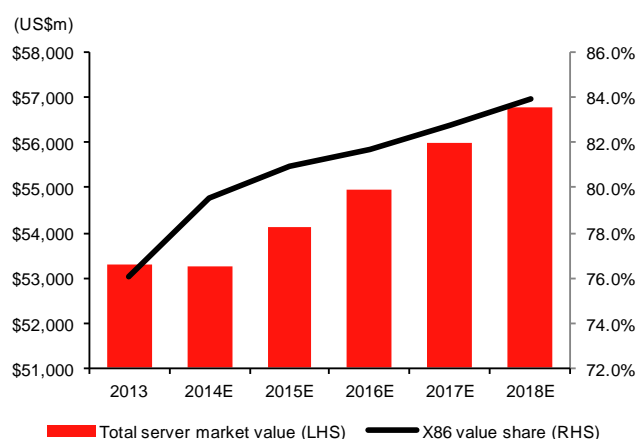
Moreover, prior to IBM x86 server business integration, off a very low base, Lenovo itself had been fast growing x86 server brands in terms of shipment performance (Fig 67). Post the Lenovo announcement of the acquisition of IBM’s x 86 business (named System X), IBM server market share had been falling in past three quarters pending completion of integration in October 2014. Lenovo aims to regain its sever market share stability after one or two quarters to stabilize and integrate the business internally. Post the integration, Lenovo should rank as the third largest server vendor next to HP and Dell, despite the combined market share (Lenovo+IBM) being higher in emerging markets vs mature markets such as North America/and EMEA (Fig 68-71).

Fig 62 Global server market shipment forecast and x86 share %



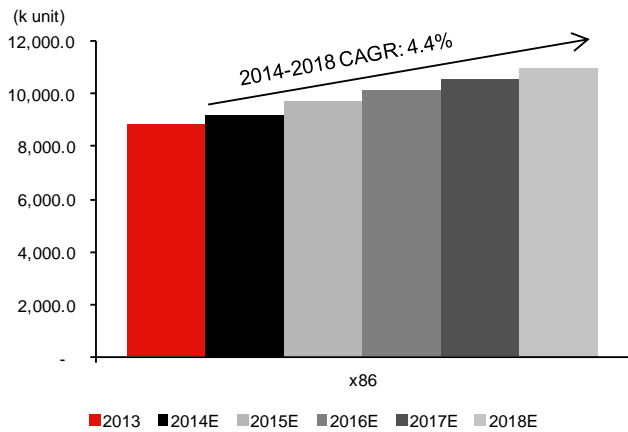
Source: IDC, Macquarie Research, March 2015

Fig 63 Global server market value forecast and x86 share %



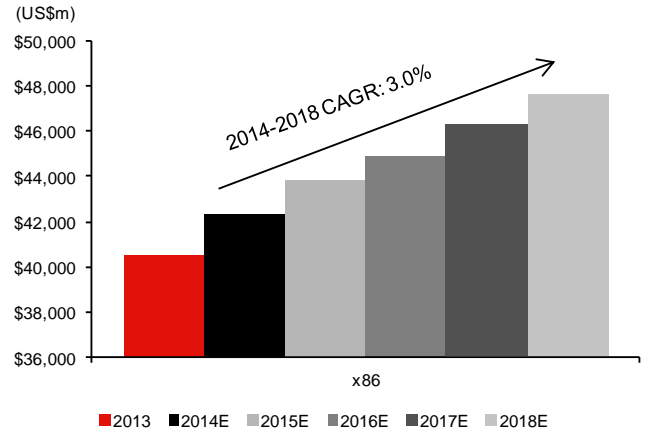
Source: IDC, Macquarie Research, March 2015

Fig 64 Global x86 server market: shipment forecast



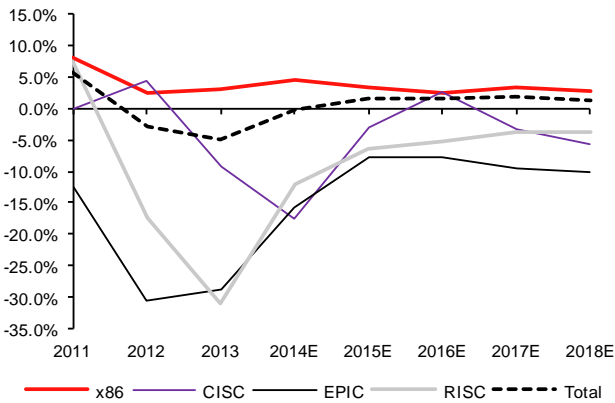
Source: IDC, Macquarie Research, March 2015

Fig 65 Global x86 server: market value forecast



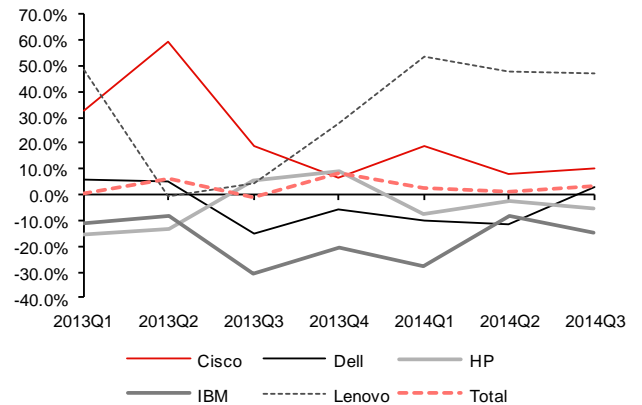
Source: IDC, Macquarie Research, March 2015

Fig 66 Global server value YoY growth – x86 the only driver



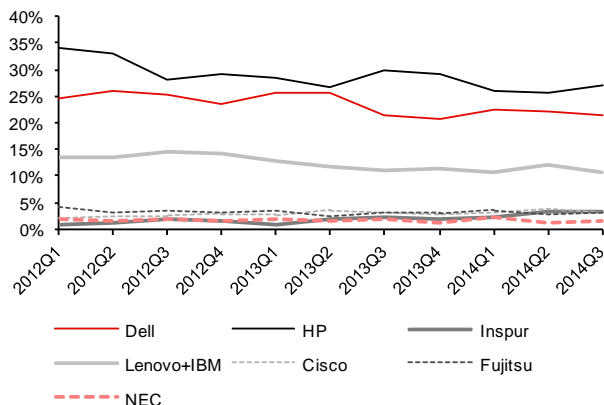
Source: IDC, Macquarie Research, March 2015

Fig 67 x86 server shipment YoY growth by vendors



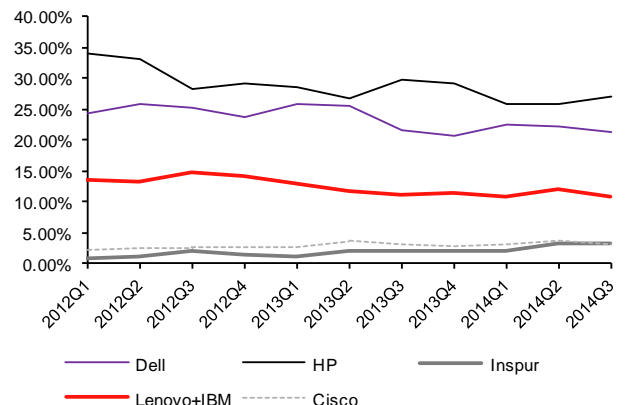
Source: IDC, Macquarie Research, March 2015

Fig 68 Global x86 server shipment market share



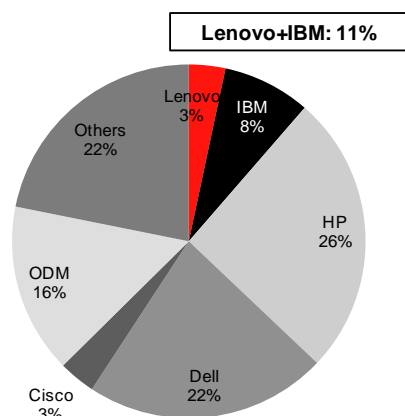
Source: IDC, Macquarie Research, March 2015

Fig 69 APAC (exc. Japan) x86 server shipment market share



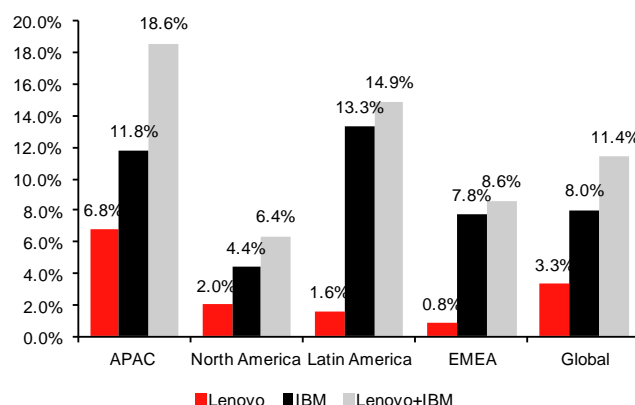
Source: IDC, Macquarie Research, March 2015

Fig 70 Global X86 server shipment market share 1H14



Source: IDC, Macquarie Research, March 2015

Fig 71 Lenovo/IBM x86 server shipment market share by regions (1H14)



Source: IDC, Gartner, Macquarie Research, March 2015

Enterprise business – opportunities to turn profit on reviving top-line growth

While we think Lenovo goal aims to revive IBM system X growth opportunities and drive the business future OP margin up to >5% or higher than its PC business performance. IBM x86 business generated US\$4.6bn of sales in 2013 versus Lenovo's revenue ranged at ~US\$950m. Post the integration, Lenovo aims to plan to build a \$5 billion business in FY16 (representing roughly ~10% global x86 market share), with higher margins than PC business by 2QFY16 (Sep quarter of 2015).

In the first quarter of integration, Lenovo enterprise business revenue reached US\$1.2bn, suggesting that IBM system X server revenue could face ~20% YoY decline (mainly due to share loss in mature markets such as US/EMEA due to rising concerns on security issues). However, we expect business to stabilize and we identify the following top-line growth opportunities, in particular in its domestic China market.

Solidifying its domestic market position on strong x86 server growth opportunities in China

In China, propelled by growing demand from Internet companies like Baidu, Alibaba, and Tencent, as well as government investment on server and networking infrastructure, server shipment/revenue growth in greater China areas will continue to outperform other geographies (Fig 72-73). The 3rd platform technologies (Cloud, Social, Mobility and Big Data/Analytics) have lead to the development of scale-out architecture, fueling the growth of high-density servers and the delivery of whole rack solutions. In the market of 2nd platform technologies (Client, Server), demands for virtualization workload consolidation and migration of low-end UNIX towards an x86 server platform have continued to drive the x86 server market. In China, x86 server segment growth rate even topped at 22.9% YoY in 1Q14, indicating growing opportunities. China also accounted for 17% of global x86 server demand based on 1H14 data, and its share should continue to rise.

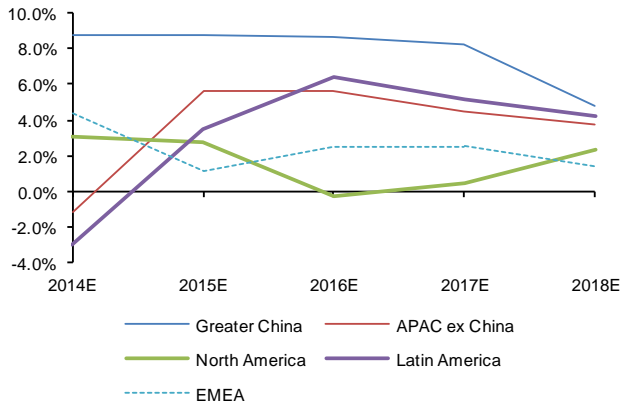
Moreover, 2014 is a key year for China to execute the 12th Five-Year Plan. On the industrial market side, the demands of government, telecommunications, electricity and financial sectors have shown a significant rebound. Taxation, social insurance, department of finance, public security and defense department all invest large amount of resources to update the infrastructure. 12th Golden Project driven by government sector has led the growth.

In order to satisfy the demands of Chinese market for local products, Chinese vendors represented by Huawei, Inspur, Lenovo and Sugon have been seeking breakthroughs in the above-mentioned sectors. In the fast-growing internet sector, domestic vendors, compared with their international counterparts, are more focused on winning the mega deal from hyper-scale customers, so as to seize desired market shares in the increasingly fierce competition in Internet and Cloud service provider markets.

Strong demand from Chinese internet companies and government investment propelled China x86 server market growth

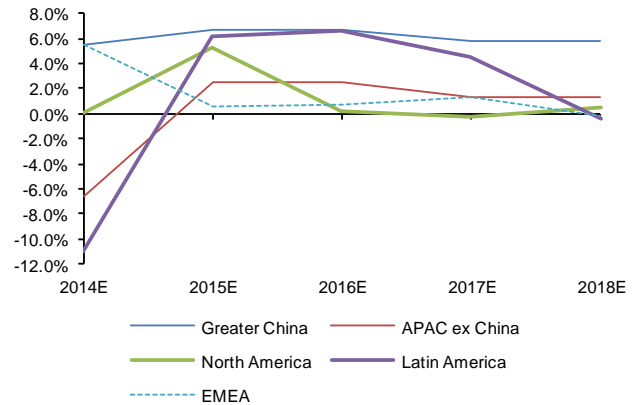
Although Dell used to rank #1 in China's x86 server market with a share of 20.2%, post Lenovo's acquisition of the IBM x86 server business, Lenovo will surpass Dell and become the largest x86 server vendor with combined 24% share. China server companies such as Inspur also showed robust YoY growth of 117% in 1Q14 thanks to its major wins with Internet companies. In other words, China domestic vendors Huawei, Inspur, and Sugon each had 9-14% share.

Fig 72 Server shipment YoY growth by regions



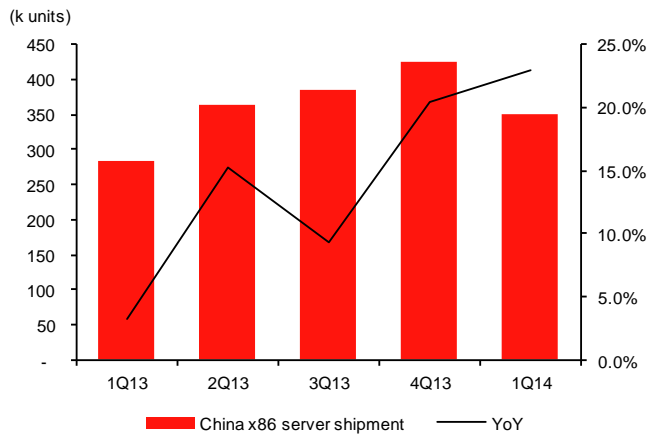
Source: Gartner, Macquarie Research, March 2015

Fig 73 Server market value YoY growth by regions



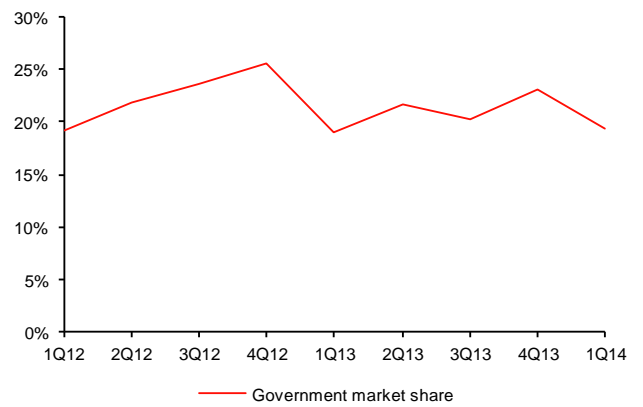
Source: Gartner, Macquarie Research, March 2015

Fig 74 Chinese x86 server quarterly shipment and YoY growth



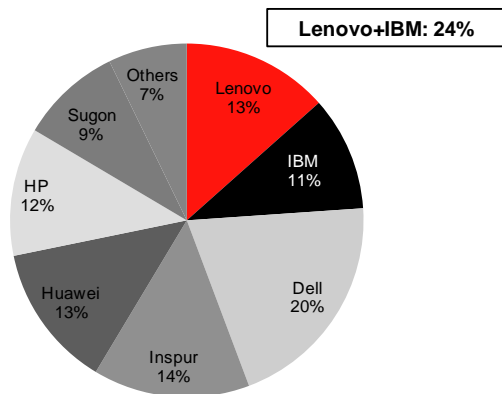
Source: IDC, Macquarie Research, March 2015

Fig 75 China government x86 server market share of total x86 server shipment



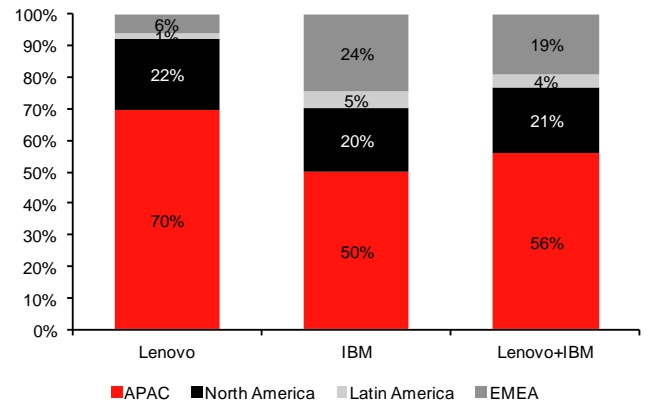
Source: IDC, Macquarie Research, March 2015

Fig 76 China x86 server shipment market share 1H14



Source: IDC, Macquarie Research, March 2015

Fig 77 Lenovo/IBM x86 server shipment breakdown by regions (1H14)



Source: IDC, Macquarie Research, March 2015

Post the integration, Lenovo has aimed to take main approach to improve its market position in China, including the following two important strategic tactics:

Lenovo aims to leverage IBM solution/service capability to penetrate more enterprise customer base

1) Leverage off its cross-selling opportunities in commercial segment

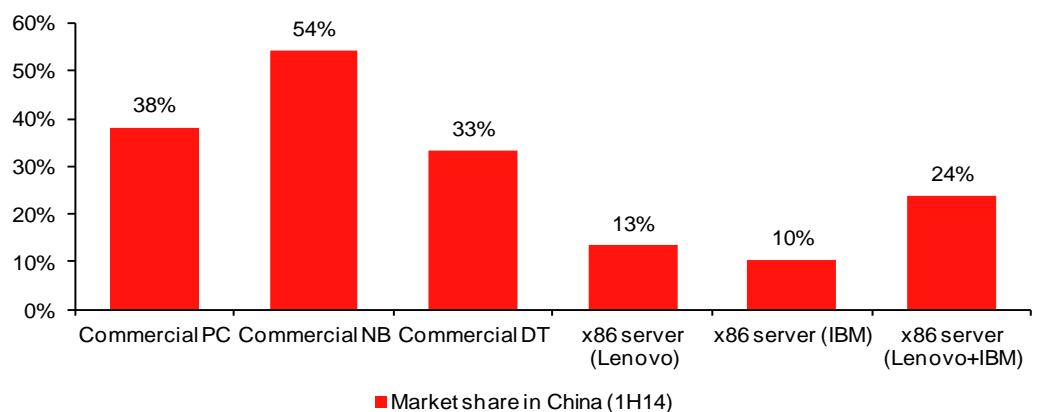
The competition in the server market has evolved beyond the product itself as the users in China market are also maturing. In other words, channel coverage, partner alliance, understanding of users' demands, as well as the capability to provide users with an integrated end-to-end solutions have emerged as major differentiators.

