



Industry
Russian Real Estate

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Emerging Europe
Russia
Real Estate



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F.I.T.T. for investors

Supported by momentum, contained by fundamentals

Breaking down housing demand and supply drivers

We find that there are generally three main aspects of the Russian residential real estate market that investors find attractive: 1) the local market is perceived to be structurally undersupplied; 2) the quality of housing stock is poor; and 3) the housing market offers alternative exposure to fast-growing domestic consumption. We have critically tested these three factors and conclude that while the near-term prospects of the market look solid, given existing supply limitations, long-term demand fundamentals are less appealing. The bottom-up screening singles out PIK (Buy) and Etalon (Buy), which offer growth optionality, and market footprint, supported by attractive valuation.



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Housing market: strong near-term momentum, less constructive LT outlook

In this report, we look at Russian housing market fundamentals and assess key consensus beliefs. In particular, we investigate the perception that the market is structurally under-supplied, which, arguably, underpins the Street's bullish long-term view on the sector. We break down housing demand to identify possible sector drivers: our findings suggest that these include relatively low mortgage penetration (set to double by 2018E in DB forecasts), and expected disposable income growth. These positive developments could be outweighed by negative demographic trends, which in a low-case scenario could bring housing demand growth rates in Russia down to an average of 2.3% in 2013E-2015E (vs. our real GDP growth rate forecast of 3.6%). Our base case forecast is a 3.7% demand CAGR 2013E-2015E, premised on an average fixed assets investment growth estimate of 6.0% (same period). On the supply side, we find that the market is not as under-supplied as perceived and recent government initiatives could lead to housing supply easing (not good for prices).

Initiating coverage on PIK, Etalon with a Buy & Hold on LSR

Despite our cautious top-down view, we are more constructive on bottom-up prospects for the companies under our coverage, given good scope for market share gains (volume-driven business model), and mix improvement potential. This, coupled with ongoing supply limitations in the Saint-Petersburg/Moscow Metropolitan Areas' housing markets suggest strong earnings/cash flow momentum for developers with a footprint in those areas. Moreover, we consider current valuation levels, which have benefited from a recent sell-off related to company-specific issues, to be attractive. We favor **PIK (Buy)**, which has turned into an investible story following a successful SPO, supported by core shareholders. The company's earnings growth rates look inferior to peers' but strong pre-sales momentum and low capex bode well for FCF generation, which should help speed up de-leveraging. **Etalon (Buy)** offers the strongest growth profile with a 26.4% pre-sales CAGR 2012-2015E (vs. 21.1%/7.2% for PIK/LSR, respectively) and a 35.3% EPS CAGR (vs. 28.3%/29.3% for PIK/LSR). The stock is also the cheapest in our universe. **LSR (Hold)** offers a reasonable combination of growth optionality and cash generation (it is the only company in our universe that pays dividends; Deutsche Bank estimated average dividend yield of 3.5% in 2013E-2015E); however, this is reflected in the stock's premium valuation.

Valuation and risks

We value Russian real estate developers using DCF. Major downside risks for the sector include a weaker-than-expected macro backdrop, higher interest rates, excessive supply (and thus lower housing prices), cost inflation, and construction delays. In the building materials sector, we see intensifying competition and import threats (Russia's accession to the WTO) as major risks.

Top picks

PIK Group (PKGPq.L),USD2.20	Buy
Etalon Group (ETLNGq.L),USD3.83	Buy

Source: Deutsche Bank

Companies Featured

PIK Group (PKGPq.L),USD2.20	Buy		
	2012A	2013E	2014E
DB EPS (RUB)	6.41	9.52	12.64
P/E (x)	11.1	7.5	5.7
EV/EBITDA (x)	8.0	5.1	4.9

Etalon Group (ETLNGq.L),USD3.83	Buy		
	2012A	2013E	2014E
DB EPS (RUB)	17.05	26.21	37.53
P/E (x)	10.5	4.8	3.3
EV/EBITDA (x)	8.2	3.6	2.5

LSR (LSRGq.L),USD4.03	Hold		
	2012A	2013E	2014E
DB EPS (RUB)	9.61	11.95	13.60
P/E (x)	14.5	11.0	9.7
EV/EBITDA (x)	8.6	7.2	6.6

Source: Deutsche Bank



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Executive summary

Supported by momentum, contained by fundamentals

Residential real estate is arguably among the least explored sectors in Russia, owing to market fragmentation, regional specifics, and data accuracy issues. In this report, we look at Russian housing market fundamentals and assess key consensus beliefs, which, arguably, underpin the Street's bullish long-term view on the sector. In particular, we investigate the perceptions that:

- The local market is perceived to be structurally undersupplied, as construction activity is deemed inadequate to meet the country's housing needs;
- The quality of housing stock is poor as most of it is old, so replacement needs could be another driver for the sector;
- The housing market offers alternative exposure to fast-growing domestic consumption.

We have critically tested all three of these arguments and conclude that while the near-term prospects of the market look decent given existing (artificial) supply limitations, longer-term demand fundamentals are less constructive.

We break down housing demand to identify possible sector drivers: our findings suggest that these include relatively low mortgage penetration (set to double by 2018E under DB forecasts), and expected disposable income growth. These positive developments could be outweighed by negative demographic trends, which in a low-case scenario could bring housing demand growth rates in Russia down to an average of 2.3% in 2013E-2015E (vs. our real GDP growth rate forecast of 3.6%). Our base case forecast is a 3.7% demand CAGR 2013E-2015E, premised on an average FAI growth estimate of 6.0% for the same period.

On the supply side, we find that the Russian housing market is not as under-supplied as investors believe, while recent government initiatives could lead to housing supply easing, which would have a negative impact on housing prices.

Likely upcoming regulatory changes support our conservative longer-term stance on the sector. Recall that local authorities are discussing new property tax calculation scheme, which envisages a move from the cadastral (normally lower) to the market value of a property in determining the tax base (to become effective in 2014-2018, depending on a particular region). Moreover, the government plans to review certain personal income tax exemptions on the sale of residential property owned for more than three years. Both developments, if approved, suggest additional risks to demand/price outlook.

Despite our cautious top-down view, we are more constructive on bottom-up prospects for the companies under our coverage, given good scope for market share gains (volume-driven business model), and mix improvement potential. This, coupled with persistent supply limitations in the SPMA/MMA housing market, suggest that the earnings/cash flow profile of the companies with strong footprint in these regions, looks robust. Moreover, we consider current valuation levels, which have benefited from a recent sell-off related to company-specific issues, to be attractive. With this report we are initiating coverage on PIK, Etalon with a Buy & Hold on LSR.

"...the affordability of housing is overwhelmingly a function of just one thing, the extent to which governments place artificial restrictions on the supply of the residential land"
Dr. Donald Brash, Governor, Reserve Bank of New Zealand (1988-2002), Chairman, Centre for Resource Management Studies

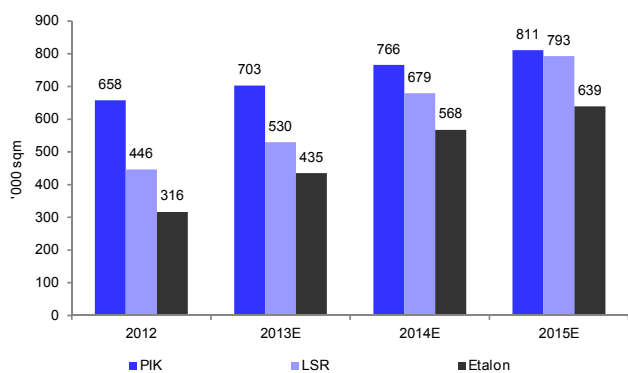


PIK (Buy) has turned into an investible story following the successful SPO, supported by core shareholders. Although the company's earnings growth rates look lower than those of its peers, we highlight that strong pre-sales momentum and low capex spending bode well for free cash flow generation, which should help speed up deleveraging. Moreover, PIK's excellent footprint in MMA, coupled with the strong lobbying power of its controlling shareholders, offers sound growth optionality. The stock is also trading at a deep discount on earnings-based multiples and the NAV of its portfolio of projects. PIK looks expensive on P/BV, trading at 2.5x on FY13 estimates; however, we believe that the company's book value does not fully reflect the market value of the assets, which is also suggested by the 30.6% ROE on the reported book value (see Figure 7).

Etalon (Buy) offers the strongest growth profile, with a 26.4% pre-sales CAGR in 2012-2015E (vs. 21.1%/7.2% for PIK/LSR, respectively), and 35.3% EPS CAGR in 2012-2015E (vs. 28.3%/29.3% for PIK/LSR, respectively); however, the company's FCF profile looks inferior to its peers, which we would normally be concerned about, but Etalon's strong balance sheet can support such growth rates, in our view. The stock is also trading at a deep discount on earnings-based multiples and the NAV of its portfolio of projects.

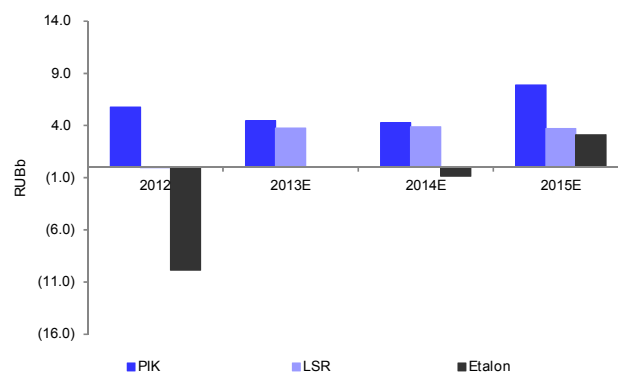
LSR (Hold) offers a reasonable combination of growth optionality and cash generation, being the only company in our universe that pays dividends (Deutsche Bank estimate: average dividend yield of 3.5% in 2013E-2015E). We like the company's footprint in Saint Petersburg, its home market, where LSR boasts a sizeable land bank; however, we are somewhat concerned about its concentration (three projects in Saint Petersburg and one project in the Moscow region account for c.50% of the group's NSA). Moreover, LSR is the most leveraged real estate developer in our universe, which is another area of concern. Finally, the stock is trading at a premium to its local peers, which supports our Hold rating.

Figure 1: Pre-sales dynamics



Source: Companies' data, Deutsche Bank

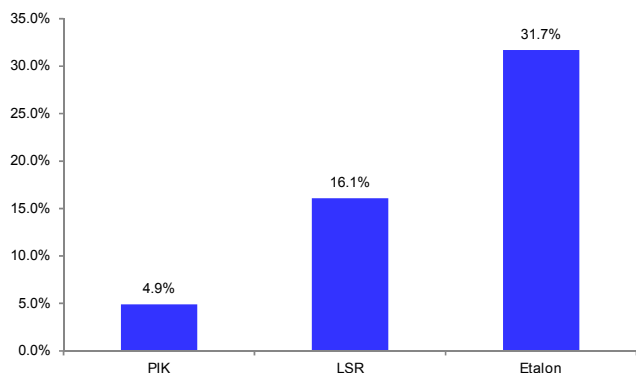
Figure 2: FCF profile (2012-2015E)



Source: Companies' data, Deutsche Bank

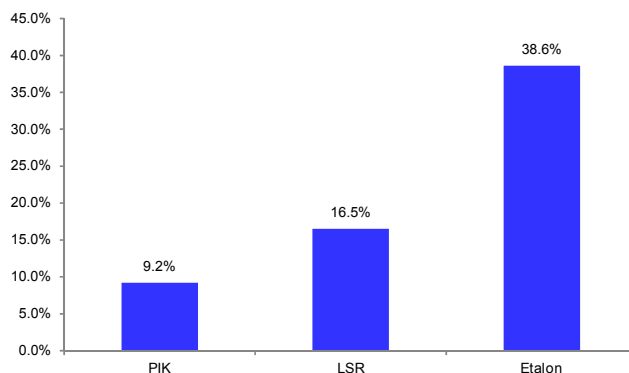


Figure 3: Revenue CAGR (2012-2015E)



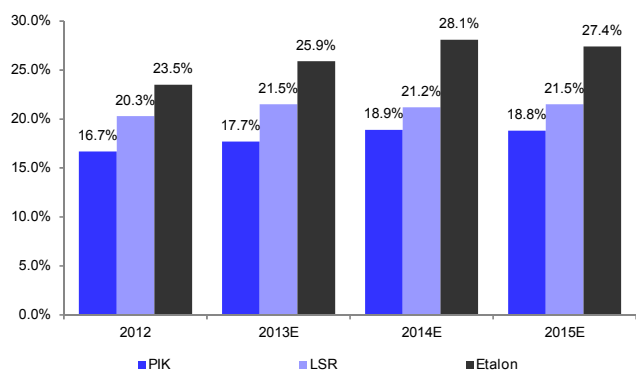
Source: Companies' data, Deutsche Bank

Figure 4: EBITDA CAGR (2012-2015E)



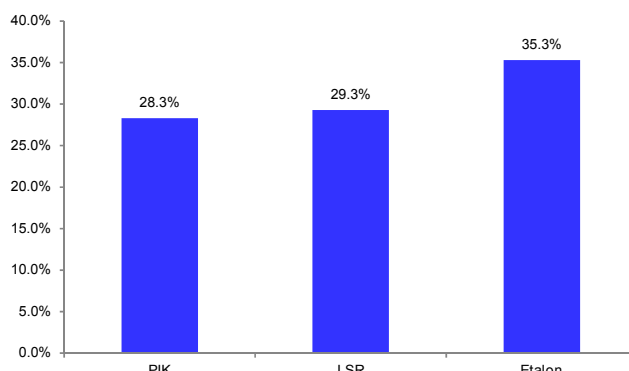
Source: Companies' data, Deutsche Bank

Figure 5: EBITDA margin (2012-2015E)



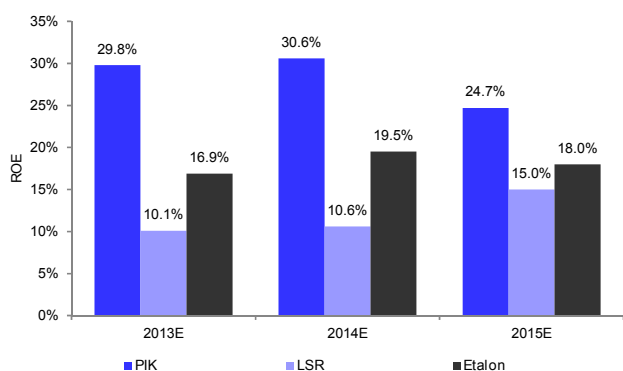
Source: Companies' data, Deutsche Bank

Figure 6: EPS CAGR (2012-2015E)



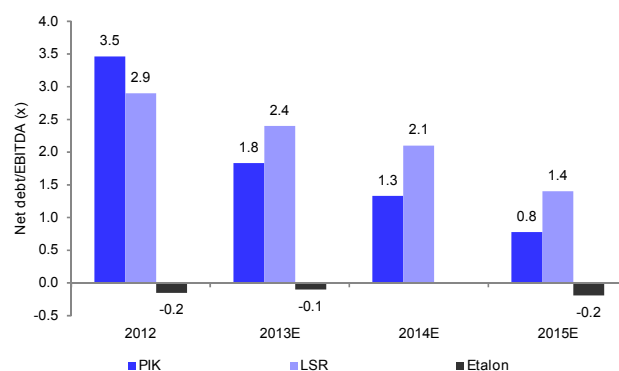
Source: Companies' data, Deutsche Bank

Figure 7: ROEs



Source: Companies' data, Deutsche Bank

Figure 8: Net debt/EBITDA



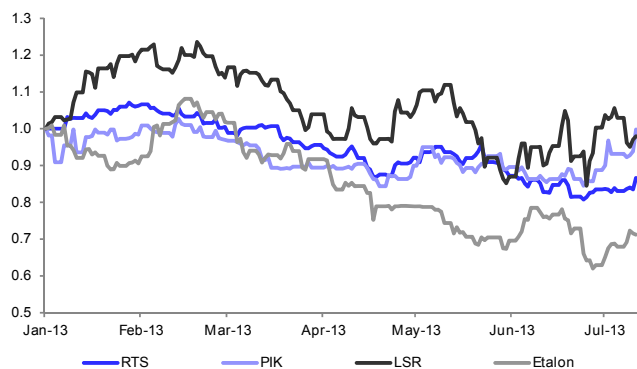
Source: Companies' data, Deutsche Bank

Performance of Russian real estate equities over last 12 months and YTD has been mixed, with LSR consistently outperforming the broader and local peers. Despite the relatively complicated business structure, the market seems generally comfortable with the stock's decent liquidity, absence of corporate governance issues, fair amount of disclosure and good communication. PIK started outperforming only after the company conducted a successful SPO, which alleviated market concerns with respect to the



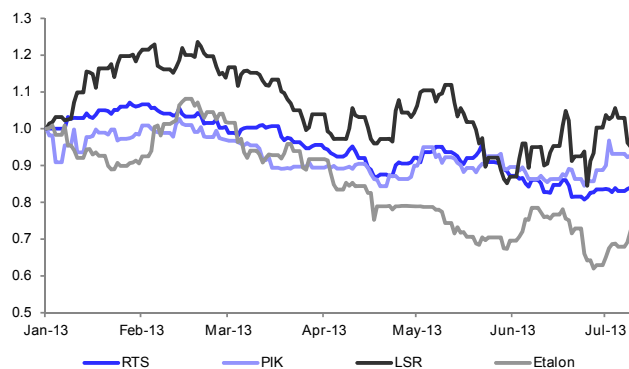
associated financial risks, and demonstrated strong support for the core shareholders. Now that the company has sufficient liquidity to repay some of its debt, and can use its stronger financial position to renegotiate and refinance the outstanding loans, management can focus on execution and leverage on PIK's excellent footprint (in MMA primarily). Etalon has been the weakest name in the space, on IPO guidance revision, corporate governance concerns and poor communication to the market.

Figure 9: Russian real estate companies vs. RTS (re-based, YTD)



Source: Bloomberg Finance LP, Deutsche Bank

Figure 10: Russian real estate companies vs. RTS (re-based, 12-month view)



Source: Bloomberg Finance LP, Deutsche Bank

Figure 11: Peer valuation

	REC	Current MCap		EV/EBITDA			P/E			P/CFPS			P/BV			ROE		
		Price	USD m	2012	2013E	2014E	2012	2013E	2014E	2012	2013E	2014E	2012	2013E	2014E	2012	2013E	2014E
Russia																		
LSR	Hold	4.082	2,103	8.6	7.3	6.7	14.5	11.1	9.8	13.9	7.8	8.2	1.1	1.1	1.0	9.0	10.5	11.0
ETALON GROUP	Buy	3.88	1,133	8.2	3.7	2.5	10.5	4.8	3.4	NM	NM	NM	1.3	0.8	0.7	14.2	18.5	21.6
PIK GROUP	Buy	2.195	1,297	8.0	5.1	4.8	11.1	7.5	5.6	5.0	5.6	6.2	11.5	2.5	1.7	NM	51.7	36.2
Average Russia				8.3	5.4	4.7	12.0	7.8	6.3	9.4	6.7	7.2	4.6	1.5	1.1	11.6	26.9	22.9
Middle East																		
DRAKE & SCULL	Sell	0.968	536	15.9	14.2	11.7	16.1	13.7	11.4	NM	31.6	15.9	0.6	0.8	0.7	3.5	5.7	6.4
ORASCOM CONSTRUCTION	Hold	247	7,346	10.0	7.8	6.4	34.4	15.2	10.7	7.3	9.8	7.4	3.7	2.8	2.5	9.7	19.8	24.6
DAR AL ARKAN	Buy	10.15	4,417	10.1	9.0	8.8	10.5	9.9	10.0	15.1	10.1	9.9	0.5	0.6	0.6	6.2	6.6	6.1
EMAAR PROPERTIES	Buy	5.77	5,189	5.2	9.9	8.9	9.4	16.9	14.6	11.9	24.0	15.4	0.7	1.0	1.0	6.6	6.2	6.9
Average Middle East				9.9	10.5	9.2	17.4	16.2	13.6	11.0	18.2	12.2	1.4	1.4	1.3	7.1	9.3	10.2
China (including Hong Kong)																		
AGILE PROPERTY	Buy	8.05	3,890	4.3	4.0	3.9	5.7	4.4	3.9	5.1	NM	4.2	1.2	0.7	0.6	21.1	17.1	15.7
CHEUNG KONG HLDGS	Buy	107.7	25,934	0.7	0.3	1.2	9.3	10.2	8.9	18.9	15.1	23.7	0.8	0.7	0.7	9.9	7.0	7.6
CHINA RESOURCES LAND	Buy	21.9	9,485	9.3	10.8	7.6	12.6	12.9	9.8	6.5	13.6	6.1	1.8	1.7	1.4	16.3	13.6	15.8
COLI	Buy	21.55	15,970	6.0	4.8	3.6	7.8	8.1	6.8	26.2	3.5	2.9	2.2	1.6	1.3	23.8	22.2	21.9
COUNTRY GARDEN HOLDINGS	Buy	4.13	5,968	6.0	5.8	4.8	6.6	7.0	5.6	3.9	NM	4.2	1.5	1.3	1.2	20.3	20.5	22.5
FRANSHION	Buy	2.47	2,559	5.9	5.3	3.6	11.5	8.5	7.3	NM	3.4	2.6	0.9	0.7	0.7	12.3	10.4	11.2
GREENTOWN CHINA	Buy	13.16	1,761	2.6	3.5	3.1	2.6	4.2	3.5	0.7	NM	33.2	1.2	0.8	0.7	29.3	22.1	21.7
GUANGZHOU R&F PROP	Buy	11.14	5,429	4.1	4.1	2.5	5.0	4.8	3.6	NM	4.9	2.4	1.3	0.9	0.8	22.5	20.6	23.6
NEW WORLD DEV	Hold	11.16	4,740	5.2	7.9	8.2	7.3	11.3	10.3	9.2	20.6	13.9	0.4	0.5	0.5	33.2	4.9	5.2
Average China				6.2	5.8	4.7	8.9	8.5	7.3	13.1	11.9	12.3	1.2	0.9	0.8	19.4	13.8	14.5
Emerging Europe																		
GTC	Hold	8.25	1,326	NM	31.7	10.7	NM	NM	12.0	43.6	41.5	23.9	1.0	0.8	0.8	- 12.8 -	3.3	6.6
ECHO	Hold	4.99	448	20.0	13.8	14.9	4.5	15.6	17.1	30.1	24.7	22.0	0.9	1.0	1.0	16.6	6.9	5.9
ENKA INSAAT	Hold	5.12	10,638	9.6	8.2	7.6	12.7	11.9	11.7	10.7	11.7	10.4	1.6	1.5	1.4	13.1	12.3	12.1
Average Emerging Europe				14.8	17.9	11.0	8.6	13.8	13.6	28.1	26.0	18.8	1.2	1.1	1.0	5.6	5.3	8.2

Source: Bloomberg Finance LP, Deutsche Bank



Figure 11: Peer valuation (continued)

