ATKearney

iCEMA

Review of Indian Earthmoving and Construction Equipment Industry

Industry Update

2013-14

Acknowledgements

This annual industry review for FY14 (2013-14) was undertaken by A.T. Kearney with support from the Indian Construction Equipment Manufacturers' Association (ICEMA). We would like to thank ICEMA leadership for their overall guidance, as well as in supporting with data for the driving the relevant analyses and helping prepare the overall report.

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Foreword

With FY2014 marking second consecutive year of sub-5% growth, macroeconomic conditions have gotten tougher, impacting the overall industry in general. Infrastructure continues to be a priority sector, with significant plans developed as part of the 12th five year plan (FY12 – FY17) – however, the pace of activity has slowed. With a stable government now in place, next two years would be crucial to regain the growth trajectory and focus on infrastructure spending, given that 12th five year plan envisaged 52% of the spending to happen in the last two years of the plan period. While the Cabinet Committee of Investments was significant step undertaken by the previous government to speed up clearances for long-pending projects, the pace of clearances (<25% of the value of projects taken up have been cleared so far) suggests that more needs to be done in a time bound manner for the CCI to be completely effective.

Slowdown in macroeconomic activity and infrastructure spending has had a direct impact on earthmoving and construction equipment (ECE) industry, with a sharper contraction witnessed in FY14 (>20%), compared to the decline in FY13 (13%). Moreover, decline in FY14 has been more broad-based with every segment witnessing a double digit decline, compared to FY13 which had at least seen growth in road construction and quarry equipment segments.

Moreover, looking at different capacity sub-segments within the different equipment categories, there have also been distinct movements within the different equipment categories. This not only reflects adoption of different choices of capacity from before, but is also suggestive of financial distress among buyers, impacting the ability to buy more expensive (bigger capacity) equipment.

All in all, FY14 have been a difficult year for the economy, directly impacting infrastructure spending and ECE sales. However, there are signals that activity will pick up, with infrastructure being highlighted as a clear focus area in the recently released Union Budget. The Budget has earmarked investments of ~INR 2 lakh crores for infrastructure, spread across diverse set of projects across all infrastructure areas - roads, railways, ports, airports, urban infrastructure (smart cities, industrial clusters, metro rail), irrigation and waterways (river linking project), among others. There are also proposals to ease funding for infrastructure projects, which has been an area of concern in the last few years.

With a stable government in place and with prospects of immediate boost in infrastructure investment, we expect that ECE sales would soon bounce back to levels seen earlier, and will continue to grow in the medium and long term.

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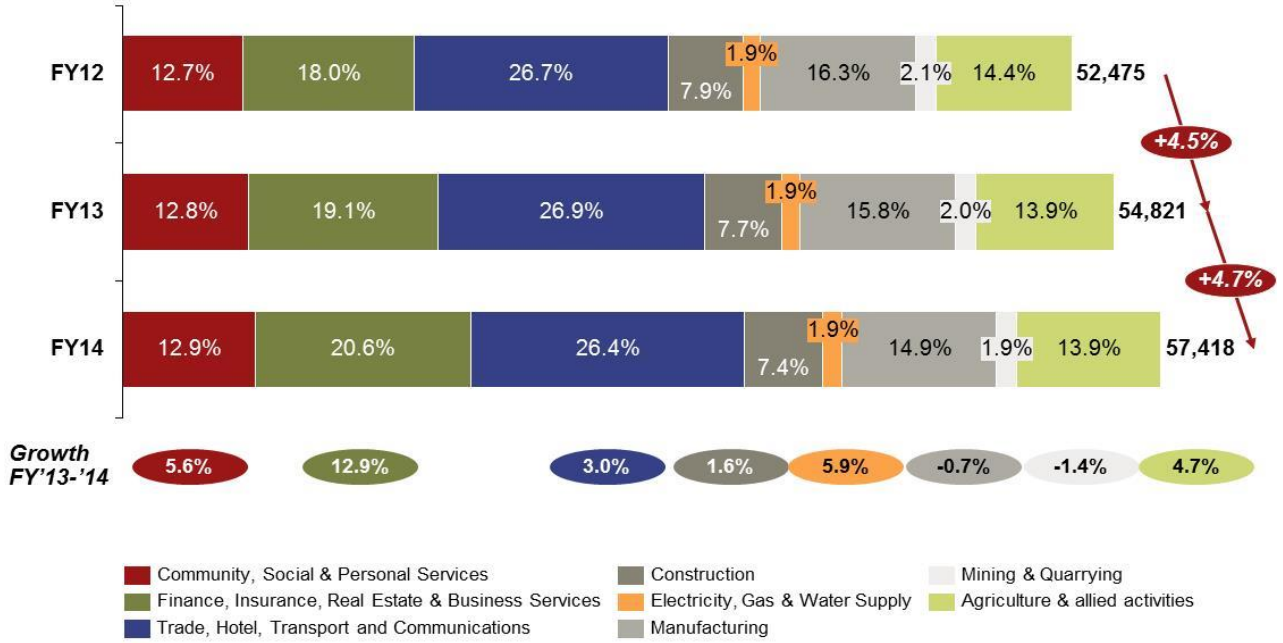
State of the economy

India registered a GDP growth of only 4.7 percent for 2013-14; this marks a second straight year of sub-5 percent growth - the worst slowdown in 12 years. The World Bank has lowered its projection of India's GDP growth from 5.7 percent to 5.5 percent for 2014-15 as it expects a slower-than-expected global growth coupled with a weak monsoon to impact the economy. The prospects of below-average monsoon this year could hit farm output and further fuel inflation, making it tougher for an inflation-focused central bank to lower interest rates to support growth. Despite the slowdown in the overall economy, service sectors have shown much healthier growth in 2013-14, compared to other sectors. Manufacturing, construction and mining continue to lag other sectors, with mining and manufacturing witnessing a contraction over last year. The recovery process in India would remain gradual with GDP growth forecast at 6.3 percent for 2015-16 and 6.6 percent for 2016-17. According to the World Bank, the economy has the potential to achieve 8-9 percent growth again with faster reforms including roll out of Goods and Services Tax and faster consolidation.

Figure 1: Gross Domestic Product (Rs. Billion, %)

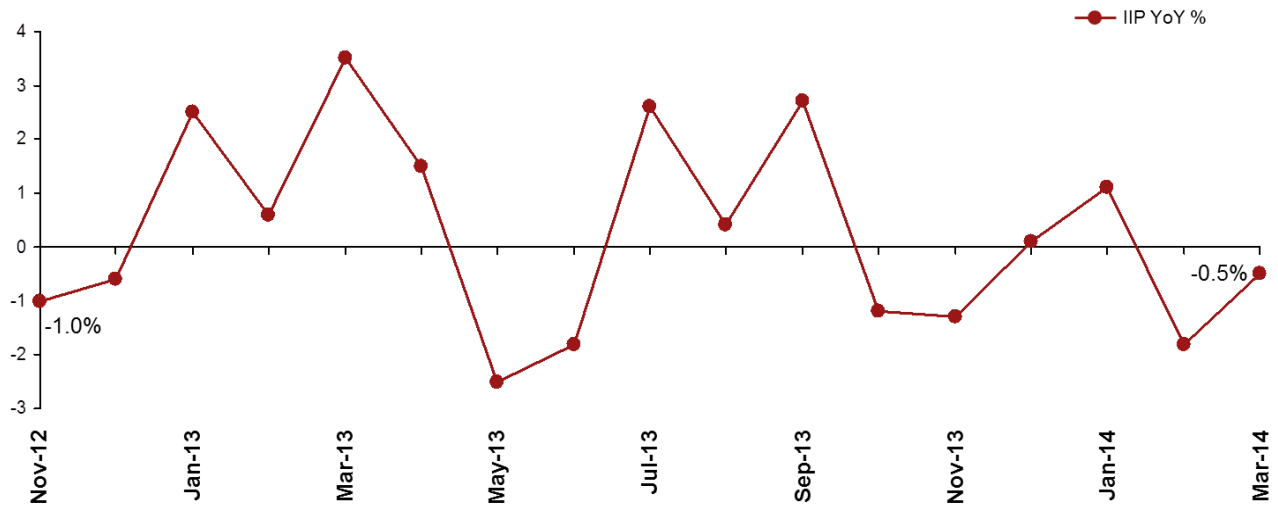


Source: CSO

Industrial Production Continues to Remain in a Weak Zone

Belying expectations of any quick turnaround in industrial activity, IIP continued to remain in the negative territory for the second consecutive month in March 2014 as it stood at -0.5 percent as compared to -1.8 percent in the previous month. The sectoral data depicts a dismal picture, with manufacturing, mining, capital and consumer goods sectors posting a decline in output during the month. The contraction during the month was unexpected as core sector output (comprising of 8 sectors – coal, crude oil, natural gas, petroleum refinery products, fertilizers, steel, cement and electricity – which together have a weight of 38 percent in the total IIP) had grown by 2.5 percent in March 2014. For 2013-14 as a whole, industrial production declined by 0.1 percent as compared to 1.1 percent growth recorded in 2012-13.

Figure 2: Trends in IIP Index



Source: Office of Economic Adviser

On the sectorial front, output of the manufacturing sector, which constitutes over 75 percent of the index, declined by 1.2 percent in March 2014 as compared to decline of 3.6 percent in the previous month. In terms of industries, twelve (12) out of the twenty two (22) industry groups (as per 2-digit NIC-2004) in the manufacturing sector showed negative growth during the month of March 2014 as compared to the corresponding month of the previous year. The industry group 'Radio, TV and communication equipment & apparatus' has shown the highest negative growth of (-) 33.1 percent, followed by (-) 26.1 percent in 'Office, accounting and computing machinery' and (-) 21.5 percent in 'Medical, precision & optical instruments, watches and clocks'. On the other hand, the industry group 'Wearing apparel; dressing and dyeing of fur' has shown the highest positive growth of 26.0 percent, followed by 9.2 percent in 'Basic metals' and 6.2 percent in 'Food products and beverages'. The mining sector, which had turned the corner in January and February 2014, again slipped into the negative territory in March 2014. For the whole year 2013-14, mining sector output declined by 0.8 percent, in part reflecting the ban on iron ore mining which was in place for most parts of last year. The electricity sector growth decelerated to 5.4 percent in March 2014 from 11.5 percent in February 2014. Notwithstanding the weak output in March 2014, electricity sector posted healthy growth rate of 6.1 percent in 2013-14 as compared to 4.0 percent in 2012-13.

On the use based front, volatile capital goods segment output declined by 12.5 percent in March 2014 – the second largest decline posted in the fiscal so far. In part, the sharp decline in capital goods output during the month could also be attributed to the adverse base effect. Notably, industrial output growth excluding capital goods stood at a positive 1.7 percent during the month. For full year 2013-14, capital goods output contracted by 3.7 percent reflecting the weakness of investment demand in the economy. Intermediate goods have continued to register steady growth throughout the year. Basic goods growth performed well and registered 4.0 percent in March 2014. Consumer goods registered negative growth for the sixth consecutive month and the continued contraction in consumer durables was on expected lines given the weakness in components such as passenger vehicles. For the full year 2013-14, consumer goods output contracted by 2.6 percent as compared to positive growth of 2.4 percent in 2012-13. Output of consumer non-durables recorded a jump to 7.2 percent in March 2014 after a surprise decline in February 2014.