IBM x86 servers used to have not only a strong product portfolio, but also very strong solution & service capability. As a result, combining IBM's strong solution offering and Lenovo's channel coverage leveraging from its PC business, Lenovo's enterprise business is poised for higher penetration into wider pricing/usage segments in China. Moreover, Lenovo will also leverage IBM's well-established service framework to gain more enterprise customer base.

Lenovo aim to cross-sell its server product to enterprise customers thanks to its brand awareness, account relationship and channel coverage

Lenovo also intends to form a solid strategy which can help cross-sell its server solution to its enterprise customer base in China. If we check Lenovo's market share in China, Lenovo has already captured 54%/33% share across in commercial NB/commercial DT, however, its combined Lenovo+IBM server market share was still very low at 24% - which suggests huge room to cross-sell once Lenovo's solution/service capability is enhanced accordingly. Moreover, Lenovo can also rely on its strong brand awareness, channel coverage and account relationships from its PC business.

Fig 78 Lenovo's commercial PC market share vs IBM/Lenovo x86 market share in China (1H14)



Source: IDC, Gartner, Macquarie Research, March 2015

China Internet companies will drive China x86 server demand

These hyperscale data center clients prefer to have more customized but commodity hardware

Lenovo aim to address IBM's prior business model shortfall by improving time-to-market and cost advantages

2) Eyeing China's fast-growing hyperscale data center business opportunities

The global hyperscale server market also outgrew the overall server market, thanks to strong demand from US internet companies such as Google, Facebook, and Amazon, etc. While US hyperscale represented up to ~70% of the global hyperscale market, Baidu, Alibaba, and Tencent (the three hyperscale companies collectively known as BAT) are also fast growing data center demand.

In fact, BAT consumed about 15% of total x86 servers shipped in China in 2013, and continue to represent the best growth opportunities in China server market, according to Gartner. Thanks to this customer demand, China local vendors such as Huawei and Inspur have gained China hyperscale market share up to 26% in 2013, from 13% in 2012, thanks to pricing, customized solutions, and post-sales service. ODMs including Quanta, and Inventec also stepped into these China hyperscale market aggressively in 2014.

In hyperscale data center markets, since BAT are large volume buyers like Google etc, they also prefer commodity hardware, which makes it more difficult for server providers to differentiate themselves, as price is also the biggest factor for purchase decisions. Moreover, these hyperscale customers are also have a high tendency to switch suppliers given no lock-ins product or technology. However, despite the commodity hardware nature, these hyperscale data center customers still have higher customization requirements. In the past, global brands such as IBM or HP have failed to provide such tailor-made products, or sometimes, used over-spec products to sell into these customers which resulted in loss in these businesses or affected ROI. Moreover, unlike Google which performs its own service and installment, BAT companies still prefer to have on-site service from server vendors which gave China local vendors advantages over international peers.

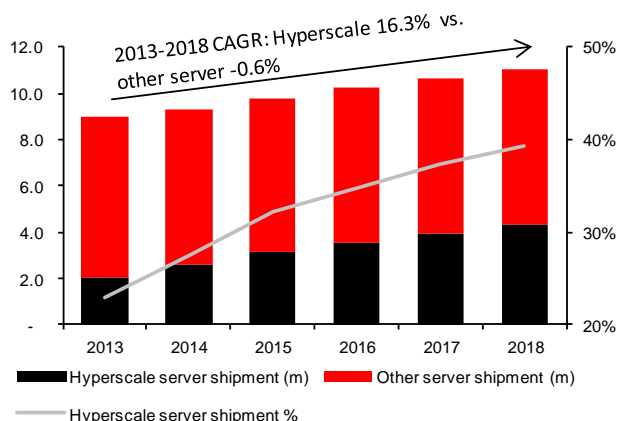
Lenovo, in the past, did not focus on this market due to lower margin and stiff competition from Huawei and Inspur, however, post the integration with IBM x86 business, Lenovo can leverage its rising economics of scale and IBM's rich R&D experience in improving its penetration in these market segments.

Lenovo aims to improve prior IBM's business model disadvantages:

- a) **Enhance time-to-market:** IBM was slow in responding to the customization requirement of such BAT companies in terms of R&D efforts. Moreover, most of their R&D were based out of China, so it takes longer to understand local specific requirements.
- b) **Improve cost structure:** In the past, IBM often did not have the right products to focus on the price-sensitive hyperscale market. Post integration, Lenovo will be able to leverage its supply chain management capability to offer much lower-cost solutions for data center customers.

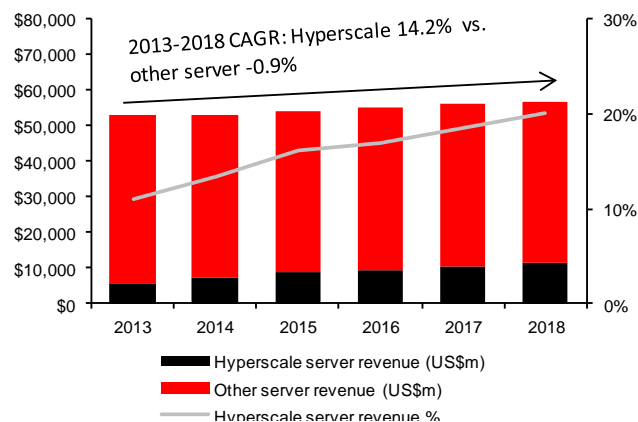
Compared to ODMs such as Quanta, given BAT companies' dependency on external resources for service or support, Lenovo aims to leverage its well-established footprint in China to increase its competitive edge in this area.

Fig 79 Global Hyperscale server shipment forecast



Source: IDC, Macquarie Research, March 2015

Fig 80 Global Hyperscale server market value forecast



Source: IDC, Macquarie Research, March 2015

Lenovo and EMC partnership on converged infrastructure could benefit Lenovo's server sales

On January 22, Lenovo formed a partnership with storage giant EMC to offer reference architecture that is designed to make it easier for businesses to build private clouds and virtual desktop infrastructure. On October 22, 2014, EMC confirmed that its VCE converged infrastructure joint venture with Cisco and VMware was heading into a new phase, with EMC taking control of the JV and Cisco drastically cutting its stake in VCE. EMC used to own a 35% stake in this JV but increased its stake to 80%.

▪ The parting of ways between EMC and Cisco reflected in the unraveling of the VCE JV

According to Macquarie US analyst, Rajesh Ghai, EMC is expected to push its converged infrastructure bundle VSPEX instead of the Cisco converged infrastructure bundle VCE in the future. The VSPEX bundle involves the use of non-Cisco Server and Networking instead of Cisco SKUs sold in the VCE bundles. VCE had reached a \$2B annual run rate last quarter. Lenovo could benefit to the extent of \$100M in server sales over the next two years.

▪ New Hyper-converged and Big Data cluster solutions

These new high-growth markets require x86 servers and Rajesh also expects EMC to lean heavily on Lenovo. Although it is not very clear what the size would be or what share EMC can generate –Rajesh estimates a ~\$100M benefit to Lenovo in new revenue in two years' time.

While Lenovo enterprise reported a loss in 3QFY15, we expect Lenovo enterprise group will improve its profitability outlook

Can Enterprise business group break even soon?

Based on Lenovo's 3QFY15 result, its enterprise group collectively generated \$1.2bn revenue in 3QFY15 but suffered a pretax loss of \$42m, implying -3.4% op margin – mainly due to the hardware side while the service business remained profitable. While this was worse than IBM's x86 server business group 2013 performance, it was chiefly due to falling sales scale. In 2013, IBM generated US\$4.6bn in x86 server sales, and its pretax loss was US\$37.3m in 2013 or OPM at -0.81%. Moreover, we think Lenovo will also need to write off some of the overhang (such as inventory, intangible asset write-off) post the first 2-3 quarters of integration. However, with its server market share reviving, we expect its enterprise group profitability could also improve. A couple drivers we believe could also help to enhance its cost structure are listed below.

- ⇒ **Drive component procurement synergies:** Leveraging off of the large share in its PC business, Lenovo could share similar component scale in CPU, DRAM, Panel, HDD, etc which could further drive down its hardware cost, thus enhancing its hardware profitability.
- ⇒ **Drive manufacturing efficiency:** While the majority of IBM's system x server adopted the Configure to order (CTO) model which requires many geographical assembly sites, thus increasing its cost structure, we believe Lenovo will help drive a disciplined cost structure and efficiency going forwards.
- ⇒ **Accelerate time-to-market for its volume segments:** IBM has centralized its high volume but lower price server R&D center in Taiwan before, and used Taiwan ODMs for outsourcing server boards, barebones etc. However, given the slow time-to-market, the decision process has decreased its cost effectiveness and often times its products are too late to the market, resulting in pricing issues. As Lenovo put more effort in improving the speed, we believe this will also help to resolve these issues.

Fig 81 Server-related business margins for IBM/HP

	3Q13	4Q13	1Q14	2Q14	3Q14
IBM (Systems & Technology)*					
GM	33.6%	38.6%	27.0%	33.9%	33.9%
PTI	-4.9%	4.7%	-25.8%	0.7%	-3.8%
HP (Enterprise Group)*					
OPM	14.4%	14.4%	14.4%	14.0%	14.8%

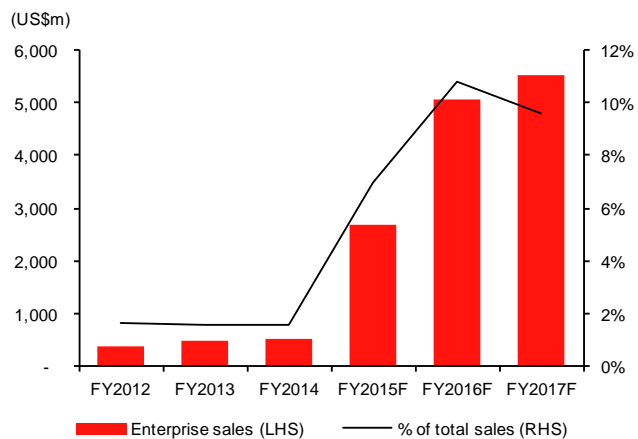
*IBM Systems & Technology includes Server (72% of 3Q sales, System x/z and Power Systems), Storage (25%), and other

HP Enterprise Group includes Industry Standard Servers (47% of 3Q sales), Storage (12%), Networking (9%), Technology Services (29%) and Business Critical Systems (3%)

Source: Company data, Macquarie Research, March 2015

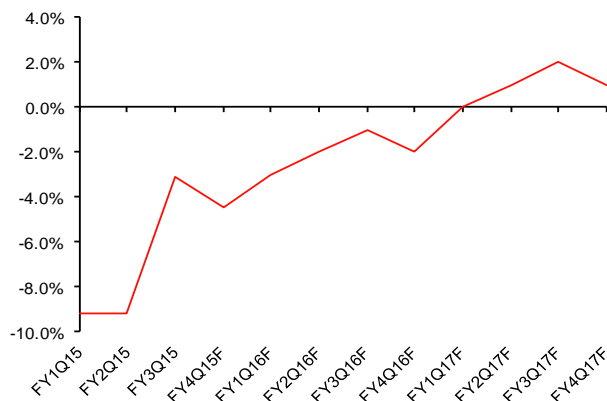
We estimate that its enterprise business will also turn profitable after seven quarters from mergers or 1QFY17, with improving operating leverage (i.e. lower OPEX ratio on rising scale), or we factor that its enterprise OPM will improve from -2.0% in FY16 to 1.0% in FY17.

Fig 82 Lenovo enterprise sales and % of total sales



Source: Company data, Macquarie Research, March 2015

Fig 83 Lenovo enterprise OP margin trend



Source: Company data, Macquarie Research, March 2015

Lenovo solidifies its global PC market position

Lenovo could improve its PC market share in some underperforming geographies and lift its margins via these markets improvements

Lenovo is already No.1 in global PC market share since 2Q13; there are key concerns though: 1) whether Lenovo has hit a ceiling in gaining more share/volume gain amid slowing PC market growth; and 2) the stability of the PC business profitability.

Although Lenovo has captured ~20% global PC market share, Lenovo still has room to gain global share as North America/Latin America/emerging Asia market share still falls behind the <15% share mark. We believe Lenovo will gain market share post PC industry consolidation, following Toshiba withdrawing from the consumer PC segment. Toshiba still had consumer PC market share at 4.0% in APAC ex China, 3.8% in Latin America, 8.5% in North America, and 7.2% in Western Europe in 4Q14. We expect Lenovo's PC market share could still expand up to 21.1% in FY16 and 21.9% in FY17 versus 19.7% in FY15. In the long term, Lenovo aims to grow at a 5pts to 10pts premium to the PC market growth in terms of shipments. And it expects to grow PC market share to 25% in three years (vs 20% in 4Q14), implying a 1-2pts increase in market share a year. While this is lower than a 2-3pts increase in PC market share a year in 2010-2014, we think it is still impressive considering a higher base and the global PC market slowdown.

We expect Lenovo can still grow its global PC market share albeit at slower pace than previous years, its improving profitability in PC business to help drive its earnings

Lenovo is also focused on driving the PC business profitability via: 1) Improving its mid- to high-end consumer product mix; 2) Enhancing its profit margin on rising scale. It aims to maintain a pretax margin > 5%. Overall, we expect Lenovo's PC Op margin to remain at 5.2% and 4.8% in FY16 and FY17. In 3QFY15, its pretax margin for the PC group reached 5.4% - relatively at peak level, however, if we look at geographic performance, we note America OP (-0.5%) margin was far behind its China/APAC (5.7%/5.4%), while EMEA (3%) still has room to lift its performance. Even excluding Motorola's smartphone impact to America, PC OP margin could still fall behind ~<1% - should some underperforming market like Brazil turn around.

Continue to solidify No.1 position with outperforming market growth

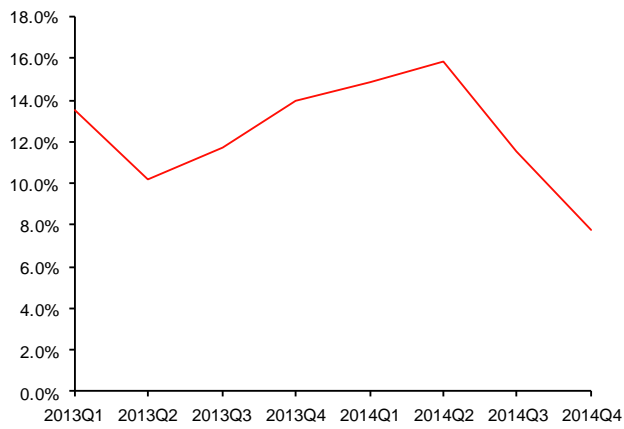
Lenovo had ~41% of sales from NB and ~24% from DT during the December quarter 2014 (3QFY15). Lenovo has been No.1 worldwide in the NB and PC markets in terms of shipments since 2Q13, with market share at 20.6% and 19.7%, respectively, in 4Q14.

While Lenovo has been outgrowing other PC brands over the past years, we expect it continue to outgrow in the next two years albeit at a slower pace

With solid execution, Lenovo PC shipment YoY growth has continued to outgrow the market by 8%-15% since 1Q13 (Fig 84) on increasing market share in key regions, in particular for EMEA, while maintaining a dominant position in Asia Pacific (Fig 90). Its NB market share largely improved in EMEA from 9.6% in 1Q12 to 23.2% in 3Q14, thanks to solid management and share gain from peers' withdrawals (Sony, Samsung, and Toshiba). Lenovo is also aggressive in Latin America, pushing NB market share from 6.5% in 1Q12 to 12.7% in 4Q14 via the acquisition of CCE, a leading electronic maker in Brazil, in 2012.

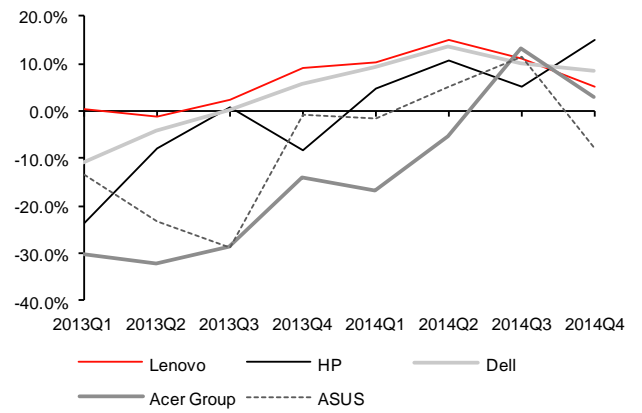
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Fig 84 Lenovo PC shipment YoY growth has outperformed global PC growth by 8%-15% since 1Q13



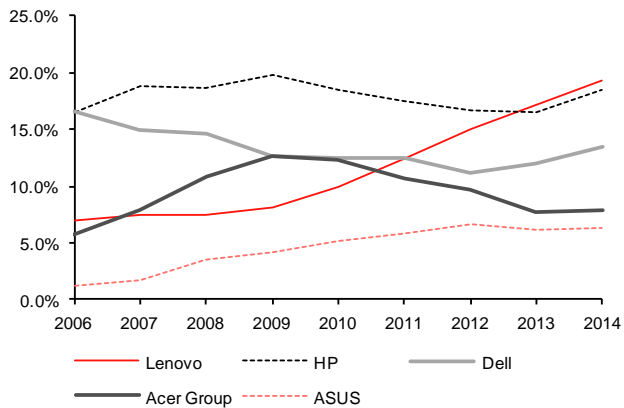
Source: IDC, Macquarie Research, March 2015

Fig 85 Global PC shipment YoY growth by Brands



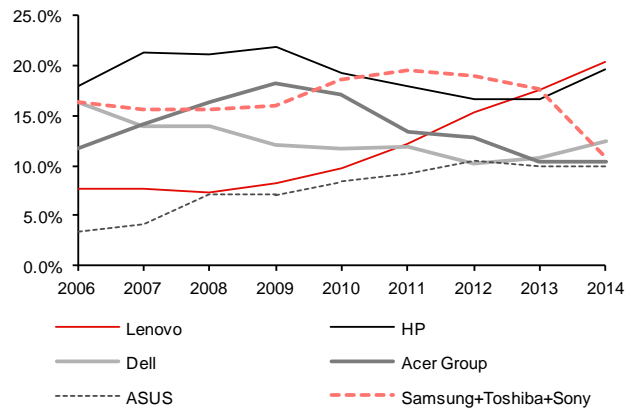
Source: IDC, Macquarie Research, March 2015

Fig 86 Global PC market share trend



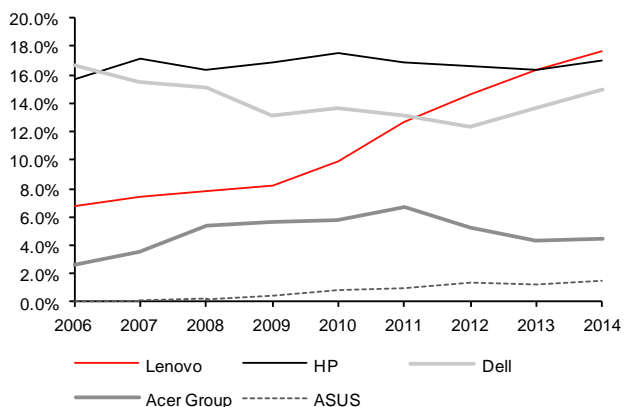
Source: IDC, Macquarie Research, March 2015