	REC	Current MCap		EV/EBITDA			P/E			P/CFPS			P/BV			ROE			
		Price	USD m	2012	2013E	2014E	2012	2013E	2014E	2012	2013E	2014E	2012	2013E	2014E	2012	2013E	2014E	
Latin America																			
CONSORCIO ARA	Hold	4.4	611	6.0	6.1	5.2	9.5	9.0	8.2	7.4	14.9	8.4	0.6	0.6	0.5	5.9	6.5	6.7	
GEO	Sell	4.28	1,040	4.5	6.7	6.4	8.6	5.9	6.0	NM	NM	151.1	0.9	0.2	0.2	11.4	4.1	3.9	
CYRELA	Buy	15.95	3,541	9.2	7.8	7.0	10.4	7.9	7.2	3.3	77.9	13.3	1.5	1.2	1.1	13.7	15.6	15.8	
GAFISA	Hold	2.92	1,343	8.8	6.1	5.0	-	7.7	4.4	1.4	2.5	5.3	0.8	0.5	0.4	-	4.8	6.2	10.1
HOMEX	Sell	7.33	1,565	5.5	8.1	7.5	7.0	2.7	2.4	NM	NM	15.4	0.6	0.2	0.1	11.2	6.0	6.4	
MRV	Hold	6.45	2,068	9.9	6.3	5.9	10.7	5.1	4.8	NM	14.0	7.5	1.5	0.7	0.7	14.6	15.2	14.7	
PDG	Hold	1.71	1,100	NM	9.4	6.6	NM	11.1	4.8	NM	NM	NM	0.9	0.4	0.4	-	38.1	3.1	7.9
URBI	Sell	2.06	1,522	7.3	8.2	7.4	9.1	2.5	2.7	NM	NM	1.6	0.5	0.1	0.1	7.3	4.8	4.2	
Average Latin America			12,791	7.3	7.4	6.4	7.9	6.5	5.1	4.0	27.3	29.0	0.9	0.5	0.5	2.7	7.7	8.7	
United States																			
D.R. HORTON	Buy	22.98	2,947	22.1	13.7	9.4	5.6	18.9	12.7	NM	NM	NM	1.8	1.9	1.6	8.5	11.7	15.4	
LENNAR	Hold	37.44	1,797	18.0	11.2	7.1	9.2	23.4	16.8	NM	6.8	6.8	2.1	1.9	1.7	21.3	9.9	12.5	
MERITAGE HOMES	Buy	45.66	545	26.7	12.9	8.5	10.8	18.9	11.2	NM	13.6	NM	1.8	2.1	1.8	17.9	12.8	18.0	
PULTEGROUP, INC.	Hold	20.39	2,626	10.6	11.0	8.3	22.0	16.6	18.0	5.9	30.0	39.6	3.2	2.9	2.6	11.6	19.7	15.4	
RYLAND HOMES	Buy	41.16	827	27.7	13.9	8.3	29.8	10.8	10.1	NM	30.1	14.4	3.2	2.6	2.5	9.3	32.5	26.9	
TOLL BROTHERS	Buy	34.66	3,074	22.3	18.1	10.9	9.2	44.3	22.3	NM	34.7	NM	1.8	1.7	1.6	17.1	4.2	7.4	
Average United States				21.2	13.5	8.7	14.4	22.1	15.2	5.9	23.0	20.3	2.3	2.2	2.0	14.3	15.1	16.0	
Europe																			
BOVIS HOMES	Buy	843	835	10.1	14.5	9.7	15.8	20.9	13.9	NM	152.4	20.5	1.0	1.4	1.3	6.1	6.9	9.7	
YIT CORPORATION	Buy	11.22	1,560	8.7	8.5	7.1	9.0	8.2	6.9	15.3	25.6	6.9	1.8	1.3	1.2	19.7	15.8	18.0	
Average Europe			2,395	9.4	11.5	8.4	12.4	14.6	10.4	15.3	89.0	13.7	1.4	1.3	1.2	12.9	11.4	13.8	

Source: Bloomberg Finance LP, Deutsche Bank





Housing market overview

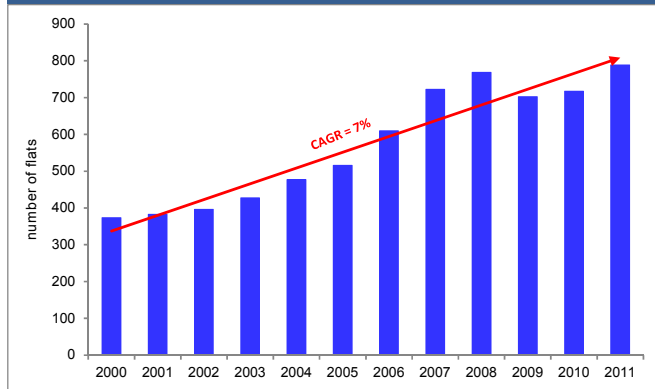
Not as undersupplied as expected

Residential real estate is arguably among the least explored sectors in Russia, owing to market fragmentation, regional specifics, and data accuracy issues. In this context, analysts normally focus on individual companies, a specific geographical area, or on a particular market segment when developing their analysis. The main drawback of such an approach, in our view, is the resultant poor understanding of the “big picture,” which is essential for longer-term investment decisions. In this report, we undertake a more academic approach, digging into the Russian housing market fundamentals and critically assessing key consensus beliefs, including the one that the Russian real estate market is structurally under-supplied, which, arguably, underpins the Street’s bullish view on the sector. We decompose housing demand to identify possible sector drivers, and our findings suggest that key sector attractions stem from relatively low mortgage penetration (set to double by 2018E under Deutsche Bank forecasts), and expected disposable income growth. These positive developments could be outweighed by negative demographic trends, which under a low-case scenario would bring housing demand growth rates in Russia to an average of 2.3% in 2013E-2015E (vs. Deutsche Bank estimate of a real GDP growth rate of 3.6%). This compares with our base case forecast of a 3.7% in CAGR 2013E-2015E, which is premised on an average FAI growth estimate of 6.0% (for the same period). On the supply side, we find that the Russian housing market is not as under-supplied as it is believed to be, while recent government initiatives bode well for housing supply easing, and not so well for housing prices.

Housing demand in Russia expanded at a healthy 7% CAGR in 2000-2011 (vs. 5% real GDP growth rate), driven by real disposable income growth and the social investment paradigm in the state’s policy (e.g. the Federal Target Program for Housing). The market reached its lowest point in 2000, with only 30.7m sqm of residential completions. The turnaround occurred in 2001, when the economy started expanding at high single-digit rates, accompanied by a boost in the real disposable income of the population, which led to a substantial upsurge in residential construction. Non-residential completions have also grown not only in terms of volumes, but also in terms of their share in total construction. The favorable macro backdrop, coupled with state support, has helped construction activity recover to the Soviet-era highs, as completions reached 65m sqm in 2012.

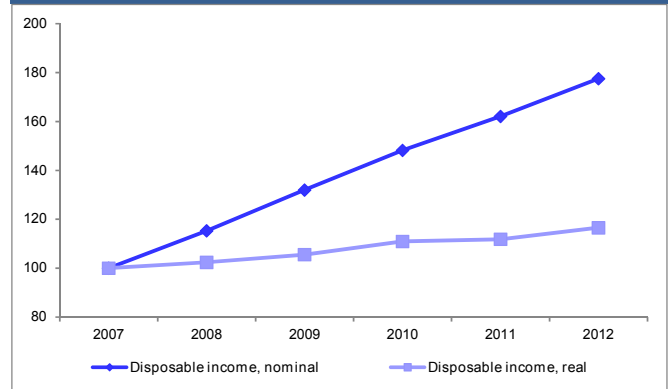


Figure 12: Housing completions ('000 flats)



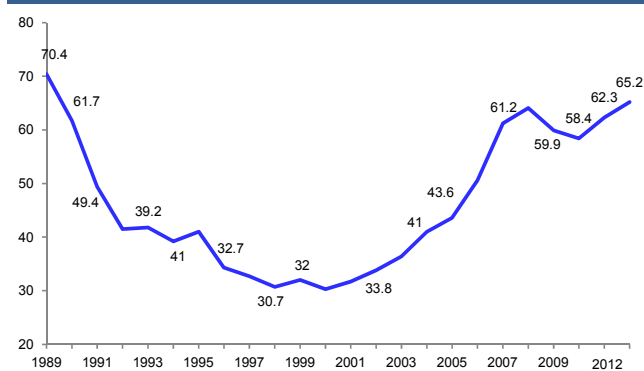
Source: Eurostat

Figure 13: Real/nominal disposable income growth (2007=100)



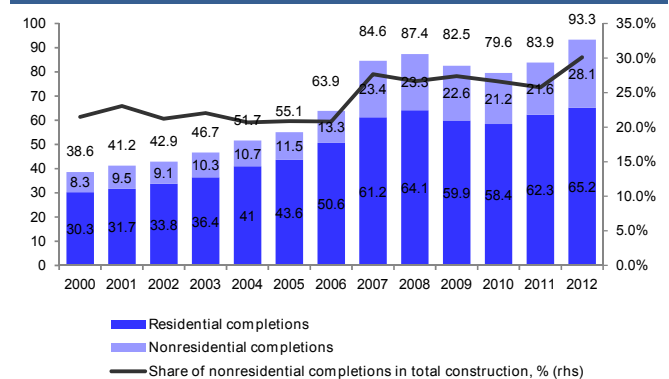
Source: Rosstat

Figure 14: Residential completions in Russia have almost reached record-high levels attained in the late 1980s (m sqm)



Source: Rosstat

Figure 15: The share of nonresidential completions in Russia has increased in the course of the last decade (m sqm)

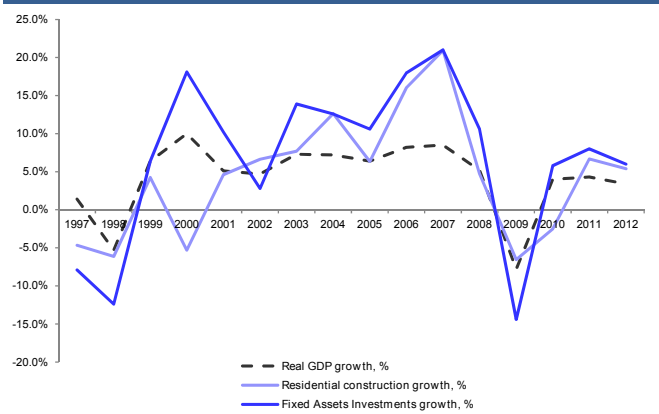


Source: Rosstat, Deutsche Banks

Construction constitutes a significant share of GDP. It stimulates a wide range of other sectors and has a significant impact on employment and overall economic growth. In this context, it comes as no surprise that construction activity growth in Russia correlates closely to real GDP growth. Within GDP components it is even more closely related to fixed asset investments, as construction is c. 25% fixed asset investments (vs. 5% of real GDP).

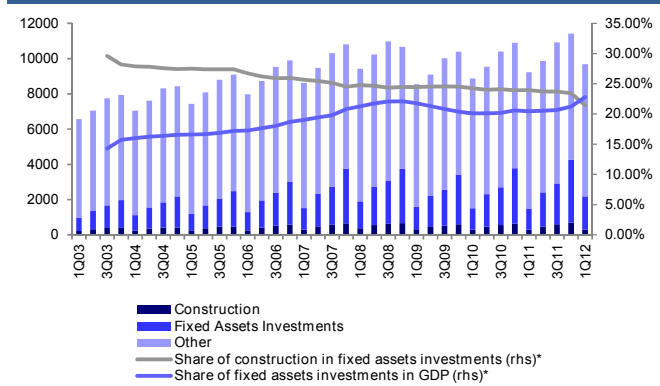


Figure 16: Real GDP growth and fixed asset investment growth vs. construction sector growth, 1997-2012



Source: Rosstat, Deutsche Bank

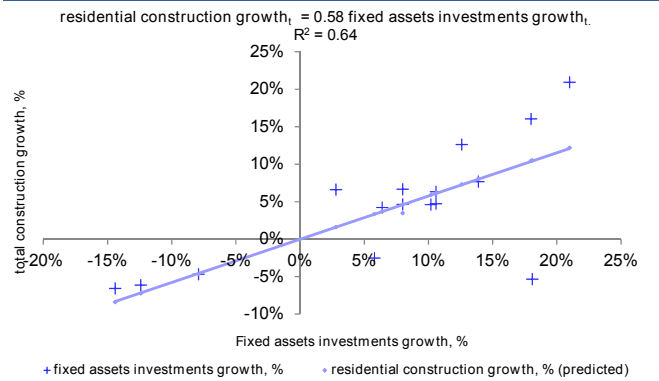
Figure 17: Fixed asset investments constitute a significant share of real GDP, while construction amounts to a high share of fixed asset investments



Source: Rosstat, Deutsche Banks
 * here taken 4-quarter moving averages of residential construction and fixed asset investments' shares

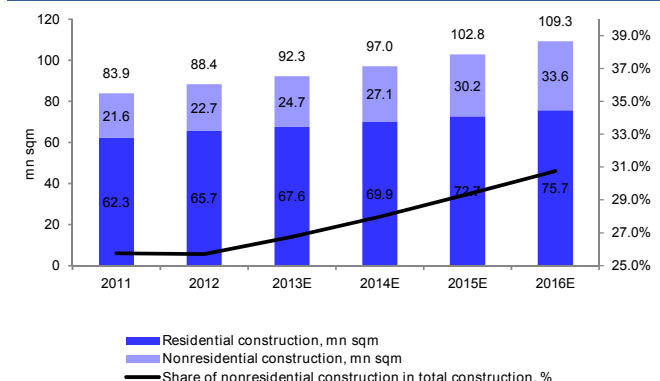
Based on the correlation above, we have developed our sector forecasts, which suggest that construction completions in Russia are set to expand at a 3.7% CAGR for 2013-2020E. Our estimates are based on a 0.58x fixed asset investment growth multiplier, derived using Ordinary Least Squares (OLS) regression. Note that our completion forecasts rely on fixed investment growth estimates provided by our macro team. Although for many years the construction sector was driven mainly by housing sector demand, we expect the share of nonresidential completions to increase to 38.8% in 2016E (from 25.7% in 2011), which mirrors previous trends and is in line with the tendencies demonstrated by developed countries.

Figure 18: Construction growth vs. fixed asset investment growth



Source: Deutsche Bank

Figure 19: Construction completion forecasts are based on fixed asset investment growth forecasts



Source: Rosstat, Deutsche Banks

We note upside risks to our forecasts, which could materialize should the authorities stick to the goals stated in the Federal Target Program for Housing for 2011-2015, which envisages reaching 90m sqm of residential completions by 2015E. For the time being, we do not expect budget financing to distort our forecasts, based on the relatively poor track record of the previous housing program.

Downside risks to our estimates include further worsening of the demographic situation in Russia, and slower-than-expected economic growth. Although our base case



forecasts are predicated on fixed asset investment growth, we highlight that at a certain level of construction activity other factors prove more important for residential real estate sector development.

Testing demand growth drivers

We find that there are, generally, three main aspects of the Russian residential real estate market that investors find attractive:

- The local market is perceived to be structurally undersupplied, as construction activity is deemed to be inadequate to cater to the country's housing needs;
- The quality of housing stock is poor, as most of it is old; thus replacement needs could be another driver for the sector;
- The housing market offers alternative exposure to fast-growing domestic consumption.

All of these factors relate to the demand situation, and we have critically tested all of the arguments above. Our key conclusions suggest that the near-term prospects of the market look decent, due to existing (artificial) supply limitations; however, longer-term demand fundamentals are less constructive, supporting our cautious view on the space.

We start with comparing Russia to Turkey, in order to understand some inhibiting issues faced by the local housing sector. We believe Turkey is a relevant peer, as the countries look very much alike on key economic and housing metrics. Both states are well-urbanized emerging economies, with similar living standards (measured in GDP/capita), high inflation environment, and fairly low mortgage affordability. If anything, Russian macro factors look more supportive due to the fast development of the real estate market. Nonetheless, the Turkish housing market is of a similar size to Russia, despite the fact that the Turkish population is half of the size of the Russian population.

Figure 20: Russia vs. Turkey on key economic/demographic metrics

	Russia	Turkey
Population, m people	142.0	73.9
GDP growth, average (2012)	4.0%	3.0%
GDP growth, average (2013E-2014E)	4.3%	4.9%
GDP/capita, USD	14,009	10,524
CPI, % YoY	5.1%	8.9%
Urbanization, %	73.6%	69.6%
Mortgage penetration, %	2.6%	5.8%
Average mortgage rate, %	12.5%	13.0%
Housing construction, m sqm	62.0	81.0

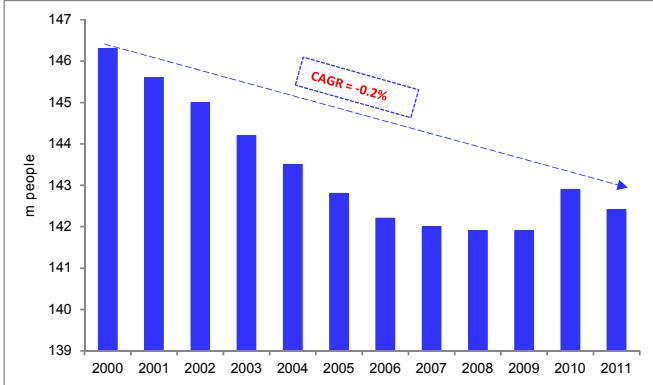
Source: TurkStat, Deutsche Bank

One major difference between Russia and Turkey is the demographic situation. The Turkish population is relatively young and growing, while the Russia population is ageing and shrinking (see Figure 53 and Figure 54). According to UNECE, the growth of the Russian population was negative at a -0.24% CAGR in 2001-2012, while the share of the population below 40 years shrank at a -0.47% CAGR for the same period. The demographic situation in Turkey looks different, as the population added 0.9% annually in 2000-2011; however, the share of the young population declined by -0.87%. In the



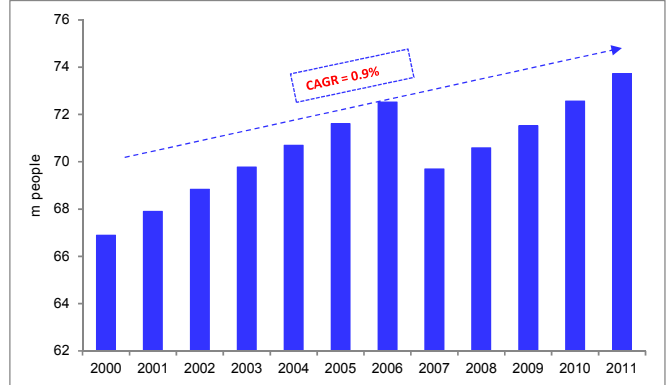
absence of a thoughtful migration policy and strong birth incentives in Russia, we forecast negative trends to continue.

Figure 21: Population in Russia shrank at a -0.2% CAGR in 2000-2011,...



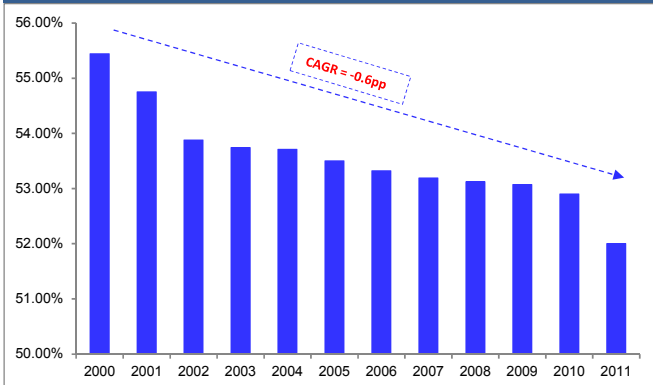
Source: Rosstat, Deutsche Bank

Figure 22: ...vs. population in Turkey expanding at 0.9% CAGR in 2000-2011



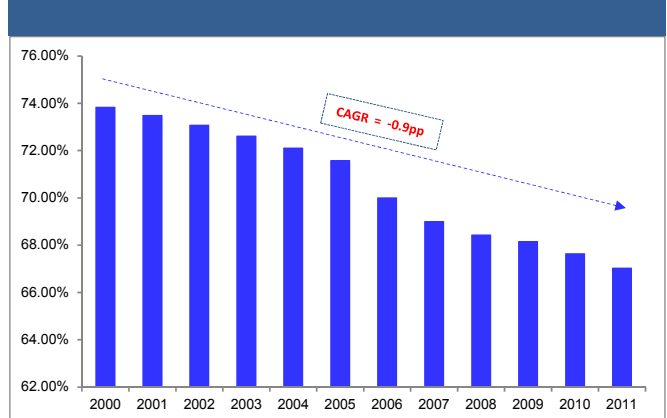
Source: IMF, Deutsche Bank

Figure 23: Share of young population (below 40 years) has been declining in Russia...



Source: Rosstat, Deutsche Bank

Figure 24: ...and in Turkey (from a different base, though)

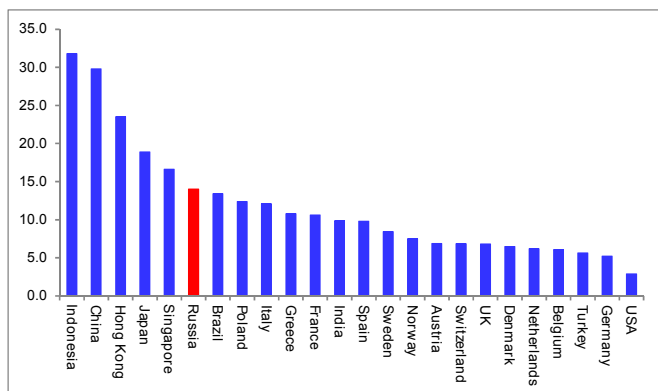


Source: TurkStat, Deutsche Bank

Another key difference, in our view, is the affordability of housing. We highlight that real estate in Russia is among the least affordable globally. The index we use represents the share of housing expenses in the population's disposable income. Moscow, for instance, ranks third on the global affordability list, only following Hong Kong and Shanghai.

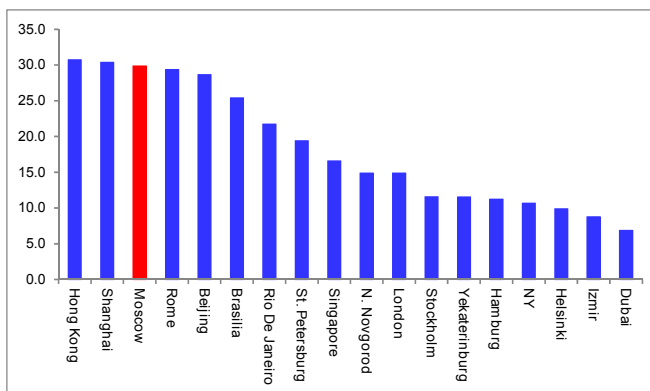


Figure 25: Affordability index by country, 2012



Source: Numbeo

Figure 26: Affordability index by town, 2012



Source: Numbeo

Supply limitations aggravate affordability issues in Russia, in our view. In Figure 59 we present the World Bank's data, which demonstrates the cost of doing business in various countries, and across different sectors, including real estate. The Bank claims that real estate developers in Russia face an incomparably higher number of bureaucratic hurdles in the process of obtaining a construction permit and commencing construction work, which affects housing supply. These limitations are imposed by the authorities; therefore, the supply situation is under control, and could be theoretically alleviated by addressing the bottlenecks in the construction permit issuing process.

Figure 27: Doing business, according to World Bank data

	Russia	Turkey	Eastern Europe & Central Asia	OECD
Procedures (number)	42	20	19	14
Time (days)	344	180	226	143
Cost (% of income per capita)	129	164	487	79

Source: World Bank, Deutsche Bank

Although the differences listed above seem to explain the key drivers of the Turkish residential real estate markets, we have developed an empirical framework to understand the relative significance of what we see as the main housing demand drivers.