Figure 3: Sectoral Growth of IIP

	Weight	Mar-13	Jan-14	Feb-14	Mar-14	Apr-Mar	
						FY13	FY14
General	1000.0	3.5	0.8	-1.8	-0.5	1.1	-0.1
• Manufacturing	755.3	4.3	0.0	-3.6	-1.2	1.3	-0.8
• Mining	141.6	-2.1	1.9	2.0	-0.4	-2.3	-0.8
• Electricity	103.2	3.5	6.5	11.5	5.4	4.0	6.1
Use-Based							
• Basic	456.8	3.2	2.5	4.1	4.0	2.5	2.0
• Capital	88.3	9.6	-4.1	-17.5	-12.5	-6.0	-3.7
• Intermediates	156.9	2.1	3.6	3.7	0.6	1.6	3.0
• Consumer Goods	298.1	1.8	-0.5	-4.1	-0.9	2.4	-2.6
– Durables	84.6	-4.9	-8.3	-9.3	-11.8	2.0	-12.2
– Non-durables	213.5	7.3	4.6	-0.5	7.2	2.8	5.2

Source: CSO

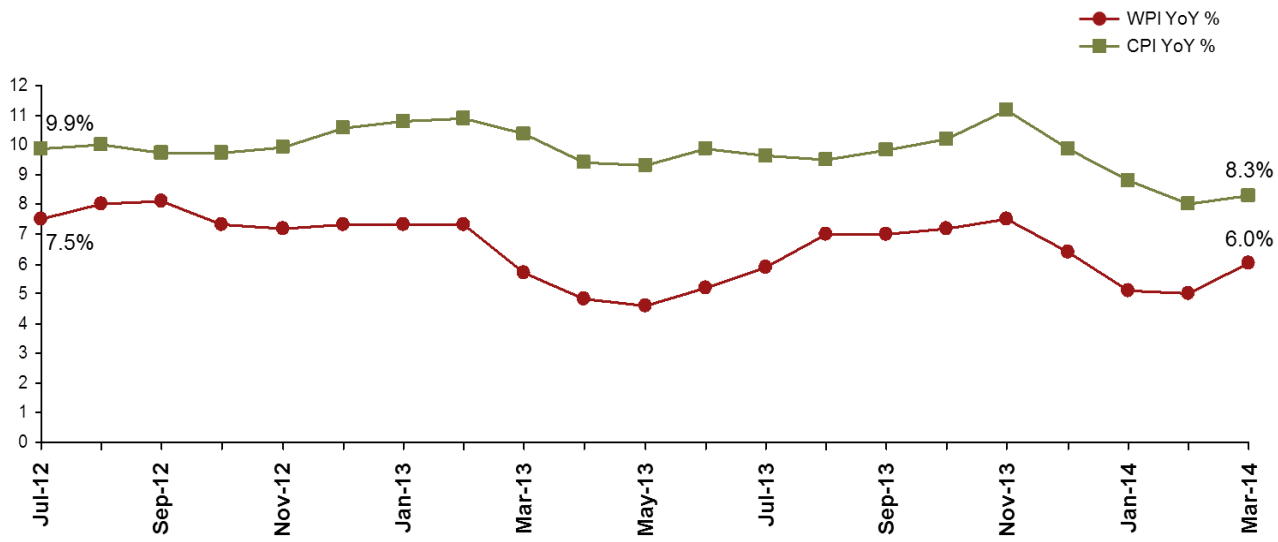
Outlook

Industrial production continued to remain in the negative territory for the second consecutive month in March 2014. This is disappointing as it is much below the expected industrial potential. It was also disconcerting to note the negative growth of the manufacturing sector for the sixth consecutive month, indicating a downturn in the business cycle as weak consumption and investment demand are continuing to stymie growth impulses. We anticipate a pick-up in industrial production, going forward, as downside risks are gradually receding on account of anticipated global recovery.

Both WPI and CPI Inflation Tread Upwards

Inflation, both at the wholesale and retail levels, inched upwards in March 2014. WPI-based inflation accelerated to 6.0 percent in March 2014 as compared to 5.0 percent in the previous month mainly on account of adverse base effect and rise in food prices due to unfavorable weather conditions. Total food inflation (primary and manufacturing) edged up to 7.1 percent in March 2014 as compared to 5.6 percent in the previous month. Amongst the food prices, fruit and vegetable prices were the main driver behind pushing WPI higher during the month. The recent estimates by IMD regarding possibility of not-so-good monsoons this year have raised the red flags for food inflation in the current year. Despite the increase in WPI inflation in March 2014, the average WPI inflation in 2013-14 stood at 6 percent as compared to 7.4 percent in the previous fiscal. CPI-based inflation too increased to 8.3 percent in March 2014 and further to 8.6 percent in April 2014. The average CPI inflation for 2013-14 had stood at 9.5 percent as compared to 10.2 percent in the previous fiscal. RBI in its recent policy statements has shown a clear preference towards CPI as an indicator for inflation in the economy. We believe that normal monsoons in the current year are crucial for helping RBI achieve its 8 percent inflation target by January-2015.

Figure 4: WPI & CPI Inflation Trends



Source: Office of Economic Adviser, RBI

Primary inflation accelerated to 7.7 percent in March 2014 from 6.3 percent in the previous month. This was mainly attributable to the sharp increase in primary food inflation to 9.9 percent as compared to 8.1 percent in February 2014. The rise in food inflation was broad-based, with prices of eggs, meat & fish too witnessing upward pressure along with fruits & vegetables during the month. In contrast, primary non-food inflation decelerated to 4.6 percent as against 5.1 percent in the previous month. Inflation in minerals declined further to 0.3 percent from -1.6 percent in the previous month. The average primary inflation stood at 10.1 percent in 2013-14 as compared to 9.8 percent in 2012-13.

Fuel inflation inched up to 6-month high of 11.2 percent in March 2014 as compared to 8.7 percent in the previous month, in part due to low base effect of last fiscal. Inflation in high-speed diesel increased to 14.6 percent in March 2014 from 12.8 percent in the previous month. Going forward, we expect fuel inflation to

moderate due to stabilization witnessed in global crude prices and the recent strengthening of the Rupee. Fuel inflation averaged 10.1 percent in 2013-14 as compared to 10.3 percent in 2012-13.

Manufacturing inflation too accelerated to 3.2 percent in March 2014, led by across the board increase in prices of both its food and non-food components. Notwithstanding the jump in manufacturing inflation in the last month of the fiscal, the data series has more or less remained stable during the course of previous fiscal. Consequently, the average manufacturing inflation for 2013-14 stood at 2.9 percent as compared to 5.4 percent in the previous fiscal. Non-food manufacturing or core inflation, which is widely regarded as the proxy for demand-side pressures in the economy, increased to 3.5 percent during the month as compared to 3.1 percent in February 2014. In the coming months, we expect core WPI to remain at sub 3 percent, RBI's comfort level for this inflation measure. Mirroring the sharp increase in primary food inflation, manufactured food product inflation also increased by 100 bps to 1.9 percent in March 2014 from 0.9 percent in the previous month.

Figure 5: Sectoral Components of Inflation

	Weight	Mar-13	Jan-14	Feb-14	Mar-14	Apr-Mar	
						FY13	FY14
General	100.0	5.7	5.2	4.7	5.7	7.4	6.0
Primary	20.1	7.4	6.8	6.3	7.7	9.8	10.1
• Food	14.3	8.6	8.8	8.1	9.9	10.0	12.7
• Non-food	4.3	9.3	4.6	5.1	4.6	10.5	5.5
• Minerals	1.5	-2.0	-1.3	-1.6	-0.3	8.2	0.0
Fuel	14.9	7.8	9.8	8.7	11.2	10.3	10.1
• Petrol	1.1	6.6	7.2	6.5	5.9	6.8	3.3
• High Speed Diesel	4.7	20.2	14.0	12.8	14.6	11.6	18.7
Manufacturing	65.0	4.3	3.0	2.8	3.2	5.4	2.9
• Food	10.0	7.5	1.1	0.9	1.9	8.1	3.2
• Non-food	55.0	3.6	3.3	3.1	3.5	4.9	2.8

Source: Office of Economic Advisor

Outlook

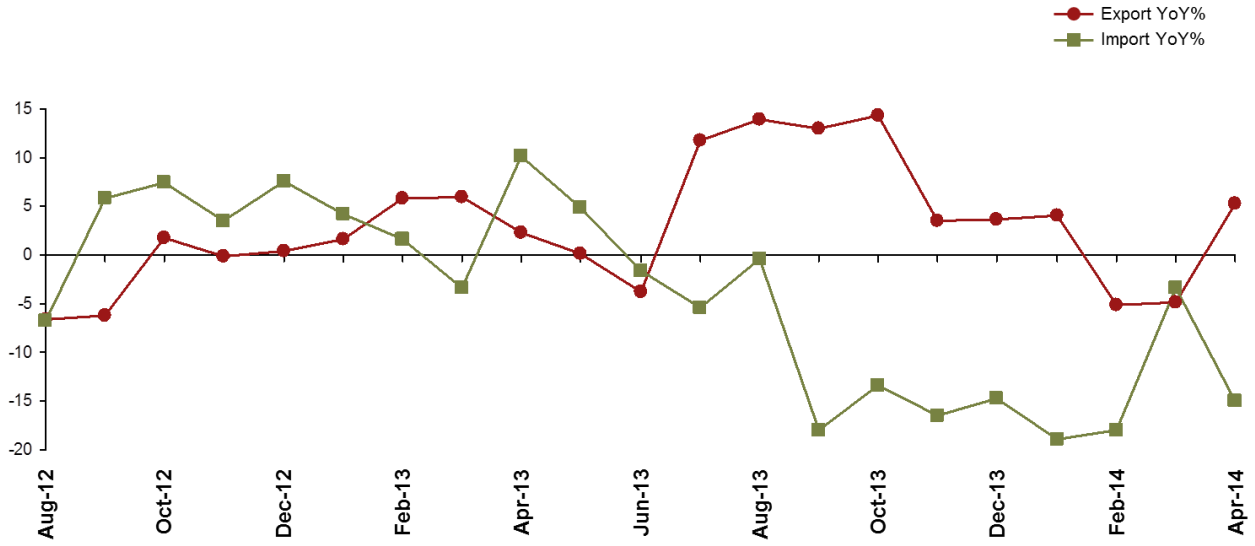
The rise in the wholesale price index (WPI) inflation in March 2014 was primarily attributed to supply-side constraints in the agricultural side and food inflation was, on account of the rise in the prices of potatoes, fruit and vegetables, onions, milk and eggs. The revival of inflation, especially of food prices, calls for supply-side initiatives to boost agricultural productivity. These include augmenting investment in agri-infrastructure; improving supply-side management; delisting perishables from the Agricultural Produce Marketing Committee (APMC), and encouraging foreign direct investment (FDI) in multi-brand retail (which would up the agricultural yield).

Exports Grow at Their Fastest Pace in Last 5 Months

Exports grew at their fastest pace in 5 months by 5.3 percent in April 2014 as compared to a contraction by 3.2 percent in March 2014. The good performance by exports in the first month of the current fiscal was underpinned by healthy growth in engineering, marine and leather goods shipments. Engineering, marine and leather goods exports recorded growth of 21.3 percent, 42.2 percent and 30.42 percent respectively in April 2014. To be sure, slow shipments to US because of the adverse weather conditions persisting in one of India's largest export destination had led to the slump in exports witnessed in February-March of the last fiscal. Exports had been growing at a double-digit rate until October 2013 but lost momentum in the last four months, signaling that the worst might not be all over as yet for the Indian economy. On a cumulative basis, exports had grown by 4 percent in 2013-14 to US$312 billion, thus missing the exports target of US$325 billion set for the fiscal year. In the current fiscal, though the recent appreciation bias of the Rupee would lead to some headwinds for the exports performance, but in our opinion, it will be balanced by concomitant recovery in economic prospects of the advanced economies like US and EU. US is likely to recover going forward from the cold weather related slowdown, thus boding well for our exports outlook.

Imports growth continued to remain in the negative territory for the tenth consecutive month in April 2014. Imports contracted by a larger clip of 15.0 percent in April 2014 as compared to 2.1 percent decline in March 2014. The main drivers behind the contraction posted in imports since last many months are weak domestic demand and restrictions on gold imports. On a cumulative basis, imports contracted by 8.1 percent to US$450 billion in 2013-14. Component wise, oil and non-oil imports declined by 0.6 percent and 21.5 percent respectively, in April 2014. For the full year 2013-14, while oil imports had grown by 2.2 percent, non-oil imports had contracted by 13.3 percent. The persistent decline in non-oil imports in part mirrors the restrictions imposed in gold imports and part due to the weak domestic demand.

Figure 6: External Sector Performance



Source: Ministry of Commerce

As the growth of exports outpaced imports, trade deficit narrowed to US$10.1 billion in April 2014 as compared to US$17.6 billion in the same month last year. However, more remarkable was the sharp improvement in trade

deficit for the financial year 2013-14. The trade deficit for the last fiscal came in at US$139 billion; significantly lower than US$190 billion in 2012-13. The lowering of trade deficit has helped to sharply lower the current account deficit for the last year from multi-year highs of 2012-13.