Fig 87 Global NB market share trend



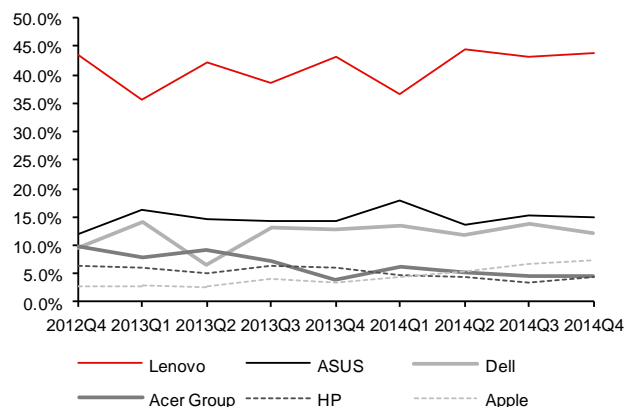
Source: IDC, Macquarie Research, March 2015

Fig 88 Global DT market share trend



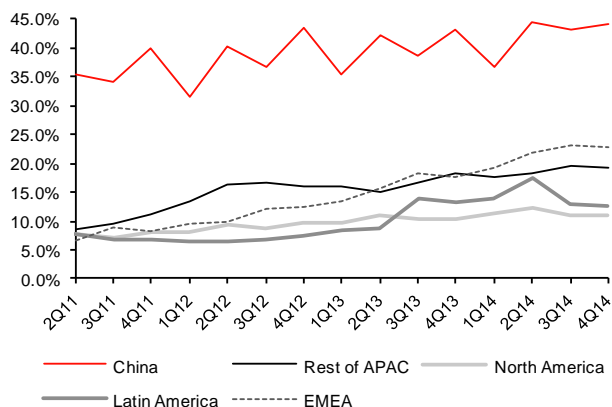
Source: IDC, Macquarie Research, March 2015

Fig 89 China NB market share trend



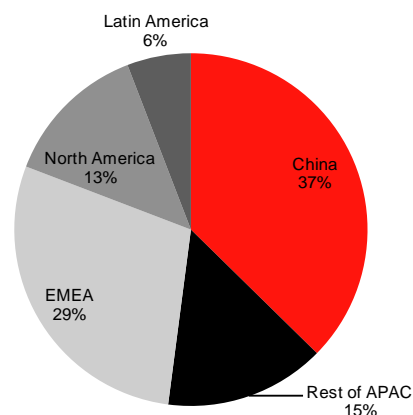
Source: IDC, Macquarie Research, March 2015

Fig 90 Lenovo's NB shipment market share in China and other major regions



Source: IDC, Macquarie Research, March 2015

Fig 91 Lenovo PC shipment breakdown by China and other regions (2014)



Source: IDC, Macquarie Research, March 2015

Target to gain share in consumer PC and Americas and APAC ex China markets

To sustain growth in its PC business, Lenovo will focus on gaining share in North America, Latin America and APAC ex China markets in 2015, in particular in the consumer PC market, as the segment would highly likely outgrow commercial segments in 2015. We identify the rationale behind why these regions are the key focus and the opportunity for Lenovo to gain share from Toshiba in below.

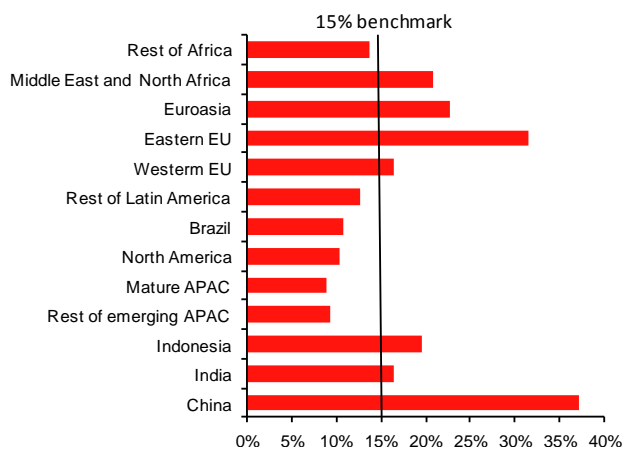
▪ **More share gain in the Americas and APAC ex China to obtain more scale economy**

Lenovo believes a ramp-up in scale would mean that to break even, it needs a share of at least 15-20% in the local PC market. In the consumer PC market, the benchmark could be even higher, say 20%+. In Fig 92, using 15% as a benchmark, we see that Lenovo still has room to improve its PC market share in North America, Latin America, and APAC countries besides China, India and Indonesia. In Fig 93, using 20% as a benchmark for the consumer PC market, Lenovo will have room to improve its market share in North America, Latin America, APAC ex China. The results show that after its substantial market share gain in EMEA, Lenovo will take more effort in increasing its PC market share in North America, Latin America, and APAC besides China, to ramp up scale in the PC business. During the latest earnings conference for the December quarter, the company also said it would be more aggressive in expanding the consumer PC market share in the USA and Asia.

On January 2014, Lenovo promoted Gianfranco Lanci, previous head of EMEA, to oversee the global PC business. Given Mr. Lanci's good track record in improving Lenovo's PC market share in EMEA, we believe there is room for Lenovo to gain market share in the PC business and thus potential to improve profitability.

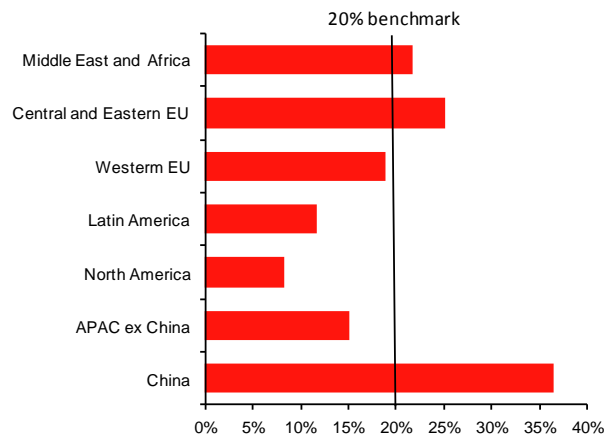
Lenovo will have opportunities to improve underperforming geographies

Fig 92 Lenovo’s PC market share in key regions/countries in 3Q14 vs 15% benchmark to breakeven



Source: Gartner, Macquarie Research, March 2015

Fig 93 Lenovo’s consumer PC market share in key regions/countries in 4Q14 vs 20% benchmark to breakeven



Source: IDC, Macquarie Research, March 2015

▪ **Benefit from PC industry consolidation: Share gain opportunity from Toshiba**

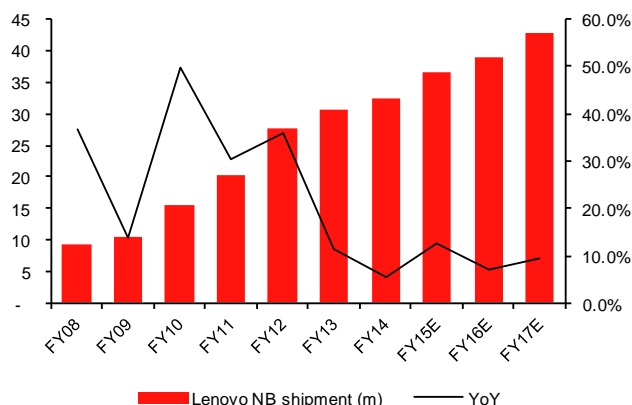
In 2014, the PC industry witnessed several players withdraw or restructure. Sony exited the PC market by selling off VAIO; Samsung decided to withdraw from the NB business in Europe; Toshiba got out of the consumer PC business to focus solely on the commercial segment; HP split into two, including HP Inc. for PC/printer business. In our prior hardware report – “[Divergent device, Convergent demand](#)”, we highlighted that the trend would favour PC brands which can gain global market share consistently, as well as diversify into divergent form factors successfully. As a global leading player in PCs, we think Lenovo would benefit from the trend of consolidation given its scale economy capable of maintaining reasonable profit and positioned for market share gain once the smaller players exit the market.

We think Lenovo could gain share in the consumer PC market after Toshiba announced in September 2014 it was restructuring its PC business and focus on the commercial market. As of 4Q14, in the consumer PC market share, Toshiba still had 4.0% in APAC ex China, 3.8% in Latin America, 8.5% in North America, and 7.2% in Western Europe.

As for Samsung’s and Sony’s (partial) withdrawal from the PC business, we don’t see much room for share gain for Lenovo as Samsung’s EMEA NB market share was already <1% in 4Q14 and Sony’s PC market share was <0.1% in 4Q14.

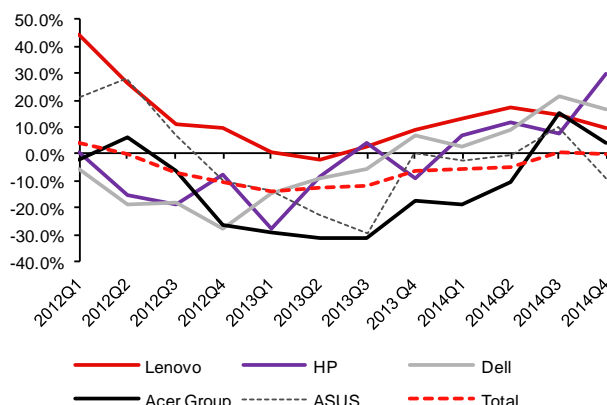
We forecast Lenovo’s PC shipment will grow 4%/7% in CY2015/2016, compared to -3.3%/-1.5% for CY2015/2016 for the total PC market as per IDC forecast, which implies Lenovo should gain to 21%/23% globally in 2015/2016.

Fig 94 Lenovo NB shipment growth trend



Source: IDC, Macquarie Research, March 2015

Fig 95 Global NB shipment YoY growth



Source: IDC, Macquarie Research, March 2015

▪ **Commercial PC replacement cycle peaked in 2014; more hope on consumer PC recovery in 2015**

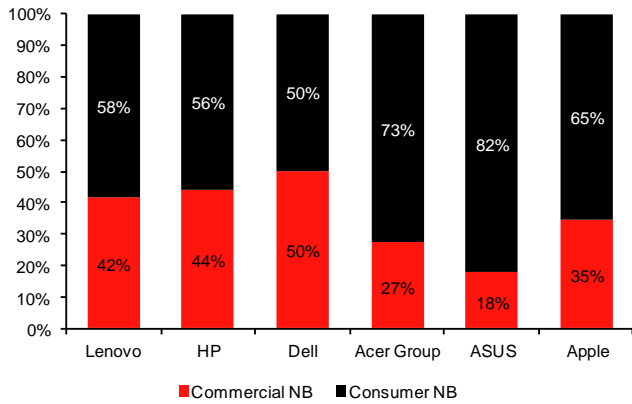
Commercial PC replacement cycle could be peaking, but expect a consumer PC recovery in 2015

The 2014 global PC industry has been bolstered by PC replacement demand in the commercial segment. According to IDC, global PC shipment declined only 2.2% in 2014 to 174.9m unit (vs. -9.8% YoY in 2013). NB shipment declined 2.2% in 2014 (vs. 11.2% in 2013), as it picked up momentum in 2H14. DT, though strong in 1H14 due to replacement cycle in particularly mature markets, the demand soon peak out in 2H14 and thus lead to a 2.2% shipment decline in 2014. As the commercial PC replacement cycle fades out, commercial desktop YoY growth decelerated in 4Q14, except for the modest increase in China (Fig 99).

Lenovo’s PC business is split roughly 60:40 in NB: DT. The consumer market accounted for about 58% of its NB shipment in 2014. While consumer demand picked up in 2H14 thanks to 2-1 (convertible tablet/NB) and low-priced NBs, emerging markets still recorded a decline in shipment, and we see no signs of an uptick. In desktops, the commercial markets accounts for 71% of Lenovo’s shipments. As we have said above, the commercial DT market only prospered in 1H14 then peaked out in 2H14. With no stimulus for demand in the near term, we see risks of sustainability for Lenovo’s desktop business.

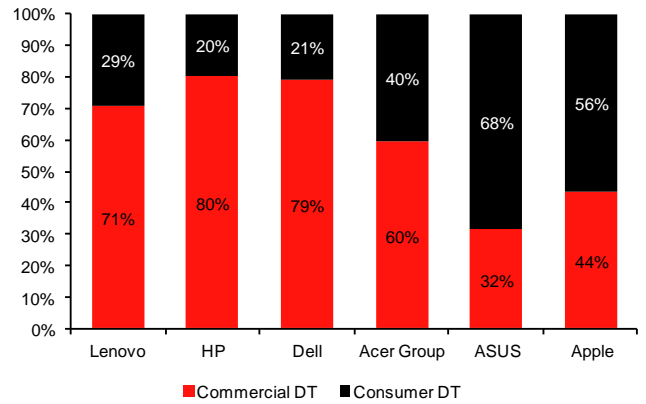
As mentioned above, Lenovo’s consumer PC market share was relatively low in North America and Latin America (Fig 93). In North America, the consumer PC market was dominated by HP and Dell, who have gained share by 8pts to 31% and 5pts to 21% from 1Q13 to 4Q14. Lenovo only grew 3.6pts to 8% from 1Q13 to 4Q14. We believe Lenovo can still gain market share that was previously controlled by Toshiba (8.5% consumer PC market share in North America in 4Q14). Lenovo’s ability to create innovative form factor NBs will also help in share gain.

Fig 96 Brands NB shipment split by commercial and consumer segment (2014)



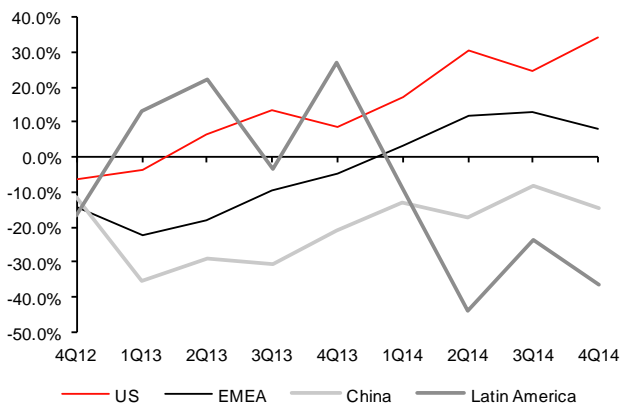
Source: IDC, Macquarie Research, March 2015

Fig 97 Brands DT shipment split by commercial and consumer segment (2014)



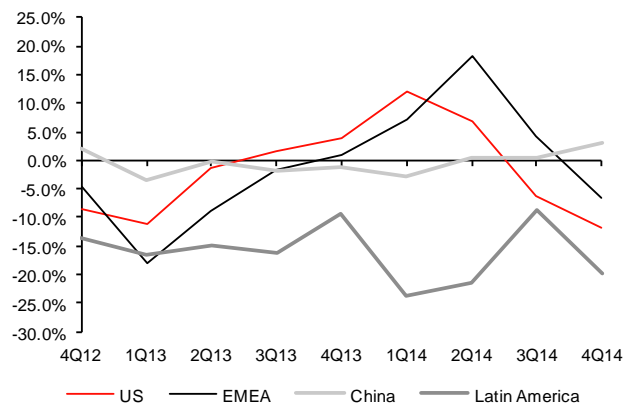
Source: IDC, Macquarie Research, March 2015

Fig 98 Commercial NB YoY growth trend



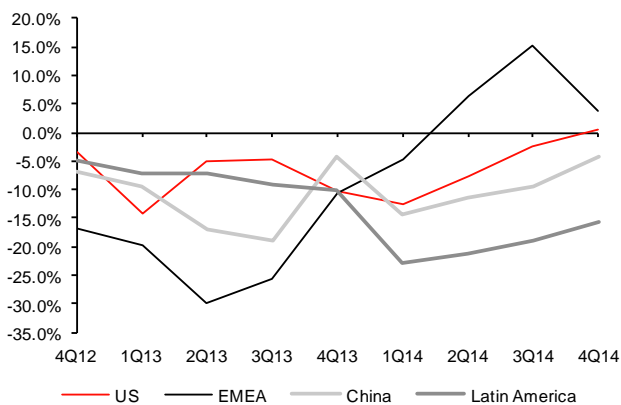
Source: IDC, Macquarie Research, March 2015

Fig 99 Commercial DT YoY growth trend



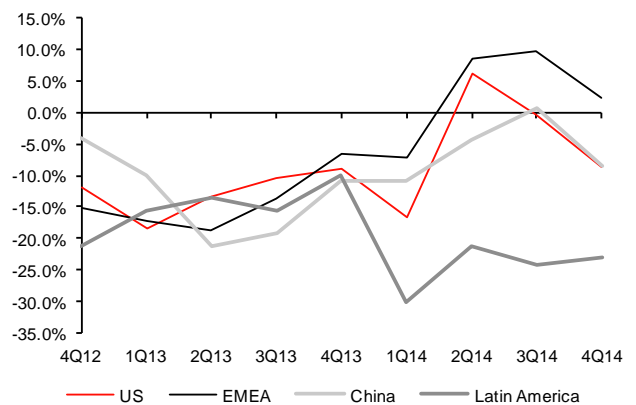
Source: IDC, Macquarie Research, March 2015

Fig 100 Consumer NB YoY growth trend



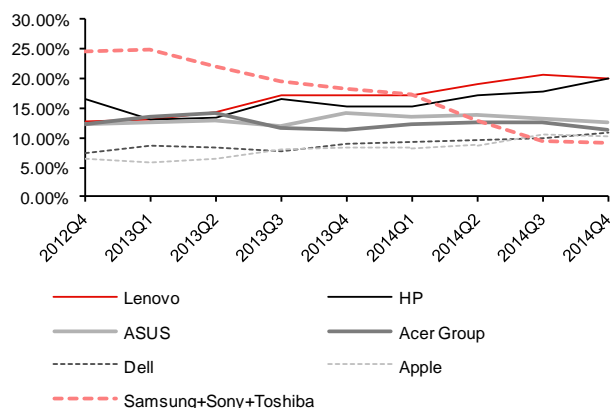
Source: IDC, Macquarie Research, March 2015

Fig 101 Consumer DT YoY growth trend



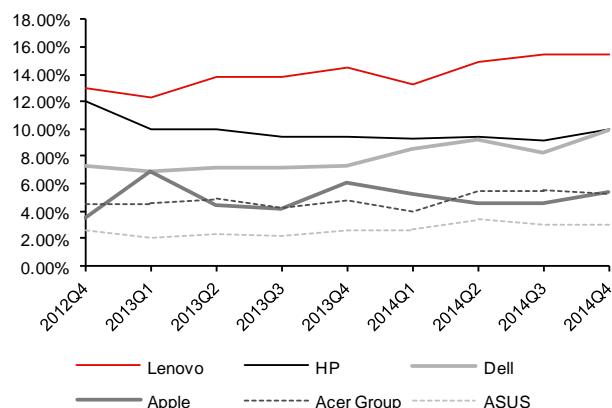
Source: IDC, Macquarie Research, March 2015

Fig 102 Global consumer NB market share trend



Source: IDC, Macquarie Research, March 2015

Fig 103 Global consumer DT market share trend



Source: IDC, Macquarie Research, March 2015

Aims to sustain 5%+ pretax margin for PC business by share gain and product mix improvement

▪ PC pretax profit the key to drive earnings

In the December quarter 2014 (3QFY15), Lenovo's PC business achieved 5.4% pretax margin, up from 3.4% a year ago. The PC business was the only division to generate a profit, while Mobile and Enterprise divisions were all loss-making in 3QFY15. Management credits the improvement mainly to share gain, while cost stayed relatively stable. For example, Lenovo's PC business market share has improved in particular in EMEA, with PC market share in EMEA increasing from 15.3% in 4Q13 to 19.7% in 4Q14. As the PC business is currently the only source of pretax profit, maintaining pretax margins will be key to Lenovo's earnings. Overall, we expect Lenovo's OPM in the PC business to be maintained at 5.2% and 4.8% in FY16 and FY17. If the company is able to sustain PC pretax OPM to 5%+, it would represent upside to our estimates in FY17.