The model is estimated on a sample of 33 countries, including the US, Iceland, Norway, Russia, Ukraine, Turkey and all member countries of European Union. The data on building permits and mortgage per capita was obtained from the latest thematic publication of the European Mortgage Federation. The National Statistics Offices, United Nations ("World Urbanization Prospects" publication), OECD and IMF databases were used as sources for the rest of the data. The sample covers a period of 11 years (2000-2011).

Russia was not part of the regression model's estimation sample, due to a lack of data on building permits, but we believe the results obtained could be applicable to it (at least qualitatively). Moreover, the proposed model should prove useful for determining the most important drivers for residential construction growth in Russia and an assessment of their potential impact on the sector's growth rates.



We find that residential real estate demand is broadly influenced by the following categories:

- demographics;
- affordability, which is a function of real estate prices vs. real disposable income, and availability of credit;
- other macroeconomic conditions.

We consider a panel regression with a fixed effects term, which we add in order to account for potentially important time-invariant cross-country factors of influence, such as differences in construction costs, households' preferences etc. Our basic empirical model is described by the following panel equation, with fixed effects in cross-section terms:

$$\log(\text{permits per capita}_{i,t}) = \alpha + \beta_1 * \text{mortgages to GDP ratio}_{i,t-1} + \beta_2 * (\text{mortgages to GDP ratio}_{i,t-1})^2 + \beta_3 * \text{GDP per capita}_{i,t} + \beta_4 * \text{share of population younger 40}_{i,t} + \beta_5 * \text{urbanization}_{i,t} + \eta_i + \varepsilon_{i,t}$$

where indexes i and t denote country and year respectively, η_i represents the country-specific error component and $\varepsilon_{i,t}$ is an error term.

- $\log(\text{permits per capita}_{i,t})$ – the natural logarithm of building permits per capita issued in the country is a proxy to changes in short-term housing supply, which is probably the most reliable indicator of housing supply adjustment;
- $\text{mortgages to GDP ratio}_{i,t-1}$ – essentially, this represents the mortgage penetration ratio. We ascribe a one-year lag to the variable in order to reduce the potential endogeneity problem that can arise due to a possible causality loop between mortgage growth and building permit growth rates, therefore leading to inconsistent parameter estimates. Also, we add the squared term of the mortgage penetration ratio to catch the possible "mortgage saturation effect", as intuitively an overly high debt burden can be a drag on economic growth, therefore leading to a deceleration in construction activity;
- $\text{GDP per capita}_{i,t}$ – a proxy to households' disposable income growth. This variable is also sensitive to demographic changes, as it increases with a decline in population and vice versa.
- $\text{share of population younger 40}_{i,t}$ – captures cross-country demographic variations for the purpose of estimating housing demand growth. We expect countries with a significant share of a young population to produce higher housing supply growth rates, all other things being equal.
- $\text{urbanization}_{i,t}$ – share of population living in urban areas. Another demographic parameter, which influences housing demand.



Figure 28: Panel model of building permits per capita

	Fixed effects regression		Descriptive statistics		
	Coefficient	Std. Error	Mean	Median	Std. Dev.
Mortgages to GDP ratio, %	1.969***	0.359	35%	30.5%	28.1%
(Mortgages to GDP ratio, %)²	-2.887***	0.361			
GDP per capita, ths USD per capita	0.011***	0.002	27 803	24 048	20 880
Share of population younger 40 yrs, %	7.531***	1.464	52.3%	51.6%	4.3%
Share of urban population, %	-7.077***	2.265	72.7%	71.1%	11.4%
Constant	-4.716**	2.131			
Number of observations	283				
Number of countries	29				
R-squared	0.88				

* - statistically significant at 10%, ** significant at 5%, *** significant at 1%. Country fixed effects not shown

Source: Deutsche Bank

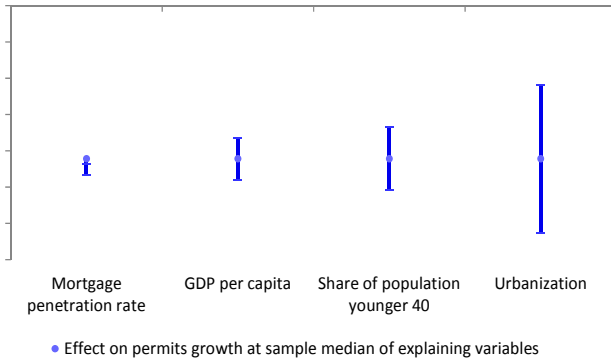
The regression analysis results (Figure 28) suggest that all variables are statistically significant. We note the negative sign of the urbanization rate regression coefficient, which we attribute to the specifics of the sample considered, as it primarily includes developed countries, where urbanization rates are quite high. Other factors, including GDP per capita and share of persons younger than 40 years, appear to have a positive correlation with building permit growth.

Our estimates suggest that GDP growth and higher mortgage penetration could become the main growth drivers for residential construction in Russia. Our macro team expects long-term real GDP growth in Russia to sustain at around 4.0%, which is a healthy level. The mortgage penetration rate in Russia looks low, standing at only 2.6% vs. 35% cross-sample average (as of 2011), underpinning the sector's growth potential. Our banking team expects the mortgage penetration ratio to increase to 3.9% in 2013E (vs. 3.5% in 2012), and expand to 4.4% in 2014E. We highlight, though, that mortgage penetration is seemingly the norm for other large emerging economies (Brazil).

Negative contribution of the demographic factors, such as ageing and high urbanization rate, put a cap on the sector's growth potential. We have tested the sensitivity of permits per capita to half a standard deviation from the sample's median. The analysis suggests that demographic factors have by far the largest impact on explanatory (dependent) variables, outweighing economic drivers. Based on our model, demand in Russia could expand by an average of only 2.2% in 2013E-2015E (vs. the Deutsche Bank estimate of real GDP growth rate of 3.6%). This compares with our base case forecast of a 3.7% CAGR in 2013E-2015E, which is premised on an average fixed asset investment growth estimate of 3.7% for the same period. We note that the key conclusions of our model support different trends in construction activity in Turkey and Russia.

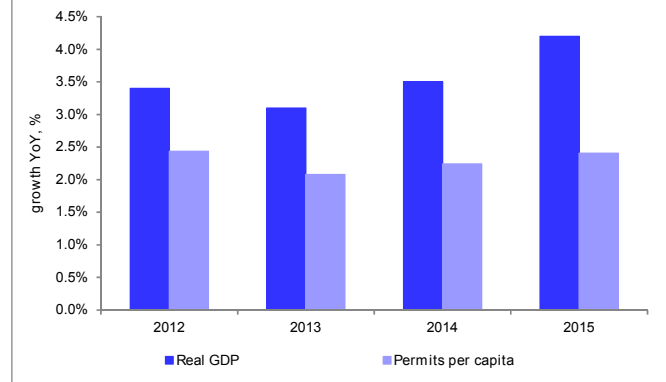


Figure 29: Sensitivity of permits/capita to half a standard deviation from the sample's median



Source: Deutsche Bank

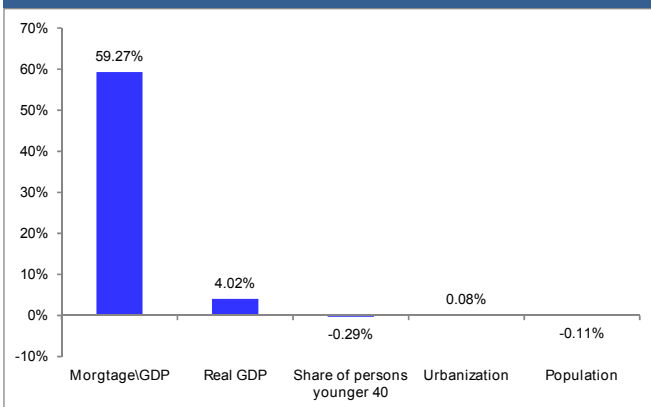
Figure 30: In our model, demand in Russia could expand by an average of only 2.2% in 2013E-2015E



Source: Deutsche Bank

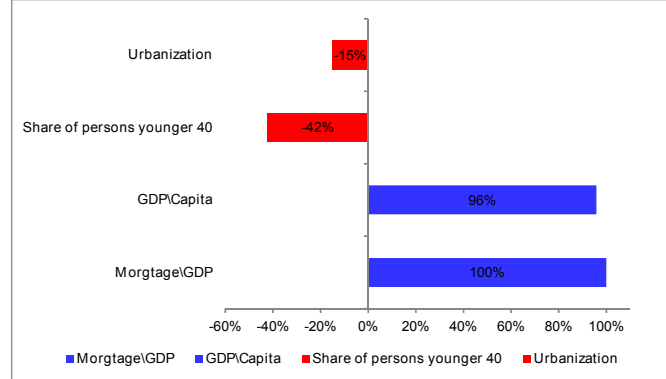
To summarize, we conclude that growing credit availability is the most important development for Russia's residential construction sector. We note, however, that a severe deterioration in the macro environment, such as economic slowdown, inflation growth or ruble weakening, represents a major downside risk to our conclusions, which may lead to a contraction in construction activity if materialized.

Figure 31: Model factors 2004-2011 CAGRs for Russia



Source: Rosstat, UN, EMF, Deutsche Bank

Figure 32: Relative factors' contribution to housing construction activity growth in Russia*

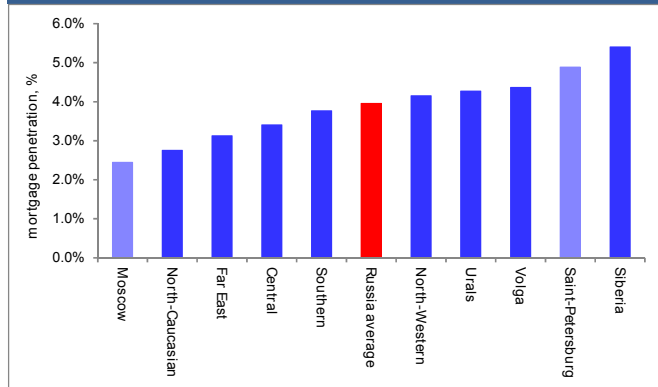


* Factors' contributions were calculated under the assumption of historical factor's growth rates
 Source: Deutsche Bank

We have also calculated the mortgage saturation rate for Russia, based on our regression analysis to gain insight into the market potential. Our estimates suggest that the inflection point is at a 34% level, i.e. growth in mortgage penetration rate up to the level of 34% leads to a positive impact on construction supply adjustment, while further growth in the mortgage debt burden has a negative effect on construction activity, possibly because the high debt level threatens macroeconomic stability (see Figure 66).

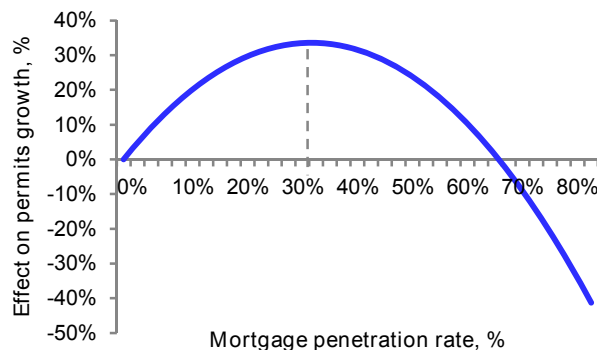


Figure 33: Mortgage penetration in Russia by region, 2012



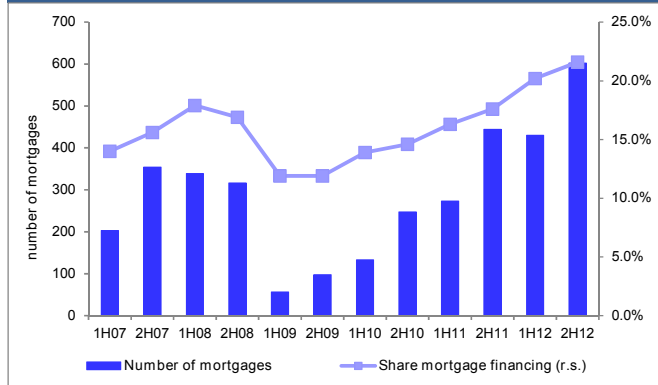
Source: AGENCY FOR HOUSING MORTGAGE LENDING

Figure 34: Too high level of mortgage penetration rate exerts negative pressure on supply adjustment



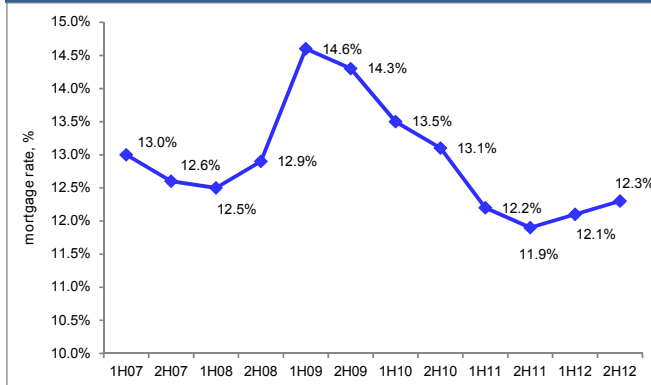
Source: Deutsche Bank

Figure 35: Almost 20% of all housing deals in Russia were financed with mortgages (2012)



Source: AGENCY FOR HOUSING MORTGAGE LENDING

Figure 36: Mortgage rate dynamics, Russia



Source: AGENCY FOR HOUSING MORTGAGE LENDING

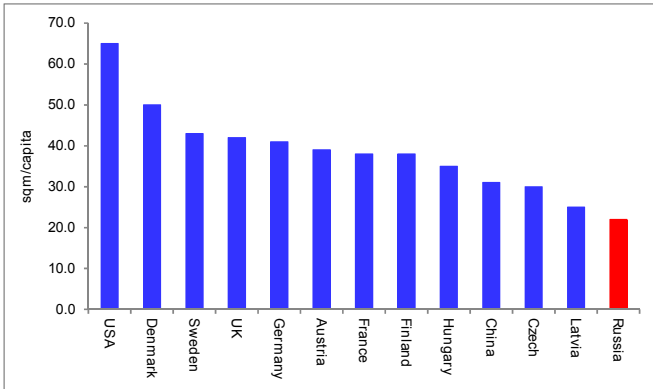
Structural undersupply: not a given

There seems to be a strong belief that the Russian residential real estate market is structurally undersupplied, while construction activity is deemed inadequate to meet the country's housing needs. Most would argue that this is self-evident, given intense media coverage of the country's dilapidated housing (following more than a decade of depressed construction activity after the USSR break-up), mortgage and property affordability issues. Some datapoints indeed suggest that the country ranks rather low vs. peers on some housing metrics, supporting the consensus belief. We have invested some time in analyzing the nature of those structural issues, given their importance for the market's long-term growth potential.

Residential stock per capita is a metric that most analysts would normally point to, highlighting the gap between Russia and its emerging/developed peers. The metric is hard to ignore, and it does look low; however, we note that it has failed to narrow during the past 20 years, although in absolute terms the metric has demonstrated a positive trend. We find that the metric on its own does not provide insight on how undersupplied the market is, as it does not account for the sector's local characteristics, as well as the investment component of the market.

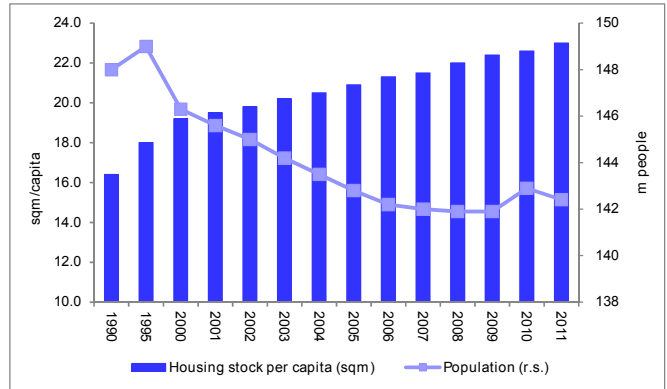


Figure 37: Residential stock/capita (2011)



Source: Rosstat

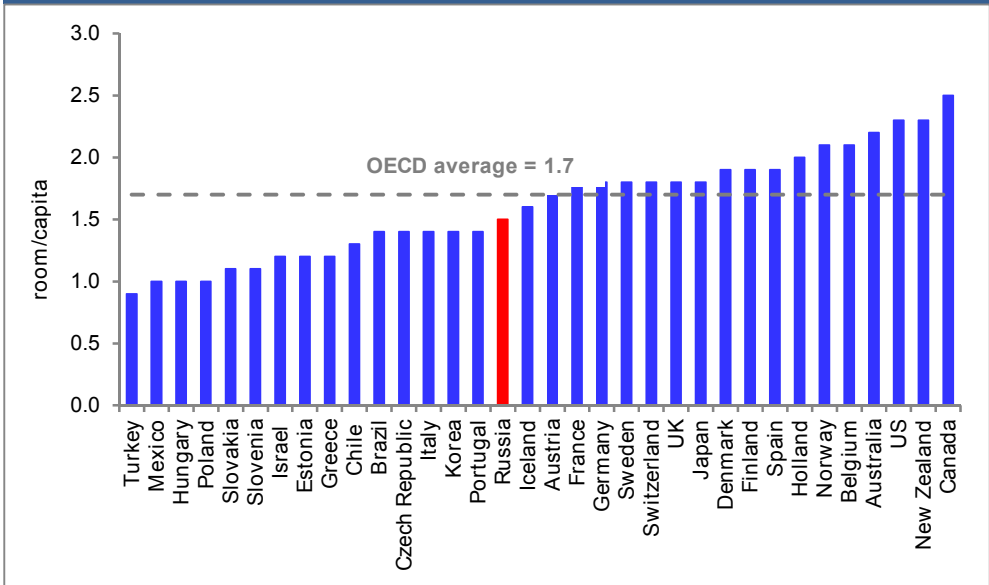
Figure 38: Residential stock/capita (1990-2011), Russia



Source: Rosstat

We look at other housing metrics, which, in our view, are more representative and offer better insight into the intensity of construction activity (and scope for its further expansion). We use OECD's Better Life Index calculation, which ranks countries in terms of rooms/person, rather than sqm/capita. According to the institution's estimates, the average Russian citizen shares 1.5 rooms (the number of rooms in a dwelling, divided by the number of persons living there), which is below the OECD average of 1.7 rooms, but higher than in such countries as Italy or Portugal. The main problem here is the reliability of that metric, as it is unclear how the OECD arrives at the figure 1.5 rooms per capita, given that our own calculations (based on Rosstat data) suggest that this number is lower.

Figure 39: Rooms per capita, Russia vs. OECD countries

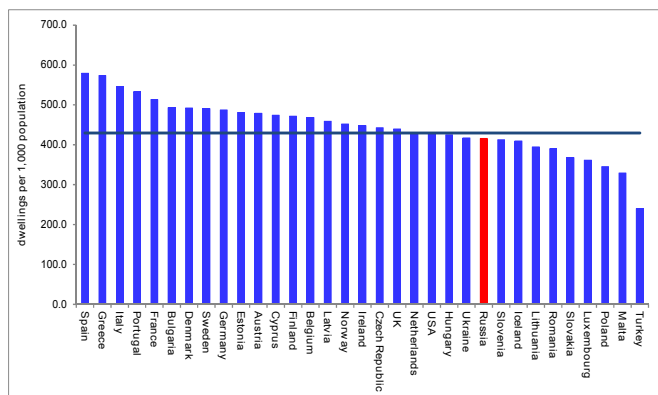


Source: OECD, Deutsche Bank

Dwellings per 1,000 of population do a better job of capturing the regional specifics of the housing market. We found that Russia screens quite well on this metric, as local households seem to own a similar number of dwellings compared with their emerging/developed counterparts.

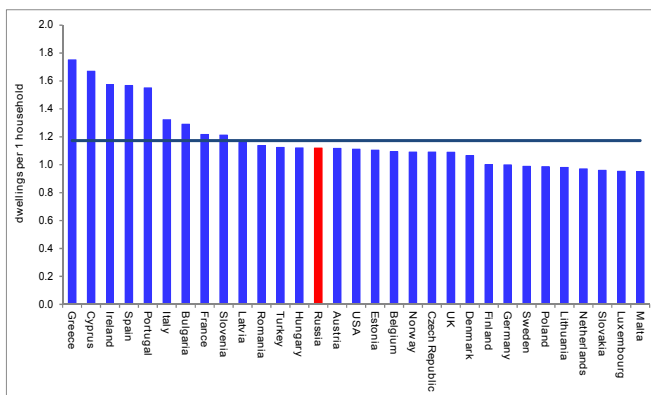


Figure 40: Dwellings per 1,000 population



Source: Eurostat, Rosstat, Deutsche Bank

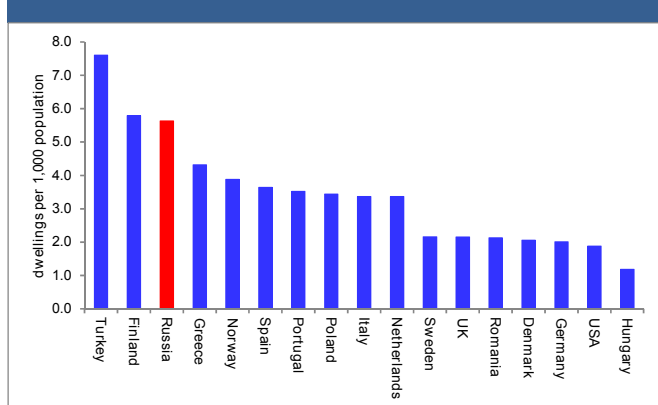
Figure 41: Dwellings per household, 2011



Source: Eurostat, Deutsche Bank

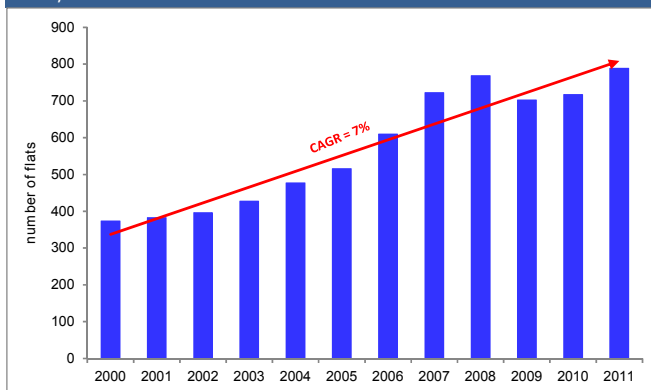
Another disputable market view relates to the level of construction activity in Russia, which has been deemed inadequate relative to housing needs and the country's scale. We have found that housing completions per 1,000 population (proxy to construction activity) in Russia are currently higher than in most peer regions, except for Turkey, which suggests that construction activity in Russia is already at a very healthy level.

Figure 42: Housing completion per 1,000 people (2011)



Source: Eurostat, Deutsche Bank

Figure 43: Housing completions dynamics, Russia ('000 flats)



Source: Rosstat, Deutsche Bank

The period of intensive construction activity translated into improving housing conditions. According to the OECD, 62% of people in Russia say they are satisfied with their current housing situation, which is lower than the OECD average of 87%; however, we believe that the current levels are likely to be the highest in the last decade, so the trend is positive, according to our estimates.