Outlook

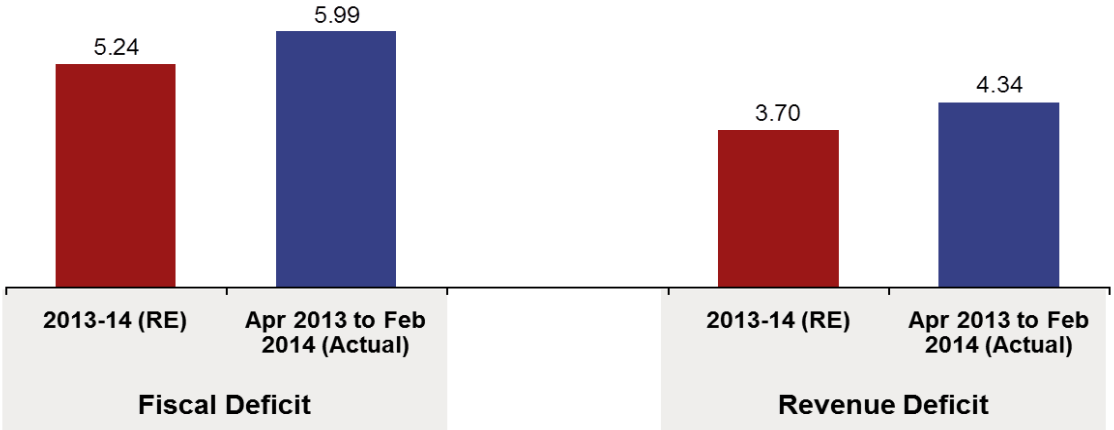
The economic conditions in the U.S. and the Euro Zone are not very favorable for exports and we hope the Indian government will help the exporters by providing help by way of including more products and countries for Focus Product Scheme and Focus market Scheme, where we have a comparative advantage. Also we need to relook at the duty drawback rates. These measures, if announced at the earliest, will give the necessary push to the industry and exports.

Fiscal Deficit Remains above Government Target

Worries about the government's management of the treasury continue as deficit indicators remained above the target the government set in its interim budget in February 2014. As per the latest numbers released by Controller General of Accounts (CGA), the fiscal deficit widened to Rs 5.9 trillion in the April-February period of 2013-14, or 114.3 percent of the target for the fiscal as compared to 97.4 percent in the same period last year. This translates into 5.3 percent of GDP. This was mainly attributable to the tax collections and disinvestment proceeds falling short of the target. Government had revised the fiscal deficit to Rs 5.24 trillion in its interim budget presented in February this year, which translates into 4.6 percent of GDP.

More worryingly, the revenue deficit, the gap between expenditure not incurred for capital generation over receipts, stood at 117 percent of the revised estimates till February of FY14, which is equivalent to 3.8 percent of GDP. The interim budget for 2014-15 had pegged the revenue deficit at 3.3 percent of GDP in 2013-14. Net tax receipts stood at Rs 6.27 lakh crore till February, constituting 75.0 percent of revised estimates outlined in the interim budget 2014-15. At this point of time, the receipts accounted for 77.1 percent of the revised estimates in 2012-13. Proceeds from disinvestment have reached Rs 5,929 crore so far as compared to the revised target of Rs 16,027 crore for the year. Apart from the expected shortfall in tax revenue collections, the Union government may not be able to meet its disinvestment target, which in turn is going to result in meeting of the revised target for fiscal deficit difficult for this year. The latter is of course possible only in the instance of the government indulging in some financial jugglery of further compressing of the total expenditure in order to meet its revised targets as outlined in the interim budget.

Figure 7: Trends in Fiscal & Revenue Deficit (Rs. Trillion)



Source: Controller General of Accounts

As far as expenditure front is concerned, till February of 2013-14, plan expenditure stood at Rs 4.08 lakh crore, representing 86.0 percent of the revised target. Nonplan expenditure was also bit higher as percentage of the revised estimates in the April-February 2013-14 period. It stood at Rs 9.9 lakh crore, about 88.9 percent of the revised estimates. The percentage stood at 86.5 percent in the corresponding period last year. Total expenditure stood at Rs 13.9 lakh crore in the year to date up to February 2014, which lies well under the revised target for the year.

Figure 8: Fiscal Trends in April-February of 2013-14

(Rs. Billion)	Revised Estimates (BE)	April-February (Actual)	Percentage to Revised Estimates	
	2013-14	2013-14	2012-13	2013-14
1. Revenue Receipts (i+ii)	10,293	7,836	77.9%	76.1%
i. Tax revenue (net)	8,360	6,271	77.1%	75.0%
ii. Non-tax revenue	1,932	1,565	82.4%	81.0%
2. Non-plan Expenditure	11,149	9,908	86.5%	88.9%
3. Plan Expenditure	4,755	4,089	82.3%	86.0%
4. Total Expenditure	15,904	13,998	85.2%	88.0%
5. Revenue Deficit	3,703	4,344	101.2%	117.3%
6. Gross Fiscal Deficit	5,245	5,993	97.4%	114.3%

Source: Controller General of Accounts (CGA)

Other Domestic Developments During the Month

- Subdued consumer sentiment due to uncertain economic environment continued to cast a shadow on car sales which registered the biggest monthly decline since May last year (when car sales had dropped by 11.7 per cent) of 10.15 per cent in April 2014.This is an extremely worrying trend as the sales have dropped despite a recent cut in excise duty on automobiles announced in the budget.
- Two-wheelers, on the other hand, continued to grow. As per the latest data from SIAM, total sales of two-wheelers in April 2014 grew by 11.7 per cent to 13.04 lakh units from 11.68 lakh units in the same month last year. While motorcycle sales grew by 8.1 per cent to 9.11 lakh units, scooter sales were up 26 per cent at 3.29 lakh units during the month.
- Core sector growth slowed to 2.5 per cent in March 2014 as compared to 4.5 per cent in February 2014, as the output of fertilizer, crude oil and natural gas declined. The eight core industries — coal, crude oil, petroleum refinery products, natural gas, fertilizer, steel, cement and electricity — have a combined weight of 37.90 per cent in the Index of Industrial Production (IIP). For 2013-14 as a whole, core sector growth slowed to 2.6 per cent from 6.5 per cent in 2012-13.

Cabinet Committee on Investments – Overview of achievements

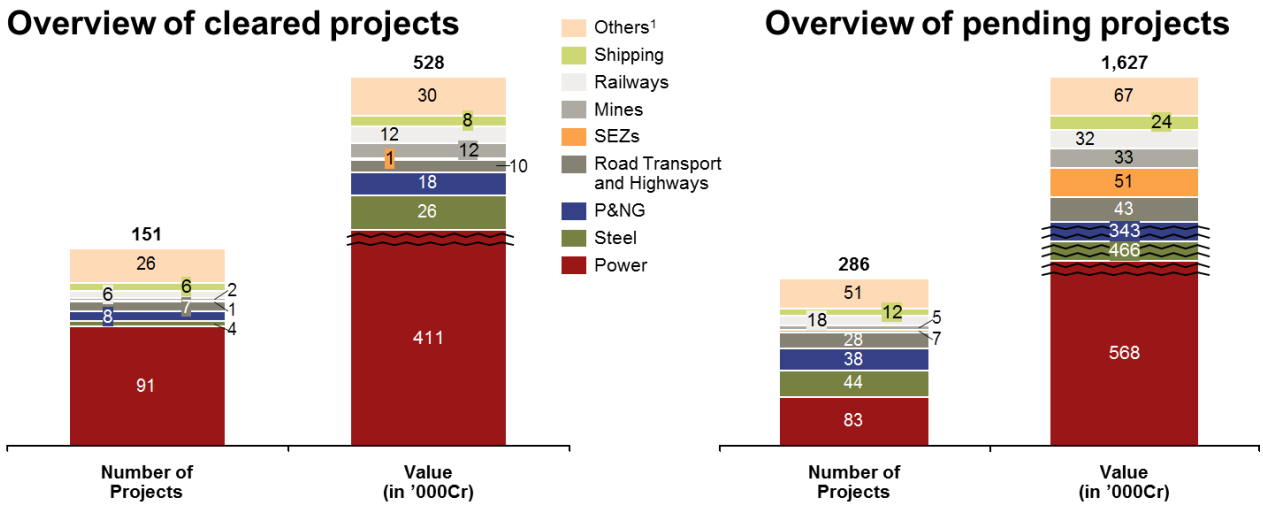
Setting up of Cabinet Committee on Investments (CCI) in January 2013 was a key initiative by the prior government to fast-track high value infrastructure projects by addressing bottlenecks and speeding up pending clearances. CCI's consideration set includes investment projects with value of INR 1,000 Cr or more, or any other critical projects in sectors such as infrastructure, manufacturing, power, etc., both in the public and private sectors.

As of 31st May'14, a total of 437 projects, totaling to INR 2,155,000 Cr have been planned across sectors. Out of these, 151 projects worth INR 528,000 Cr have been cleared, and 286 projects worth INR 1,627,000 Cr are pending, which account for more than 75% of the total value.

In the power sector, which alone accounts for 45% of all identified projects by value, about 42% of the investments have been cleared. However, the next highest 4 sectors i.e. Steel, P&NG, Roads and SEZs, which together account for 44% of all identified projects by value, have witnessed very low clearance levels of less than 6% of the planned investments (ranging from 2% to 18%).

On the other hand, the next 4 sectors i.e. Mines, Railways, Shipping and Paper & Cement, which accounts for 7% to all identified projects by value, witnessed a much better clearance level of 29% (ranging from 26% to 37%).

In addition, in Paper & Cement sector, high value projects have been cleared (with an average value of INR 3,600 Cr), in SEZs and Petroleum & Natural Gas, low value projects have been cleared (with average values of INR 1,000 Cr and INR 2,200 Cr respectively).



1. Includes Textiles, Civil Aviation, Paper & Cement, Coal, Chemicals, Petrochemicals and Fertilizers

Sector-wise analysis

Power

In the power sector, 42% of the projects by value (INR 401,819 Cr / INR 927,621 Cr) have been cleared, which account for 52% of the number of projects (89 out of 166). However, out of the top 15 highest value projects, only three have been cleared.

North Karanpura TPP (3*660 MW) NTPC (INR 15,000 Cr) and 2X600 MW Tamnar Power Plant (INR 13,600 Cr) are the top 2 projects which have been cleared. Amongst the pending projects, Tilaiya Ultra Mega Power Project (INR 40,000 Cr) and 4000 MW Cheyyur Ultra Mega Power Project (INR 25,000 Cr) are of the highest value.

Steel

In the steel sector, 5% of the projects by value (INR 25,846 Cr / INR 492,076 Cr) have been cleared, which account for 8% of the number of projects (4 out of 48). Out of the top 15 highest value projects, only Essar Steel India Ltd - Odisha Complex (INR 22,600 Cr) project has been cleared.

Amongst the pending projects, Posco Steel Plant Project in Odisha (INR 52,800 Cr) and Raigarh Expansion Project (INR 42,300 Cr) are of the highest value.

Petroleum and Natural Gas

In the petroleum and natural gas sector, 5% of the projects by value (INR 17,893 Cr / INR 361,205 Cr) have been cleared, which account for 17% of the number of projects (8 out of 46). Out of the top 15 highest value projects, only two projects have been cleared.

GAIL Project - Jagdishpur - Haldia Pipeline (INR 7,600 Cr) and LNG Terminal at Mundra (INR 5,200 Cr) are the top 2 projects by value, which have been cleared. Amongst the pending projects, Coal To liquids Project - Jindal Synfuels Limited (INR 77,500 Cr) and Tata Sasol CTL Project (INR 60,000 Cr) are of the highest value.

Road Transport and Highways

In the road transport and highways, 18% of the projects by value (INR 9,636 Cr / INR 52,421 Cr) have been cleared, which account for 20% of the number of projects (7 out of 35). Out of the top 15 highest value projects, only two projects have been cleared.