▪ Share gain + improve product mix = PC profitability

Lenovo's target is to sustain PC pretax margin at 5%+ in the long term. We think the 5.4% PC pretax margin in the December quarter 2014 (3QFY15) is unlikely to be surpassed for the next year or so, given larger scale in the peak season. Nonetheless, we believe its regional share gain and product mix improvement still provide stability or upside potential to its long-term PC margins. We thus expect Lenovo's PC OPM to be maintained at 5.2% and 4.8% in FY16 and FY17, share gain could lead to volume increase and scale benefit, while an improving product mix could raise ASP and margins.

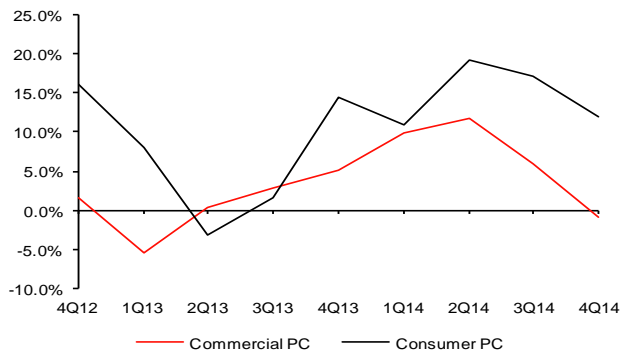
For regional share gain, we have highlighted the opportunity in North America, Latin America, and APAC ex China, which have <15% PC market share in general. With more countries' market share above 15% threshold, there will be more profitable markets. If we look at geographic performance, we note that America's OP (-0.5%) margin was far behind its China/APAC(5.7%/5.4%), while EMEA (3%) still have room to lift up performance. Even excluding Motorola smartphone impact to America, PC OP margin could still fell behind ~<1%.

Despite its commercial PC growth rate decelerating in 4Q14 (Fig 104), Lenovo has able to lift its PC profitability in its December quarter. This suggests that most of the margin improvement will come from scale/and profitability improvement rather than product mix between commercial/consumer, in our view (Fig 105).

Lenovo aims to sustain 5% pretax margin in the PC business

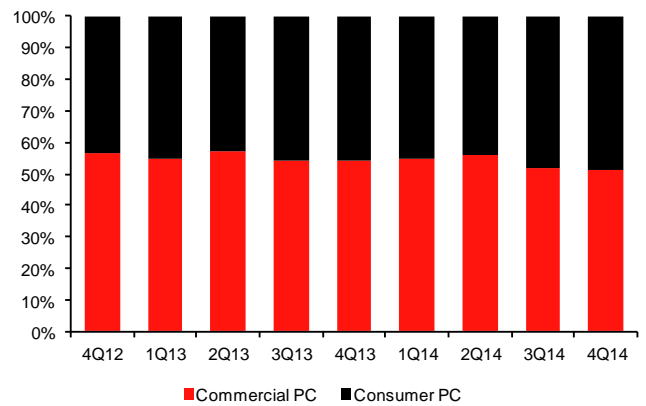
Lenovo also aims to increase its mid-high end consumer sales

Fig 104 Lenovo: Commercial/consumer shipment: YoY growth rate



Source: IDC, Macquarie Research, March 2015







Fig 105 Lenovo: Commercial/Consumer PC mix



Source: IDC, Macquarie Research, March 2015

As market share gains in the years ahead are unlikely to be as strong as in 2010-2014, Lenovo also expects to improve its product mix, in particular in the consumer market, to improve its PC profitability. In its recent product launches (Fig 106), Lenovo introduced more high price/spec model such as the YOGA NB series, which could be priced up to US\$1,200, as against the average NB ASP of US\$500-600. As Lenovo aims to focus more on the consumer PC market in 2015, it will try to improve the product mix to mitigate the impact from lower ASP/margin of consumer models than commercial ones. Given the innovative form factor design such as the YOGA series, we think there is a good chance Lenovo will improve the product mix, particularly in mature markets such as North America.

Fig 106 Lenovo's latest NB product spec

Product	Lenovo LaVie Z HZ550/750	Lenovo YOGA 3	Lenovo ThinkPad Yoga 12/14/15	Lenovo ThinkPad X1 Carbon	Lenovo ThinkPad X250	YOGA 3 Pro
						
Processor	Intel Core i7 (HZ750)/ Core i5 (HZ550)	11"-Intel Core M 14"-Intel Core i7	12"-Intel Pentium 14"/15"-Up to Intel Core i7	Intel Core i7	Intel Core i7	Intel® Core™ M-70 processor
OS	Windows 8.1 13.3" WQHD	Windows 8.1	Windows 8.1	Windows 8.1	Windows 8.1	Windows 8.1
Display/Resolution	(2560x1440)/FHD (1920x1080), touch screen for ZH750	FHD 1920x1080 IPS touchscreen	12"/14"/15" FHD (1920x1080) touchscreen	Up to 14" WQHD (2560x1440) 10-point multitouch	12" FHD (1920x1080) touchscreen	13.3" QHD+ (3200 x 1800) touchscreen
Memory	HZ550-4GB LPDDR3 HZ750-4GB/8GB LPDDR3	11"-Up to 8GB LP- DDR3 14"-Up to 8GB DDR3L	12"/14"-Up to 8GB DDR3L 15"-Up to 16GB DDR3L	Up to 8GB DDR3	Up to 8GB DDR3	Up to 8GB LPDDR3L
Storage	128GB SSD	11"-Up to 256GB SSD 14"-Up to 500GB SSHD or 256GB SSD	Up to 1TB HDD; 256GB SSD	Up to PCIe 512GB SSD	Up to 512GB SSD, up to 1TB HDD	Up to 512GB SSD
Connectivity	Bluetooth® 4.0, 802.11 A/C WiFi	Bluetooth® 4.0, 802.11 A/C WiFi	Bluetooth, Wifi	Bluetooth 4.0; WiFi combo card	Optional WWAN 3G and 4G LTE, Bluetooth 4.0	Bluetooth® 4.0, 802.11 A/C WiFi
Ports	2xUSB 3.0, HDMI out, SD card, Headphone Jack	2xUSB 3.0, 1XUSB 2.0, 4in1 card reader (SD,SDHC,SDXC, MMC), Audio combo jack, HDMI	USB 3.0; (mini) HDMI; card reader; OneLink connector	OneLink 1.0; MiniDP; HDMI; 3.5mm combo jack (headphone/mic); FPR; Ethernet extension connection; 3G/4G LTE (optional)	VGA, Gigabit Ethernet, Smartcard Reader (Optional), 4- in-1 SD ,card reader) card reader, , 2x USB3.0, mDP	2 x USB 3.0, 1 x DC- in with USB 2.0 function,4-in-1 card reader (SD, MMC, SDXC, SDHC), Micro- HDMI out
Camera	720p HD	720p HD	12"/14"-720p HD 15"-Optional Intel RealSense 3D camera	720p HD	720p HD	720p webcam
Battery	HZ550-29.6Whr HZ750-44.4Whr	Up to 6.5 hours	Up to 8 hours	Up to 10.9 hours	Up to 20 hours	Up to 9 hours
Weight	HZ550-780 g HZ750-925 g	11"-1.1 kg 14"-1.6-1.7 kg	12": 1.58kg 14": 1.9kg 15": 2.3kg	1.31 kg	1.3 kg	1.19 kg
Dimensions	HZ550-319x212x16.9 mm HZ750-319x217x16.9 mm	11"-290 x 197 x 15.8 mm 14"-334.9 x 229.5 x 18.3 mm	12": 316 x 221 x 18.8 mm 14": 336 x 230 x 21 mm 15": 383 x 257 x 22 mm	331 x 226.5 x 17.7 mm	305.5 x 208.5 x 20.3 mm	330 x 228 x 12.8 mm
Announced	Jan-15	Jan-15	Jan-15	Jan-15	Jan-15	Oct-14
Price (USD)	1299 (HZ550)/1499 (HZ750)	699/799	685/749/875	1249	1149	1200

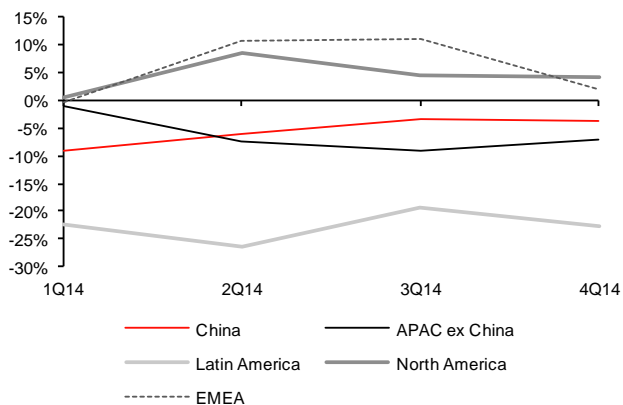
Source: Company data, Macquarie Research, March 2015

Recovery of emerging markets provides potential upside

PC shipments have been growing much stronger YoY in mature markets than emerging markets in 2014 due to replacement demand in mature markets; moreover, weaker macroeconomic conditions in the emerging markets also negatively affected PC demand recovery in those geographies. So far, as of 4Q14, we have seen no major signs for recovery in emerging markets including China, other APAC countries and Latin America, which account for about 58% of Lenovo's total PC shipment in 2014. Hence, any PC demand recovery pickup in these emerging markets would provide upside to Lenovo's PC growth.

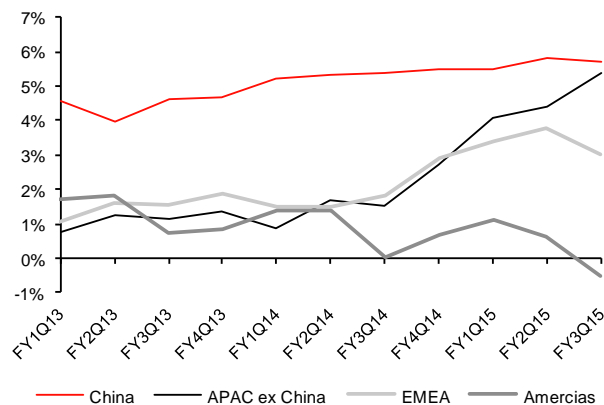
Lenovo has highlighted several times during earnings calls that it aimed to minimise losses in Brazil before a turnaround to profitability can be attained; we estimate that this could affect ~5% of Lenovo's PC pretax profit. The company attributes the losses in Brazil to a slow economy and low efficiency of local manufacturing. From the macro side, Latin America has been showing 20-25% YoY decline in its quarterly PC shipment in 2014, with no signs of recovery or uptick. However, Lenovo has assigned a new management team to run the Brazilian business, hoping to stabilize and reduce losses. Although profitability may be distant, any cuts in losses would have helped Lenovo's pretax profit.

Fig 107 PC shipment YoY growth trend in key regions



Source: IDC, Macquarie Research, March 2015

Fig 108 Lenovo OPM in key geographies



Source: Company, Macquarie Research, March 2015

3QFY15 results review

3QFY15 results beat market expectation due to reducing Motorola losses and lower tax

- First quarterly results after the IBM x86 and Motorola acquisitions:** Lenovo reported December quarter results (3QFY15) on 3 February, which included a full quarter of IBM x86 server and two months of Motorola's business results. Sales at \$14.1bn were up 35% QoQ or 31% YoY. Although PC business sales growth decelerated (to \$9.1bn, up 7% YoY vs 9.9% YoY growth in 2QFY15) the robust top-line growth rate was mainly due to two acquisitions¹. Mobile segment revenue, which included two months' sales contribution from Moto, was \$3.39bn, up 143% QoQ/109% YoY, while Enterprise segment sales were up 617% QoQ/685% YoY.
- Higher GM but lower OPM due to acquisitions, but still beat on less-than-expected Motorola losses and stronger PC business profitability:** During the quarter, gross margin rose to 14.9% from 13.9% in 2QFY15 and 12.6% in 3QFY14 chiefly due to the higher gross margins from the acquired two businesses; moreover, Lenovo also reported stronger margin expansion from its PC business due to seasonality and rising scale. However, due to the losses from acquired businesses, its 3QFY14 operating margin declined to 2.3% from 3.5% in 2QFY15 and 2.9% in 3QFY14. 3QFY14 operating profit declined 11% QoQ to \$325m but was still up 4% YoY. The number beat consensus by 20%, which we think was chiefly due to lower-than-expected loss from Motorola and stronger-than-expected PC business profitability. While its OPEX ratio increased sharply to 12.6% during the quarter from 10.4% in FY2Q15 and 9.7% in 3QFY14, it was partly due to the non-cash amortization of Motorola and IBM x86 (US\$58m in total), severance (US\$40m), post-merger management expense (US\$10m) and other non-cash M&A charges (US\$9m) (Fig 113). If excluding all the M&A related charges, OPEX ratio could reduce by 0.8pts to 11.7% during the quarter, up 2ppt versus a year ago, or 1.3ppt versus 2QFY15.
- Tax deferral lead in lower tax rate also contributed to profit upside:** During 3QFY15, Lenovo's pretax profit was \$274m, down 17% QoQ and 15% YoY, however, net profit was \$253m, down only 3% QoQ and 5% YoY. EPS was US\$2.32 cents, down only 8% QoQ and 9% YoY, beating consensus by 45%. This was partially due to lower tax rate (~6.3% vs consensus of ~23%), which was the deferred tax due to losses carried over from IBM x86 and Motorola. We expect effective tax rate of 8-9% in 4QFY15 and high teens in subsequent quarters, similar to its level in 2QFY15.

Fig 109 Lenovo's 3QFY15 results comparison

US\$ m	3QFY15 A	2QFY15	3QFY14	QoQ	YoY	BBG consensus	Diff
Revenues	14,092	10,476	10,789	35%	31%	13,537	4%
Gross Profit	2,097	1,457	1,363	44%	54%	1,905	10%
Operating expenses	1,772	1,093	1,051	62%	69%	1,635	8%
Operating Profit	325	364	312	-11%	4%	270	20%
PBT	274	329	321	-17%	-15%	250	10%
Net profit	253	262	265	-3%	-5%	182	39%
EPS (US cents)	2.32	2.53	2.56	-8%	-9%	1.60	45%
Profitability							
Gross Margin	14.9%	13.9%	12.6%			14.1%	
Operating Margin	2.3%	3.5%	2.9%			2.0%	
Expense ratio	12.6%	10.4%	9.7%			12.1%	
Pretax Margin	1.9%	3.1%	3.0%			1.8%	
Net Margin	1.8%	2.5%	2.5%			1.3%	

Source: Company data, Bloomberg consensus, Macquarie Research, March 2015

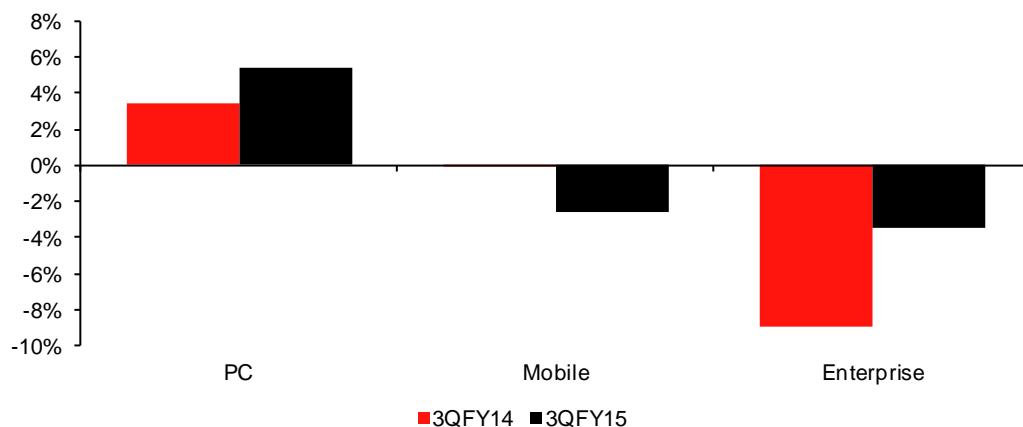
¹ Completion of two acquisitions of Motorola and IBM x86 server business

Fig 110 Lenovo pretax profit vs. Non-cash and cash M&A charges

(US\$m)	3QFY15	2QFY15	3QFY14	QoQ	YoY
Reported pretax profit (GAAP)	274	329	321	-17%	-15%
Non-cash M&A charges	74	0	0		
Pretax profit excluding non-cash M&A charges	348	329	321	6%	8%
Non-cash M&A charges					
	3QFY15	4QFY15E Recurring			
Amortization					
• Motorola	24	36	Yes		
• IBM x86	34	34	Yes		
Total Amortization (Motorola+IBM x86)	58	70	Yes		
Imputed interest for promissory note to Google	7	11	Yes, till Oct 30 2017		
Others	9	9	Yes		
Total Non-cash M&A charges	74	90 Yes, maintaining 90m per quarter			
Cash M&A charges					
	3QFY15	4QFY15E Recurring			
Loan interests on 5-year US\$1.5bn note	16	16	Yes, till May 2019		
Other loan interests related to M&A	14	14	Yes		
Severance	40	~40	Depend on those applying for early retirement package		
Post-merger management expense	10	<10	Could decline		
Total Cash M&A charges	80	<80			

Source: Company data, Macquarie Research, March 2015

Fig 111 Lenovo pretax margin by product segment



Source: Company data, Macquarie Research, March 2015

Fig 112 Lenovo Segment performance

Sales split (US\$ m)	3QFY15 A	2QFY15	3QFY14	QoQ	YoY
PC	9,147	8,464	8,534	8%	7%
Mobile	3,390	1,393	1,726	143%	96%
Enterprise	1,222	170	156	617%	683%
Others	333	448	373	-26%	-11%
Sales split %					
PC	65%	81%	79%		
Mobile	24%	13%	16%		
Enterprise	9%	2%	1%		
Others	2%	4%	3%		
Pretax margin					
PC	5.4%		3.4%		
Mobile	-2.6%		-0.1%		
Enterprise	-3.4%		-9.3%		

Source: Company data, Macquarie Research, March 2015

PC pretax margin improvement and less Motorola loss

Starting from 3QFY15, Lenovo disclosed its sales split by three major product segment: PCs (64.9%, including NB and DT); Mobile (24.1%, including smartphones and tablets), Enterprise (8.7%, mainly servers, storage and service); and Others (2.3%). It also disclosed product segments' pretax margins for the first time to help investors better understand profitability trends for each segment. We include the results in Fig 112.