So why is there such a discrepancy between different metrics? We attribute it to:

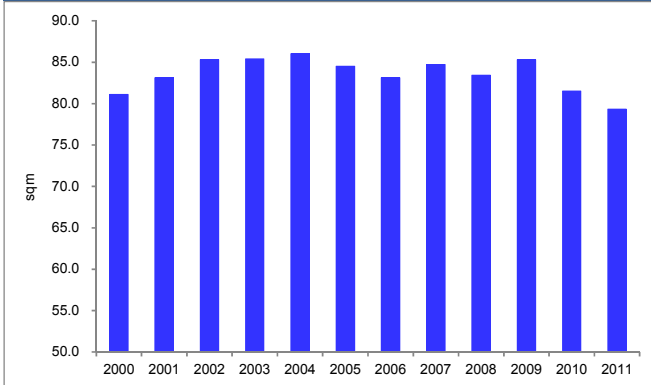
- The legacy of the Russian housing market (Soviet Union times) and, more importantly,
- The affordability of housing, which remains relatively low.

Russian households are indeed constrained in terms of living space (therefore, low sqm/capita), which is a legacy of the Soviet housing market. Recall that following the devastating war (1941-1945), the provision of housing to the population was among the



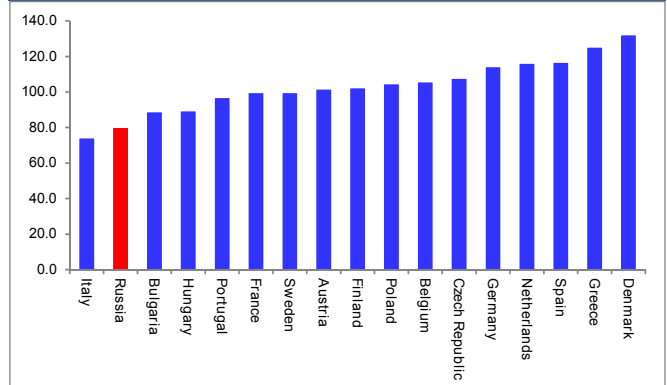
key challenges for the central government. Consequently, state-sponsored investment culminated in the fast development of affordable housing, with priorities skewed towards the provision of living space over the quality of living. A transition to the market economy and growth in disposable income should have seen housing conditions improving; however, recent statistics suggest that the average area of new dwellings has in fact declined marginally.

Figure 44: Average area of new-built dwellings, Russia



Source: Rosstat, Deutsche Bank

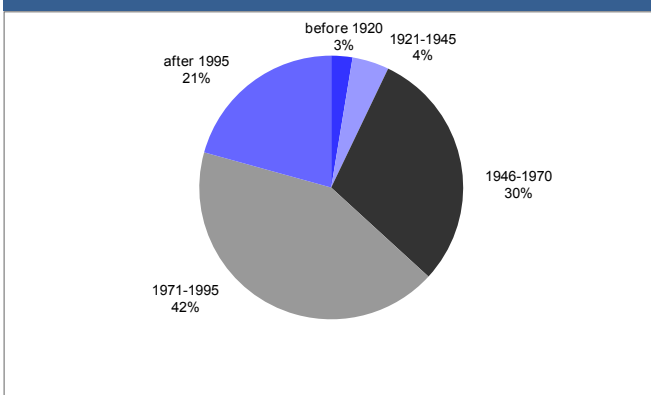
Figure 45: Average area of new-built dwellings, Russia vs. peers (2012)



Source: Deutsche Bank

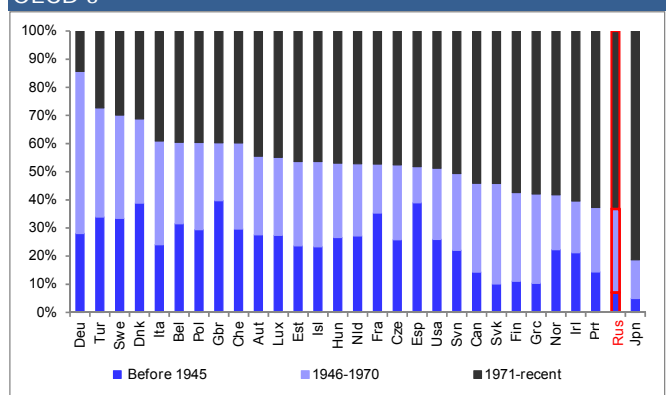
Housing stock in Russia looks younger than in OECD countries. According to Rosstat, approximately 63% of Russia's residential property was built after 1971, which compares with an average of 47% in OECD. In fact, the only OECD member that boasts a younger housing stock than Russia is Japan. We realize that Figure 78 does not demonstrate the state of the residential property, which would account for maintenance; however, recent government initiatives to allocate funds for urgent repairs imply that the existing housing stock's life cycle should be extendable.

Figure 46: Housing stock age structure (2011)



Source: Rosstat, Deutsche Bank

Figure 47: Russia's housing stock looks younger than OECD's



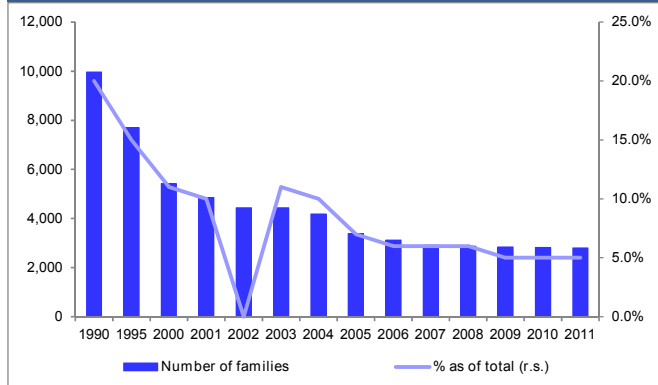
Source: OECD, Rosstat, Deutsche Bank

Dilapidated housing issue has been taken under control, according to official data. Rosstat suggests that the deprivation rate has been steady at approximately 3.1% since the beginning of 2000, which means that all new construction has compensated for liquidated housing. We understand that the accuracy of data represents the biggest issue in terms of comparing Russia with its peers on this metric; however, intuitively,



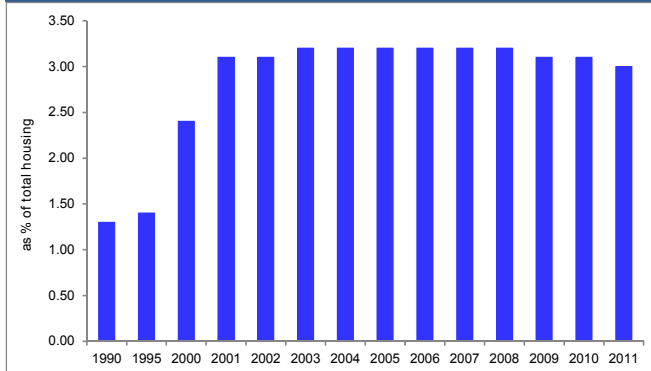
the problem seems to be under control in the largest towns, which are most important from the point of view of housing demand.

Figure 48: Number of families requiring new dwellings, Russia



Source: Rosstat

Figure 49: Deprivation rate dynamics, Russia



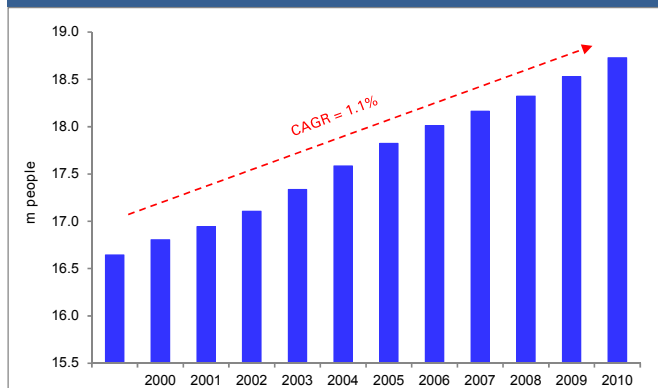
Source: Rosstat, Eurostat

Moscow Metropolitan Area (MMA) and Saint Petersburg Metropolitan Area (SPMA): a special case

MMA and SPMA have always been a special case for the Russian real estate market.

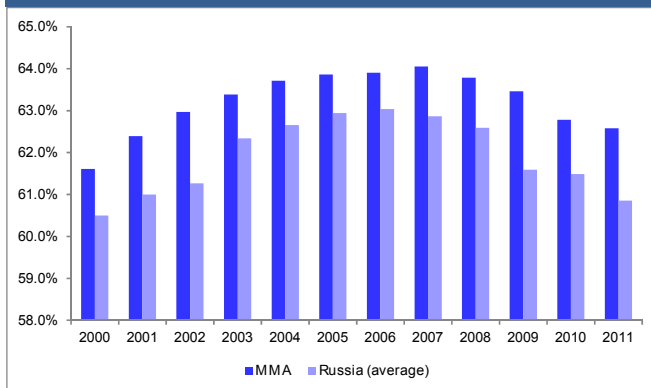
The areas combined are home to c.20% of the country's population, which makes them, to a certain degree, a state of their own. This is manifested not only in their diverging economic trends, but, more importantly, in their different underlying demographic patterns. In this context, we note that the continued deterioration of the demographic situation in Russia had little impact on the MMA and SPMA, as both territories recorded an expanding population at a 1.1%/0.3% CAGR in 2000-2011, respectively (vs. Russia shrinking at a 0.24% CAGR in 2000-2011). We also note that the age structure of the MMA/SPMA population looks quite favorable from a housing demand point of view. A positive read on the demographic situation (especially in the MMA), coupled with healthy underlying economic activity and lower-than-average mortgage penetration, suggests that both regions enjoy a rare combination of factors (in Russia's context), which bodes well for the robust development of the residential real estate sector.

Figure 50: MMA population expanded at a 1.1% CAGR in 2000-2011



Source: Rosstat

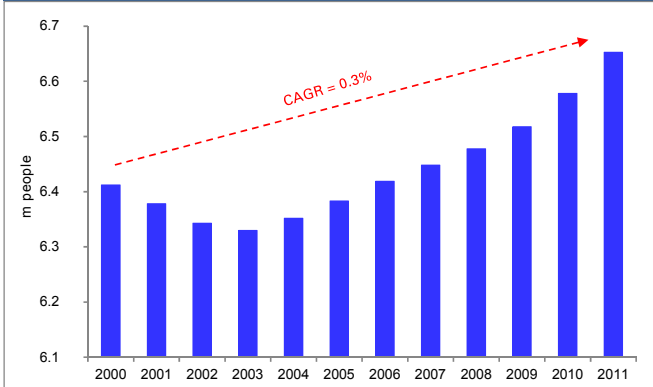
Figure 51: Labor pool, MMA vs. Russia



Source: Rosstat

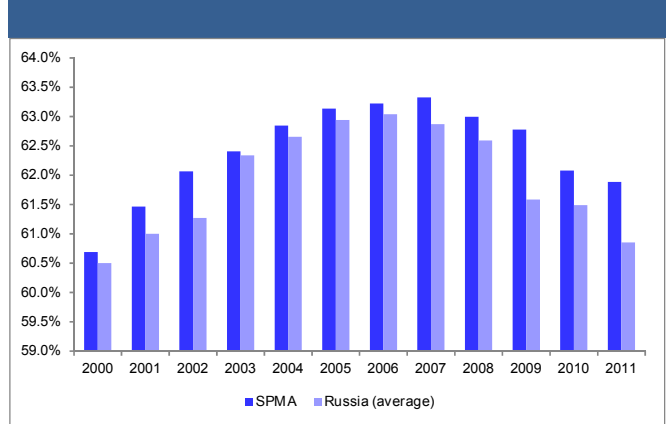


Figure 52: SPMA population expanded at a 1.1% CAGR in 2000-2011



Source: Rosstat

Figure 53: Labor pool, SPMA vs. Russia



Source: Rosstat

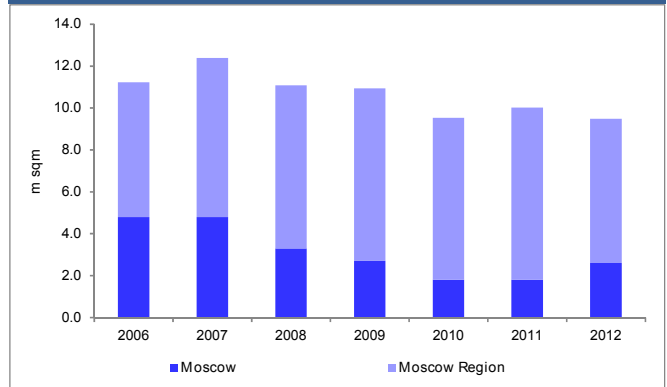
Supply limitations in 2012 in both areas saw residential completions declining by 5.7%/1.7% YoY; however, the number of transactions in the MMA/SPMA recorded new highs. Recall that the newly appointed regional authorities in Moscow, the Moscow region and Saint Petersburg initiated a detailed review of all investment contracts, revoking all previously granted development/construction rights, and freezing the approval process. Subsequent to the review, Moscow authorities levied an extra charge on developers (ranging from 10% to 60% of land value) to partially offset government costs associated with the investments into supporting infrastructure. The situation with approvals in Moscow returned to normal only recently; however, restrictions in the Moscow region and Saint Petersburg remain in place until the regional government completes the assessment of key issues related to social infrastructure and comes up with a plan to finance it. Note that only two auctions were held in Saint Petersburg since 2011, underscoring the extent of the infrastructure issues, in our view.

Figure 54: Number of deals in MMA residential space continued to advance



Source: Agency for Housing Mortgage Lending

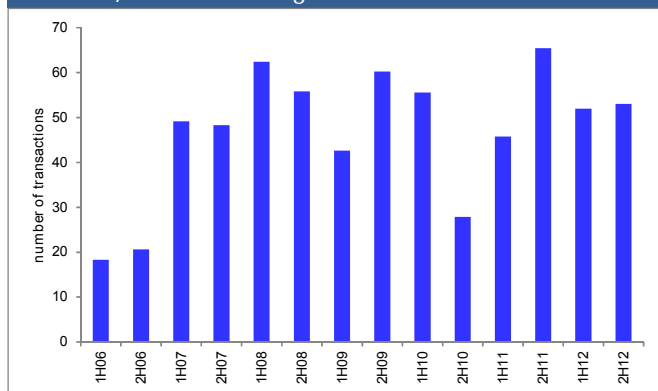
Figure 55: Residential completions in MMA contracted by 5.7% YoY



Source: Rosstat

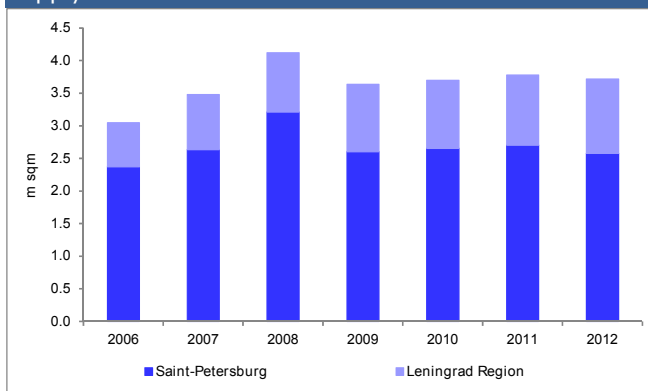


Figure 56: Number of transactions in Saint Petersburg has stabilized, but note the high base



Source: Agency for Housing Mortgage Lending

Figure 57: Completions in SPMA declined marginally, as supply limitations came into effect



Source: Rosstat

Development of New Moscow and re-development of industrial zones in Moscow should ease supply concerns in the medium term. Two major developments occurred in 2012, which will have long-term supply consequences for the Moscow housing market, in our view. First, the annexation of Moscow region territories in July 2012 saw the area of the enlarged capital increasing 2.4x, with the population growing by only 2%. The local government initiated the process of *master plan* development for the annexed territory, which will include extensive infrastructure upgrades and construction of new infrastructure. According to Sergey Sobyanin, Mayor of Moscow, the new territory could accommodate c.40m sqm of residential housing, which compares to 2.6m sqm of annual completions registered in Moscow in 2012 (9.5m sqm in MMA), and total housing stock in Moscow of 212m sqm (425m sqm in MMA). This is quite a lot of new supply, likely spread at least until 2025, which will also be relatively more affordable.

Re-development of industrial zones in Moscow could affect c. 8,000ha. The Moscow government estimated that the re-development capacity of all zones combined could stand at 30m sqm (both residential and non-residential).



Figure 58: Area of the enlarged Moscow increased by 2.4x

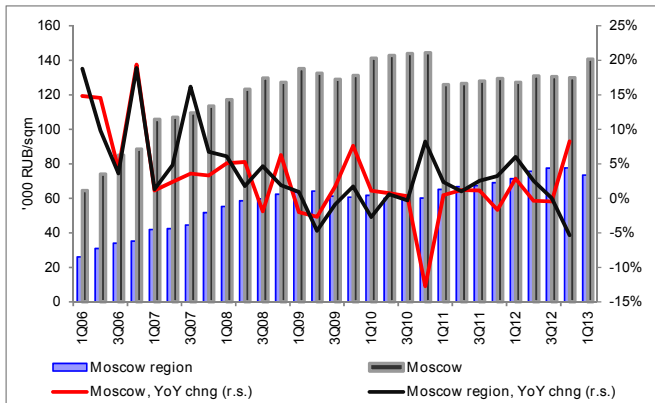


Source: Deutsche Bank

Residential prices in both regions have maintained positive momentum, aided by supply situation in the primary market. We expect supply issues to provide some support to prices going forward; however, our demand forecasts for the MMA, and more so for the SPMA, compel us to take a rather conservative view on residential price developments. That said, we expect housing prices to grow below the CPI level in both areas in 2013E-15E, with risks skewed to the downside.

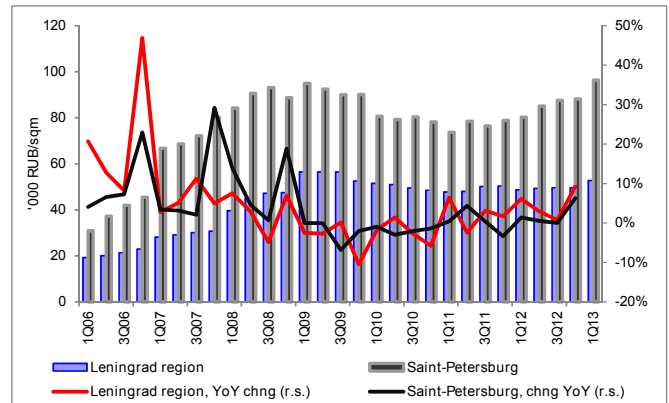


Figure 59: Housing prices, MMA



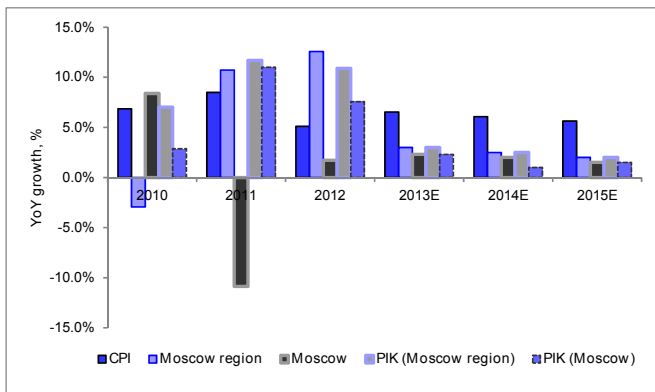
Source: Rosstat

Figure 60: Housing prices, SPMA



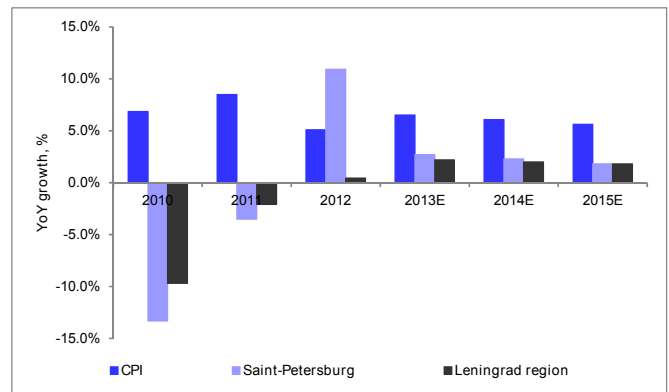
Source: Rosstat

Figure 61: Residential prices forecasts, MMA



Source: Rosstat, PIK, Deutsche Bank

Figure 62: Residential prices forecasts, SPMA

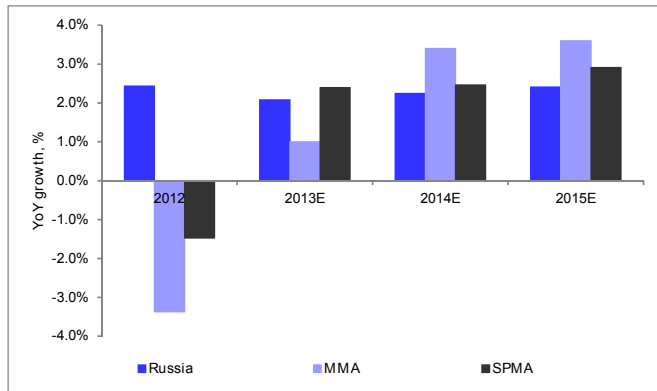


Source: Rosstat, PIK, Deutsche Bank

Our base case demand forecasts for MMA and SPMA are consistent with our forecasts for Russia, premised on fixed asset investment growth projections for the respective regions (developed by the Deutsche Bank macro team). We have also produced alternative forecasts (as we did previously for Russia), which reflect both demographic and economic factors. Our calculations suggest that the residential demand outlook for the MMA looks stronger relative to the SPMA, largely driven by the healthier fundamentals of the Moscow region, where the combination of supportive demographic and economic factors bode well for housing demand. Our base case demand forecasts are somewhat higher; however, we highlight that the growth pace under both scenarios is below projected GDP expansion, despite perceived leverage to domestic consumption growth.

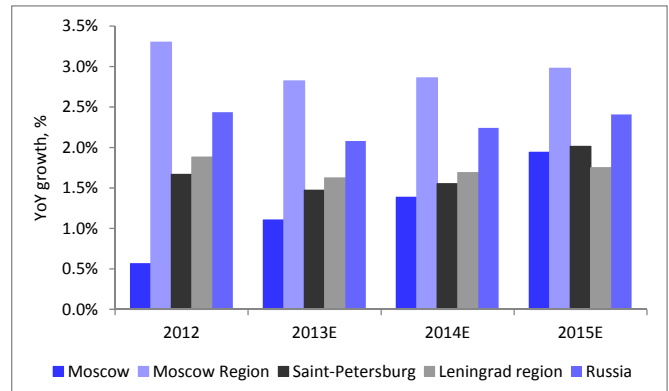


Figure 63: MMA/SPMA demand forecasts, base case



Source: Rosstat, Deutsche Bank

Figure 64: MMA/SPMA demand forecasts, alternative



Source: Rosstat, Deutsche Bank

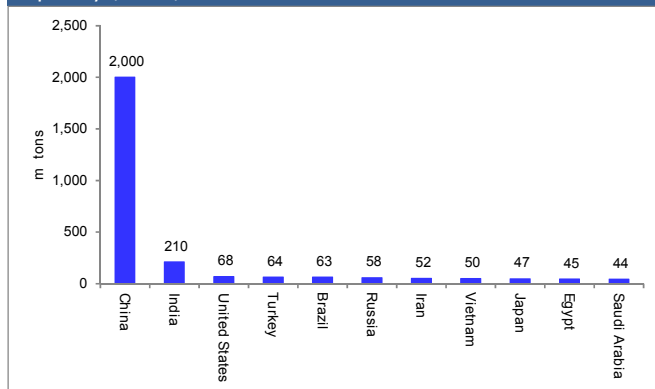


Cement industry

Overview

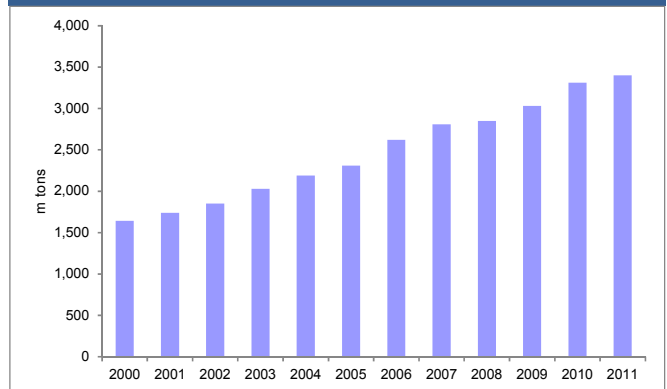
The Russian cement market is among the largest globally. With c. 65m tons of clinker capacity, Russia is among the top-five regions by capacity, producing 50m tons of cement per annum (lagging only the BRIC countries, Turkey and the US). China is the undisputable leader in the global cement sector, though, controlling approximately 2.0bn tons of capacity. Ranking by per capita consumption provides a slightly different picture; however, the top-ten regions feature the same countries.