Beawar Pali Pindwara Tollway (INR 2,400 Cr) and six laning of Dhankuni–Kharagpur (INR 2,000 Cr) are the top two projects by value, which have been cleared. Amongst pending projects, the L&T East West Tollway Ltd (INR 2,538 Cr) and Six laning of Varanasi-Aurangabad section of NH2 (INR 3,400 Cr) are of highest value.

SEZs

In the SEZs sector, 2% of the projects by value (INR 1,000 Cr / INR 52,271 Cr) have been cleared, which account for 13% of the number of projects (1 out of 8). Dell International Services Business Process Services is the only project cleared (INR 1,000 Cr), out of the 8 projects which are planned.

Amongst pending projects, Mumbai SEZ Ltd (INR 15,000 Cr) and Indiabulls Multi Product SEZ (INR 14,700 Cr) are of the highest value.

Mines

In the mines sector, 27% of the projects by value (INR 11,849 Cr / INR 44,408 Cr) have been cleared, which account for 29% of the number of projects (2 out of 7). Only 2 of all (7 in total) projects have been cleared.

Utkal Alumina International Ltd. - a Subsidiary of Hindalco Industries Ltd.- (INR 7,000 Cr) and Vedanta Aluminium Limited- Expansion of Alumina Refinery (INR 4,800 Cr) are the 2 projects which have been cleared. Amongst the pending projects, Aditya Aluminium Smelter of Hindalco Industries Ltd. (INR 13,200 Cr) and Mahan Aluminium Project of Hindalco Industries Limited (INR 10,500 Cr) are of the highest value.

Railway

In the railway sector, 28% of the projects by value (INR 12,479 Cr / INR 44,076 Cr) have been cleared, which account for 25% of the number of projects (6 out of 24). Out of the top 10 highest value projects, only three projects have been cleared.

Lumding-Silchar (482Km) gauge Conversion (INR 4,300 Cr) and Bhanupalli-Bilaspur-Beri new railway line project (INR 3,000 Cr) are the top 2 projects by value which have been cleared. Amongst the pending projects, Jiribam-Imphal new line project (INR 4,400 Cr) and Byrnihat-Shillong new line project (INR 4,100 Cr) are of the highest value.

Shipping

In the shipping sector, 26% of the projects by value (INR 8,408 Cr / INR 32,336 Cr) have been cleared, which account for 33% of the number of projects (6 out of 18). Out of the top 10 highest value projects, only two projects have been cleared.

Development of New Major Port at Dugarajapatnam in Nellore District of Andhra Pradesh (INR 4,000 Cr) and Kattupalli Port (INR 2,000 Cr) are the top 2 projects by value, which have been cleared. Amongst the pending projects, Vizhinjam International Deepwater Multipurpose Seaport, Thiruvananthapuram (INR 5,200 Cr) and Bharati Shipyard Limited (INR 5,000 Cr) are of the highest value.

Overall, CCI is a well-intentioned intervention by the prior government, which has also achieved reasonable success so far in terms of clearing long pending projects. However, few sectors are under-represented w.r.t. overall investment plans, and they need more attention. For example, Road Transport & Highways have a total investment plan of INR ~900,000 Cr in 12th five year plan (FY12 TO FY17), but only INR ~52,000 Cr worth of projects have been taken up by CCI (out of which INR ~9,000 Cr have been cleared). Similarly, railways has a total investment plan of INR ~500,000 Cr in the 12th five year plan, but only INR 44,000 Cr worth of projects have been taken up (out of which INR ~12,000 Cr have been cleared).

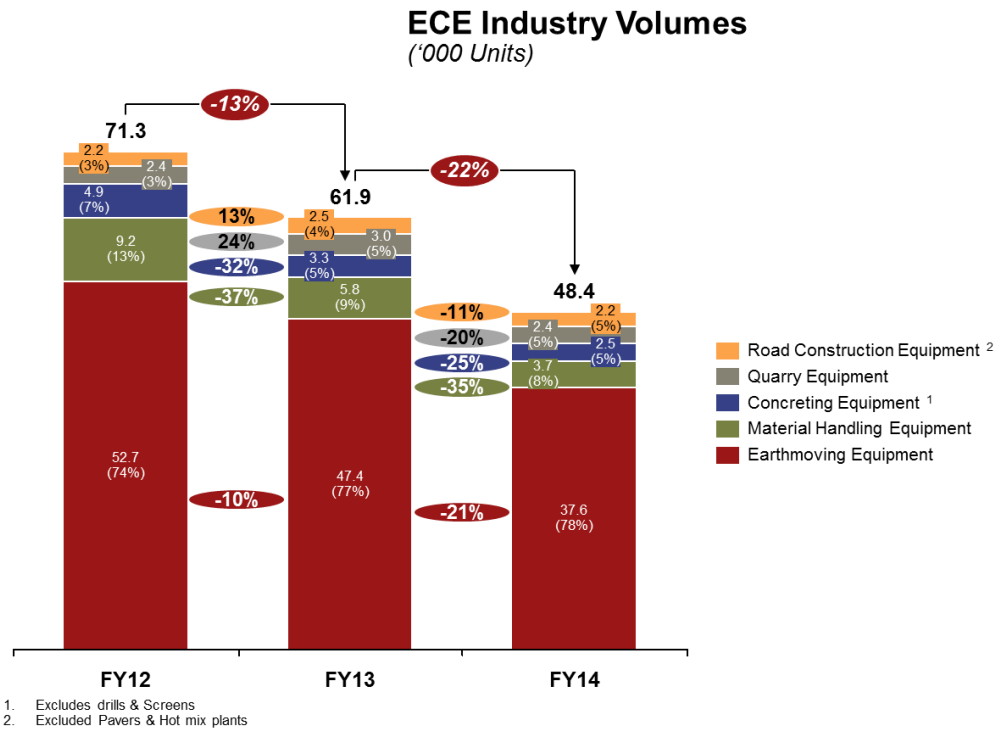
Moreover, given the pending pipeline of clearances (>75% of projects taken up), more time-bound decision making is needed for further enhancing the effectiveness of CCI.

Overall ECE industry

Overall, poor macroeconomic environment has continued to hamper the growth of the ECE industry. With infrastructure projects slowing down, the ECE industry volumes have declined by a sharper rate of 22% from FY13 to FY14, compared to a 13% decline from FY12 to FY13. Moreover, the FY14 contraction was more broadbased, with >20% decline across most segments (except road construction equipment). This was unlike the decline in FY13, where road equipment and quarry equipment had shown growth.

Earthmoving equipment has continued to be the most dominant segment across the years, with lesser decline in volumes compared to the industry average. Highest decline was seen in material handling equipment (average -36% over last two years), followed by concreting equipment (average -28% over the last two years).

Figure 9: ECE industry sales break up by segments – FY12 to FY14



Source: A.T. Kearney analysis, ICEMA

Segment wise analysis

The segments which are included in this section are –

- Earthmoving Equipment
- Material Handling Equipment
- Road Construction Equipment
- Quarry equipment
- Concreting Equipment

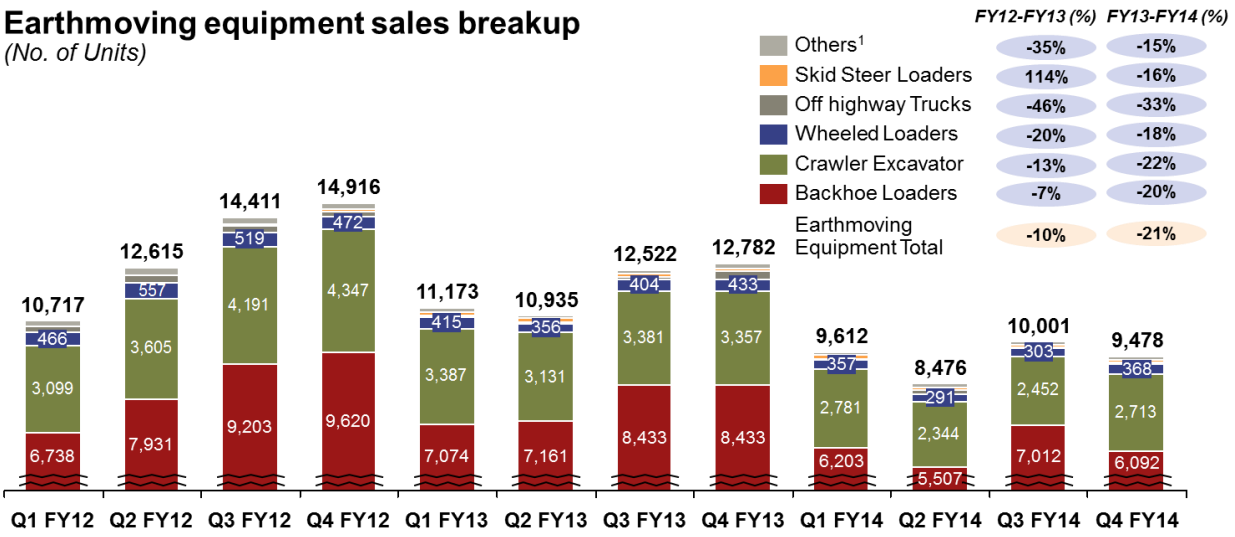
Earthmoving Equipment

Earthmoving equipment continues to be the dominant segment over the years, and has seen a relatively lower decline over the past two years, as compared to the industry average. However, the decline in FY14 was sharper (21%), compared to FY13 (10%). Moreover, historically, highest sales for the year are recorded in Q4. In FY14, however, Q4 saw the second lowest sales, reflective of a weak sentiment in the market.

Within earthmoving, backhoes and crawler excavators dominate, accounting for >90% of overall earthmoving equipment sales. Both the sub-segments have seen decline in sales over the last two years, with decline being sharper from FY13 to FY14.

The sharpest decline from FY13 to FY14 has been in off highway trucks and crawler excavators - off highway trucks declining by -33% and crawler excavator by -22%. Skid-steer loaders showed an impressive growth from FY12 to FY13, but declined by -16% from FY13 to FY14 and still constitutes a very small proportion (<1%) of the overall earthmoving equipment volumes.

Figure 10: Earthmoving equipment sales breakup by equipment types – FY12 to FY14



1. Includes Track Type Tractors, Motor Graders, Wheel Dozer, Articulated Trucks, Telescopic Handlers, Pipe Layers, Wheeled Excavators, Shovel electric

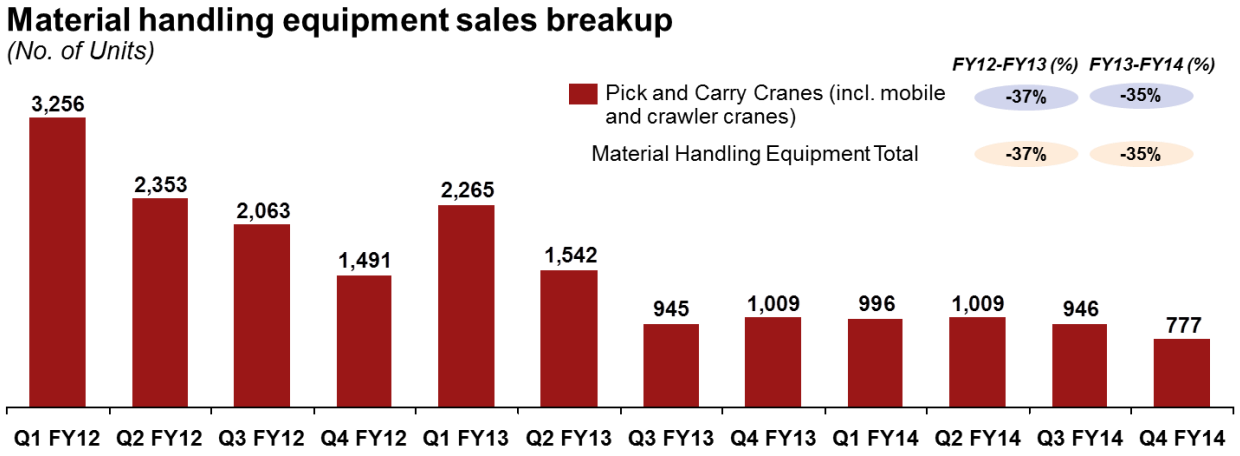
Source: A.T. Kearney analysis, ICEMA

Material Handling Equipment

Material handling equipment has seen the sharpest fall in volumes over the last two years, compared to all other segments. The decline has been consistently highest across last two years, with the segment declining by more than a third in each of the years.