- **PC – pretax margin improvement leverage from volume growth:** Lenovo's PC pretax margin was 5.4% in 3QFY15, up from 3.4% a year ago, thanks to PC share gain and increasing scale in the wake of PC industry consolidation. During the quarter, Lenovo shipped 16m PCs (+2.2% QoQ/4.9% YoY), increasing its global market share to 20% from 18.5% a year ago. Its PC sales by value were also up 8% QoQ and 7% YoY, which implies an ASP increase. Lenovo credits its YoY sales growth and pretax margin improvement to solid share gain in EMEA (from 18% in 3QFY14 to 23% in 3QFY15). In fact, its EMEA OP margin was up at 3% versus only 1.8% in FY3Q14. Lenovo expects its PC pretax margin to be sustained at 5%+ in the long term on share/volume gain and better cost control. The only sore spot for Lenovo's PC business is in the Brazil market, which suffered from weak demand, inefficient local manufacturing/assembly which increased cost, high inventory level and currency depreciation. Lenovo has taken action with a new local management team to help improve the supply chain and stabilize the losses.
- **Mobile – stronger Motorola growth narrowed the loss:** Including the combined 8m Motorola shipments in November and December (the 2014 peak), Lenovo shipped 22-23m smartphones during 3QFY15, up 34% QoQ and 63% YoY. Motorola's growth was stronger than Lenovo's own brand during the quarter, and accounted for about 40% of Lenovo's total smartphone shipments. Despite mobile segment pretax loss of US\$89m during the quarter (only booked 2 months of loss), Motorola's loss was also narrowing: it was lower than market expectation of US\$100-120m. While Lenovo's mobile segment pretax margin fell to -2.6% in 3QFY15 from -0.1% a year ago (Lenovo alone, before Motorola acquisition), if we exclude the related M&A charges (at least US\$31m), its mobile segment pretax margin would have been -1.7% versus the prior period when Google reported Moto's net margin at -4.2% in the June quarter and -1.5% in the September quarter. Lenovo plans for more country penetration for Motorola, including re-entering China, to help grow the top lines to improve its profitability. Lenovo also guided a US\$400-500m material cost saving for Motorola in the next 12 months. The company is sticking to its guidance that it will turn Motorola profitable in 4-6 quarters.
- **Enterprise profitability: slightly below expectation on IBM x86 sales fell:** Lenovo's enterprise pretax margin was -3.4% (loss of US\$42m) during 3QFY15 from -9.3% a year ago (FY3Q14 without acquisition of IBM x86 sales, thus limited sales scale). We estimate that IBM x86 accounted for about 85-90% of Lenovo's total enterprise sales during the quarter. Company guided IBM x86 business at above breakeven level exclude M&A charges (e.g. amortization of US\$34m) or we estimate that IBM x86 business server business at -2.1% including M&A charges, while Lenovo's Think server business was still loss making despite higher growth. We notice that the combined x86 global market share for IBM and Lenovo actually declined to 10.7% in September quarter from 11.9% in June quarter, indicating integration pain. Lenovo also admitted that IBM x86 shipment unit indeed declined in December quarter. While Lenovo will leverage from its PC component supply chain and sales synergies to lower costs for its server segment, the company's top priority is to protect IBM x86's market share from falling and improve its combined Lenovo+IBM server share gains.

March quarter – a trough quarter ahead

A slow quarter ahead, shares can pull back post recent rally

Due to seasonality, Lenovo guided 20-30% QoQ sales decline for the March quarter 2015 (4QFY15). We read its guidance as conservative, mainly because of the slow-down of the smartphone business, and the seasonality of the PC business. We currently model a 15% QoQ decline in sales for the March quarter 2015, versus consensus expectations of a 14% QoQ decline. We note that 4QFY15 OP margin could fall further on less scale and limited near-term cost savings. We expect net profit for 4QFY15 of \$79m, declining by 69% QoQ and 53% YoY.

Lenovo expects investors to also look at ex-M&A charges profits

Lenovo's 3QFY15 pretax profit of US\$274m included non-cash and cash M&A related charges of US\$74m and US\$80m, respectively (Fig 110). But Lenovo also disclosed an adjusted pretax profit excluding non-cash M&A charges of US\$74m such as amortization of IBM x86/Motorola, imputed interest for promissory note, and others. Excluding these non-cash M&A charges, Lenovo's 3QFY15 pretax profit could grow 6% QoQ and 8% YoY, rather than decline 17% QoQ and 15% YoY. These non-cash M&A charges are recurring and the company is guiding of about US\$90m a quarter in the future considering full quarter amortization of Motorola and IBM x86.

We also provide breakdown of these cash and non-cash M&A related charges in OPEX and non-operating level in Fig 113, by our checks with the financial reports and with the company management. The table shows that the total M&A related charges will impact OPM for 3QFY15/4QFY15E by 0.8pts/1.1pts and pretax margin by 0.3pts/0.3pts.

Fig 113 Lenovo's OPEX and non operating expense breakdown

(US\$m)	3QFY15	4QFY15E
Sales	14,092	11,952
Reported gross profit	2,097	1,777
OPEX		
Amortization for IBM x86 and Motorola	58	70
Other non-cash M&A charges	9	9
Severance	40	~40
post-merger management expense	10	<10
Other OPEX	1,655	1,504
Reported operating profit	325	144
Non-OP expense		
Imputed interest for promissory note	7	11
Loan interests on 5-year US\$1.5bn note	16	16
Other loan interests related to M&A	14	14
Other Non-OP expense	14	13
Reported pretax profit	274	91
OPM	2.3%	1.2%
OPM impact from M&A related charges	0.8%	1.1%
OPM excluding M&A related charges	3.1%	2.3%
Pretax margin	1.9%	0.8%
Pretax margin impact from M&A related charges	0.3%	0.3%
Pretax margin excluding M&A related charges	2.2%	1.1%

Note: Light orange for non-cash M&A related charges and dark orange for cash M&A related charges

Source: Company data, Macquarie Research, March 2015

Fig 114 Lenovo's quarterly Income Statement

Year ended March 31	1QFY15	2QFY15	3QFY15	4QFY15F	1QFY16F	2QFY16F	3QFY16F	4QFY16F
Revenues	10,395	10,476	14,092	11,952	13,011	14,016	16,224	14,267
Gross Profit	1,349	1,457	2,097	1,777	1,937	2,094	2,440	2,167
Operating Expenses	1,066	1,093	1,772	1,633	1,695	1,791	1,959	1,745
Operating Profit	282	364	325	144	241	303	481	421
PBT	264	329	274	91	185	251	426	370
Net profit	214	262	253	79	150	205	350	303
EPS (US\$ cent)	2.03	2.53	2.32	0.71	1.35	1.84	3.15	2.73
PBT exc. Non-cash M&A charges			348	181	275	341	516	460
Profitability								
Gross Margin	13.0%	13.9%	14.9%	14.9%	14.9%	14.9%	15.0%	15.2%
Operating Margin	2.7%	3.5%	2.3%	1.2%	1.9%	2.2%	3.0%	3.0%
Expense ratio	10.3%	10.4%	12.6%	13.7%	13.0%	12.8%	12.1%	12.2%
Pretax Margin	2.5%	3.1%	1.9%	0.8%	1.4%	1.8%	2.6%	2.6%
Net Margin	2.1%	2.5%	1.8%	0.7%	1.2%	1.5%	2.2%	2.1%
QoQ Growth								
Sales	11.1%	0.8%	34.5%	-15.2%	8.9%	7.7%	15.8%	-12.1%
Gross Profit	8.4%	8.0%	43.9%	-15.3%	9.0%	8.1%	16.5%	-11.2%
Operating Profit	-0.5%	29.0%	-10.9%	-55.7%	67.6%	25.8%	58.6%	-12.5%
Pretax Profit	24.2%	24.7%	-16.7%	-66.9%	104.1%	35.6%	69.7%	-13.2%
Net Profit	34.9%	22.8%	-3.4%	-68.7%	89.1%	36.5%	70.9%	-13.3%
EPS	33.3%	24.2%	-8.1%	-69.2%	89.1%	36.5%	70.9%	-13.3%
PBT exc. Non-cash M&A charges			5.8%	-48.1%	52.3%	24.0%	51.3%	-10.9%
YoY Growth								
Sales	18.3%	7.2%	30.6%	27.7%	25.2%	33.8%	15.1%	19.4%
Gross Profit	13.2%	15.2%	53.8%	42.8%	43.6%	43.7%	16.4%	21.9%
Operating Profit	40.0%	28.6%	3.9%	-49.3%	-14.6%	-16.7%	48.2%	192.8%
Pretax Profit	22.5%	24.1%	-14.6%	-57.3%	-29.8%	-23.7%	55.4%	307.8%
Net Profit	22.8%	19.3%	-4.6%	-49.9%	-29.8%	-21.9%	38.2%	282.4%
EPS	21.9%	19.4%	-9.3%	-53.2%	-33.6%	-27.1%	35.7%	282.4%
PBT exc. Non-cash M&A charges			8.4%	-14.9%	4.3%	3.6%	48.2%	154.5%

Source: Company data, Macquarie Research, March 2015

Financial analysis

Balance sheet remains healthy post the acquisition

After the acquisition of IBM x86 and Motorola, Lenovo maintained a net cash position due to the right issue of ~700m shares to finance these acquisitions. Its net debt to equity ratio went from -105% as of FY2Q15 to -28% as of 3QFY15. Its cash conversion cycle days decreased by ~2 days from FY2Q15's 9.4 days to 3QFY15's 7.9 days thanks to better control in receivables and inventory as well peak seasonality. We expect conversion cycle days will likely maintain at ~10 days in the FY15-17.

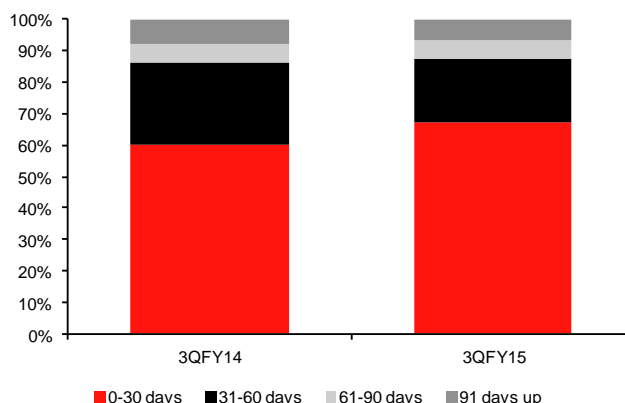
To further examine Lenovo's credit risks, we add its accounts payable on its net debt position and it shows insufficient net cash for its current liability. (Fig 115) But if we also consider its accounts receivable, it suggests slightly "net debt" in FY15/16 due to acquisitions, but will return to "net cash" again in FY17. Although there is certain level of default risk to the accounts receivable, we see Lenovo's quality of accounts receivable improving as the aging analysis shows that the amount % of 0-30 days accounts receivable has increased in 3QFY15 than a year ago. (Fig 116)

Fig 115 Lenovo's net debt considering accounts payable and receivable

(US\$ m)	FY11	FY 12	FY 13	FY14	FY15F	FY16F	FY17F
Net Debt	-2,725	-4,108	-3,092	-3,498	-1,222	-1,569	-2,447
Accounts Payable (AP)	2,279	4,178	3,724	4,860	6,095	7,249	7,503
Net Debt+AP	-446	69	632	1,362	4,873	5,680	5,056
Accounts Receivable (AR)	1,761	2,994	3,458	3,619	4,622	5,517	5,716
Net Debt+AP-AR	-2,207	-2,925	-2,826	-2,256	251	163	-660

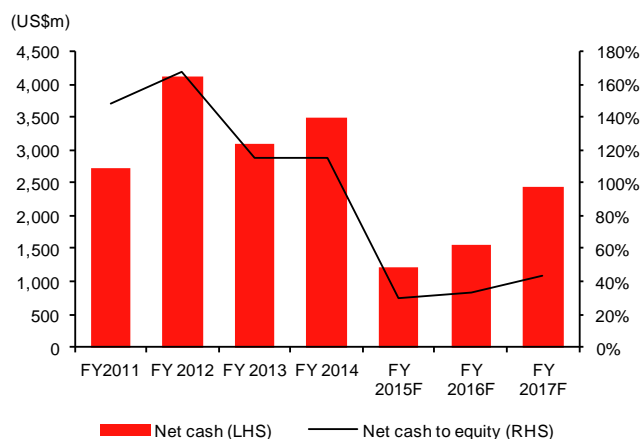
Source: Company data, Macquarie Research, March 2015

Fig 116 Lenovo's aging analysis breakdown of its accounts receivable



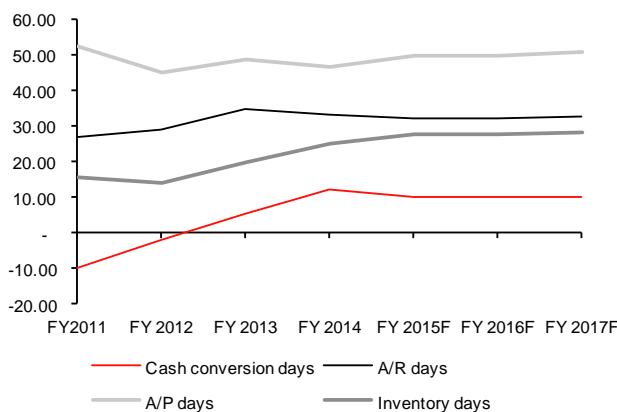
Source: Company data, Macquarie Research, March 2015

Fig 117 Lenovo's net cash and net cash to equity-changed



Source: Company data, Macquarie Research, March 2015

Fig 118 Lenovo's cash conversion cycle



Source: Company data, Macquarie Research, March 2015

Free cash flow lowered on acquired fix assets in FY15

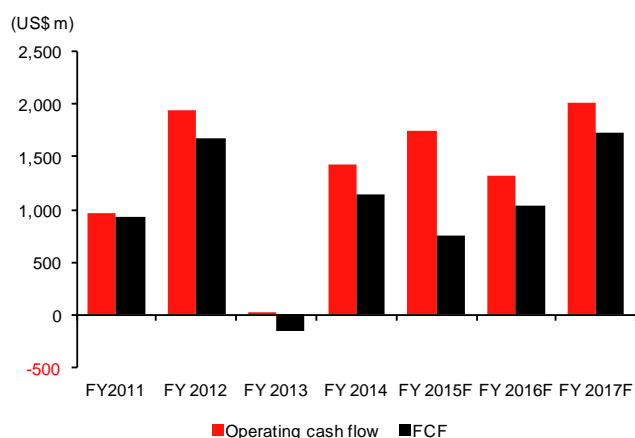
Lenovo has been generating US\$900m+ FCF a year since FY10, except for FY13, when the business diversified into smartphones, tablets, and cloud computing, which led to low operating cash flow thus negative FCF. As Lenovo incurred about US\$800m of capex from the acquisition of IBM x86 and Motorola, the FCF for FY15 will be lower, at ~US\$750m. But as there is no major capex expansion in the next 1-2 years, FCF could gradually revert to normal on improving profitability for the acquired businesses.

ROE decline due to acquisition, but will recover in next 1-2 years

Due to the loss of the acquired businesses and right issue of shares during the acquisition, we expect FY15E ROE to decline to 19.6% from 27.0% in FY14. But driven by the scale economy of both acquired business and core PC businesses (higher asset turnover) and improving margins (higher net margin), we expect ROE to recover to 24.9% in FY17.

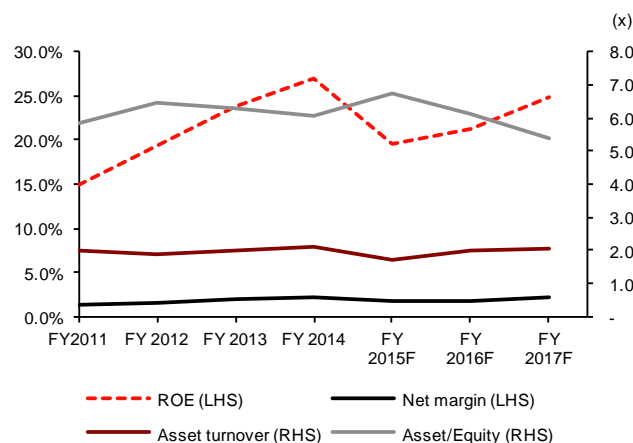
We conduct Dupont analysis for Lenovo and its PC/smartphone peers, shown in Fig 121-Fig 124. While Lenovo's net margin is relatively low comparing to peers due to product mix, it has higher ROE thanks to higher asset turnover and financial leverage (i.e. asset to equity/ or debt to equity). This shows Lenovo has better efficiency in driving its top lines, and its use of debt financing which has lower costs/higher return than equity financing.