Figure 65: Russia is among top-five regions globally by capacity (2011)



Source: US Geological Survey

Figure 66: World cement output grew at a 6.8% CAGR in 2000-2011

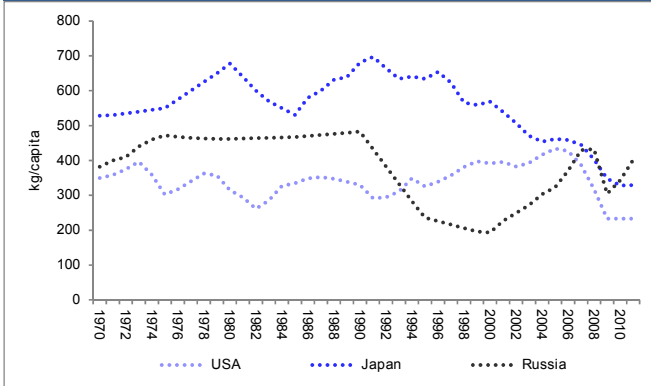


Source: US Geological Survey

Russian cement sector has been through ups and downs, boasting a number-one position globally in 1970s. For the next twenty years the country's cement consumption was on the rise, supported by the urbanization and industrialization of the Soviet Union. Consumption per capita in Russia was also close at that time to that of its developed peers, reaching a peak level of 483 kg/capita in 1990s. Domestic cement consumption hit bottom in the early 2000s and has strongly recovered since then, driven by the intensification of construction activity. We have plotted the historical dynamics of per capita consumption, and our findings suggest that industrially-developed economies reach a certain level of cement intensity (similar to steel consumption), after which consumption stagnates. Although Russia is still c. 20% off its peak from a historical prospective, the country's current cement consumption per capita is c. 400kg, which is above that of some of its developed peers, including the US and Japan.

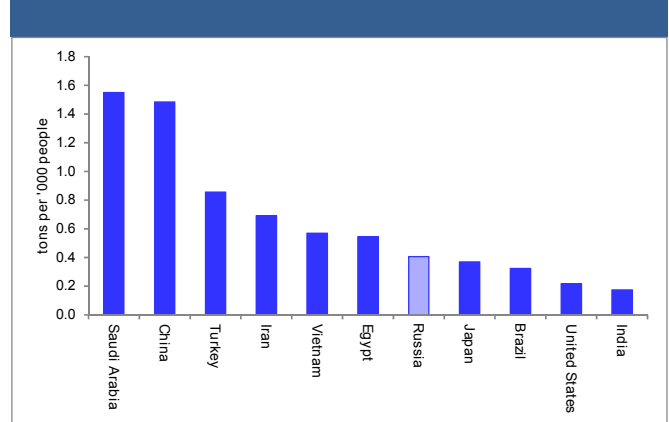


Figure 67: Consumption per capita dynamics (Russia vs. US and Japan)



Source: US Geological Survey, Deutsche Bank

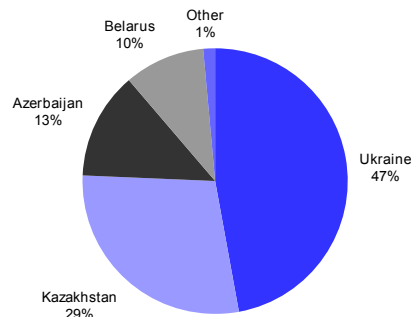
Figure 68: Consumption per capita by country (2012)



Source: US Geological Survey, Deutsche Bank

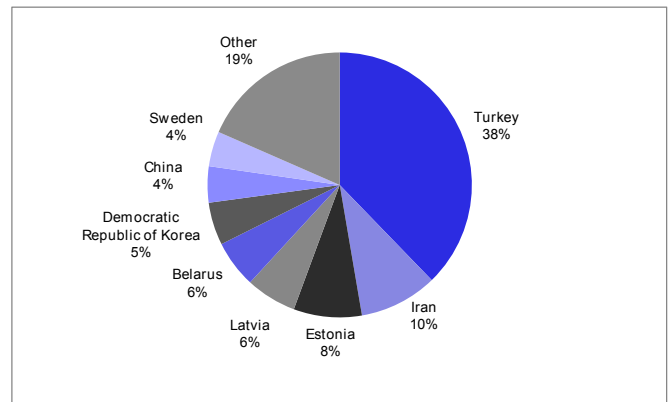
The market is mostly local, as cement transportation to distances of more than 300km is deemed economically unviable. Consequently, new capacities are built not only in close proximity to the raw material base, but also next to key customers. High transportation costs, especially in the context of Russia, limit imports in a natural way; however, there are certain regional characteristics (e.g. regions located close to export/import gates) and, more importantly, the price factor, which could distort the market balance. Recall that in 2008, cement imports reached c. 8m tons, as prices hit the USD200/t mark. In 2012, import volumes reached 4.8m tons (mostly in the Krasnodar region from Turkey and Iran), implying 2.0m tons of net imports, which represents c 5% of Russia's apparent cement consumption.

Figure 69: Russia's cement exports (2012)



Source: Federal Customs Service, Deutsche Bank

Figure 70: Russia's cement imports (2012)

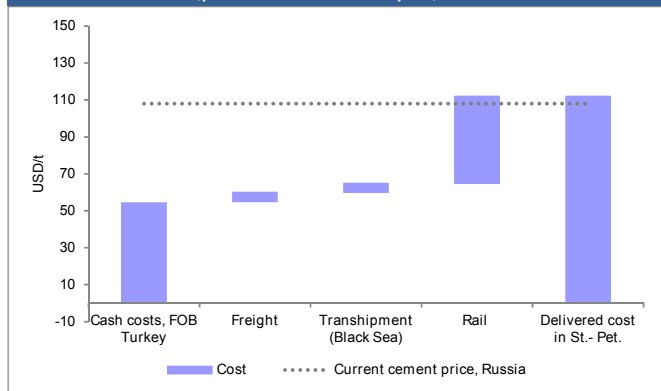


Source: Federal Customs Service, Deutsche Bank

Current cement price levels in Russia seem just low enough to curb excessive imports. Since cement flows between different regions in Russia are not material, while domestic prices differ substantially from the country's average price only in the Far East, imports represent the main threat to producers' pricing power locally. In this context, we have calculated the landed cost in Saint Petersburg for a Turkish cement producer via the North-Western and Black Sea basins. At an average FOB cost of c. USD55/t, we estimate that the landed cost would be between USD85 and USD110/t, CFR (depending on the basin used), vs. the current cement price of USD118/t. The estimates above suggest that current cement prices are just low enough to curb excessive imports.

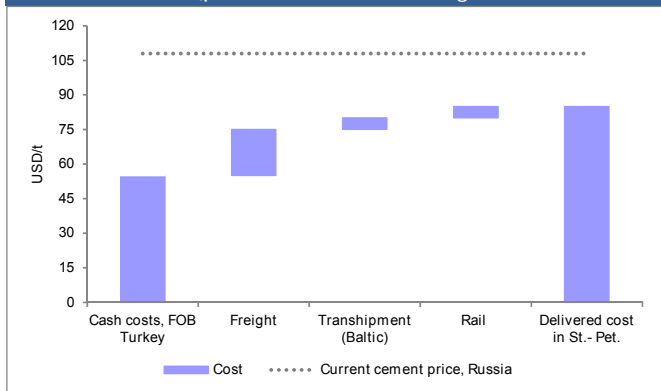


Figure 71: Imports from Turkey into Saint Petersburg via Black Sea basin (port of Novorossiysk)



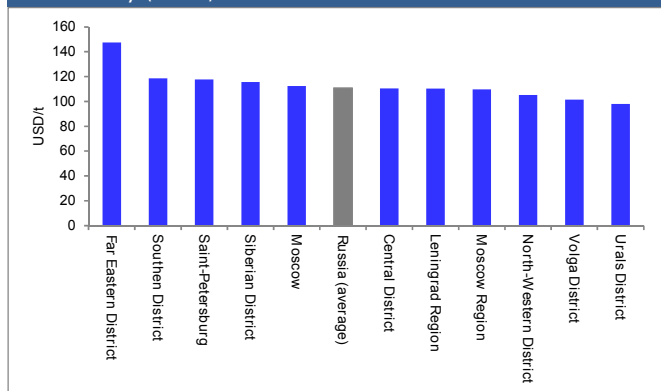
Source: Deutsche Bank

Figure 72: Imports from Turkey into Saint Petersburg via Baltic Sea Basin (port of Saint Petersburg)



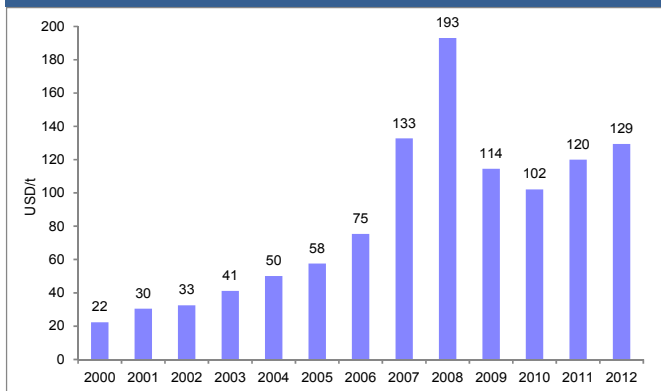
Source: Deutsche Bank

Figure 73: Cement prices do not vary materially across the country (2012)



Source: Rosstat

Figure 74: Cement price dynamics in Russia



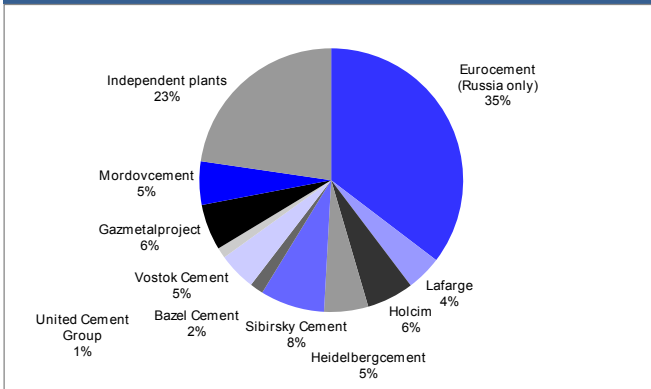
Source: Rosstat

Supply: 6.4% CAGR in 2012-2016E

Cement supply in Russia breaks down into approximately 50 operating plants in, with c. 75% of the capacity controlled by ten major players, and Eurocement being the market leader with around 34% of market share. Although the sector is dominated by local players, international producers, such as Lafarge, Holcim and Heidelbergcement, are also active, entering the domestic market via acquisitions and greenfield projects.

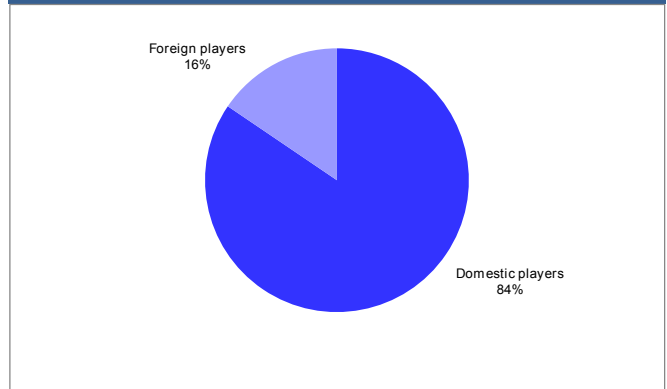


Figure 75: Russian cement market by key players (2012)



Source: RUSEM, Deutsche Bank

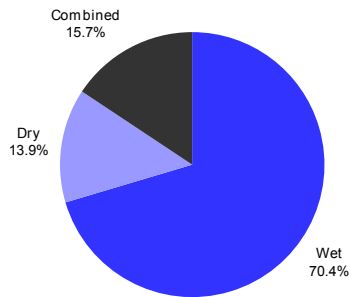
Figure 76: Foreign cement producers are also active in Russia



Source: RUSEM, Deutsche Bank

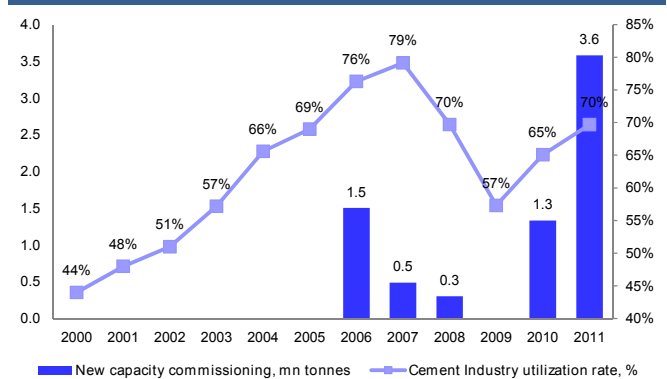
Despite the scale of the national production, Russia differs from its main peer regions in many ways, including the technological state of the plants, as most were built in the Soviet era, using outdated wet production technology, which is cost-inefficient and energy-consuming. In fact, not a single plant or new production line was commissioned in Russia until 2006. The lack of investment was primarily driven by declining construction volumes following the break-up of the Soviet Union, which freed up sizeable capacity. On our estimates, the industry was operating at below the 70% utilization rate until 2006. The cost of cement plants is usually above €150m per million tonnes of annual capacity, with correspondingly high costs for modifications, which ranks the cement industry among the most capital-intensive industries.

Figure 77: Cement production by technology, 2012



Source: Rosstat

Figure 78: Cement capacity commissioning vs. utilization rate



Source: Rosstat

We expect the commissioning of eight new plants by the end of 2016, leading to Russia's cement production capacity growth to total a 6.3% CAGR for 2012-2016E. All new plants are expected to operate using modern dry methods of production and therefore to be more cost-efficient and environmentally-friendly. Among the largest plants, we note that Bazel Cement and Lafarge are expected to commission their new plants in the Ryazan and Kaluga regions, respectively, by the end of this year, while Eurocement should also complete the reconstruction of its Podgorensky Cementnik plant in the Voronezh region by end-2012.



Figure 79: Outlook on major Russian cement producers' capacities commissioning, 2011-2016E

	2011	2012	2013E	2014E	2015E	2016E
Eurocement (Russia only)	30.1	32.1	32.1	32.1	34.8	34.8
Lafarge	3.7	5.7	5.7	5.7	5.7	5.7
Holcim	4.9	4.9	4.9	4.9	4.9	4.9
Heidelbergcement	4.6	4.6	4.6	5.2	5.2	5.2
Sibirsky Cement	6.7	6.7	6.7	6.7	9.3	11.9
Bazel Cement	1.4	3.2	3.2	3.9	3.9	5.9
Vostok Cement	3.9	3.9	3.9	3.9	3.9	3.9
United Cement Group	1.1	1.1	1.1	1.1	1.1	1.1
Gazmetalproject	4.8	7.1	9.6	9.6	9.6	9.6
Mordovcement	4.5	4.5	7.0	7.0	7.0	7.0
Independent plants	19.3	19.3	21.9	27.4	30.4	30.4
Total capacity Russia	80.5	88.6	93.7	100.5	108.9	113.5

Source: Company data, Deutsche Bank

Demand: 5.1% CAGR in 2012-2016E

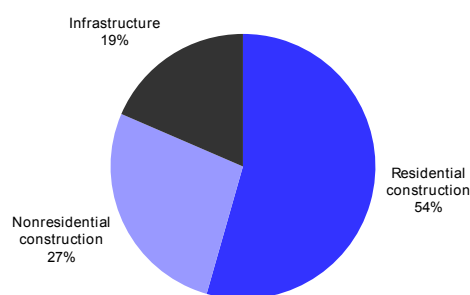
Cement demand is primarily driven by construction activity. Practically all types of construction, including residential, commercial and infrastructure, require cement (per se or as part of other construction materials). As a result, cement consumption growth highly correlates with construction sector growth (Figure 112). On our estimates, around 54% of Russia's cement demand in 2012 came from residential construction, while 27% and 19% were driven by nonresidential construction and infrastructure, respectively (Figure 113).

Figure 80: Cement consumption growth vs. total construction growth, 2004-2012



Source: Rosstat, Deutsche Bank estimates

Figure 81: Cement consumption breakdown by segment (2012)



Source: Eurocement, Deutsche Bank estimates

We use a top-down approach to estimate cement demand in 2013E-2016E. Note that cement intensity differs in different types of construction. Therefore, we have performed separate analyses of residential, non-residential, industrial, and infrastructure construction. According to approved construction standards, cement usage is the following:

- residential construction = 0.5 t/sqm;
- non-residential construction = 0.7 t/sqm;



- industrial construction = 1.2 t/sqm;
- infrastructure construction = 700 tons per 1 km (on average).

We also assume that two years are required (on average) to complete the construction of a building. Basing on our regression analysis, we estimate that the first year of construction requires on average 50% more cement than the second. Thus, when calculating the cement demand for the current year, we assign a 40% weight for current year construction completions and 60% for the completion of the following year. This estimate seems reasonable, as foundation works are generally more cement-intensive than the latter stages of construction. The following formula elaborates on cement demand from residential construction in year t:

$$\text{cement demand}_t = 0.5 * (0.4 \text{ residential completions}_t + 0.6 \text{ residential completions}_{t+1})$$

where 0.5 is cement use per sq m in residential construction; and 0.4 is share of total cement used in year t (required to complete the construction started in the previous year).

Based on our construction work forecasts, we estimate the domestic cement consumption will witness a 5.1% 2012-2016E CAGR. We also expect the share of residential construction in total cement consumption to fall from 56% in 2011 to 50% in 2016E given our expectation of a gradual reduction of housing construction's share in total completions (see the Russian construction market section of this report for details).

Figure 82: Russian cement market supply/demand model, 2011-2016E

	2011	2012	2013E	2014E	2015E	2016E
Cement consumption, m tons	57.1	63.5	64.3	68.0	72.6	77.6
% change, YoY	17.0%	11.2%	1.2%	5.9%	6.7%	6.9%
Share of residential construction in cement consumption, %	56.3%	54.4%	53.5%	52.4%	51.1%	49.8%
Nonresidential construction share in total cement consumption, %	27.1%	27.1%	28.3%	29.6%	30.8%	32.1%
Net import (export), m ton	1.2	2.0	(1.3)	(2.3)	(3.6)	(5.1)
Cement production, m tons	55.9	61.5	65.6	70.4	76.2	82.6
% change, YoY	11.0%	10.0%	6.7%	7.3%	8.3%	8.4%
Total capacity, m tons	80.5	88.6	93.7	100.5	108.9	114.8
% change, YoY	4.1%	10.1%	5.8%	7.3%	8.3%	5.4%
Capacity utilization, %	69.4%	69.4%	70.0%	70.0%	70.0%	72.0%

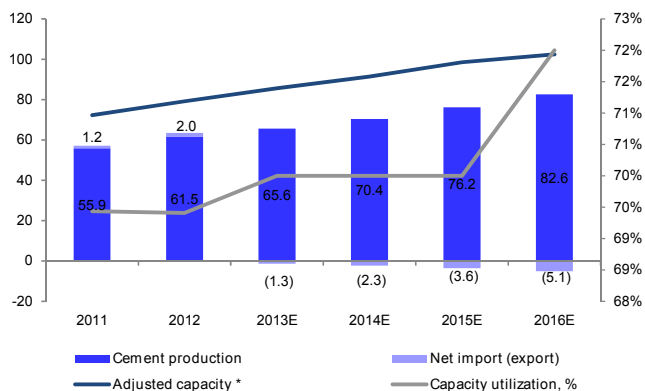
Source: Rosstat, Deutsche Bank estimates

Based on the above, we expect Russian cement to be roughly balanced in the next couple of years, as capacity expansion plans should only marginally exceed demand forecasts.

We conservatively assume cement prices to correct in 2013E, given the supply response expected and positive import economics. On our estimates, the RUB-denominated cement price will increase at a 3.93% CAGR in 2011-2016E, or below our macro team's PPI growth forecast of a 5.7% CAGR for the same period.



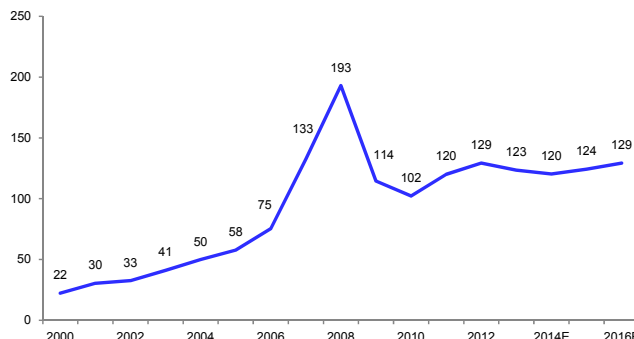
Figure 83: Russian cement market outlook, 2011-2016



Source: Rosstat, Deutsche Bank estimates

* Adjusted capacity accounts for regular maintenance needs

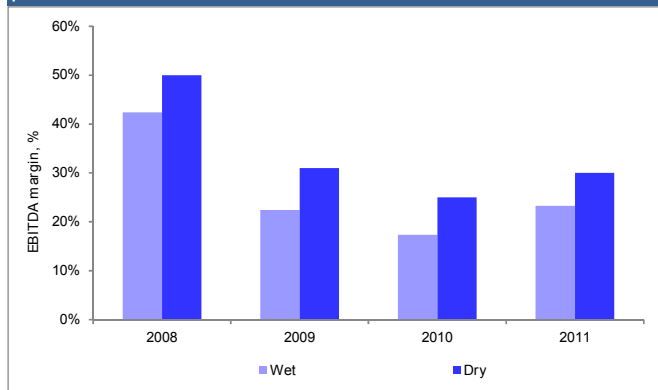
Figure 84: Average cement prices in Russia, USD/ton



Source: Rosstat, Deutsche Bank estimates

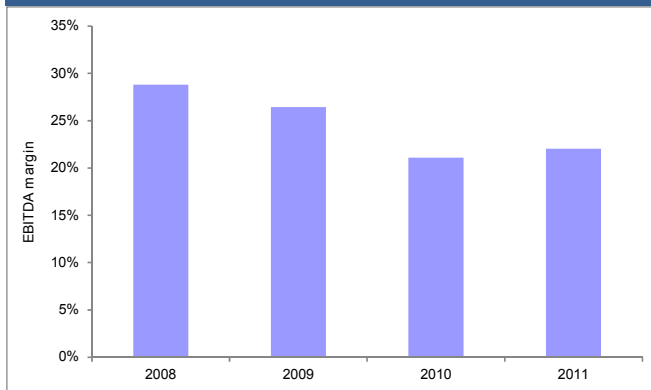
Our expectations of rising cement prices in the longer term are supported by sub-optimal returns generated by Russian cement producers on new projects, which does not justify additional sizeable capacity expansion. Despite the fact that domestic cement producers are generating decent margins at current cement prices, we estimate that new greenfield projects/modernization do not produce adequate returns, due to their capital intensity. For instance, LSR's most modern Russian cement plant (Slantsy) required c. USD510m of capex (excl. VAT) and generates positive NPV of only USD30m (assuming full capacity utilization and current cement prices), and negative NPV of USD185m (assuming full capacity utilization and Deutsche Bank estimated cement prices). In this context, the cost of financing new projects/modernization is key to the supply outlook.