Sales have witnessed consistently declining trend within a year, with Q1 recording the peak sales and Q4 recording the lowest / second-lowest sales in the year.

Figure 11: Material handling equipment sales breakup by equipment types – FY12 to FY14



Source: A.T. Kearney analysis, ICEMA

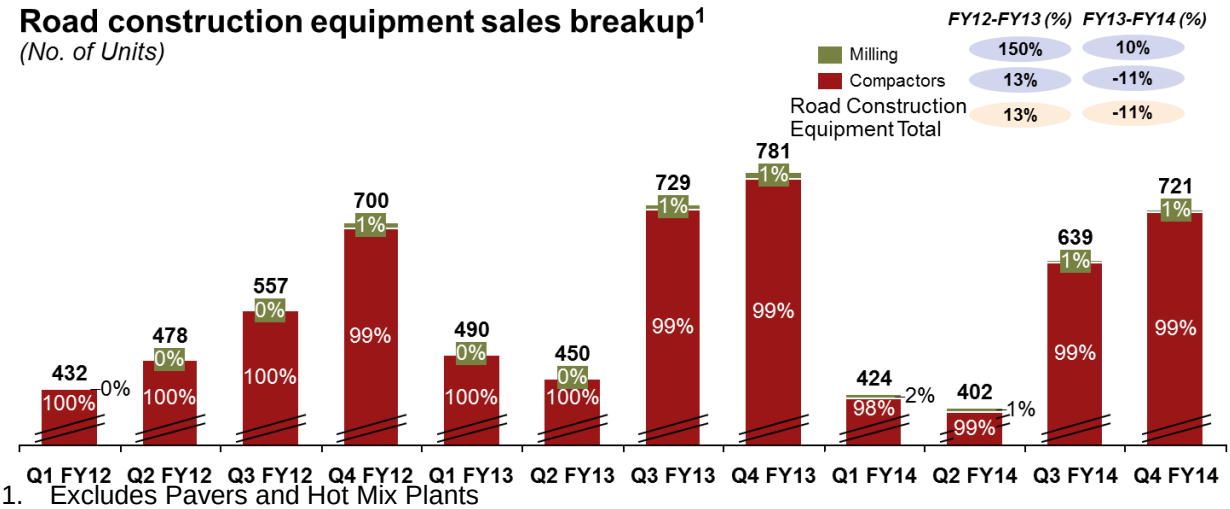
Road Construction Equipment

Road construction equipment sales have witnessed relatively lesser slowdown over the last two years, as compared to most other segments (except quarry equipment), with growth exhibited from FY12 to FY13 followed by 11% decline from FY13 to FY14.

Within the road construction equipment segment, trends have been diverse across the two sub-segments –

- Compactors continue to be the most significant contributor to volumes in this segment over the years. It grew by 13% from FY12 to FY13, but registered a decline of 11% from FY13 to FY14
- Milling machines have shown growth in FY12-13 and in FY13-14, though the base continues to be very small

Figure 12: Road construction equipment sales breakup by equipment types – FY12 to FY14



1. Excludes Pavers and Hot Mix Plants

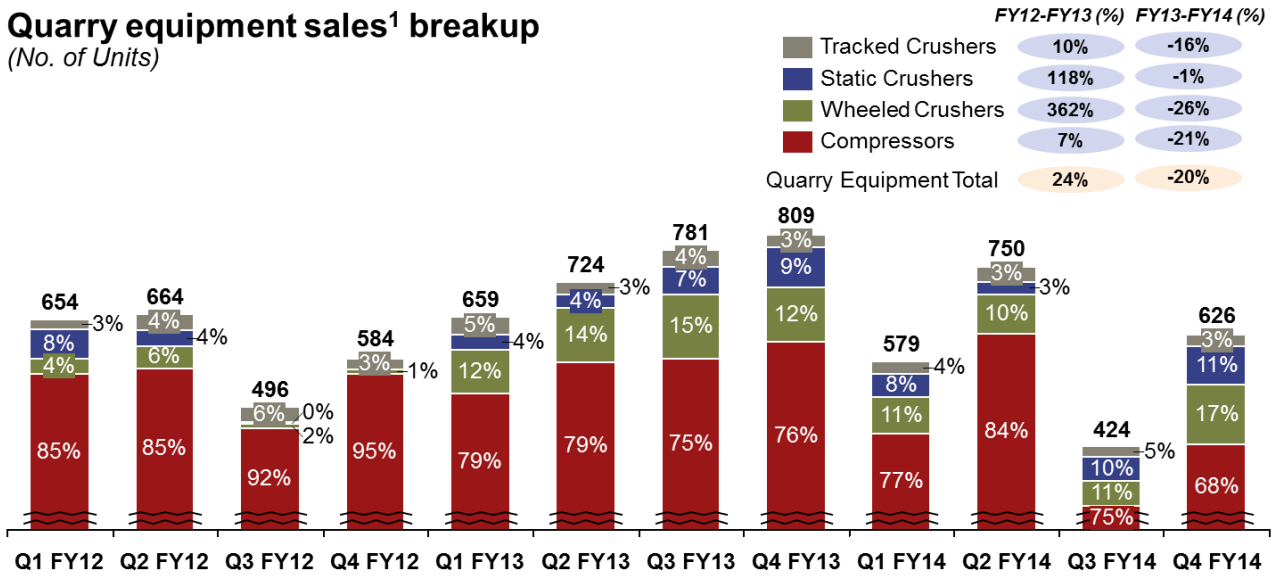
Source: A.T. Kearney analysis, ICEMA

Quarry Equipment

Quarry equipment is the only segment to have shown a slight growth over last two years (1% CAGR). Sharp growth in static crushers and wheeled crushers from FY12 to FY13 has helped the segment in sustaining its sales over two years, despite an overall decline (by 20%) in FY14.

Compressors continue to dominate the quarry equipment segment in terms of volumes, though it declined by -21% from FY13 to FY14, after exhibiting a small growth (7%) in FY13. Crushers (both static and wheeled) have registered a strong growth in volume over the last two years and now contribute more than 30% of the overall quarry equipment volumes, as compared to ~15% in FY12.

Figure 13: Quarry equipment sales breakup by equipment types – FY12 to FY14



1. Excludes drills & screens

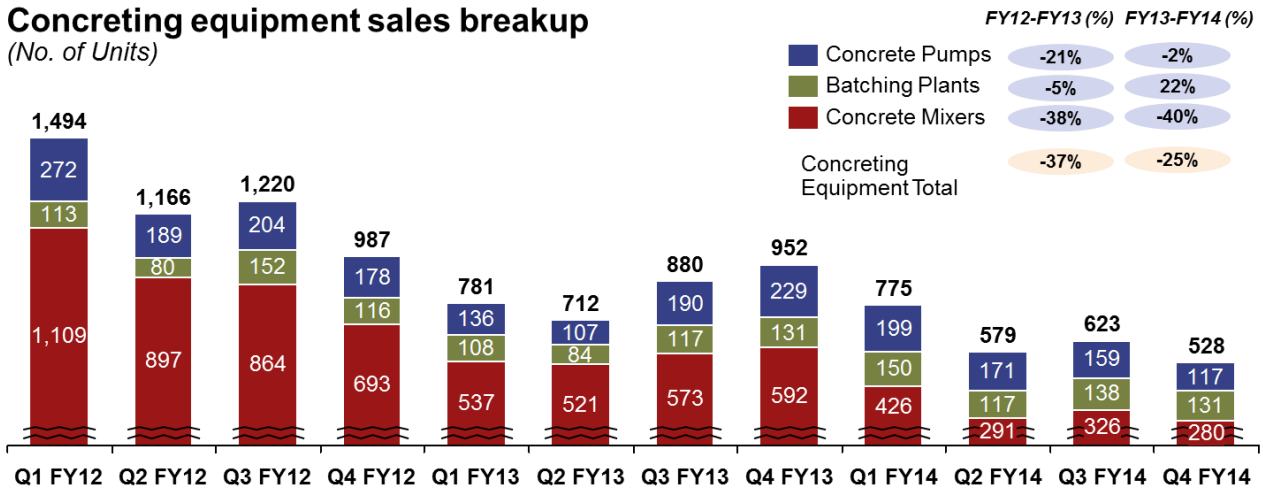
Source: A.T. Kearney analysis, ICEMA

Concreting Equipment

Concreting equipment sales have declined over last two years by an average of -28%, primarily driven by a sharp decline in concrete mixer sales in both the years. The segment volumes have halved over the last two years, while the concrete mixer volumes have become almost a third of their FY12 numbers.

The sharp decline in the concreting equipment segment has been partly arrested by the growth in batching plants, which grew at 22% from FY13 to FY14

Figure 14: Concreting equipment sales breakup by equipment types – FY12 to FY14



Source: A.T. Kearney analysis, ICEMA

Sub-segment capacity wise analysis

The overall capacity wise analysis has been done for select high volume sub-segments within each of the segments in ECE (except road construction equipment and material handling equipment). Other sub-segments have not been considered for analysis in this section since the volumes were small and/or no discernible capacity shifts were observed.

Earthmoving Equipment

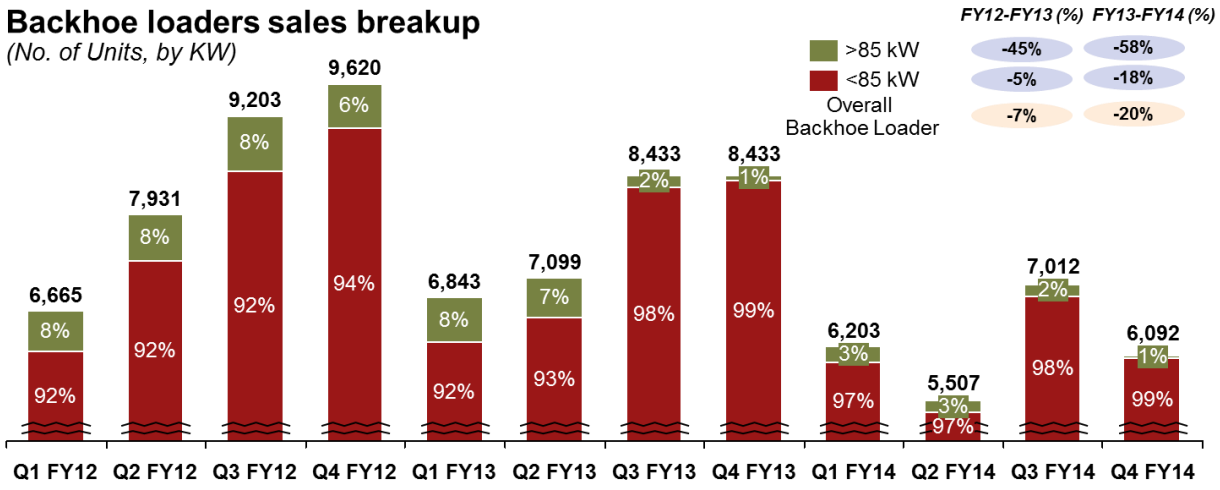
High volume sub-segments which are covered under this section are –

- Backhoe Loaders
- Crawler Excavator
- Wheeled Loaders
- Skid Steer Loaders

Backhoe Loaders

Small sized backhoes (<85 KW power) constitute >95% of overall backhoe loader sales in FY14. Higher capacity machines have consistently shown a sharp contraction over each of the last two years (declining by >45% in each of the years), with the >85 kW machines contributing only 2-3% of backhoe sales in FY14, as compared to ~8% in FY12. This might be reflecting the increased 'price consciousness' in the market and a trend of 'down-specification' due to tough economic conditions.