Fig 119 Lenovo's operating cash flow and free cash flow



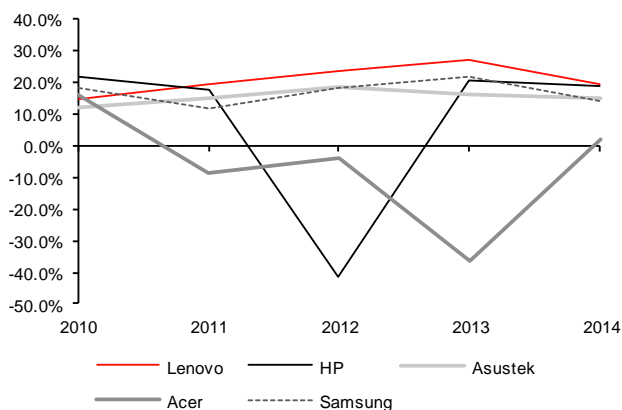
Source: Company data, Macquarie Research, March 2015

Fig 120 Lenovo's ROE and Dupont decomposition



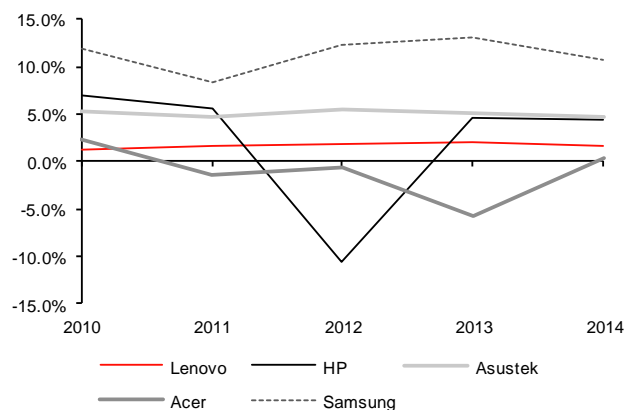
Source: Company data, Macquarie Research, March 2015

Fig 121 ROE comparison



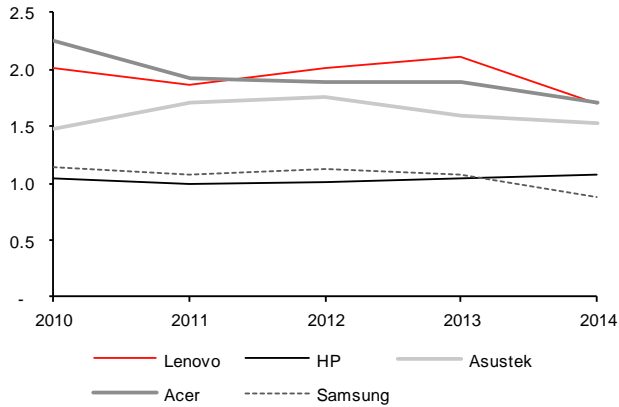
Note: Lenovo's 2014 ended Mar 2015, HP's 2014 ended Oct 2014, while the others' ended Dec 2014. All 2014 numbers are estimated except for HP
Source: Company data, Macquarie Research, March 2015

Fig 122 Net margin comparison



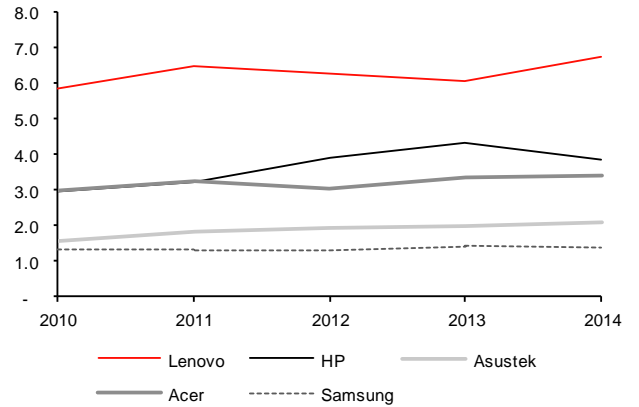
Note: Lenovo's 2014 ended Mar 2015, HP's 2014 ended Oct 2014, while the others' ended Dec 2014. All 2014 numbers are estimated except for HP
Source: Company data, Macquarie Research, March 2015

Fig 123 Asset turnover comparison



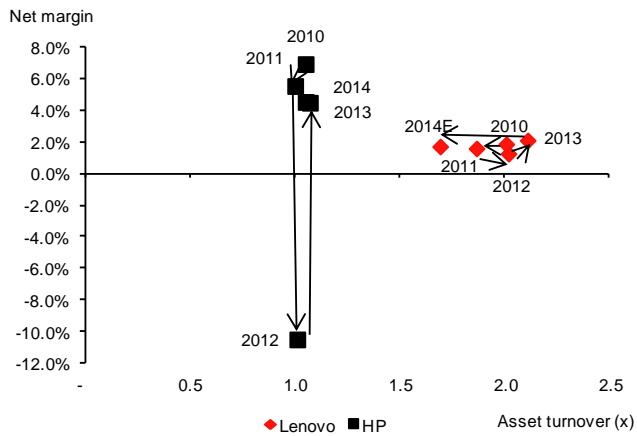
Note: Lenovo's 2014 ended Mar 2015, HP's 2014 ended Oct 2014, while the others' ended Dec 2014. All 2014 numbers are estimated except for HP
Source: Company data, Macquarie Research, March 2015

Fig 124 Asset to equity ratio comparison



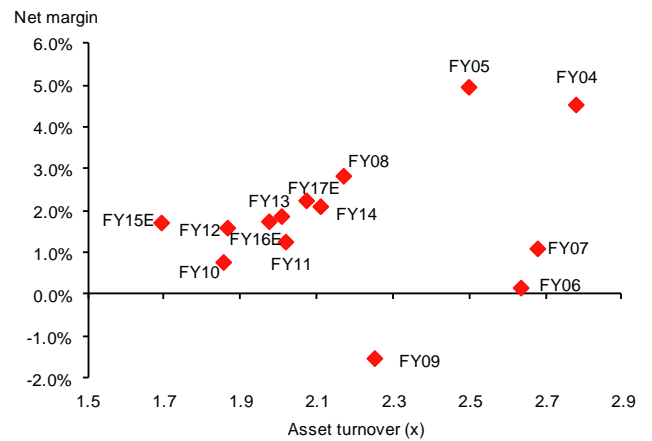
Note: Lenovo's 2014 ended Mar 2015, HP's 2014 ended Oct 2014, while the others' ended Dec 2014. All 2014 numbers are estimated except for HP
Source: Company data, Macquarie Research, March 2015

Fig 125 Net margin/Asset turnover: Lenovo vs HP



Note: Lenovo's 2014E ended Mar 2015, HP's 2014 ended Oct 2014
Source: Company data, Macquarie Research, March 2015

Fig 126 Net margin/Asset turnover: Lenovo



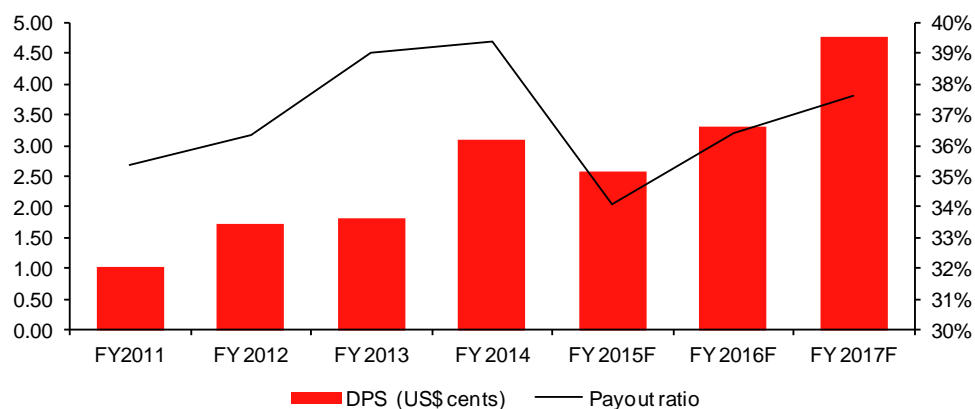
Source: Company data, Macquarie Research, March 2015

Fig 127 Lenovo financial highlights

(US\$ m)	FY2011	FY 2012	FY 2013	FY 2014	FY 2015F	FY 2016F	FY 2017F
EPS (US\$ cents)	2.86	4.73	6.17	7.87	7.60	9.07	12.64
Net Debt	-2,725	-4,108	-3,092	-3,498	-1,222	-1,569	-2,447
Net Debt/Equity	-149%	-168%	-115%	-116%	-30%	-33%	-43%
Cash conversion days	(9.59)	(1.63)	5.52	12.11	9.98	10.04	10.25
A/R days	26.78	29.34	34.76	33.37	32.06	32.17	32.86
A/P days	52.34	45.10	48.97	46.56	49.69	49.82	50.91
Inventory days	15.97	14.12	19.73	25.31	27.62	27.69	28.30
Capex	43	263	179	297	1,009	280	280
Operating cash flow	965	1,940	20	1,432	1,751	1,313	2,007
FCF	922	1,677	-160	1,135	743	1,033	1,727
ROE*	14.9%	19.3%	23.7%	27.0%	19.6%	21.2%	24.9%
Net margin	1.3%	1.6%	1.9%	2.1%	1.7%	1.8%	2.3%
Asset turnover	2.0	1.9	2.0	2.1	1.7	2.0	2.1
Asset/Equity	5.8	6.5	6.3	6.1	6.7	6.1	5.4
DPS (US\$ cents)	1.01	1.72	1.80	3.10	2.59	3.30	4.76
Payout ratio	35%	36%	39%	39%	34%	36%	38%

* ROE is based on net profit/ year end equity

Source: Company data, Macquarie Research, March 2015

Fig 128 Lenovo's Dividend Payment history

Source: Company data, Macquarie Research, March 2015

Fig 129 Lenovo's balance sheet

Year ended March 31	FY2010	FY2011	FY2012	FY2013	FY2014	FY2015F	FY2016F	FY2017F
Cash & Cash Equivalents	2,439	2,997	4,171	3,571	3,953	3,941	4,218	5,097
Accounts Receivable	1,408	1,761	2,994	3,458	3,619	4,622	5,517	5,716
Inventories	879	804	1,218	1,965	2,701	3,387	4,029	4,170
Other Current Assets	1,510	2,376	3,436	3,396	3,128	4,464	4,542	4,620
TOTAL CURRENT ASSETS	6,236	7,936	11,820	12,390	13,401	16,415	18,306	19,603
PPE	248	209	392	480	667	1,542	1,694	1,846
Intangible assets	2,066	2,134	3,091	3,326	3,340	8,749	8,345	7,941
Other non current assets	406	426	557	686	950	1,031	797	725
TOTAL NON CURRENT ASSETS	2,720	2,769	4,040	4,492	4,957	11,322	10,836	10,511
TOTAL ASSETS	8,956	10,706	15,861	16,882	18,357	27,737	29,142	30,114
Short-Term Debt	295	272	63	176	445	827	827	827
Accounts Payable	3,236	2,279	4,178	3,724	4,860	6,095	7,249	7,503
Other Current Liabilities	2,889	5,482	7,569	8,192	8,157	10,830	10,510	10,190
TOTAL CURRENT LIABILITIES	6,419	8,033	11,810	12,091	13,462	17,752	18,586	18,520
LIABILITIES								
Long-Term Debt (ex. current portion)	295	0	0	303	10	1,892	1,892	1,892
Other Long Term Liabilities	636	838	1,603	1,807	1,860	3,978	3,978	4,140
TOTAL LIABILITIES	7,350	8,871	13,413	14,202	15,332	23,622	24,456	24,552
Common Stocks	31	32	33	33	1,650	2,690	2,690	2,690
Reserves/Others	1,574	1,803	2,328	2,633	1,360	1,399	1,971	2,847
Minority	0	0	87	14	15	25	25	25
SHAREHOLDERS' EQUITY	1,606	1,835	2,448	2,680	3,025	4,115	4,686	5,562
TOTAL LIABILITIES AND EQUITY	8,956	10,706	15,861	16,882	18,357	27,737	29,142	30,114

Source: Company data, Macquarie Research, March 2015

Fig 130 Lenovo's statement of cash flow

Cash Flow Statement	FY2010	FY2011	FY2012	FY2013	FY2014	FY2015F	FY2016F	FY2017F
Net Income	129	273	473	635	817	808	1,008	1,405
Depreciation	102	82	80	92	110	134	128	128
Amortisation	70	94	98	118	145	271	404	404
Other M&A related non-cash expense	0	0	0	0	0	36	78	78
Net Change in Working Capital	-182	-88	-107	-288	360	-1,997	-383	-85
Other	715	603	1,397	-538	-0	2,500	78	78
Cash from Operations	835	965	1,940	20	1,432	1,751	1,313	2,007
(Purchases) Sale of fixed asset-CAPEX	-36	-43	-263	-179	-297	-1,009	-280	-280
(Purchases) Sale of LT investment	-11	34	7	2	35	-35	0	0
Proceeds from Disposal of S/T Investments	-427	-865	-1,061	40	268	-1,357	-160	-160
Other adjustment	219	940	480	-108	-590	-764	0	0
Cash from Investing	-255	66	-837	-245	-584	-3,165	-440	-440
Net Change in LT Debt	-151	-295	0	303	-293	1,882	0	0
Net Change in ST Debt	-161	-23	-209	113	270	382	0	0
Dividends Paid	-69	-97	-172	-248	-322	-275	-436	-529
Proceeds from Share Issuance	0	0	0	0	0	0	0	0
Director & Employee's bonus	0	0	0	0	0	0	0	0
Other Financing Cash Flows	163	42	65	-237	-85	-449	-320	-320
Cash from Financing	-217	-373	-316	-68	-430	1,539	-756	-849
Currency Adjustments	12	58	16	-10	3,454	-82	0	0
Net Cash Flow	375	716	803	-304	3,872	43	117	719
Free Cash Flow	798	922	1,677	-160	1,135	743	1,033	1,727

Source: Company data, Macquarie Research, March 2015

Risks

Integration risk from Motorola and IBM acquisition

While Lenovo has went through a couple major integrations post acquisitions before, we think the two entities(IBM System X/Motorola) integration remain key risk to Lenovo's earning estimate, in particular for more fluctuating OPEX estimate given the pace of OPEX cutting and potential cost saving could be deferring. In the December quarter 2014, which included full quarter of IBM x86 and two months of Motorola loss; Lenovo's OPEX increased by \$680m from September quarter.

As Motorola's operation will still be independent post acquisition and intend to increase multiple country exposure via re-entry, there could be less room for cost saving in operating expense level. For IBM x86 server business, Lenovo also has to sustain IBM's x86 server market share, and expedite the speed of cost saving.

Moreover, as part of the manufacturing and final assembly for IBM x86 servers will remain at its original sites around the world, close to its customers, this could reduce the manufacturing synergies for the merger. Lenovo has offered severance packages for ex-IBM/Motorola employees to reduce headcount. It expects material cost savings of US\$400-500m in the next 12 months for Motorola. Beyond that, the company has not offered detailed cost saving plans or target for the two acquired businesses. Hence, we see risks in integration in the next few quarters.

Smartphone business faces stiff competition

Lenovo is facing a stiffer competitive environment in the China smartphone market, with factors including: 1) Chinese telco operator subsidy cuts; 2) Chinese vendors moving to the mid-range to high-end models, while Lenovo's products are mostly geared to the bottom end of the market; 3) concerns about saturation of the smartphone market. While Lenovo has become more aggressive in online channels, it comes later to the market than Xiaomi, Huawei, etc.

Many local players are moving to the middle/higher end of the market, which was already crowded with international brands. As Lenovo relaunches Motorola in China to address this, it will not face easy competition.

In 4Q14, shipments of Lenovo's own brand smartphone (i.e. excluding Motorola), were 14.1m, down 17% QoQ and up only 1.5% YoY. This shows the tougher competition Lenovo faces in the China smartphone market. If Lenovo's volume growth declines drastically, it will mean there is a smaller cushion for Motorola's expansion and the operating expenses connected with it.

Potential server market share loss in US due to information security

We think that Lenovo's server business faces risks from security concerns among US and other government-related organizations. Since the announcement of the acquisition, the global market share of the x86 has fallen from 8.6% in 4Q13 to 7.0% in 3Q14. While security concerns are not a direct cause for IBM's falling market share, we think the risk will persist in the future.

PC market growth deceleration

While Lenovo is already the No.1 player in terms of PC market share, it could be negatively impacted by the slower/negative growth of the PC market. IDC forecasts that global PC shipment will decline 3.3%/1.5% in 2015/16, and that global NB shipment will decline 2.4%/1.1% in 2015/16. Off a higher PC shipment base in 2014 thanks to stronger corporate replacement cycle, it will have a tougher comparison base. As PC still contributed 65% of Lenovo's total sales in the December quarter 2014, PC industry growth deceleration or decline will affect its top-line sales growth and profitability, given economies of scale. To maintain or grow its PC shipment volume, Lenovo needs to further increase its market share. We currently forecast Lenovo to increase PC market share by 2pts in CY2015 and 2pts in CY2016 to maintain the PC volume YoY increase of 4%/7% in 2015/16.

Consumer PC: lower ASP/margins and slower demand in emerging markets

As the commercial PC market replacement cycle peaked in late 2014, consumer PC could be the key driver for Lenovo's PC volume growth in 2015. Despite Lenovo aiming to improve product mix, consumer PC's ASP and margin are still lower than commercial's in general.

Moreover, as shown in Figs 100-101, consumer NB/DT YoY shipment growth for emerging markets (e.g. China) lagged that of mature markets, and hasn't shown any signs of recovery. As China still accounted for 33% of Lenovo's consumer PC shipment in 4Q14, the consumer PC recovery pace in China would be a key to Lenovo's PC shipment growth.

Commercial PC: replacement cycle peaked out but emerging market demand still sluggish

Commercial PC replacement demand bolstered 2014 PC shipments, but this peaked in 2H14. Fifty-one percent of Lenovo's shipments in 4Q14 were commercial PCs, moreover, China and Latin America collectively accounted for 43% of its total PC shipment. We have not observed signs of recovery for commercial PCs in emerging markets (Fig 98-99), in its DT segment, Lenovo has about 71% exposure to the commercial market. The commercial DT market only prospered in 1H14, and then peaked in 2H14. With nothing to stimulate demand in the near term, we see risks for Lenovo's DT business.

USD appreciation could weigh on sales growth

Lenovo's dominant reporting currency is the USD, but ~70% of its sales are generated outside the Americas. This means that strong USD appreciation would negatively impact sales. In the December 2014 quarter, the impact from USD appreciation for total sales was ~3%, according to management. If this continues throughout 2015, it would mean downside to our USD sales estimates. The impact on the bottom line will be minor, as the company has built up a hedging position.

Appendices

Lenovo's corporate and M&A history

Fig 131 Lenovo's corporate and M&A history

Time	Event
1984	Lenovo is founded in Beijing by chairman Liu Chuanzhi. He and 10 other colleagues launch the New Technology Developer Inc. (the predecessor of the Legend Group) funded by the Chinese Academy of Sciences.
1988	Legend Hong Kong is established.
1990	The very first Legend PC is launched in the market as the company shifts to a producer and seller of its own branded computer products.
1995	Legend introduces the first Legend-brand server.
1996	Legend becomes the market share leader in China for the first time.
1999	Legend introduces the first Legend brand laptop.
1999	Legend becomes the top PC vendor in the Asia-Pacific region.
2000	Legend becomes a constituent stock of the Hang Seng Index - HK.
2001	Legend appoints Yuanqing Yang President and CEO.
2003	Legend announces the birth of its new "Lenovo" logo to prepare for its expansion into the overseas market.
2004	Lenovo and IBM announce an agreement by which Lenovo will acquire IBM's Personal Computing Division.
2005	Lenovo completes the acquisition of IBM's Personal Computing Division, making it a new international IT competitor and the third-largest personal computer company in the world.
2005	William J. Amelio is appointed as CEO and President of Lenovo.
2008	Lenovo enters the worldwide consumer PC market with new Idea brand.
2009	Yuanqing Yang is appointed CEO
2010	Lenovo introduces LePhone, its first smartphone
2010	Lenovo forms Mobile Internet Digital Home (MIDH) business unit to attack growing opportunity in consumer devices such as smartphones, tablets and smart TV
2011	Lenovo forms a joint venture with NEC, creating the largest PC company in Japan.
2011	Lenovo acquires Medion, a PC and consumer electronics company based in Germany, substantially increasing presence in consumer market in Western Europe.
2012	Lenovo forms a joint venture with EMC to sell servers in China and develop storage solutions
2012	Lenovo acquires Stoneware, a software firm focused on cloud computing
2012	Lenovo becomes the world's #1 PC company
2013	Lenovo reaches #329 in the Fortune 500 list of the world's largest companies
2013	Lenovo acquires CCE, a leading consumer electronic company in Brazil
2013	Lenovo acquires IBM X86 business unit to grow its server business into global #3
2014	Lenovo acquires Motorola Mobility from Google to increase smartphone penetration overseas and solidify #3 position in worldwide smartphone market
2014	Lenovo renews the joint venture with NEC to extend the NEC brand license agreements to at least 2018