Figure 85: Russian producers, wet/dry method of production



Source: Eurocement, Deutsche Bank

Figure 86: Turkish producers, dry method of production



Source: Eurocement, Deutsche Bank



Aggregates

Overview

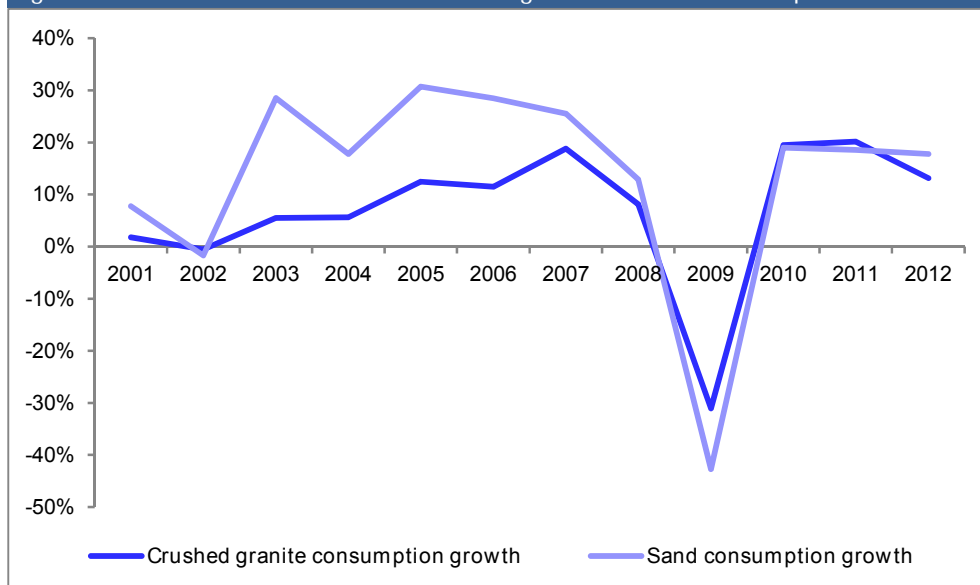
Aggregates represent a broad category of mineral materials widely used in construction, including sand, gravel, crushed granite and macadam. In most cases it is produced in open-cast mines. Aggregates are used extensively in road construction, building materials production (e.g. as a component of concrete and reinforced concrete) and in construction (as part of mortar or as part of the coating for the area restoration around the construction place).

The aggregates business in Russia is highly profitable: for example, the average EBITDA margin of LSR's aggregates business for the last six years was 31%. The market is highly concentrated, though, which is explained by difficulties with obtaining mining licenses, the limited number of idle deposits, relatively high costs of exploration work and risks associated with them. All this, along with the relatively high capital intensity and rather long payback period, creates high entry barriers for new entrants.

Transportation of aggregates is not economically viable to significant distances due to the high share of transportation costs in the total price of the product. That said, we calculate that it is not economical to ship sand to a distance of over 60 km by trucks, as transportation costs could literally double the sand price. Therefore, inter-regional aggregate trade is low, while aggregates are consumed almost entirely in the regions of production, with occasional shipments to the neighboring regions.

Sand and crushed stone are among the most popular construction materials, and their consumption is driven by residential and road construction. We consider below the markets for each of these products in greater detail.

Figure 87: The demand for sand and crushed granite follows a similar pattern



Source: Rosstat, Deutsche Bank



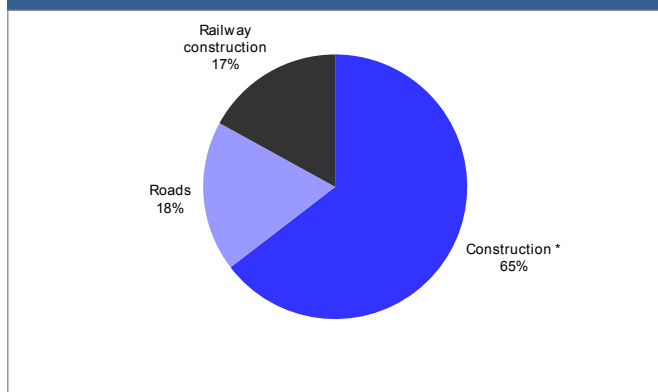
Crushed stone

Crushed stone is used in all types of construction, either as a separate ingredient, or as a component of other building materials. On our estimates, c. 66% of crushed stone in the North-Western region in 2012 was consumed in residential and non-residential construction, while around 40% of it was consumed indirectly as part of construction materials (mostly poured and reinforced). Crushed stone is also important for road construction, representing up to 60% of raw materials' costs.

Commercial production of crushed granite (or crushed stone of high quality) is located only in a few regions, with the largest being the North-Western and Ural regions. Exports from those locations cover the deficit of most other regions of Russia, including the MMA and other central regions.

A vast number of Russian North-Western crushed granite deposits are located in the Leningrad region and Republic of Karelia. The market for granite in the North-West of Russia is highly concentrated, with the top-three producers controlling more than two-thirds of the market. The aggregates mining division of LSR, Granit Kuzhechnoe, boasts around a 35% market share, being the second-largest Russian crushed granite producer with estimated reserves of over 500m m³. The second-largest market player is Lenstroyaterialy, with an estimated market share of 25%.

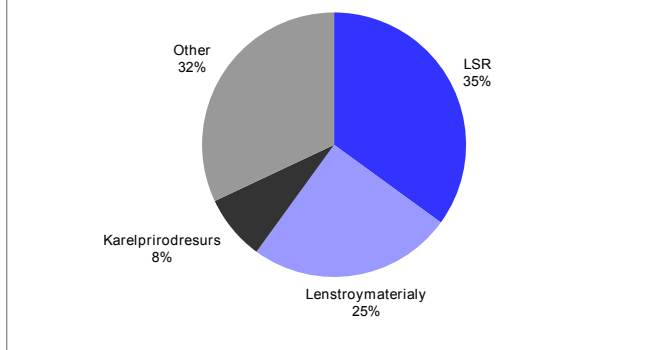
Figure 88: Major users of crushed granite in NW, 2012



Source: Reshenie, Deutsche Bank

* including gravel used for production of building materials, such as reinforced concrete and ready-mix concrete

Figure 89: Top players by market share in SP and Leningrad, 2012



Source: Kommersant, Reshenie, Company Data, Deutsche Bank

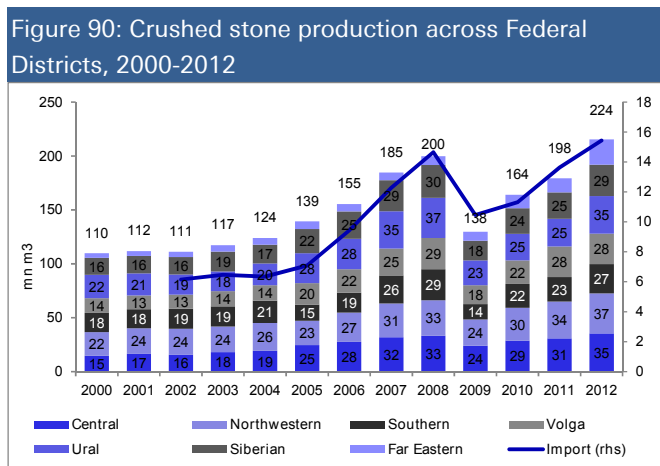
North-Western and Central regions are by far the largest crushed stone consumers, accounting for 36% of total Russian consumption in 2012. This is explained to a larger extent by strong infrastructure and residential construction momentum in the MMA/SPMA.

Imports into Russia are dominated by Ukraine, Belarus and Abkhazia. Ukrainian and Belarusian producers ship crushed stone predominantly to the Central region and, in particular, to Moscow, while Abkhazia supplies the Southern region. We estimate that imports accounted for 6.4% of Russia's total crushed stone consumption in 2012.

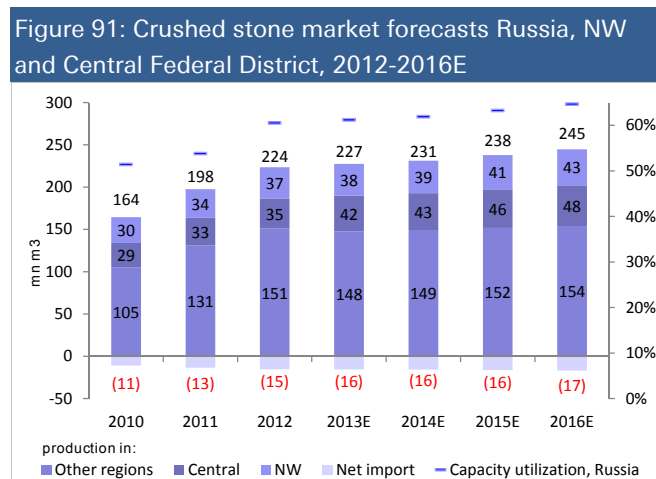
Our forecasts for crushed stone production growth are based on in-house estimates for construction and roads commissioning. We expect crushed stone production in Russia to see a 2.3% CAGR in 2012-2016E, driven by a projected construction CAGR of 2.1% in 2012-2016E, and an expected road commissioning increase of a 3.4% CAGR in 2012-



2016E. We estimate that consumption growth in the North-Western and Central regions is expected to outpace Russia's average growth due to a sizable pipeline of construction and infrastructure development projects in Saint Petersburg and Moscow, which are to be implemented in the next few years. That said, we expect crushed stone consumption in the North-Western and Central regions to achieve a 3.8% and 7.8% CAGR for 2011-16E, respectively.



Source: Rosstat, Deutsche Bank Estimates



Source: Rosstat, Deutsche Bank Estimates

Sand

Sand is commonly used as an aggregate for construction and building materials production. According to our estimates, around 33% of North-Western sand was used in 2012 for road construction, up to 65% was used for buildings construction and the rest (c.12%) was used for other purposes, such as utilities, agriculture and private consumption.

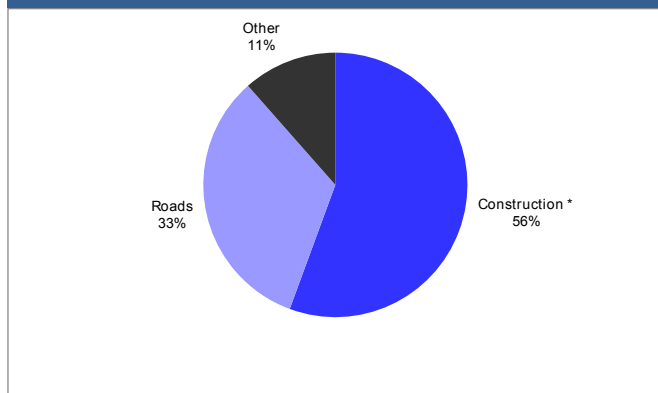
Sand can be largely divided into marine-dredged and quarry. Marine-dredged sand contains fewer clay alloys than quarry sand and its grains are generally of a smaller size. Therefore, marine-dredged sand is often used for buildings construction and glass production, while quarry sand is more widely used for base construction of roads and concrete production.

The import market of sand is almost inexistent due to sand's relative cheapness and its wide availability all over the country, while sand transportation is uneconomical for distances of over 300 km (even by railways and river transport). The river transport is by far the cheapest way to ship sand, although it requires concurrent use of automotive transport in many cases as well.

Regional markets of sand are highly concentrated, as obtaining a license is a difficult and time-consuming process. For example, the Saint Petersburg and Leningrad market is controlled by three major producers with a total market share exceeding 90%, with over 68% being controlled by LSR. Note that the widespread availability of sand and issues with licenses lead to illegal mining of sand. The share of illegal sand extraction is estimated to be around 5-10%, although it is expected to gradually decline thanks to the joint efforts of the major market players.



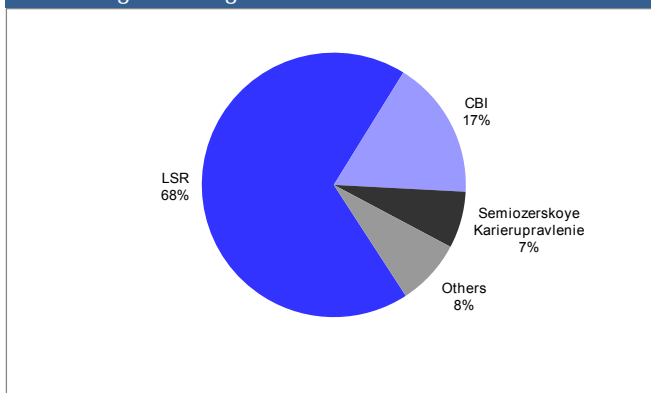
Figure 92: Major sand consumers in NW, 2012



Source: Deutsche Bank Estimates

* including sand used for production of building materials, such as reinforced concrete and ready-mix concrete

Figure 93: Three companies control over 90% of Saint Petersburg & Leningrad's sand market

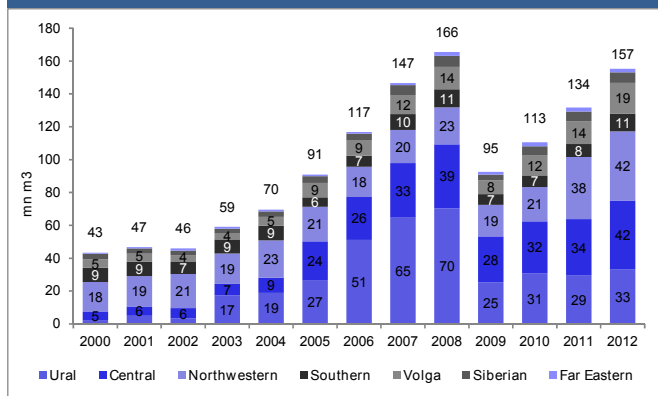


Source: Reshenie, Deutsche Bank Estimates

Sand consumption patterns are similar to those demonstrated by the market for crushed stone. The North-Western and Central regions are the major consumers of sand, accounting for almost half of total Russian consumption. Land reclamation works in Saint Petersburg were among the most important drivers of demand for sand, consuming around 3m³ of sand annually.

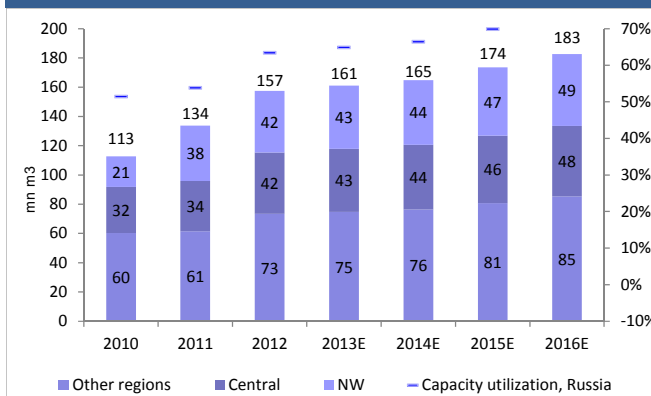
We forecast Russia's overall sand consumption to see a 3.8% CAGR in 2012-16E. The Central region is expected to demonstrate better growth with a 6.4% CAGR for the same period, while we assume sand demand growth in the North-West region will lag behind the average trend in the next few years due to the already high level of demand achieved.

Figure 94: Sand production across Federal Districts, 2000-2012



Source: Rosstat, Deutsche Bank Estimates

Figure 95: Sand production forecasts Russia and NW, 2010-2016E



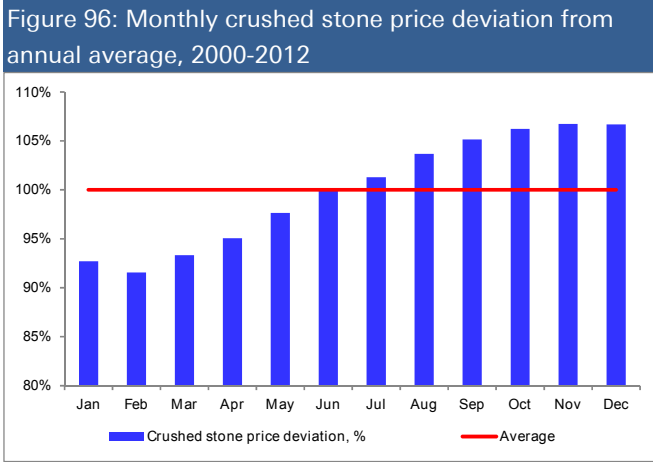
Source: Rosstat, Deutsche Bank Estimates

Prices

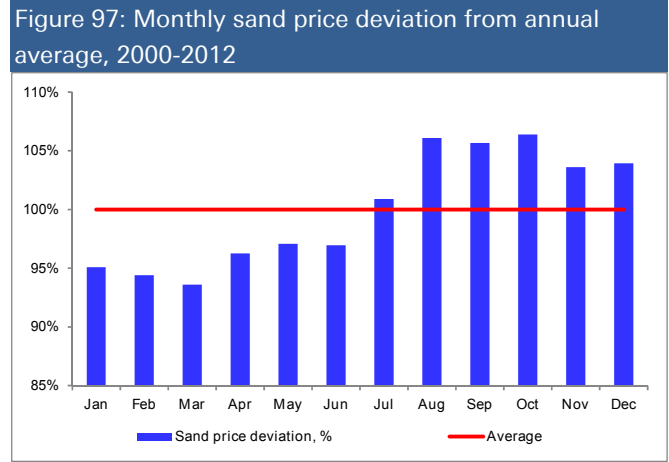
In our analysis, we use the average aggregates' price levels for producers, provided by Rosstat. Although this data is too aggregate and in some cases it may significantly differ from the actual market prices, we believe that the growth rates in Rosstat's prices correctly reflect the market reality.



The monthly prices for aggregates follow a seasonal pattern. The prices are usually below the average in the first quarter of the year due to subdued construction activity and become much higher in the following two quarters as intensifying aggregates demand from builders creates deficiencies, which drive prices up.



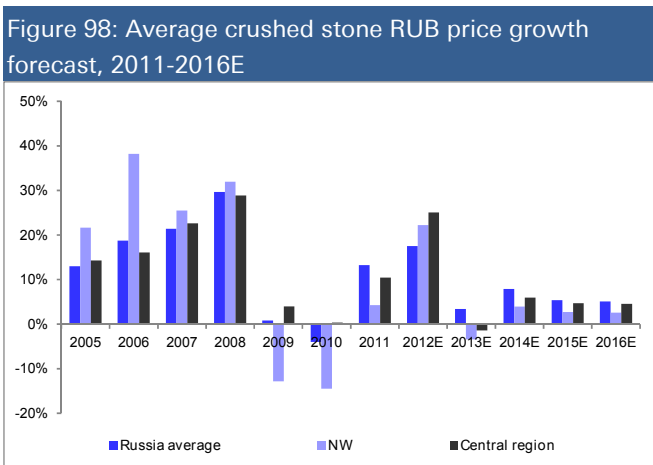
Source: Rosstat, Deutsche Bank



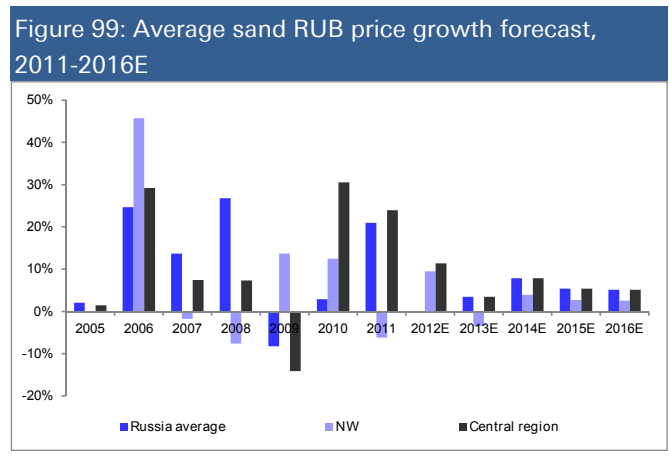
Source: Rosstat, Deutsche Bank Estimates

Prices for aggregates demonstrated strong growth during 2000-2008, increasing at rates of 10-40% per year. Such growth was driven by booming construction activity and backed up by key infrastructure projects in Moscow and Leningrad region. During the crisis, the demand for construction materials dramatically declined, resulting in a sharp decrease in prices for aggregates. Despite the decline, aggregates' prices have already reached their pre-crisis highs throughout most of the regions.

We do not assume the prices for aggregates to grow significantly, as our forecasts imply a normalization of construction activity growth in the following years. We expect average prices for aggregates to fluctuate around the PPI levels going forward, with slightly more pronounced growth in the MMA and central region on the back of anticipated construction activity and crushed stone deficiency in these regions.



Source: Rosstat, Deutsche Bank Estimates



Source: Rosstat, Deutsche Bank Estimates



Walling market

Aerated concrete

Aerated concrete is a lightweight precast building material. It is widely used for insulation and wall construction of residential and non-residential buildings. Aerated concrete is becoming increasingly popular in individual construction, as a replacement for bricks due to its relative cost-efficiency backed up by lower weight, higher thermal insulation and faster construction time compared with bricks.

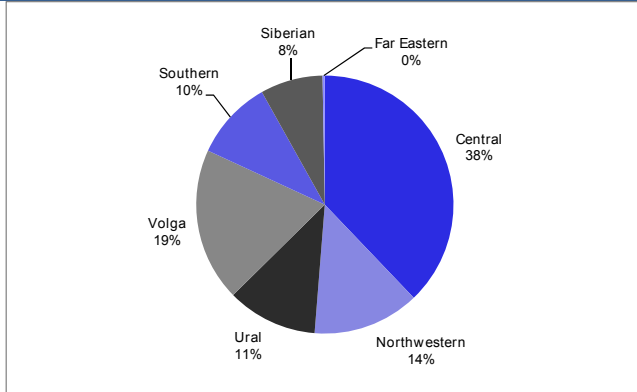
Rosstat does not report the exact volumes of aerated concrete production in Russia, including aerated concrete into a category of cellular (or porous) concrete. Cellular concrete can be divided into two groups of materials – aerated concrete and foam concrete. Although aerated concrete shares similar characteristics with foam concrete, they significantly differ in terms of production process. Thus, autoclaved aerated concrete requires sophisticated production technology and can only be produced in a factory, while foamed concrete can be produced directly at the construction site. Generally, aerated concrete is of better quality due to the finer precision of building block sizes, which leads to less consumption of mortar during construction. Currently, aerated concrete accounts for around 50-60% of cellular concrete production, and we expect this share to increase going forward due to the growing aerated concrete production capacity.