Figure 15: Backhoe loaders sales breakup by machine capacity (KW) – FY12 to FY14

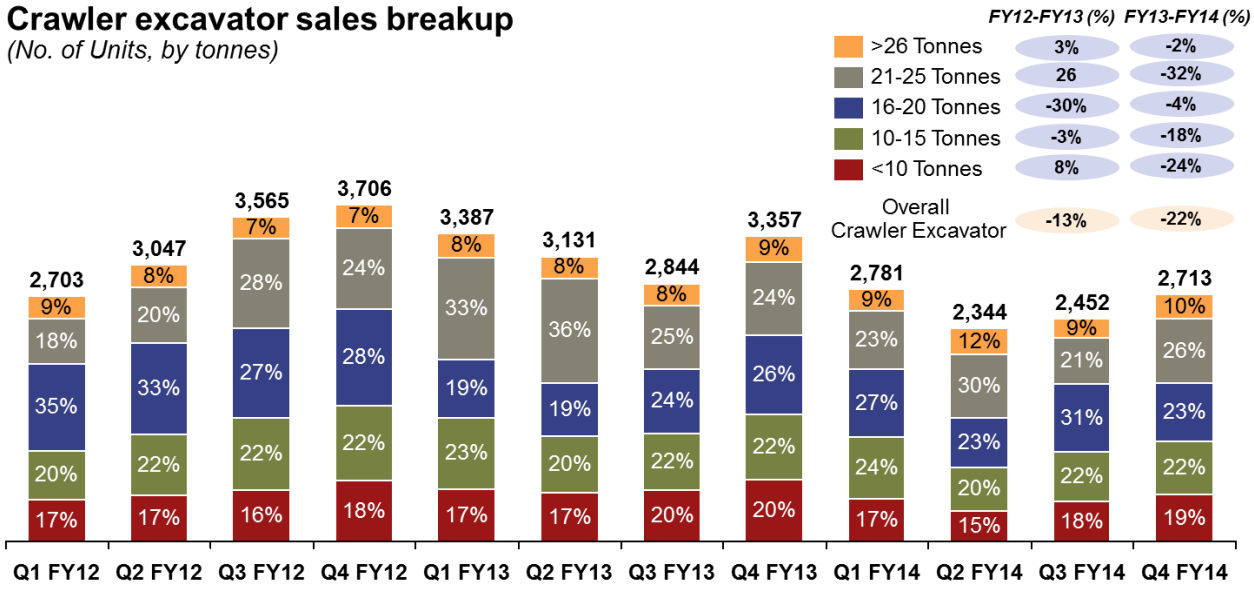


Source: A.T. Kearney analysis, ICEMA

Crawler Excavator

Crawler excavator market has shown a matured trend over the past two years, with minor shifts in demand among the different tonnages. While small size excavators (<15T) have held their share, there has been a slight increase in the share of 21-25T machines, coupled with the decrease in the share of 16-20T machines. This might indicate the beginning of 'upward migration' in this segment. This trend is also supported by the slight increase in the share of >26T machines over the past two years, though the overall volumes are still not very significant.

Figure 16: Crawler excavator sales breakup by machine capacity (Tonnes) – FY12 to FY14



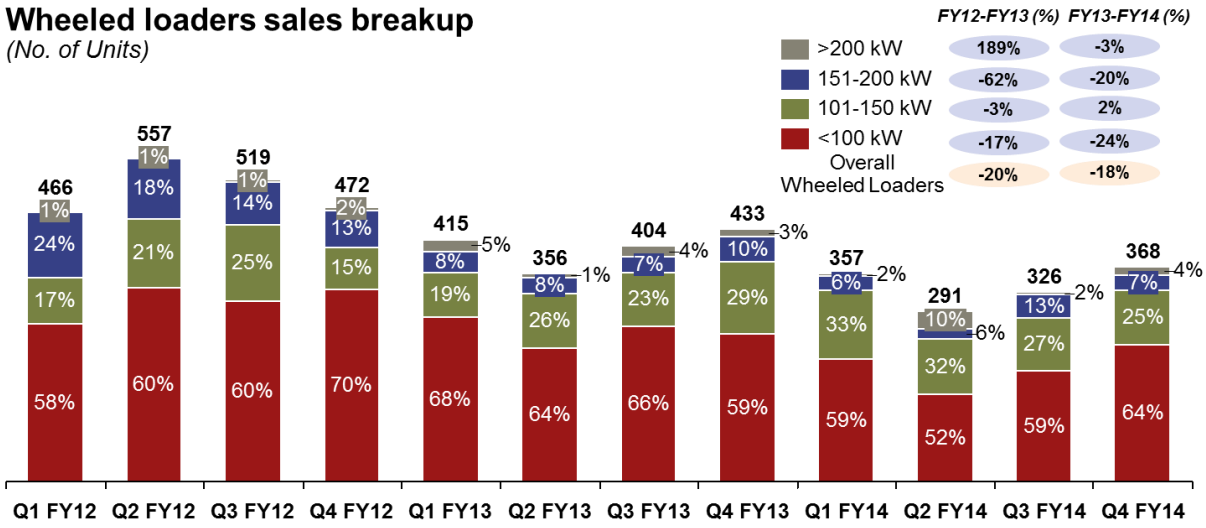
Source: A.T. Kearney analysis, ICEMA

Wheeled Loaders

The heaviest capacity machines (>200 kW) are witnessing increase in penetration, primarily driven by sharp growth in FY13, followed by minor contraction in FY14. However, the overall volumes are marginal.

At the same time, the small capacity machines (<100 kW) continue to be the most dominant, with their share ranging between 50-70% over the past few quarters.

Figure 17: Wheeled loaders sales breakup by machine capacity (KW) – FY12 to FY14



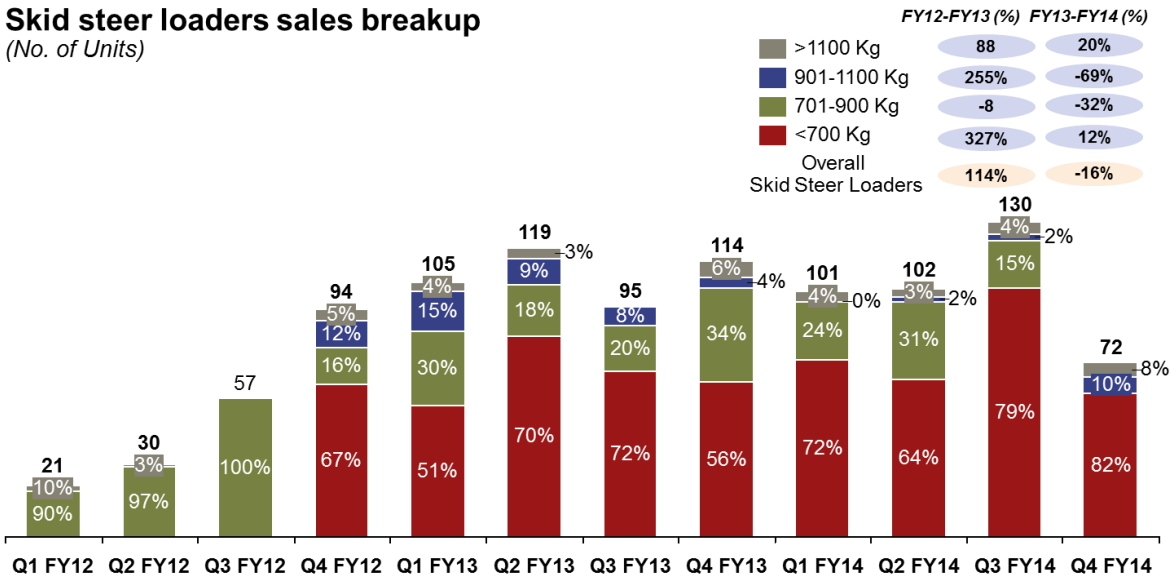
Source: A.T. Kearney analysis, ICEMA

Skid Steer Loader

Overall, skid steer loader is still an emerging segment with small volumes. The segment witnessed growth in FY13, but was not sustained in FY14 even at small volumes.

The small capacity machines (<0.7T) seem to be emerging as the dominant category within skid steers.

Figure 18: Skid steer loaders sales breakup by machine capacity (KG) – FY12 to FY14



Source: A.T. Kearney analysis, ICEMA

Quarry Equipment

High volume sub-segments which are covered under this section are –

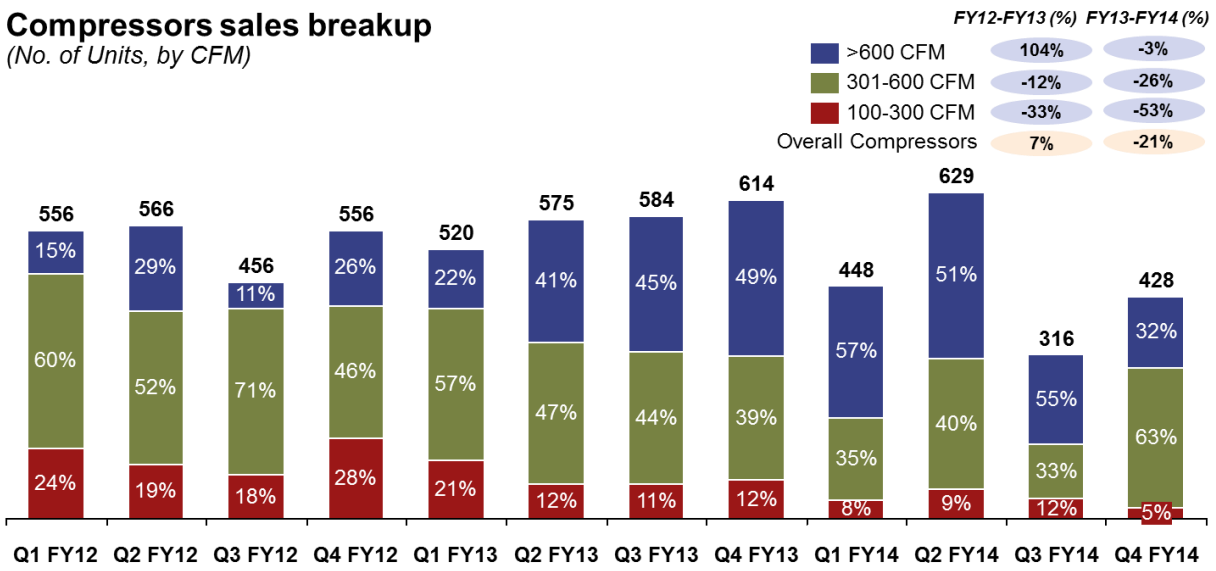
- Compressors
- Wheeled Crushers
- Static Crushers

Compressors

Overall, there is a clear migration towards heavier capacity compressors, with sales of large capacity compressors (>600 CFM) doubling over the last two years. This was driven by sharp growth from FY12 to FY13.

Sales from small compressors (100-300 CFM) have declined sharply over last two years (22% of overall volumes in FY12 to 8% in FY14). Mid-range compressors (300-600 CFM) have shown a relatively lesser decline, which is indicative of some additional volumes coming in from the 'upward migration'.

Figure 19: Compressors sales breakup by machine capacity (cubic feet per minute) – FY12 to FY14



Source: A.T. Kearney analysis, ICEMA

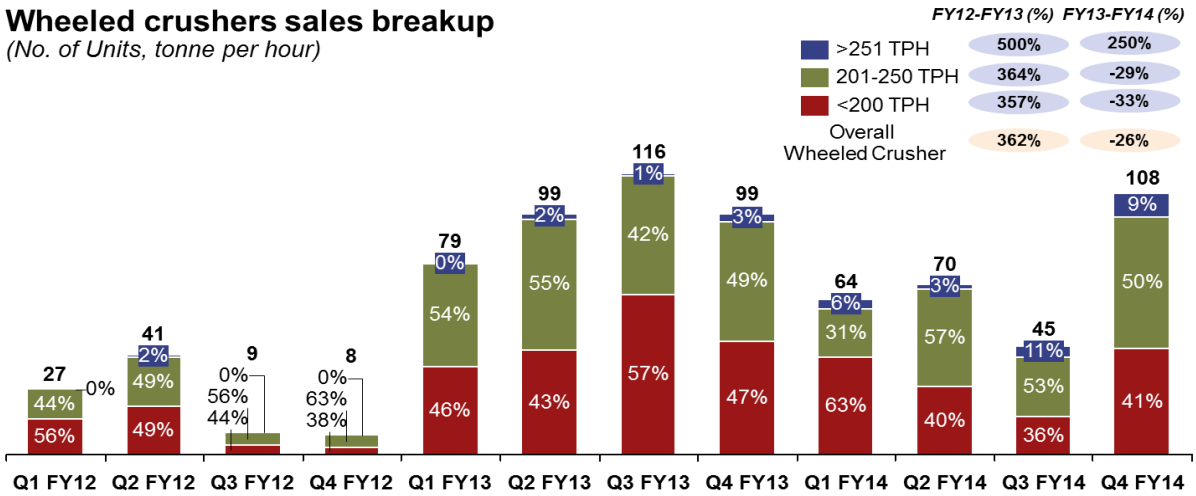
Wheeled Crushers

Overall, there has been a sharp increase in volumes for wheeled crushers from FY12 to FY13, followed by decline in FY14. The segement has registered an impressive average growth rate of 84% over the last two years.