Source: Company data, Macquarie Research, March 2015

Lenovo's Management team

Fig 132 Lenovo's key management background

Name	Role	Experience and background
YANG Yuanqing	Chairman and CEO	Yang Yuanqing is Chief Executive Officer and an executive director of the Company and has been appointed as the Chairman of the Board on November 3, 2011. He is also a director and a shareholder of Sureinvest Holdings Limited which holds interests in the issued share capital of the Company. Mr. Yang assumed the duties of chief executive officer on February 5, 2009. Prior to that, he was the chairman of the board from April 30, 2005. Before taking up the office as chairman, Mr. Yang was the chief executive officer and has been an executive director since December 16, 1997. He has more than 20 years of experience in the field of computers. Under his leadership, Lenovo has been China's best-selling PC brand since 1997. Mr. Yang holds a Master's degree from the Department of Computer Science at the University of Science and Technology of China.
WONG Wai Ming	Executive VP and CFO	Mr. Wong Wai Ming is Executive VP of the Company and Chief Financial Officer. He was previously an investment banker for more than 15 years and also held senior management position in listed companies in Hong Kong. He was an independent non-executive director of the Company from March 30, 1999 until his appointment to the position of CFO on May 23, 2007. Mr. Wong is a member of the Hong Kong Institute of Certified Public Accountants and the Institute of Chartered Accountants in England and Wales and holds a Bachelor's degree in Management Sciences from the Victoria University of Manchester, U.K.
Gianfranco LANCI	Executive VP and COO; President, EMEA and Asia Pacific Mature Markets	Gianfranco Lanci joined the Group in April 2012 and is currently Executive VP and Chief Operating Officer, responsible for running Lenovo's global PC business as well as for Lenovo's EMEA region and the Asia Pacific markets of Australia, Japan and New Zealand. Prior to that, he was Senior VP of the Company and President of the EMEA geography. Mr Lanci has 30 years experience across the PC business, including leadership roles at Texas Instruments and Acer. He was appointed as President of Acer Inc. in 2005 and in 2008 became Chief Executive Officer and President. Under his leadership he led Acer to the #2 position globally and #1 in EMEA whilst recording record profitability for three consecutive years. He holds a degree in engineering from the Politecnico of Turin.
LIU Jun	Executive VP; President, Mobile Business Group	Liu Jun joined the Group in 1993 and is currently Executive VP of the Company and President of the Mobile Business Group responsible for driving Lenovo's rapid growth in smartphones, tablets and smart televisions. Prior to this role, he was Senior VP of the Company and President of Lenovo Business Group responsible for driving Lenovo's mainstream consumer/commercial desktop, notebook and tablet businesses and also the growth across the Mobile Internet & Digital Home portfolio including smartphone and smart TV. Before that, Mr. Liu held a broad range of leadership positions in Lenovo including president of the Products Group, Consumer Business Group, Global Supply Chain and Lenovo China. He holds a Bachelor's degree in Automation and an EMBA, both from Tsinghua University and completed executive programs at Harvard University and Stanford University.
Gerry P. SMITH	Executive VP; President, Enterprise Business Group and Americas	Gerry P. Smith joined the Group in August 2006 and is currently Executive VP of the Company and President of the Enterprise Business Group as well as President of the Americas geography. In these roles he oversees Lenovo's fast-growing enterprise business worldwide and Lenovo's overall business in the Americas region. Prior to that, Mr. Smith was Senior VP of the Company and President of the Americas geography. Before that, Mr. Smith was Senior VP of Global Supply Chain and is responsible for end-to-end supply chain management encompassing order management, supply planning, procurement, manufacturing, logistics and fulfilment operations. Before joining the Group, Mr. Smith held a number of leadership roles at Dell, including VP and General Manager of Notebook Development, of Peripherals Development and of the Display Line of Business. Mr. Smith holds a Bachelor's degree in Finance and Marketing from Pacific Lutheran University.
CHEN Xudong	Senior VP, Lenovo Group President, Lenovo China and Asia Pacific Emerging Markets	Chen Xudong is senior VP of Lenovo Group and president for Lenovo China Region and the Asia Pacific Emerging Markets region. Mr. Chen, who oversees Lenovo's business and operations in this geography, has rich experience in sales and marketing, commercial operation, quality management and channel management in the industry and holds an international perspective. Prior to this, he was President of the Lenovo China Region. Mr. Chen joined Lenovo in 1993, and served as various leading roles including Regional Sales, Commerce, Quality, and Channel Management. He was appointed as VP of Lenovo Group in April 2005, and took charge of Lenovo's channel sales and consumer business for Asia Pacific in 2006. From December 2008 to December 2009, he was responsible for the strategy and operations of Lenovo's Asia Pacific and Russia regions, and then moved to Lenovo's Emerging Market Group. Mr.Chen has served as the general manager of Lenovo China region since December 2009, and was appointed to senior VP of Lenovo Group in October 2011. Mr. Chen graduated from Peking University with a bachelor's degree in probability statistics in 1989 and a master's degree in the same discipline in 1992. Mr. Chen also holds an EMBA degree from China Europe International Business School.
David ROMAN	Senior VP and Chief Marketing Officer	David Roman is senior VP and chief marketing officer at Lenovo, responsible for driving all marketing activities for the global personal computer maker. Prior to joining Lenovo, David was VP of worldwide marketing communications for HP's Personal Systems Group, responsible for driving advertising, media relations and marketing services. He was responsible for HP's award-winning "The Computer is Personal Again" campaign. Before HP, David was VP of Corporate and International Marketing at NVIDIA. He also held a number of different marketing leadership roles at Apple Computer in Europe, Asia Pacific and the USA. His last Apple role was VP of worldwide advertising and brand marketing. David graduated from the Queensland University of Technology (Australia) with a degree in Architecture after starting his architectural studies at the Polytechnic of Torino (Italy). He also pursued executive MBA studies at INSEAD in Paris.

Source: Company data, Macquarie Research, March 2015

Lenovo's Shareholder structure

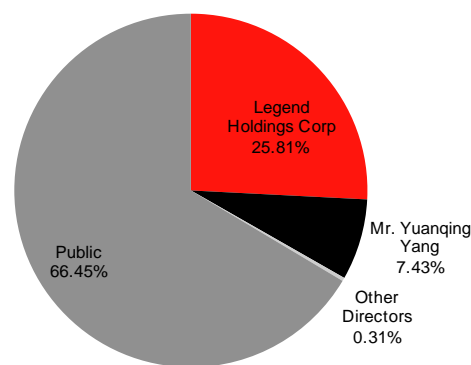
Legend Holdings Corp, now a conglomerate and also the predecessor of Lenovo, holds 25.81% of Lenovo's share. CEO, Mr. Yuanqing Yang, holds 0.51% share as personal interests. But considering his share awards and interests in Sureinvest Holdings, Mr. Yang actually holds 7.43% of the company's share.

Fig 133 Lenovo's shareholding structure

Holder Name	Shares (m)	TSO (%)
Legend Holdings Corp	2,867.6	25.81
JP Morgan	1,056.9	9.51
Sureinvest Holdings Ltd	640.0	5.76
Google inc	519.1	4.67
Right Lane Ltd	477.8	4.3
First State investments	218.9	1.97
Vanguard Group Inc	173.5	1.56
Blackrock fund advisors	151.9	1.37
William Blair & company LLC	151.8	1.37
Skagen AS	148.5	1.34
Matthews International Capital	121.1	1.09
Gam Holding Ltd	96.5	0.87
Yuanqing Yang (personal interests)	57.2	0.51

Source: Company data, Macquarie Research, March 2015

Fig 134 Lenovo's shareholding structure



Source: Company data, Macquarie Research, March 2015

Lenovo Acquisition of Motorola unfold a new chapter

Lenovo has completed the Motorola deal on October 30, 2014 (refer to Fig 135 for details). Post the acquisition, Motorola will be an independent subsidiary of Lenovo and retains the Motorola brand. In terms of production and operation side, we list some of development as below:

- Motorola US plant was established in May 2013 for manufacturing Motorola X, however, Motorola closed its production base in Texas, US in May 2014 due to weak Motorola X sales and higher production cost. However, it aims to continue the production in China post the acquisition.
- Lenovo aims to leverage off its production and distribution recourses to expand the Motorola market footprint, in particular for emerging markets such as China. In addition to absorbing 3,500 Motorola employees, of which 2800 from the US, joining Lenovo, Motorola also started recruiting marketing and R&D talents in China.
- On Jan 26th, 2015, Lenovo launched Motorola G, Motorola X and Motorola X Pro, aiming a strong come back after Motorola officially withdrew from the Chinese market in 2013. Motorola G will be sold at Rmb1,299 with pre-order starting from February, 2015. Available at launch, Motorola X is sold at Rmb3,299 and Rmb3,699 for natural leather, bamboo, or wood casings models. Motorola aims to introduce Motorola Maker, customized smartphone service, in China in 1H15 for Motorola X, giving customers more choices to customize their smartphone's cases, wallpaper, memory, etc. Motorola X Pro, or Nexus 6 outside China, will be available in China in March. Motorola works with open channels such as JD.com, T-mall, Gome, Suning, and DXT to distribute smartphones in China.

Fig 135 Lenovo's Motorola acquisition summary

Time	On January 29, 2014, Lenovo announced the acquisition of Motorola Mobility from Google, the deal was completed on October 30, 2014
Transaction	Total consideration of approximately US\$3.1bn, consisting of: 1) Cash consideration less cash to be refunded of approximately US\$872.5m, paid after close 2) 519m of Lenovo's share, equivalent to a value of approximately US\$750m, issued to Google on October 30, 2014 3) Deferred consideration of US\$1.5bn in the form of a promissory note, issued to Google, payable in cash on the third anniversary of the completion date. (October 30, 2017)
Market position	Adding Motorola's market share will further solidify Lenovo's No.3 position in global smartphone market. (from 4.8% to 6.6% in 1Q-3Q14 market share).
Financial impact	1) US\$872.5m cash to Google: 16% of Lenovo cash balance at end of Sep 2014 2) 519m of Lenovo's share issued to Google: 4.9% of dilution to Lenovo share. Google became the 4th largest share holder with 4.7% of Lenovo's share. 3) Lenovo incurred US\$7m interest expense related to promissory note issued to Google in 3QFY15. And during the quarter, Lenovo also incurred US\$44m interest expense related to the US\$1.5bn note issued in May 2014 at 4.7% interest rate due on May 2019. The note is mainly for the upfront payment totalling US\$2.7bn for the IBM x86 and Motorola acquisition completed in Oct 2014. 4) For the amortization considering both IBM x86 and Motorola deals, Lenovo disclosed that out of the total consideration of US\$5.2bn for the two acquisitions, approximately 46% is classified as intangible assets. Lenovo recorded amortization of IBM system X and Motorola acquisition at US\$58m in the December quarter of 2014.

Source: Company data, Macquarie Research, March 2015

Fig 136 Lenovo's IBM x86 server acquisition summary

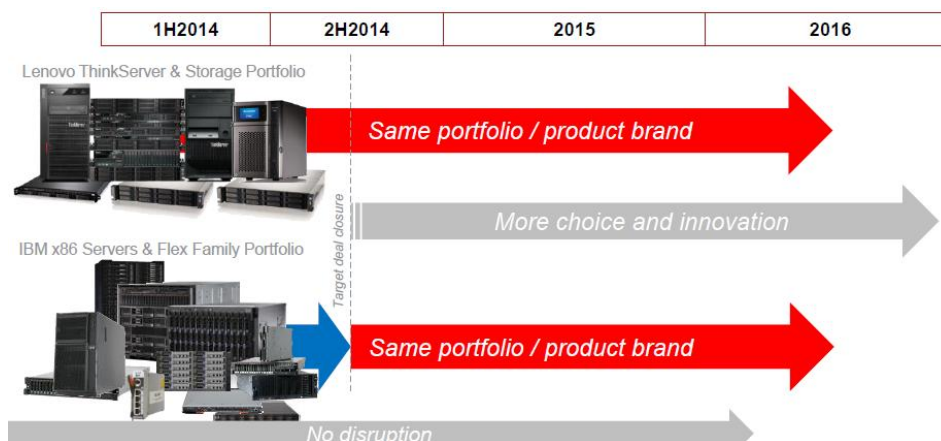
Time	On January 23, 2014, Lenovo announced the acquisition of IBM X86 server hardware and related maintenance services business. The deal was completed on October 1, 2014.
Transaction	Total consideration of US\$2.1bn, including 1) Cash consideration less cash to be refunded of approximately US\$1.87bn, paid after close. 2) 182m of Lenovo's share, equivalent to a value of approximately US\$271m, issued to IBM on October 1, 2014
Market position	Combined with IBM, Lenovo x86 server business will jump to global top 3 in terms of unit market share (from 3.3% to 11.7% for 1H14).
Financial impact	1) US\$1.85bn cash to IBM: 35% of Lenovo cash balance at end of Sep 2014 2) 182m of Lenovo share issued to IBM: around 1.7% of share dilution to Lenovo share as of September 2014 3) During 3QFY15, Lenovo incurred US\$44m interest expense related to the US\$1.5bn note issued in May 2014 at 4.7% interest rate due on May 2019. The note is mainly for the upfront payment totalling US\$2.7bn for the IBM x86 and Motorola acquisition completed in Oct 2014. 4) For the amortization considering both IBM x86 and Motorola deals, Lenovo disclosed that out of the total consideration of US\$5.2bn for the two acquisitions, approximately 46% is classified as intangible assets. Lenovo recorded amortization of IBM system X and Motorola acquisition at US\$58m in the December quarter of 2014.

Source: Company data, Macquarie Research, March 2015

Acquisition of IBM x86- a step to complete its product offerings

In October 2014, Lenovo also completed the acquisition of the complete IBM x86 portfolio including product lines (System x, BladeCenter, Blade, Flex System, Pure Flex, Blade Network Technology, etc.), IPs, sales forces, R&D, and manufacturing resources. Lenovo is committed to follow IBM's x86 product roadmap, adding it to Lenovo's ThinkServer&Storage product lines to expand the overall product portfolio of its enterprise business. While Lenovo used to offer lower-end servers to SMB, the addition of IBM's technology and product lines will add a new class of high-end servers to its portfolio for applications like analytics and databases. Lenovo will cover the entire gamut of enterprise customers. According to IBM presentation, post the merge, IBM's System X and Flex servers with x86 chips will fill out Lenovo's high-end product line. Meanwhile, Lenovo's ThinkServer products will be targeted at small and medium-size businesses.

Fig 137 Lenovo will have more completed product portfolio after the acquisition



Source: Company data, Macquarie Research, March 2015

Market share data & others

Fig 138 Global 1Q-3Q14 smartphone shipment Rank & Market share

Rank	Unit (k)	%	Pro forma Rank	Unit (k)	%		
1	Samsung	234,848	27%	1	Samsung	234,848	27%
2	Apple	116,594	13%	2	Apple	116,594	13%
3	Huawei	47,043	5%	3	Lenovo+Motorola	57,116	7%
4	Lenovo	41,463	5%	4	Huawei	47,043	5%
5	LG	39,478	5%	5	LG	39,478	5%
6	Xiaomi	37,948	4%	6	Xiaomi	37,948	4%
7	ZTE	29,379	3%	7	ZTE	29,379	3%
8	Coolpad	28,510	3%	8	Coolpad	28,510	3%
9	Sony	27,175	3%	9	Sony	27,175	3%
10	Nokia	25,271	3%	10	Nokia	25,271	3%
11	TCL	23,297	3%	11	TCL	23,297	3%
12	HTC	15,718	2%	12	HTC	15,718	2%
13	Motorola	15,653	2%				
Total	868,211						

Source: Gartner, Macquarie Research, March 2015

Fig 139 North America 1Q-3Q14 smartphone shipment Rank & Market share

Rank	Unit (k)	%	Pro forma Rank	Unit (k)	%		
1	Apple	39,379	35%	1	Apple	39,379	35%
2	Samsung	32,892	29%	2	Samsung	32,892	29%
3	LG	10,368	9%	3	LG	10,368	9%
4	ZTE	7,124	6%	4	ZTE	7,124	6%
5	Motorola	4,565	4%	5	Lenovo+Motorola	4,565	4%
6	HTC	3,575	3%	6	HTC	3,575	3%
7	Nokia	3,323	3%	7	Nokia	3,323	3%
8	TCL	3,287	3%	8	TCL	3,287	3%
9	Kyocera	2,774	2%	9	Kyocera	2,774	2%
10	Huawei	1,700	2%	10	Huawei	1,700	2%
11	BlackBerry	1,480	1%	11	BlackBerry	1,480	1%
Total	122,217						

Source: Gartner, Macquarie Research, March 2015

Fig 140 China 1Q-3Q14 smartphone shipment rank

Rank	Unit (k)	%	Pro forma Rank	Unit (k)	%		
1	Samsung	42,536	14%	1	Samsung	42,536	14%
2	Xiaomi	36,535	12%	2	Xiaomi	36,535	12%
3	Lenovo	33,931	11%	3	Lenovo+Motorola	34,131	11%
4	Coolpad	28,256	9%	4	Coolpad	28,256	9%
5	Huawei	27,068	9%	5	Huawei	27,068	9%
6	Apple	21,840	7%	6	Apple	21,840	7%
7	BBK	14,834	5%	7	BBK	14,834	5%
8	OPPO	13,908	5%	8	OPPO	13,908	5%
9	ZTE	12,947	4%	9	ZTE	12,947	4%
10	Gionee	6,913	2%	10	Gionee	6,913	2%
11	Tianyu	6,826	2%	11	Tianyu	6,826	2%
28	Motorola	200	0%				
Total	302,452						

Source: Gartner, Macquarie Research, March 2015

Fig 141 Emerging Asia Pacific 1Q-3Q14 smartphone shipment Rank

Rank	Unit (k)	%	Pro forma Rank	Unit (k)	%		
1	Samsung	28,503	27%	1	Samsung	28,503	27%
2	Micromax	9,620	9%	2	Micromax	9,620	9%
3	Karbons	6,339	6%	3	Lenovo+Motorola	6,383	6%
4	Nokia	4,559	4%	4	Karbons	6,339	6%
5	Nexian	4,554	4%	5	Nokia	4,559	4%
6	Lenovo	4,073	4%	6	Nexian	4,554	4%
7	Sony	3,264	3%	7	Sony	3,264	3%
8	Apple	2,994	3%	8	Apple	2,994	3%
9	Lava	2,406	2%	9	Lava	2,406	2%
10	Motorola	2,310	2%				
Total	105,480						

Source: Gartner, Macquarie Research, March 2015

Fig 142 Western Europe 1Q-3Q14 smartphone shipment rank

Rank	Unit (k)	%	Pro forma Rank	Unit (k)	%		
1	Samsung	35,635	39%	1	Samsung	35,635	39%
2	Apple	19,539	22%	2	Apple	19,539	22%
3	Sony	8,128	9%	3	Sony	8,128	9%
4	LG	5,073	6%	4	LG	5,073	6%
5	Nokia	5,009	6%	5	Nokia	5,009	6%
6	HTC	3,459	4%	6	HTC	3,459	4%
7	Huawei	3,173	4%	7	Huawei	3,173	4%
8	TCL	2,651	3%	8	TCL	2,651	3%
9	BlackBerry	1,678	2%	9	BlackBerry	1,678	2%
10	Motorola	1,037	1%	10	Lenovo+Motorola	1,047	1%
11	ZTE	913	1%	11	ZTE	913	1%
	Total	90,255					

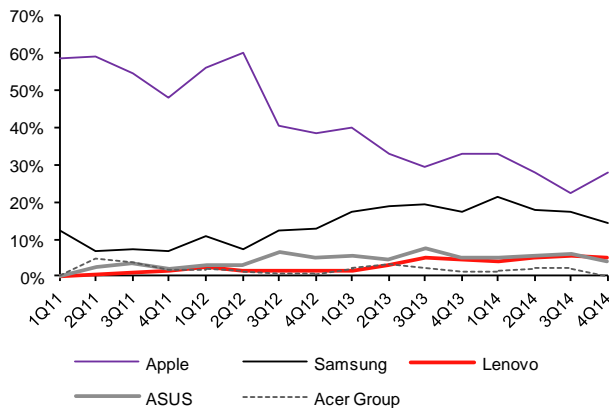
Source: Gartner, Macquarie Research, March 2015