There are over 40 aerated concrete producers in Russia, most of which are concentrated in the Central Federal District, which is explained by the long history of aerated concrete presence on the market of this region and relatively high growth rate of construction in the European part of Russia (compared with the other regions). The market of aerated concrete is relatively local. Most of the producers supply aerated concrete to the region of operations, although occasional shipments to the adjacent regions are also possible.

Production of porous concrete witnessed a 16.6% CAGR in 2001-11, reaching a 10-year high level in 2012, despite the 30% contraction in 2009. We expect the aerated concrete production growth to outpace the growth of cellular concrete production, due to the growing share of aerated concrete in total cellular concrete production (at the expense of foamed concrete). That said, we forecast aerated concrete production to mark a 6.4% CAGR in 2012-16E versus cellular concrete production growth at a 3.4% CAGR in 2012-2016E.

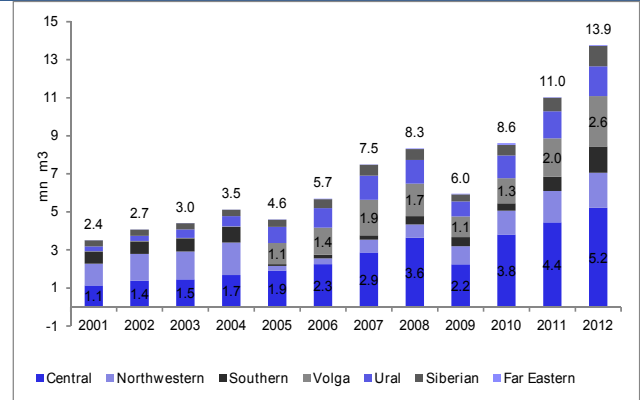


Figure 100: Shares of Federal Districts in total cellular concrete production, 2012



Source: Rosstat

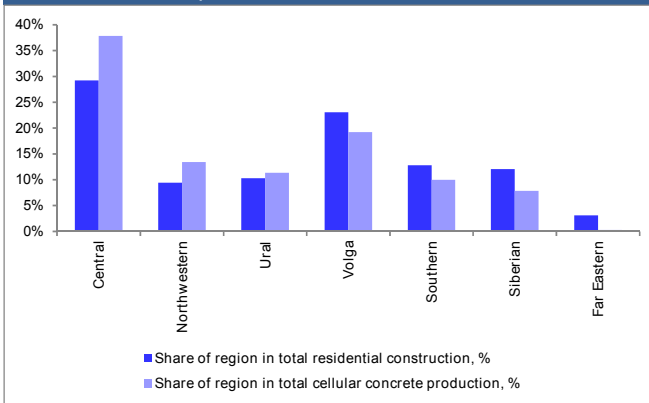
Figure 101: Cellular concrete production in Russia, 2001-2012



Source: Rosstat

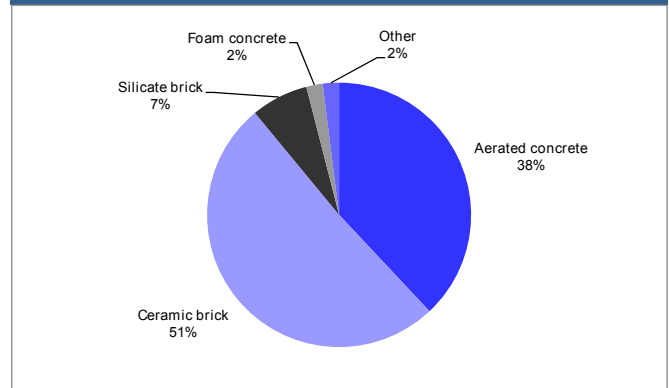
We view the Saint Petersburg and Leningrad region as a good example of a saturated aerated concrete market. According to the Center of Cellular Concrete, aerated concrete features in around 15m sqm of property in St Petersburg, or approximately 13% of the town's total residential stock. Aerated concrete is used in almost 90% of multi-storey residential construction projects in Saint Petersburg, accounting for c.40% of walling materials' total use, with ceramic brick occupying around 51%. We expect this share to increase further at the expense of brick and foam concrete.

Figure 102: Relative shares of residential construction and cellular concrete production across Federal Districts, 2012



Source: Rosstat, Deutsche Bank

Figure 103: Shares of wall materials in Saint Petersburg market, %



Source: Aeroc Spb

Currently there are five major aerated concrete producers in the North-Western region, with an aggregate capacity of around 1,275th m³ per year. Historically, most of the aerated concrete was imported; however, LSR's 274th m³ plant improved the supply situation in the region, although some demand was still not covered by the local production.

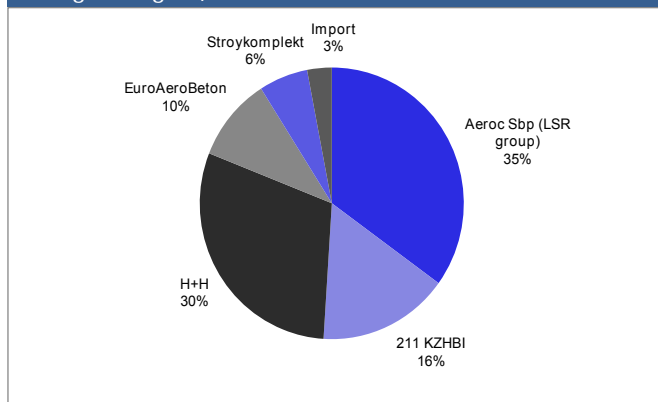
The situation changed significantly in 2009 when two new local plants were introduced in the midst of the crisis: the German-Dutch H+H and EuroAeroBeton with aggregate capacity of 565th m³. The launch of one more plant in 2010 by Stroykomplekt heightened the competitive landscape for the following years. Since 2008, the aggregate aerated concrete capacity of the Saint Petersburg and Leningrad region has almost doubled, reaching 1,275th m³ of aerated concrete per annum. LSR estimates the



consumption of aerated concrete in the Saint Petersburg and Leningrad region at 864th m³ in 2012, which implies that existing capacities exceeded the demand.

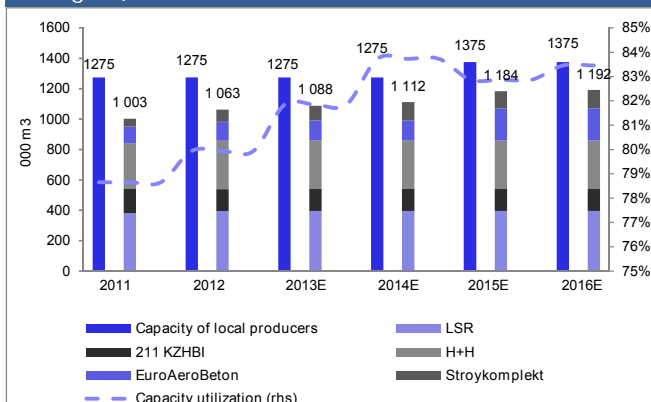
The profitability of aerated concrete producers in the St Petersburg and Leningrad region is likely to decline, in our view. Note that the current average industry profitability (EBITDA margin) is in the range of 20-53%, which was sufficient to attract imports from other regions and neighboring countries. The recent changes in the region's competitive landscape, coupled with our projections of lower construction growth rates and additional capacity build-up, suggest that the pricing power of the local producers is set to deteriorate. We expect milder prices for aerated concrete in the following years, which should bring producers' margins to a more sustainable level of 15-20%, or closer to European peers.

Figure 104: Market players in St Petersburg and the Leningrad region, 2011



Source: CMPro

Figure 105: Aerated concrete market in St Petersburg and Leningrad, 2011-2016E



Source: ABARUS Market Research, Company Data, Deutsche Bank Estimates

Bricks

The brick industry in Russia has generally been contracting, despite favorable demand fundamentals driven by the expanding construction sector. That said, the industry's production CAGR in 2000-2012 stood at a negative -1%, as opposed to steady growth in construction and other building materials. In Figure 136 we see that the performance of the brick production sector has significantly lagged the growth in residential and nonresidential construction (all figures were rebased to 1 in 2000). Actually, the volumes of brick production had been almost flat until 2007, when brick output intensified, while the decline in brick production as a result of the economic crisis was more pronounced compared with construction activity.

We see at least two reasons for the shallow performance of the brick industry during the previous decade. The first reason is the gradual growth of the poured concrete technology share in residential construction at the expense of the shares of brick and prefabricated panels construction. Thus, the share of new housing built using poured concrete technology in Moscow and Saint Petersburg is estimated to be above 60% versus 9-15% for purely brick houses (see Figure 142). The residential construction technology breakdown for regions looks more balanced, with around 40% attributable to both poured concrete and prefabricated panels technology, while the remaining 20% is secured by brick houses. We expect the share of poured concrete technology in regions to increase at the expense of prefabricated panels and brick technologies, reflecting the trends in Moscow and Saint Petersburg, which have always been the forerunners of any changes and new technologies.



The second potential reason for the weak brick industry growth is related to the rapid production growth of substitutes, such as aerated concrete, which had a double-digit CAGR in 2000-2012. Some substitutes for brick, while being offered on the market at a competitive price, are of better quality (e.g. better thermal/sound insulation, greater unit size, etc.). The market for alternative walling materials is still unsaturated (especially in the Southern and Far Eastern regions, where brick still occupies a dominant position), and we expect brick to continue losing its share to substitutes going forward.

Individual construction could be an important driver for brick demand due to its substantial share in total residential construction, which stood at an average 44% in the last five years. Consumer tastes are inertial and a significant share of population still prefers brick to other walling materials for individual construction, considering it as having better quality material. Also, brick housing is still considered to be more prestigious compared with buildings constructed from other materials. It applies both to mass-market and individual construction. Elite real estate development can be another driver of brick demand, as high-end residential buildings are usually constructed from bricks or employ poured concrete technology. We note that brick is used in the construction of poured concrete buildings as well as in brick housing construction, although the consumption of brick by the former technology is considerably lower than the latter (70mf per sqm for poured concrete house vs. 380mf per sqm of high-rise brick house on average).

Figure 106: Brick production in Russia, 1990-2012

	1990	1995	2000	2005	2007	2008	2009	2010	2011	2012	% chng, 2011 vs 1990	CAGR 2000-11
Bricks production in Russia, m mf	24 477	13 893	10 696	11 291	13 090	13 532	8 609	8 458	9 552	10612	-61%	-1%
% chng, y-o-y		-43%	-23%	-1%	12%	3%	-36%	-2%	13%	11%		
By region												
Central	6 070	3 805	3 147	3 355	3 882	3 922	2 576	2 616	3 053	3231	-50%	0%
Moscow region	904	738	559	637	664	648	409	418	457	na	-49%	-2%
Moscow	240	182	126	117	119	114	70	28	36	na	-85%	-11%
North-West	2 065	833	586	771	926	889	454	411	448	519	-78%	-2%
Saint Petersburg and Leningrad	595	319	300	377	440	443	249	218	220	na	-63%	-3%
% chng, y-o-y		-46%	-6%	-8%	-2%	1%	-44%	-13%	1%	nm		
Leningrad region	482	172	107	174	226	228	152	164	179	na	-63%	5%
St Petersburg	113	147	193	203	215	215	97	54	41	na	-64%	-13%
Southern (before 2010)*	3 927	2 392	1 776	1 680	1 945	2 135	na	1 522	1 563	1673	-60%	-1%
Volga	6 759	4 118	3 429	3 445	3 813	3 926	2 445	2 435	2 722	3122	-60%	-2%
Ural	1 569	942	743	906	1 088	1 042	557	595	703	807	-55%	0%
Siberian	3 253	1 587	894	992	1 281	1 429	866	779	952	1127	-71%	1%
Far East	864	217	121	143	157	190	106	61	61	133	-93%	-6%

Source: Rosstat

* For the years 2010 and 2011 we summed up production figures of Southern and North Caucasian regions, as the latter was split from Southern region in 2010

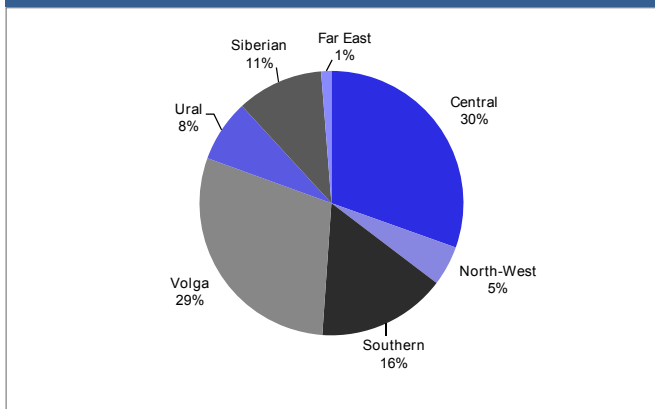
We derive brick consumption forecasts based on in-house projections for residential construction growth rates sector and average brick consumption ratios (by respective technology). We also expect the share of pure brick technology to decline from the current level of 12-20% to 7% in 2020. That said, we estimate that brick consumption in Russia will see a 4.65% CAGR in 2012-16E; however, we highlight the low base effect.

Imports of brick into Russia are immaterial and would normally not exceed 1-2% of the local production (we estimate imports at the level of 160m mf in 2011, which is around 1.7% of local market). According to Reshenie, it is usually not economical for plants to



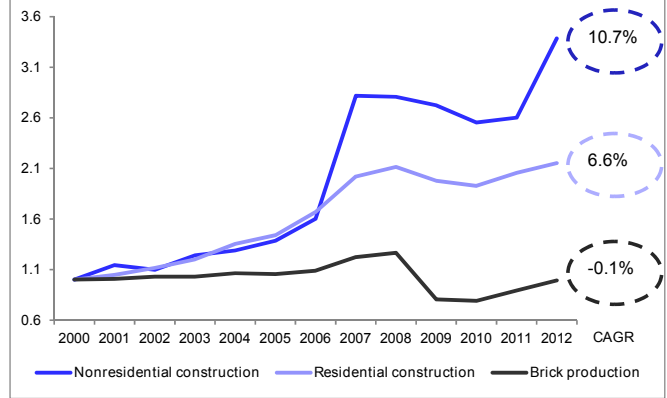
ship brick to distances over 500km, so the greatest share of brick import comes from neighboring countries. We do not expect significant changes in brick import/export patterns in the next few years.

Figure 107: Regions' shares in brick production, 2012



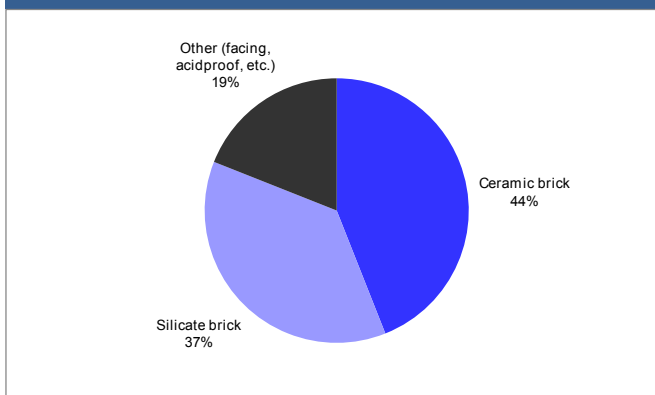
Source: Rosstat

Figure 108: Rapid growth in construction since 2000 had almost no influence on brick production



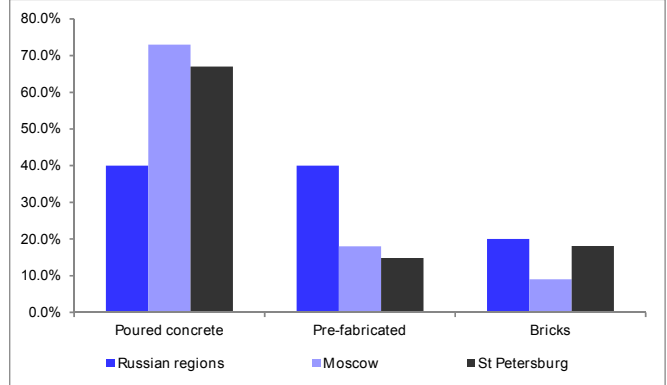
Source: Rosstat, Deutsche Bank

Figure 109: Structure of brick production in Russia (2011)



Source: ABARUS Market Research

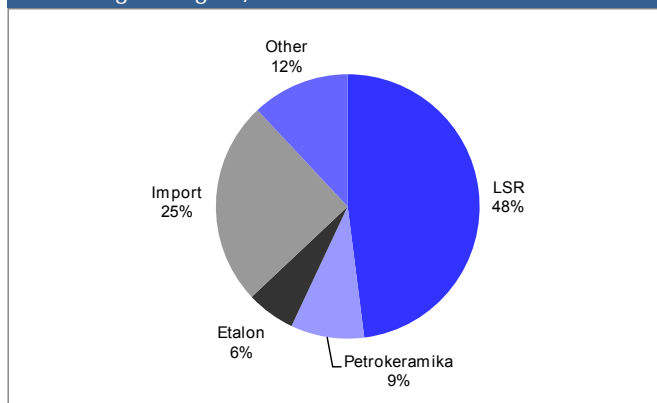
Figure 110: Share of production technology in residential construction, 2011



Source: Concol, Peterburzhskaya Nedvizhimost, Deutsche Bank Estimates

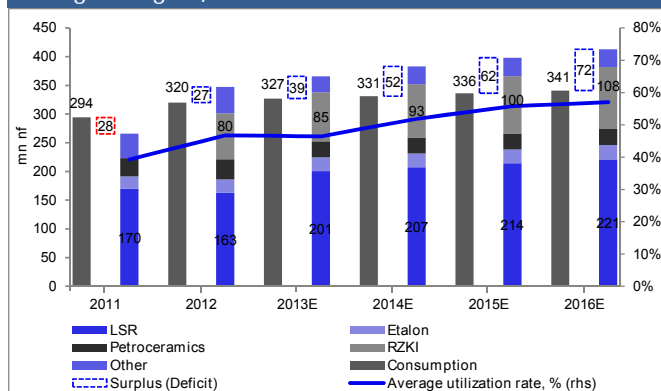


Figure 111: Major brick producers in St Petersburg and the Leningrad region, 2011



Source: Reshenie, Deutsche Bank

Figure 112: Forecast for brick market in St Petersburg and Leningrad region, 2011-16E



Source: Companies (historical data), Deutsche Bank Estimates

The brick market in the North-Western region accounted for 4.9% of total Russian production in 2012, with the Saint Petersburg and Leningrad market representing roughly half of it. The region's share in total Russian brick production declined from 3.0-3.5% in the early 2000s to 2.3% in 2012, which is explained by the intensifying use of pouring concrete technology in residential construction and relatively low level of individual construction, in our view.

The brick market of St Petersburg and Leningrad region is highly concentrated, with the three largest players controlling 63% of the market in 2012. According to Reshenie, LSR boasts a 48% market share, followed by Petrokeramika (9%) and Etalon (6%). Ryabovskiy Ceramic Plant (RZKI) completed reconstruction work at end-2011 and is now expected to become an important market player as well, targeting 25-30% market share. We believe the target, despite being ambitious, is attainable, given the high share of imports into the region (c. 25% in 2012, according to Reshenie), which we expect to be squeezed out by local players in the next few years. LSR also completed construction of the new brick plant in the Leningrad region, which will replace two of LSR's other plants in the region.

We expect brick consumption in the North-Western region to see a 3.0% CAGR in 2012-2016E, reaching 341m nf, which is still lower than the pre-crisis peak level of 448m nf in 2008. We highlight that the average projected growth rate is lower than our estimated growth for the residential construction, which reflects our view that bricks will continue to be replaced with cheaper substitutes. We expect the average capacity utilization rate in the region to grow to 60% in 2016E from its 54% level in 2012. The relatively low utilization rate leaves not much room for potential import, creating export opportunities for high-quality brick, produced at the modernized capacities of local players, and putting pressure on local prices.

Concrete market

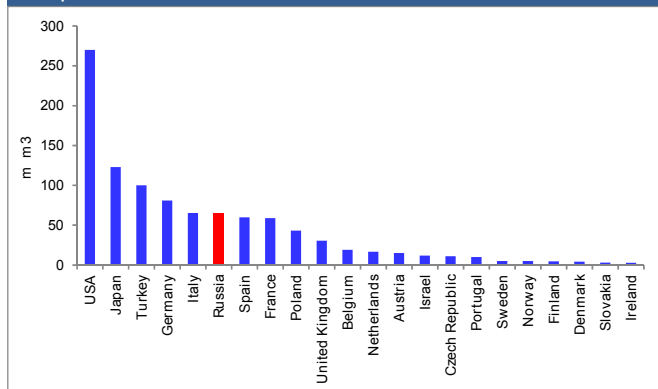
Concrete market is mainly represented by ready-mix concrete and reinforced concrete. Concrete is a major building material for both residential and nonresidential construction. According to ERMCO (European Ready Mix Concrete Organization), concrete production consumes roughly half of all cement, produced in Russia.

Concrete production and residential construction are highly correlated, with the correlation coefficient reaching 94% for ready-mix concrete. The correlation between



residential construction and reinforced concrete production is somewhat lower, which can be explained by the increased use of reinforced concrete in infrastructure.

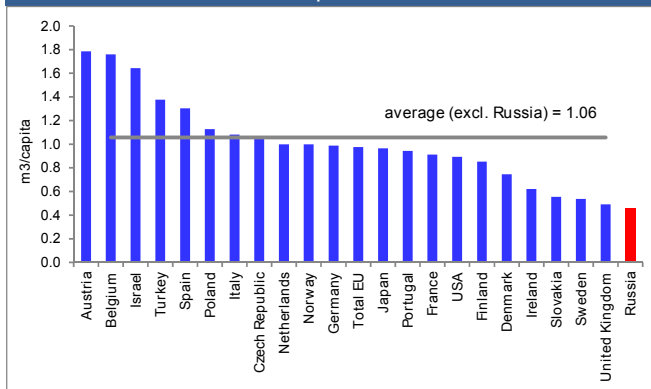
Figure 113: Concrete production: cross-country comparison *, 2011



Source: ERMCO

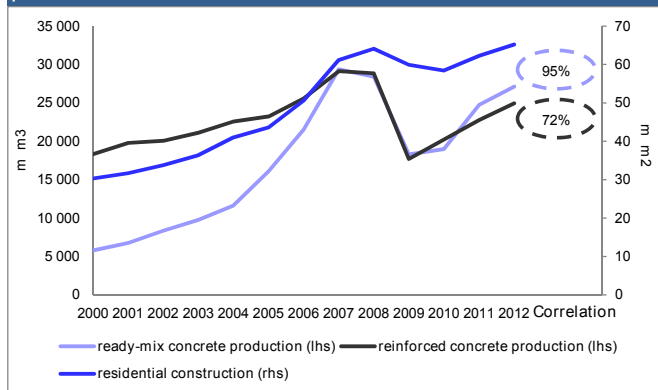
* Both mixed and precast concrete included

Figure 114: Concrete production per capita suggests gap between Russia and developed countries, 2011



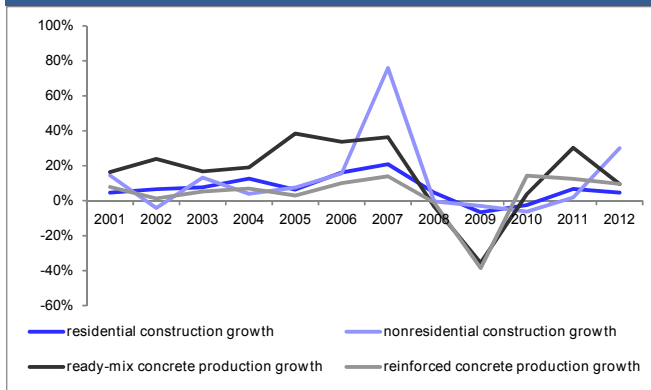
Source: ERMCO

Figure 115: Residential construction vs. concrete production: levels, 2000-12



Source: Rosstat, Deutsche Bank

Figure 116: Construction vs. concrete production: growth rates, %



Source: Rosstat, Deutsche Bank

Ready-mix concrete

Ready-mix concrete production hit a 13.9% CAGR over 2001-12, outpacing both residential and non-residential construction (9.1% and 6.8% CAGR, respectively). This can be explained by the growing popularity of poured-concrete technology, which requires significant amounts of ready-mix concrete throughout all stages of the construction cycle. From Figure 149 we see that regions with the highest share of poured concrete technology (MMA, Central region and Saint Petersburg) experienced higher ready-mix construction growth rates compared with the regions, where this technology is not widely implemented.