Increase in penetration of heavier crushers (>251TPH) is also evident, though the volumes are still marginal.

Within the <200TPH range, most of the volumes are from Jaw crushers, whereas within the 200-250TPH range, the volumes are largely from cone crushers and VSI crushers.

Figure 20: Wheeled crusher sales breakup by machine capacity (Tonne per hour) – FY12 to FY14



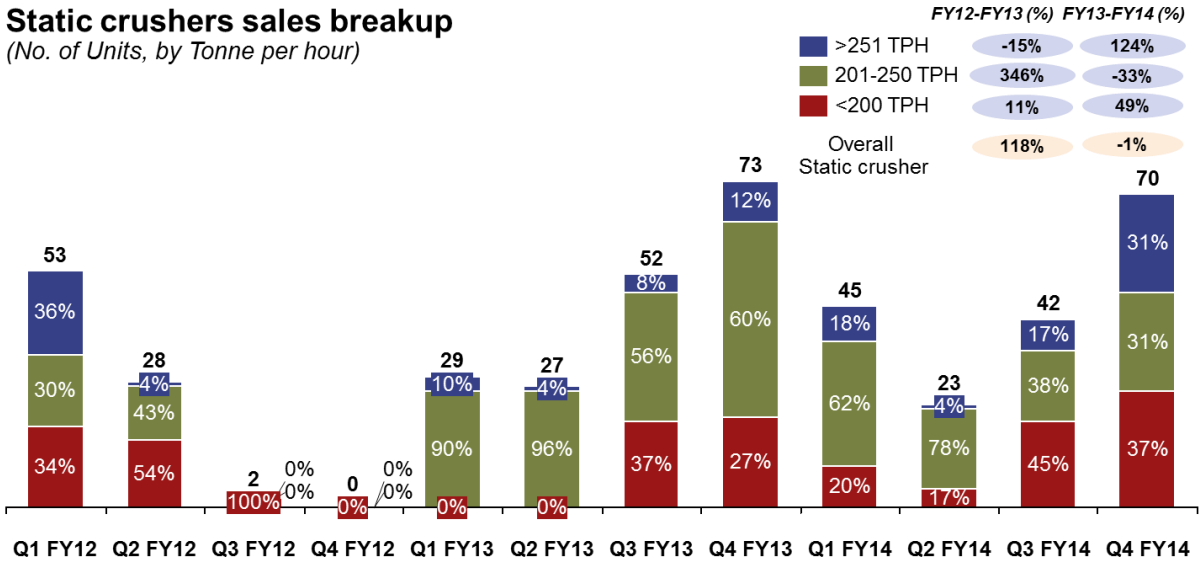
Source: A.T. Kearney analysis, ICEMA

Static Crushers

Similar to wheeled crushers, static crushers has seen a sharp increase in volumes from FY12 to FY13, and the segment has registered an impressive average growth rate of 47% over the last two years.

Similar to wheeled crushers, increase in penetration of heavier crushers (>251TPH) is evident in static crushers.

Figure 21: Static crusher sales breakup by machine capacity (Tonne per hour) – FY12 to FY14



Source: A.T. Kearney analysis, ICEMA

Concreting Equipment

High volume sub-segments which are covered under this section are –

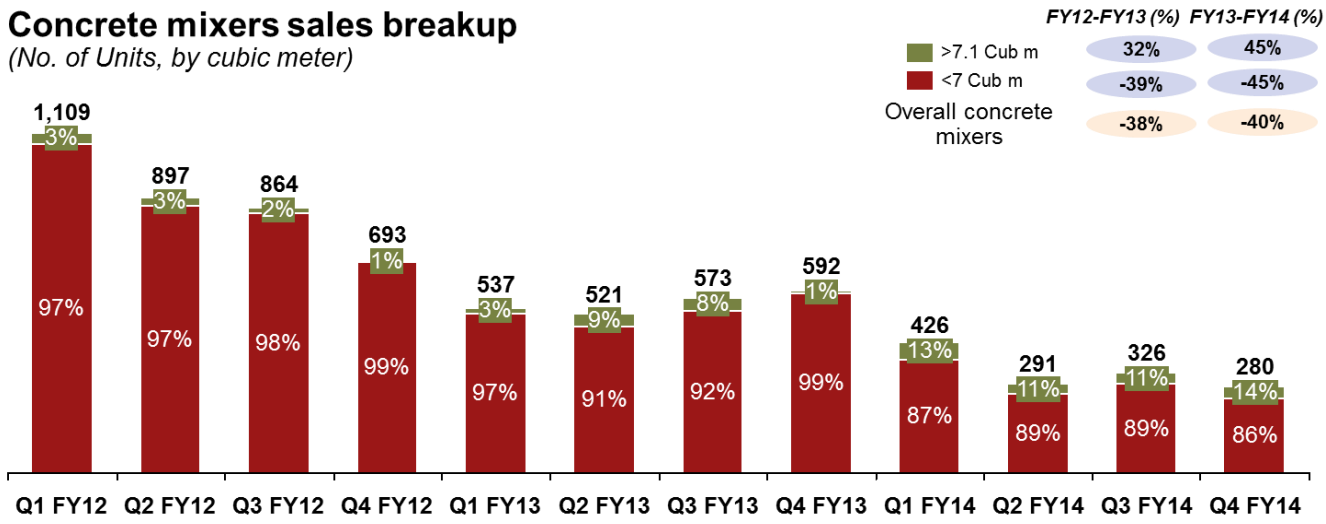
- Concrete Mixers
- Concrete Pumps
- Batching Plants

Concrete Mixers

The concrete mixer sales have declined significantly over the last two years, with volumes in FY14 being almost a third of the volumes in FY12.

However, heavier mixers (>7 cubic meter) have shown an impressive growth across each of last two years, resulting in increasing overall penetration from 3% to 14% in the same period.

Figure 22: Concrete mixers sales breakup by machine capacity (Cubic meter) – FY12 to FY14



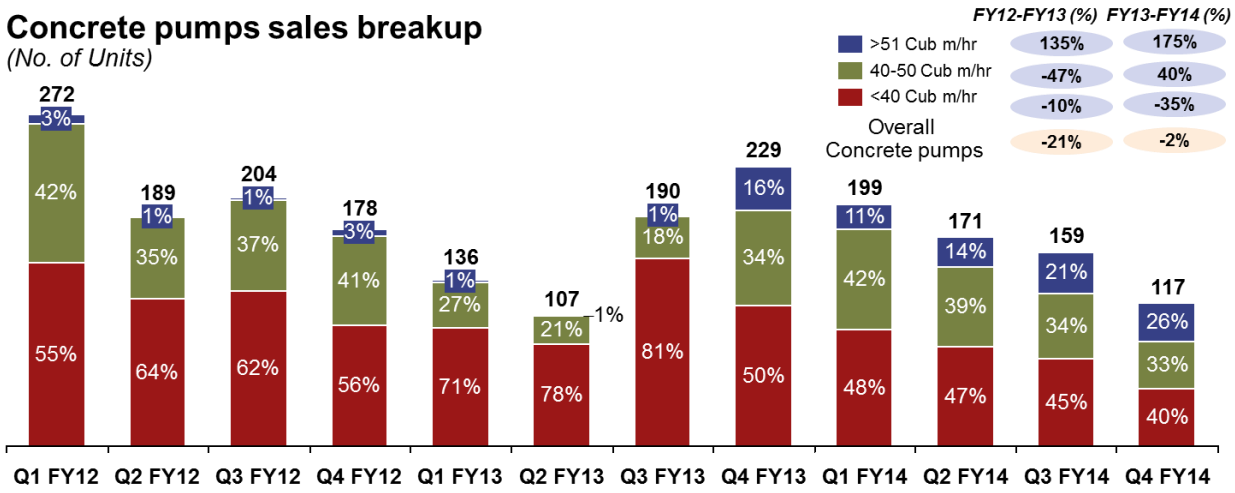
Source: A.T. Kearney analysis, ICEMA

Concrete Pumps

Within concrete pumps, there has been a distinct upward migration towards higher capacity concrete pumps (>51 cubic meter/hour), with their volumes growing from 3% in Q1 FY12 to 26% in Q4 in FY14.

This has mirrored the decline of the smaller pumps (<50 m3/hr), with the sharpest decline seen in the smallest size (<40 m3/hr), though it continues to be the highest contributors in terms of volume within concrete pumps.

Figure 23: Concrete pumps sales breakup by machine capacity (Cubic meter) – FY12 to FY14



Source: A.T. Kearney analysis, ICEMA

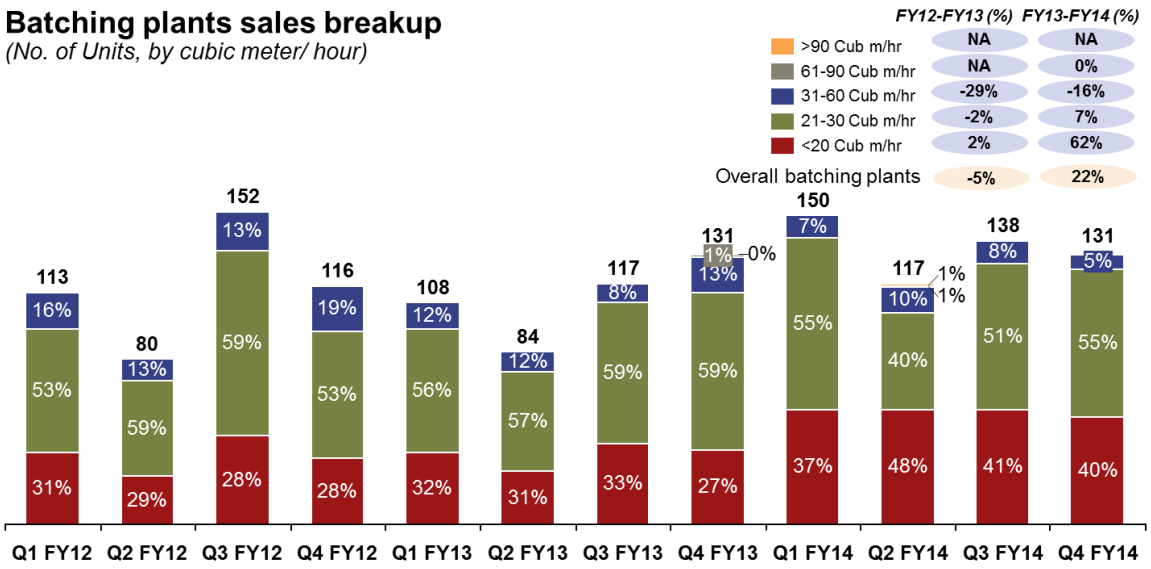
Batching Plants

Within batching plants, the smaller throughput plants (<30 cubic meter/hour) have grown over the last two years to increase their share from 84% of overall sales in FY12 to 95% in FY14.

The smallest size plants (<20 cubic meter/hour) have shown an impressive growth over this period, with sharp growth in FY14, when the other sizes have seen varying degrees of decline.

The larger throughput plants (31-60 cubic meter/hour) has fallen in share. Moreover, no discernible movement towards adoption of even higher throughput plants (>61 cubic meter/hour) seen over last two years.