Fig 143 Latin America 1Q-3Q14 smartphone shipment rank

Rank	Unit (k)	%	Pro forma Rank	Unit (k)	%		
1	Samsung	30,425	35%	1	Samsung	30,425	35%
2	LG	12,743	15%	2	LG	12,743	15%
3	TCL	9,825	11%	3	TCL	9,825	11%
4	Motorola	7,498	9%	4	Lenovo+Motorola	8,120	9%
5	Nokia	5,783	7%	5	Nokia	5,783	7%
6	Huawei	5,290	6%	6	Huawei	5,290	6%
7	ZTE	4,810	6%	7	ZTE	4,810	6%
8	Apple	4,558	5%	8	Apple	4,558	5%
9	Sony	2,267	3%	9	Sony	2,267	3%
10	Lenovo	622	1%				
	Total	87,361					

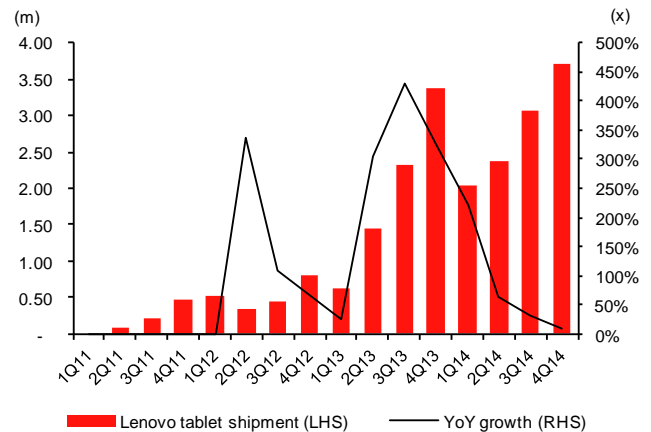
Source: Gartner, Macquarie Research, March 2015

Fig 144 Global tablet market share



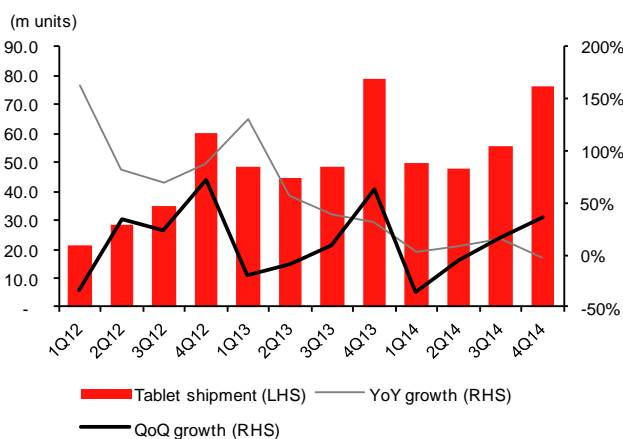
Source: IDC, Macquarie Research, March 2015

Fig 145 Lenovo's tablet shipment YoY growth trend



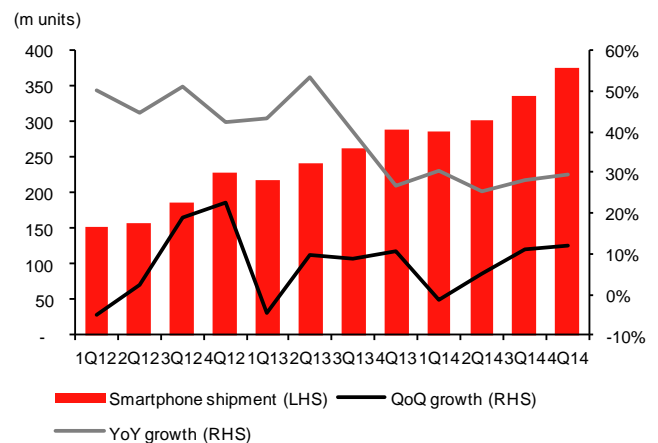
Source: IDC, Macquarie Research, March 2015

Fig 146 Global tablet shipment growth trend



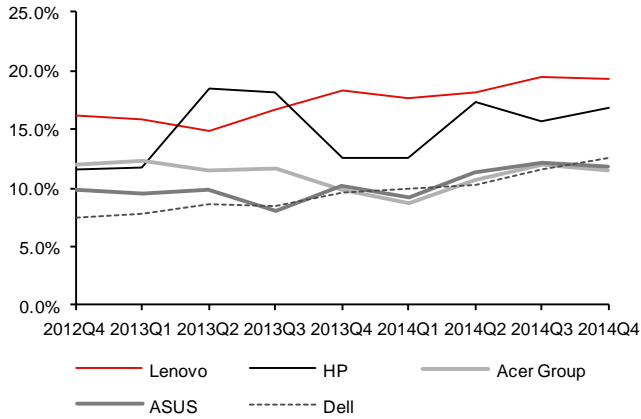
Source: IDC, Macquarie Research, March 2015

Fig 147 Global smartphone shipment growth trend



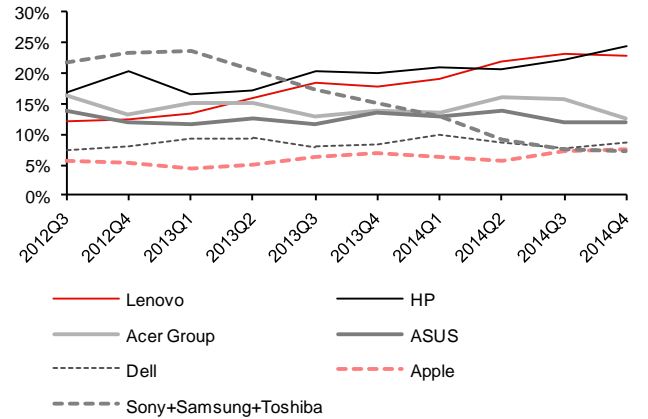
Source: IDC, Macquarie Research, March 2015

Fig 148 APAC ex PRC NB market share trend



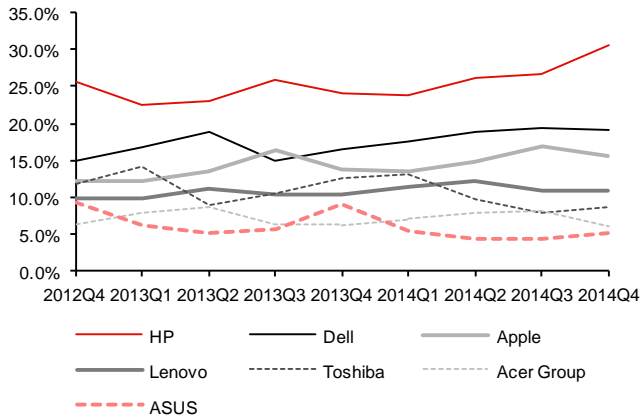
Source: IDC, Macquarie Research, March 2015

Fig 149 EMEA NB market share trend



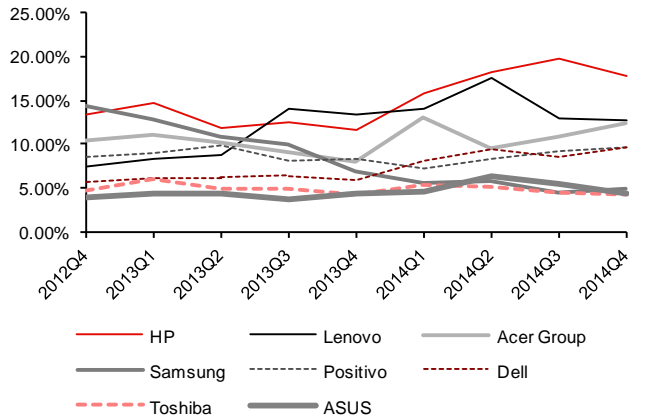
Source: IDC, Macquarie Research, March 2015

Fig 150 North America NB market share trend



Source: IDC, Macquarie Research, March 2015

Fig 151 Latin America NB market share trend



Source: IDC, Macquarie Research, March 2015

Lenovo Group (992 HK)

Quarterly Results					Profit & Loss						
	2Q/15A	3Q/15E	4Q/15E	1Q/16E		2014A	2015E	2016E	2017E		
Revenue	m	10,476	14,092	11,952	13,011	Revenue	m	38,707	46,914	57,518	62,380
Gross Profit	m	1,457	2,097	1,777	1,937	Gross Profit	m	5,064	6,680	8,638	9,504
Cost of Goods Sold	m	9,018	11,995	10,175	11,074	Cost of Goods Sold	m	33,643	40,234	48,880	52,876
EBITDA	m	440	462	297	394	EBITDA	m	1,337	1,556	2,058	2,530
Depreciation	m	35	32	32	32	Depreciation	m	110	134	128	128
Amortisation of Goodwill	m	40	105	121	121	Amortisation of Goodwill	m	145	306	482	482
Other Amortisation	m	0	0	0	0	Other Amortisation	m	0	0	0	0
EBIT	m	364	325	144	241	EBIT	m	1,082	1,116	1,448	1,920
Net Interest Income	m	-35	-49	-53	-56	Net Interest Income	m	-47	-162	-216	-210
Associates	m	-1	-2	0	0	Associates	m	9	-5	0	0
Exceptionals	m	0	0	0	0	Exceptionals	m	0	0	0	0
Forex Gains / Losses	m	0	0	0	0	Forex Gains / Losses	m	0	0	0	0
Other Pre-Tax Income	m	1	-0	-0	-0	Other Pre-Tax Income	m	-29	10	-0	-0
Pre-Tax Profit	m	329	274	91	185	Pre-Tax Profit	m	1,014	958	1,232	1,710
Tax Expense	m	-57	-17	-8	-31	Tax Expense	m	-197	-135	-209	-291
Net Profit	m	272	257	83	154	Net Profit	m	817	822	1,022	1,419
Minority Interests	m	-10	-4	-4	-4	Minority Interests	m	-0	-14	-15	-15
Reported Earnings	m	262	253	79	150	Reported Earnings	m	817	808	1,008	1,405
Adjusted Earnings	m	302	358	200	271	Adjusted Earnings	m	963	1,114	1,490	1,887
EPS (rep)		0.03	0.02	0.01	0.01	EPS (rep)		0.08	0.08	0.09	0.13
EPS (adj)		0.03	0.03	0.02	0.02	EPS (adj)		0.09	0.10	0.13	0.17
EPS Growth yoy (adj)	%	19.6	12.0	-6.5	0.5	EPS Growth (adj)	%	26.9	12.4	28.7	26.6
						PE (rep)	x	19.7	20.5	17.1	12.2
						PE (adj)	x	16.7	14.9	11.5	9.1
EBITDA Margin	%	4.2	3.3	2.5	3.0	Total DPS		0.03	0.03	0.03	0.05
EBIT Margin	%	3.5	2.3	1.2	1.9	Total Div Yield	%	2.0	1.6	2.1	3.1
Earnings Split	%	27.1	32.1	17.9	18.2	Basic Shares Outstanding	m	10,370	11,109	11,109	11,109
Revenue Growth	%	7.2	30.6	27.7	25.2	Diluted Shares Outstanding	m	10,385	10,721	11,109	11,109
EBIT Growth	%	28.6	3.9	-49.3	-14.6						
Profit and Loss Ratios					Cashflow Analysis						
	2014A	2015E	2016E	2017E		2014A	2015E	2016E	2017E		
Revenue Growth	%	14.3	21.2	22.6	8.5	EBITDA	m	1,337	1,556	2,058	2,530
EBITDA Growth	%	32.3	16.4	32.2	22.9	Tax Paid	m	-197	-135	-209	-291
EBIT Growth	%	35.1	3.2	29.8	32.6	Chgs in Working Cap	m	360	-1,997	-383	-85
Gross Profit Margin	%	13.1	14.2	15.0	15.2	Net Interest Paid	m	-47	-162	-216	-210
EBITDA Margin	%	3.5	3.3	3.6	4.1	Other	m	-21	2,490	63	63
EBIT Margin	%	2.8	2.4	2.5	3.1	Operating Cashflow	m	1,432	1,751	1,313	2,007
Net Profit Margin	%	2.5	2.4	2.6	3.0	Acquisitions	m	-555	-799	0	0
Payout Ratio	%	33.5	24.3	24.6	28.0	Capex	m	-297	-1,009	-280	-280
EV/EBITDA	x	9.5	9.0	6.8	5.5	Asset Sales	m	0	0	0	0
EV/EBIT	x	11.7	12.6	9.6	7.3	Other	m	268	-1,357	-160	-160
Balance Sheet Ratios					Investing Cashflow	m	-584	-3,165	-440	-440	
ROE	%	33.9	31.4	33.8	36.5	Dividend (Ordinary)	m	-322	-275	-367	-529
ROA	%	6.1	4.8	5.1	6.5	Equity Raised	m	0	0	0	0
ROIC	%	-211.8	-202.6	41.5	50.0	Debt Movements	m	-23	2,264	0	0
Net Debt/Equity	%	-115.6	-29.7	-33.0	-43.5	Other	m	-85	-449	-320	-320
Interest Cover	x	23.0	6.9	6.7	9.1	Financing Cashflow	m	-430	1,539	-687	-849
Price/Book	x	5.3	4.2	3.6	3.1	Net Chg in Cash/Debt	m	3,872	43	186	719
Book Value per Share		0.3	0.4	0.4	0.5	Free Cashflow	m	1,135	743	1,033	1,727
					Balance Sheet		2014A	2015E	2016E	2017E	
					Cash	m	3,953	3,941	4,288	5,166	
					Receivables	m	3,619	4,622	5,517	5,716	
					Inventories	m	2,701	3,387	4,029	4,170	
					Investments	m	0	0	0	0	
					Fixed Assets	m	667	1,542	1,694	1,846	
					Intangibles	m	3,340	8,749	8,345	7,941	
					Other Assets	m	4,077	5,495	5,339	5,345	
					Total Assets	m	18,357	27,737	29,212	30,184	
					Payables	m	4,860	6,095	7,249	7,503	
					Short Term Debt	m	445	827	827	827	
					Long Term Debt	m	10	1,892	1,892	1,892	
					Provisions	m	0	0	0	0	
					Other Liabilities	m	10,017	14,808	14,488	14,330	
					Total Liabilities	m	15,332	23,622	24,456	24,552	
					Shareholders' Funds	m	3,010	4,089	4,730	5,606	
					Minority Interests	m	15	25	25	25	
					Other	m	0	0	0	0	
					Total S/H Equity	m	3,025	4,115	4,756	5,632	
					Total Liab & S/H Funds	m	18,357	27,737	29,212	30,184	

All figures in USD unless noted.

Source: Company data, Macquarie Research, March 2015

Important disclosures:

Recommendation definitions

Macquarie - Australia/New Zealand

Outperform – return >3% in excess of benchmark return
 Neutral – return within 3% of benchmark return
 Underperform – return >3% below benchmark return

Benchmark return is determined by long term nominal GDP growth plus 12 month forward market dividend yield

Macquarie – Asia/Europe

Outperform – expected return >+10%
 Neutral – expected return from -10% to +10%
 Underperform – expected return <-10%

Macquarie First South - South Africa

Outperform – expected return >+10%
 Neutral – expected return from -10% to +10%
 Underperform – expected return <-10%

Macquarie - Canada

Outperform – return >5% in excess of benchmark return
 Neutral – return within 5% of benchmark return
 Underperform – return >5% below benchmark return

Macquarie - USA

Outperform (Buy) – return >5% in excess of Russell 3000 index return
 Neutral (Hold) – return within 5% of Russell 3000 index return
 Underperform (Sell) – return >5% below Russell 3000 index return

Volatility index definition*

This is calculated from the volatility of historical price movements.

Very high-highest risk – Stock should be expected to move up or down 60–100% in a year – investors should be aware this stock is highly speculative.

High – stock should be expected to move up or down at least 40–60% in a year – investors should be aware this stock could be speculative.

Medium – stock should be expected to move up or down at least 30–40% in a year.

Low-medium – stock should be expected to move up or down at least 25–30% in a year.

Low – stock should be expected to move up or down at least 15–25% in a year.

* Applicable to Asia/Australian/NZ/Canada stocks only

Recommendations – 12 months

Note: Quant recommendations may differ from Fundamental Analyst recommendations

Financial definitions

All "Adjusted" data items have had the following adjustments made:

Added back: goodwill amortisation, provision for catastrophe reserves, IFRS derivatives & hedging, IFRS impairments & IFRS interest expense
 Excluded: non recurring items, asset revals, property revals, appraisal value uplift, preference dividends & minority interests

EPS = adjusted net profit / efpowa*

ROA = adjusted ebit / average total assets

ROA Banks/Insurance = adjusted net profit / average total assets

ROE = adjusted net profit / average shareholders funds

Gross cashflow = adjusted net profit + depreciation

*equivalent fully paid ordinary weighted average number of shares

All Reported numbers for Australian/NZ listed stocks are modelled under IFRS (International Financial Reporting Standards).

Recommendation proportions – For quarter ending 31 December 2014

	AU/NZ	Asia	RSA	USA	CA	EUR	
Outperform	51.80%	58.06%	45.07%	44.42%	60.54%	46.81%	(for US coverage by MCUSA, 5.29% of stocks followed are investment banking clients)
Neutral	31.80%	27.37%	30.99%	50.10%	35.37%	33.51%	(for US coverage by MCUSA, 3.08% of stocks followed are investment banking clients)
Underperform	16.39%	14.57%	23.94%	5.48%	4.08%	19.68%	(for US coverage by MCUSA, 0.44% of stocks followed are investment banking clients)

992 HK vs HSI, & rec history



(all figures in HKD currency unless noted)

Note: Recommendation timeline – if not a continuous line, then there was no Macquarie coverage at the time or there was an embargo period.

Source: FactSet, Macquarie Research, December 2014

12-month target price methodology

992 HK: HK\$13.20 based on a PER methodology

Company-specific disclosures:

992 HK: Macquarie Capital Securities Limited makes a market in the securities of Lenovo Group.

Important disclosure information regarding the subject companies covered in this report is available at www.macquarie.com/disclosures.

Date	Stock Code (BBG code)	Recommendation	Target Price
13-May-2014	992 HK	Outperform	HK\$10.35
07-Mar-2014	992 HK	Outperform	HK\$10.00
08-Nov-2013	992 HK	Outperform	HK\$10.80
20-Mar-2013	992 HK	Outperform	HK\$10.00
31-Jan-2013	992 HK	Outperform	HK\$8.50
24-May-2012	992 HK	Outperform	HK\$7.80
10-Feb-2012	992 HK	Outperform	HK\$7.50

Target price risk disclosures:

992 HK: Any inability to compete successfully in their markets may harm the business. This could be a result of many factors which may include geographic mix and introduction of improved products or service offerings by competitors. The results of operations may be materially affected by global economic conditions generally, including conditions in financial markets. The company is exposed to market risks, such as changes in interest rates, foreign exchange rates and input prices. From time to time, the company will enter into transactions, including transactions in derivative instruments, to manage certain of these exposures.

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