Figure 24: Batching plants sales breakup by machine capacity (Cubic meter/hour) – FY12 to FY14



Source: A.T. Kearney analysis, ICEMA

Infrastructure targets in near future

The overall slowdown in the economy has taken a toll on infrastructure investments in India. Across different segments, infrastructure availability is a key gap area compared to many countries in the world. To address this gap, ambitious targets have been taken up as part of the ongoing 12th five year plan (FY12 – FY17) – INR 56 lakh crores of investment in infrastructure is envisioned in the plan. Despite a slow start to the plan, the next two years are the critical years for fund deployment. The targets are heavily weighted towards the second half of the plan period with 52% of the total investment plan expected in the last two years of the plan period.

In addition, the Union Budget of the new government has earmarked INR 2 lakh crores of investment for infrastructure. The investments are broad based across all infrastructure areas – roads, railways, ports, airports, irrigation and waterways, urban infrastructure, among others. There are also proposals to ease funding for infrastructure projects, through banks being allowed to raise long term fund that will be free of reserve requirements to finance infrastructure projects.

Some highlights of infrastructure plans over key sectors of roads, railways, ports, airports, irrigation and urban development are covered below.

Roads

India has one of the highest densities of roads in the world, with 1.42 kms of road for every square km of land area. However, the country still has poor penetration of multilane highways (four or more lanes) at 0.6%, compared to 8.2% in USA and 12.9% in Mexico, which offsets the benefits of high roads density. Hence road is an important area for growth over the next few years. An aggressive plan for road network development has been taken up in the current five year plan -

- A total of 13,000 kms national highways are planned to be constructed between FY12 and FY17, to add to the existing national highway network of 92,000 kms (as of FY12)
- A total of 158,000 kms rural roads are planned to be constructed between FY12 and FY17, to add to the existing rural roads network of 2.7 Million kms (as of FY12); a total of 84,181 kms (out of the 2.7Mn kms) will be upgraded in this period
- Total state and district roads network as of FY12 is around 1.15Mn kms. Out of this, a total of 294,000 kms are planned for upgradation by FY17

	Development Area		Physical Infrastructure (in kms)
New Roads	Rural Road New		158,000
	National Highways		13,000
Upgrades	Rural Road Upgrade		84,181
	State Highways	2–Laning	30,000
		4–Laning	5,000
		Strengthening	41,500
		IRQP (Improvement of Riding Quality Program)	50,000
	District Roads	2–Laning	20,000
		4–Laning	1,000
		Strengthening	66,500
		IRQP (Improvement of Riding Quality Program)	80,000

To enable the road infrastructure improvement, INR ~9.15 lakh crores of investment is planned during the 12th five year plan period.

There is a strong focus on road development in the Union Budget presented by the new government. An investment of INR 37,880 crores in NHAI and State Roads is proposed, which includes INR 3,000 crores for the north-eastern region. The target of current financial year is to construct 8,500 kms of national highway. Further, INR 14,389 crores have been earmarked for investments in rural roads through the PMGSY (Pradhan Mantri Grameen Sadak Yojana) program. Work on select expressways will also be initiated, in parallel to the development of the Industrial Corridors. For project preparation, NHAI shall set aside a sum of INR 500 crores.

Railways

Railways have continued to be another large focus area for developing transportation infrastructure. Indian Railways is the fourth largest railway network in the world in terms of route kilometers. However, considering the requirements of the economy and size of the country, the expansion and upgrade of the railway network has been inadequate. In India, availability of railway tracks is only 52 km per million people, compared to 721 km in USA, 230 km in Mexico and 148 km in Brazil. The network needs upgrades, speed increases, improvement in safety and modernization of rolling stock to meet the needs of a rapidly growing economy.

There is a plan to construct 7,338 kms of new railway lines between FY12 and FY17 (new line construction and eastern and western dedicated freight corridor). Total upgradation of 78,153 kms is planned for this period, which majorly includes electrification of railway lines. Also, total rolling stock of 133,669 is planned to be added during this period.

	Development Area	Physical Infrastructure (in kms)
New Lines	New Line	4000
	Eastern & Western dedicated freight corridor	3338
Upgrades	Gauge Conversion	5500
	Doubling	7653
	Railway Electrification	65000

Rolling Stock Requirement	Types	Units
	Coaches	24,000
	Diesel Locos	2,000
	Electric Locos	2,010
	Wagons (in Vehicle Units)	105,659

For railways, INR 5.2 lakh crores of investment is planned during the 12th five year plan period.

According to the recently announced Union Budget FY14-15, INR 1,000 crores will be provided for rail connectivity in north-eastern region.

The Railway Budget 2014 has also proposed to set up a Diamond Quadrilateral of the rail network, connecting major metros apart from announcing a bullet train. The Rail Budget has also proposed to attract private domestic investment and FDI in infrastructure.

Ports

Ports constitute inter-modal interface between maritime and road and rail transport. India has a coast line of around 7,517 km with 12 major ports and over 200 non-major ports along the coast line and sea islands. Current port infrastructure requires rapid upgradation, as current containerization levels at our ports are only 25%, compared to a global average of 60-70%. Moreover, India's ports are operating with high capacity utilization of 90%, compared to 55% for China and 60% for Singapore. There is a clear need for capacity enhancement at our ports.

Demand forecasts predict that capacity at both major and non-major ports is expected to almost double by FY17, as compared to FY12 levels. The major ports capacity is expected to increase from 689 million tonnes in FY12 to 1,229 million tonnes in FY17. Similarly, the non-major ports capacity is expected to increase from 544 million tonnes in FY12 to 1,059 million tonnes in FY17.

For ports, INR 2 lakh crores of investment is planned during the 12th five year plan period.

16 new port projects have been announced as part of the Union Budget. An amount of INR 11,635 crore for the development of the first phase of the outer harbor project in Tuticorin has been proposed.

Airports

Indian airports are amongst the most crowded in the world. Indian airports cater to 204,000 passengers per airport per year, compared to USA (55,000), Brazil (23,000) and Mexico (19,000). This highlights the need for airport infrastructure development. Both passenger and cargo carrying capacity is expected to double by FY17, as compared to FY12 levels. The passenger capacity is expected to increase from 144 million passengers in FY12 to 269 million passengers in FY17. Similarly, the cargo capacity is expected to increase from 2.4MMTPA in FY12 to 4.4MMTPA in FY17.

For airports, INR 88,000 crores of investment is planned during the 12th five year plan period.

According to the announcements in the Union Budget FY14-15, scheme for development of new airports in tier II and III cities through PPP mode will be launched. Plan to build 200 low-cost airports in the next 20 years to connect tier-II and tier-III cities will be made.

Irrigation

Irrigation is essential for improving India's agriculture sector. It is crucial to sustain livelihood of more than half of the country's population. Irrigation penetration has increased only minimally over the last decade. Moreover, canal irrigation accounts for only 12% share of arable land, compared to 20% in Pakistan and 34% in Indonesia. Consequently, irrigation is a big focus area in the 12th five year plan.

The target is to increase the gross irrigated area from 90 Million hectare as of FY12 to 103 Million hectare by FY17, i.e. increment of 13 million hectare or 14% between FY12 and FY17.

In the irrigation sector, INR 5 lakh crores of investment is planned during the 12th five year plan period.

INR 1,000 crores has been announced during the Union Budget for creating infrastructure for the rural irrigation scheme (Pradhan Mantri Krishi Sinchayee Yojana) to provide assured water to farmers. A large scale river linking project has also been announced, for which a detailed study would be undertaken (INR 100 crores have been set aside for the study).

Urban Infrastructure

Urban areas are engines of economic growth. According to 2011 census, about 377 million Indians comprising ~31 per cent of the country's population live in urban areas. This is a smaller proportion compared to other large developing countries - 45 per cent in China, 54 per cent in Indonesia, 78 per cent in Mexico and 87 per cent in Brazil.

Increasing urbanization will be thus be central to India's strategy of achieving faster and more inclusive growth because urban conglomerations stimulates economic efficiencies and provides more opportunities for earning livelihoods. Urbanization continues to be a thrust area in the Union Budget as well, with many announcements made across different areas of urban infrastructure development -

- Total of INR 50,000 crores for urban infrastructure projects
- Development of 100 smart cities as satellite towns of larger cities and by modernizing the existing mid-sized cities. A sum of INR 7,060 crore in the current fiscal will be allotted to provide the necessary focus
- Metro rail projects for cities with over 20 lakh population; Lucknow and Ahmedabad to get metro trains, with INR 100 crores allotted
- 7 industrial cities to be developed

Outlook

Infrastructure development is one of the key growth engines for uplifting the economy, and has been identified as a key focus area by the current government. This has been signaled through the infrastructure investment plans, as well as easing funding norms for infrastructure (as announced in the Union Budget). However, the timely execution of large scale projects holds the key to reviving interest and investments in this area.

If the proposed infrastructure plans materialize, this would have a high impact in boosting ECE industry sales, which have been declining over the last two years with a sharper fall witnessed in FY14. More importantly, the proposed plans are broad-based across all infrastructure sectors, and hence all segments with ECE industry stand to be benefit. With that, the ECE industry should well be on its way to realize its long term potential growth rate of 20-25% on an annual basis.

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The authors wish to thank Akash Goel and Parul Mudgal for their valuable contributions to this paper.

Further reading

A.T. Kearney has published several papers and reports of relevance to this sector:

Road Map to Success for the Construction Equipment Industry

With high infrastructure growth expected in India, the earthmoving and construction equipment (ECE) market is estimated to grow by 20 to 25 percent.

Cement Vision 2025: Scaling New Heights

The cement industry is a vital part of India's economy. A changing landscape will require government support and strategic industry decisions to take it to the next level.

Supply Chain 2025 – Trends and Implications for India

As India's economy grows and the operating environment evolves, it is critical to understand the macro trends that will shape future supply chain design.

2014 A.T. Kearney Foreign Direct Investment Confidence Index - Ready for Takeoff

In spite of the slow and uneven economic recovery, business executives now feel more bullish about the global outlook. A majority of business leaders report that this optimism will translate into increased levels of foreign direct investment in the next 12 months.

2014 Global Cities Index & Emerging Cities Outlook - Global Cities, Present & Future

Today more than ever, global cities need to run just to stand still. Urban leaders who wish to provide their citizens with the benefits of becoming a global powerhouse must fire on all cylinders, all the time.

Next-Generation Economic Clusters

By creating ripe environments for business, academia, and innovation, these emerging economic clusters have jump-started industries and accelerated economic development in mature and developing markets worldwide.

New Manufacturing Technologies

With manufacturing technology heading in dramatically new directions, keeping pace with the latest developments is more important than ever. Executives need to keep their eyes open and be prepared for a very different world from today.

Adapting to the Inevitable

As recent natural disasters illustrate, learning how to deal with a changing climate is an important topic of discussion for governments and businesses worldwide. While past efforts focused on preventing climate change, the future will be about adapting smartly.

Harnessing Supplier Energy: The Next Frontier in Procurement

Procurement can no longer engage suppliers through tactical negotiations focused on cutting margins. Your key suppliers must be immersed in a strategic dialogue focused on long-term creation of mutual value.

About A.T. Kearney

A.T. Kearney is a leading global management consulting firm with offices in more than 40 countries. Since 1926, we have been trusted advisors to the world's foremost organizations. A.T. Kearney is a partner-owned firm, committed to helping clients achieve immediate impact and growing advantage on their most mission-critical issues. For more information, visit: **www.atkearney.com**.

About ICEMA

Constituted in 1949 as Tractor and Allied Equipment Manufacturers and Importers Association Ltd., the association started with 10 Indian member companies, primarily manufacturers and importers of tractors and earthmoving and allied equipment. It was rechristened as Indian Earthmoving and Construction Industry Association Ltd. in 1986 with the objective to make the body a national point of reference for the Indian earthmoving and construction equipment industry. The association was renamed as the Indian Construction Equipment Manufacturers Association (ICEMA) in 2012 with the objective to make the association a truly representative body of the Indian construction equipment industry and to expand its scope of services.

ICEMA represents 57 leading companies that manufacture, trade, and finance a variety of products, including hydraulic excavators, wheel loaders, backhoe loaders, motor graders, vibratory compactors, cranes, dumpers, tippers, forklifts trucks, dozers, pavers, batching plants, and diesel engines.