In 2009, the production of ready-mix concrete dropped by almost 38% (see Figure 148). This compares with the 9% YoY decline in construction volumes, affected by the freeze in the large number of poured concrete construction projects and temporary increase in the share of relatively cheap prefabricated panel construction, which was often subsidized by the government. Once the industry backdrop improved, ready-mix concrete production recovered by 30.3% YoY in 2011. This year we expect ready-mix



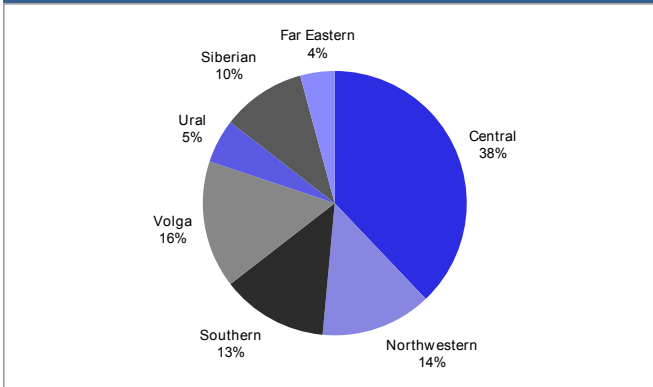
concrete production to beat its historical high level of 29.3m m³ in 2007 and to achieve the landmark of 35m m³ in 2012.

Ready-mix concrete is widely used in residential, infrastructure, industrial and commercial construction. Residential construction accounts for roughly 40-60% of ready-mix concrete consumption, while commercial and industrial construction account for 20-35%, with the rest being attributable to infrastructure construction.

We forecast ready-mix concrete market to see a 6.4% CAGR over 2012-16E, which is higher than our projected construction growth at a 4.0% CAGR in 2012-2016E. This is primarily due to our expectation of a further increase in poured concrete technology's share in residential construction at the expense of brick and prefabricated panel technologies.

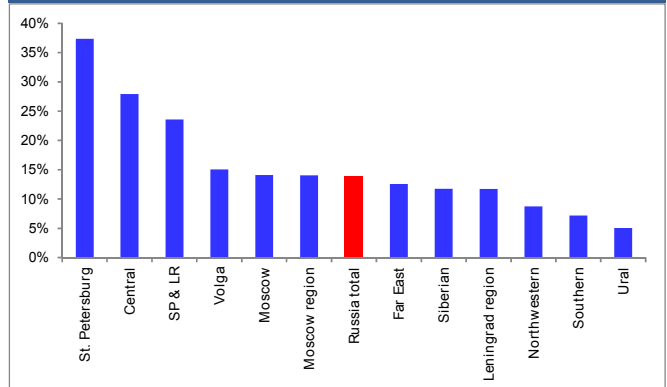
The market for ready-mix concrete is predominantly local due to the nature of this product: it has to be delivered to the construction site within several hours of being made, as it loses its quality otherwise. There are some imports of dry construction mixtures and ready-mix concrete supplements, but these amounts are insignificant and do not exceed 1% of total production.

Figure 117: Regions' shares of ready-mix concrete production, 2012



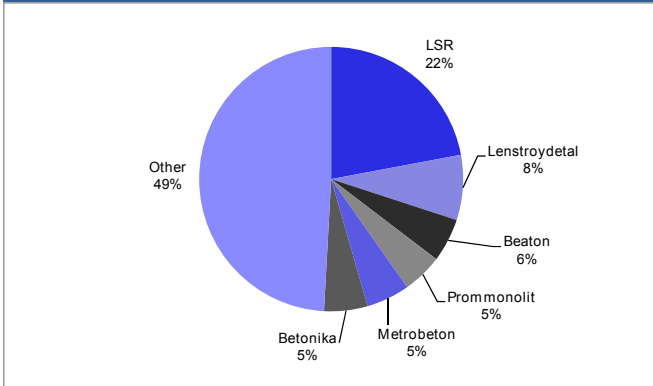
Source: Rosstat, Deutsche Bank

Figure 118: Ready-mix concrete production CAGR by regions, 2001-2011



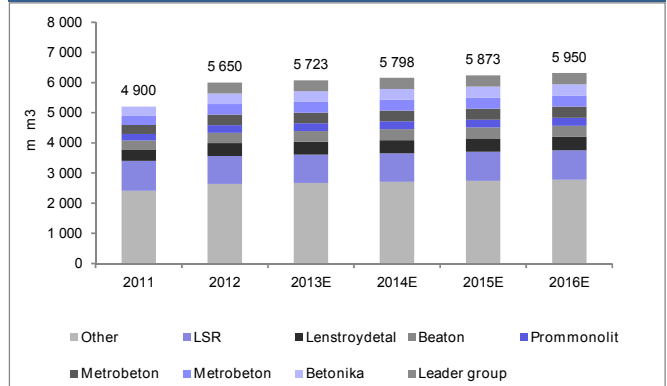
Source: Rosstat, Deutsche Bank

Figure 119: Major ready-mix concrete market players in St Petersburg and Leningrad, 2011



Source: Company data, Reshenie, Deutsche Bank Estimates

Figure 120: Ready-mix concrete production forecasts St Petersburg and Leningrad, 2011-16E



Source: Companies (historical data), Deutsche Bank



The ready-mix concrete market in the Saint Petersburg and Leningrad region is highly competitive. There are more than 60 ready-mix concrete producers in the region operating more than 100 batching plants, while more than half of the market is controlled by six major players (see Figure 153). LSR dominates the market with an estimated share of 22% in 2012. The second-largest ready-mix concrete supplier Lenstroydetal controlled 8% of the market in 2012. The competitive structure of the market changes throughout time, as real estate developers seek greater upstream integration. Note that Leader Group invested around USD5m into four batching plants around Saint Petersburg in 2012 with a cumulative capacity of around 300 m³ per hour. According to our estimates, the company could occupy c. 6-7% of the market.

We forecast the ready-mix concrete market in the Saint Petersburg and Leningrad region to see a 4.0% CAGR over 2012-16E, which is roughly in line with our forecasts for residential construction growth in the Saint Petersburg and Leningrad region of 2.2% and 4.2%, respectively. We note that our forecast of 4.0% ready-mix concrete production growth in the SPMA is rather low compared with the 7.0% growth forecast for Russia as a whole, as we do not expect the share of poured concrete construction in Saint Petersburg and Leningrad to increase significantly due to the high level achieved already (64% in St Petersburg vs. around 40% Russian average).

The intensifying competition and low average capacity utilization rate, which is estimated to be below 50% in the Saint Petersburg/Leningrad region, do not bode well for the high profitability of the local ready-mix concrete producers. On our estimates, the average EBITDA margin of ready-mix concrete producers is in the range of 8-10%. This, coupled with low entry barriers, suggests that the price for ready-mix concrete is largely determined by raw material costs, such as cement, aggregates, energy and transportation. Our ready-mix concrete demand growth forecasts do not factor in an improvement in capacity utilization in the following several years, so we expect some industry consolidation. Vertically integrated ready-mix concrete producers have a significant advantage over standalone producers due to the stable demand that could be generated by the parent's real estate development divisions, which often reach 20-70% of total production. We note that four of the six largest ready-mix concrete producers in the Saint Petersburg and Leningrad region belong to vertically-integrated holdings (LSR, Lenstroydetal, Prommonolit and Beaton).

Reinforced concrete

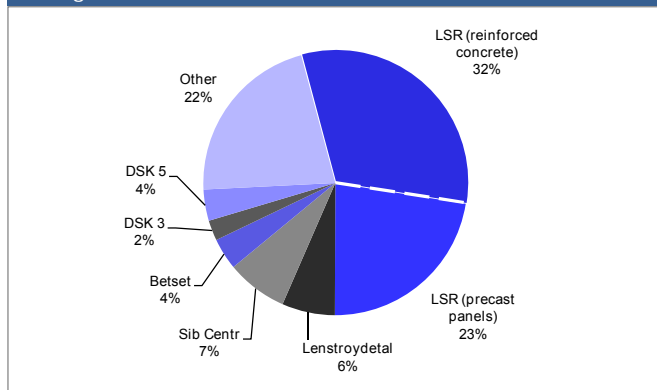
Reinforced concrete products represent a wide range of construction materials, which are used as part of many types of structures and components of structures, such as slabs, walls, stairs, elevator shafts, beams, columns, foundation piles and frames. They are also used in infrastructure and road construction as part of curbstones, road slabs or light poles. Well rings, road plates and reinforced concrete pipes are used in individual construction as well, but the volume of this market is relatively low compared with mass-market construction. Some reinforced concrete plants sell their products to third-party developers, while a number of vertically integrated firms produce reinforced concrete details primarily for in-house construction. DSKs (integrated homebuilding factories) can be separated into a distinct group of reinforced concrete producers, as they produce prefabricated housing units and assemble them into housing at the construction site. Rosstat does not distinguish between prefabricated housing units and other reinforced concrete products, so we do not distinguish these products either, in our market forecasts and estimates.

The market for reinforced concrete experienced a severe 40% contraction during the crisis. The production of reinforced concrete has not completely recovered yet and has



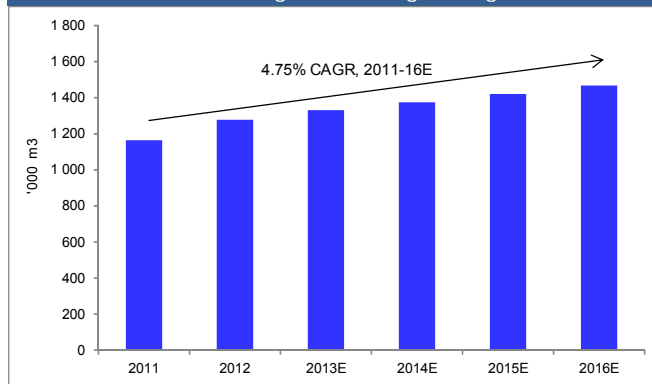
still not reached its pre-crisis high of 29th m³ in 2007. Before the crisis the market saw a 6.8% CAGR over 2000-07, which is low compared with the 13.6% residential construction growth over the same period. This can be explained by the growth in the popularity of poured concrete technology, which uses relatively fewer amounts of reinforced concrete compared with prefabricated panel construction. Based on our residential construction forecasts, we anticipate Russia's total reinforced concrete output to have a 4.75% CAGR over 2011-16E.

Figure 121: Major market players in St Petersburg and Leningrad, 2011



Source: Company Data, Deutsche Bank Estimates

Figure 122: Reinforced concrete consumption growth forecast in St Petersburg and Leningrad region, 2011-16E



Source: Companies (historical data), Deutsche Bank Estimates

Currently there are around 90 firms producing reinforced concrete in the market for the Saint Petersburg and Leningrad region. LSR is the dominant player with more than 50% market share. According to our estimates, 32% of LSR's market share is accounted for by reinforced concrete products, while around 23% is attributable to prefabricated panel construction, a significant part of which is used by the in-house construction division of LSR. Lenstroydetal, Sib Centr, Betsset and DSK 5 are also notable local reinforced concrete producers with individual market shares below 10%. According to LSR, around 41% of reinforced concrete production is consumed in residential construction, 38% is used in infrastructure construction, while the rest is employed in industrial and commercial construction. The exact shares vary from year to year. We forecast the reinforced concrete market in the St Petersburg and Leningrad region to see a 4.6% CAGR over 2012-2016E. Import volumes are generally low, with Belarus being the major reinforced concrete importer to the local market. The price for reinforced concrete, similar to ready-mix concrete, depends on prices for raw materials, such as cement, rebar, energy, transport and storage costs.



Model updated: 16 July 2013

Running the numbers

Emerging Europe

Russia

Property

PIK Group

Reuters: PKGPq.L

Bloomberg: PIK LI

Buy

Price (15 Jul 13) USD 2.20

Target Price USD 3.50

52 Week range USD 1.86 - 2.42

Market Cap (m) EURm 995
USDm 1,300

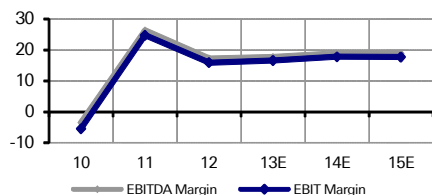
Company Profile

PIK Group is one of the largest real estate developers in Russia with a focus on mass-market housing located primarily in Moscow and Moscow region. The company is also involved in the manufacturing of pre-fabricated concrete panel, the sale of construction materials, as well as facility management. The company's development pipeline stands at 6.5m metres of NSA.

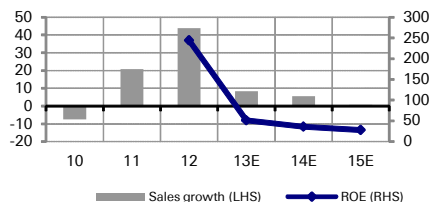
Price Performance



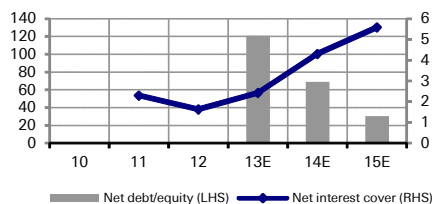
Margin Trends



Growth & Profitability



Solvency



Fiscal year end 31-Dec

Financial Summary

	2010	2011	2012	2013E	2014E	2015E
DB EPS (RUB)	-12.34	9.42	6.41	9.52	12.64	13.55
Reported EPS (RUB)	-12.34	9.42	6.41	9.52	12.64	13.55
DPS (RUB)	0.00	0.00	0.00	0.00	0.00	0.00
BVPS (RUB)	-10.0	-0.6	5.8	28.6	41.2	54.8
Weighted average shares (m)	493	493	493	591	660	660
Average market cap (RUBm)	63,199	51,899	35,190	42,370	42,370	42,370
Enterprise value (RUBm)	102,394	96,310	73,511	65,769	61,412	53,431

Valuation Metrics

P/E (DB) (x)	nm	11.2	11.1	7.5	5.7	5.3
P/E (Reported) (x)	nm	11.2	11.1	7.5	5.7	5.3
P/BV (x)	nm	nm	11.50	2.51	1.74	1.31
FCF Yield (%)	nm	nm	14.2	9.9	7.2	15.3
Dividend Yield (%)	0.0	0.0	0.0	0.0	0.0	0.0
EV/Sales (x)	2.7	2.1	1.1	0.9	0.8	0.7
EV/EBITDA (x)	nm	8.0	6.5	5.2	4.3	3.7
EV/EBIT (x)	nm	8.5	7.0	5.5	4.6	4.0

Income Statement (RUBm)

Sales revenue	38,090	45,991	66,129	71,640	75,714	76,237
Gross profit	2,892	9,403	14,428	16,399	18,302	18,615
EBITDA	-1,320	12,106	11,360	12,715	14,312	14,338
Depreciation	759	736	860	860	860	860
Amortisation	0	0	0	0	0	0
EBIT	-2,079	11,370	10,500	11,855	13,452	13,478
Net interest income/(expense)	-5,965	-4,958	-6,469	-4,903	-3,311	-2,416
Associates/affiliates	-52	0	0	0	0	0
Exceptionals/extraordinary	0	0	0	0	0	0
Other pre-tax income/(expense)	0	0	0	0	0	0
Profit before tax	-8,096	6,412	4,031	6,952	10,321	11,062
Income tax expense	-2,051	1,607	904	1,390	2,064	2,212
Minorities	43	160	-35	-62	-92	-99
Other post-tax income/(expense)	0	0	0	0	0	0
Net profit	-6,088	4,645	3,162	5,624	8,349	8,949
DB adjustments (including dilution)	0	0	0	0	0	0
DB Net profit	-6,088	4,645	3,162	5,624	8,349	8,949

Cash Flow (RUBm)

Cash flow from operations	-4,816	-8,051	7,040	7,572	6,780	10,622
Net Capex	1,329	1,621	-2,038	-3,360	-3,360	-3,360
Free cash flow	-3,487	-6,430	5,002	4,212	3,420	7,262
Equity raised/(bought back)	0	0	0	10,395	0	0
Dividends paid	0	0	0	0	0	0
Net inc/(dec) in borrowings	4,315	4,484	-3,573	-2,596	-8,928	-8,177
Other investing/financing cash flows	105	470	764	252	845	620
Net cash flow	933	-1,476	2,193	12,264	-4,663	-295
Change in working capital	-6,218	-9,026	4,369	10,968	-592	-175

Balance Sheet (RUBm)

Cash and other liquid assets	4,350	2,874	5,067	17,331	12,668	12,372
Tangible fixed assets	9,452	9,023	9,076	9,076	9,076	9,076
Goodwill/intangible assets	22,844	26,843	16,618	19,118	21,618	24,118
Associates/investments	778	291	293	293	293	293
Other assets	82,158	89,743	95,447	92,629	95,588	97,838
Total assets	119,582	128,774	126,501	138,447	139,243	143,698
Interest bearing debt	43,978	47,071	43,211	40,615	31,687	23,510
Other liabilities	80,191	81,485	79,945	78,530	79,998	83,780
Total liabilities	124,169	128,556	123,156	119,145	111,685	107,290
Shareholders' equity	-4,932	-287	2,875	18,894	27,243	36,191
Minorities	345	505	470	408	315	216
Total shareholders' equity	-4,587	218	3,345	19,301	27,558	36,408
Net debt	39,628	44,197	38,144	23,284	19,019	11,138

Key Company Metrics

Sales growth (%)	-7.5	20.7	43.8	8.3	5.7	0.7
DB EPS growth (%)	50.8	na	-31.9	48.5	32.8	7.2
EBITDA Margin (%)	-3.5	26.3	17.2	17.7	18.9	18.8
EBIT Margin (%)	-5.5	24.7	15.9	16.5	17.8	17.7
Payout ratio (%)	nm	0.0	0.0	0.0	0.0	0.0
ROE (%)	nm	nm	244.4	51.7	36.2	28.2
Capex/sales (%)	0.8	3.8	3.9	4.7	4.4	4.4
Capex/depreciation (x)	0.4	2.3	3.0	3.9	3.9	3.9
Net debt/equity (%)	nm	nm	nm	120.6	69.0	30.6
Net interest cover (x)	nm	2.3	1.6	2.4	4.3	5.6

Source: Company data, Deutsche Bank estimates

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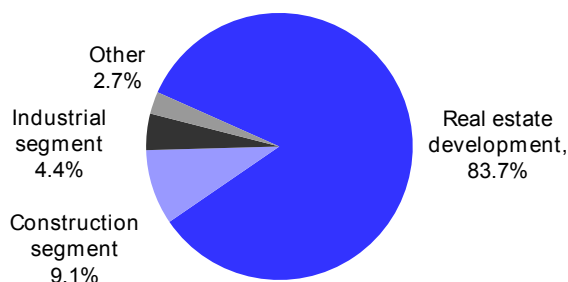


PIK Group: back in the game

Overview

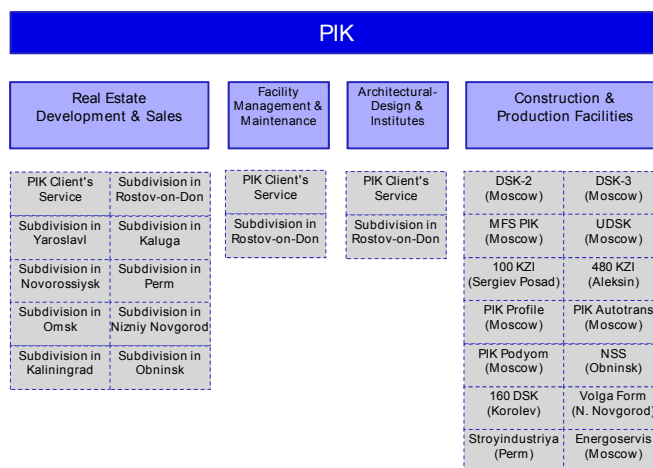
PIK Group (PIK) is Russia's largest residential real estate developer, boasting the strongest footprint in the country's most attractive region, the MMA (15.9% market share by completions, 2012). The company focuses on mass-market housing, which involves developing large economy-class complexes with integrated social infrastructure. PIK's strategy revolves around the crystallization of value at each stage of the development process; hence the company's activity is spread across the entire value chain, including production (prefabricated panels), development per se, and the provision of management services (post-actual transfers). Marketing and sales functions are not very sophisticated, as they are performed primarily by the internal sales force at a centralized sales office. PIK also maintains a call center at the headquarters in Moscow and a number of front offices at the major construction sites.

Figure 123: PIK's revenues by segment, 2012



Source: Company data

Figure 124: Organization structure



Source: Company Data

The business of PIK is divided into four major segments:

- Real estate development
- Construction services
- Industrial segment
- Other

Real estate development

Real estate development is a core business for PIK, contributing c.84% to the group's top line in 2012. The company develops projects primarily in the MMA; however, the post-IPO expansion into the regions resulted in significant land bank accretion, with quality being the key issue. A sharp correction in residential property prices saw the value of the company's assets plunging by almost 80% (land bank) against the backdrop of expanding NSA (by some 700,000 sqm). Subsequently, the company sold



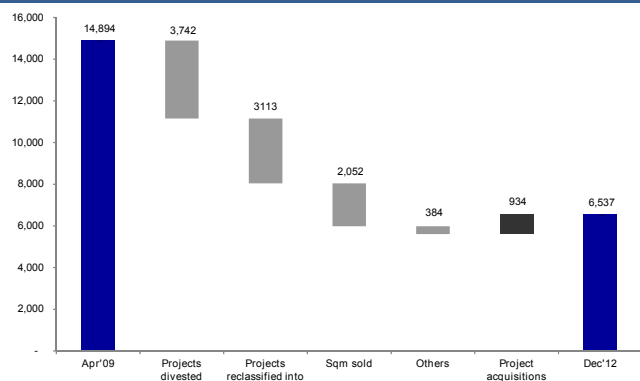
out, reclassified (into land), and revised the buildable area for a number of projects in an attempt to re-inject liquidity and streamline the asset base. Thus, by end-2012 the company's portfolio of projects was marked down to approximately 6.5m sqm of unsold NSA vs. 14.9m sqm in April 2009 (mostly reclassified into land); however, the value of portfolio remained largely flat, helped by the residential price recovery.

Figure 125: Geography of PIK's presence



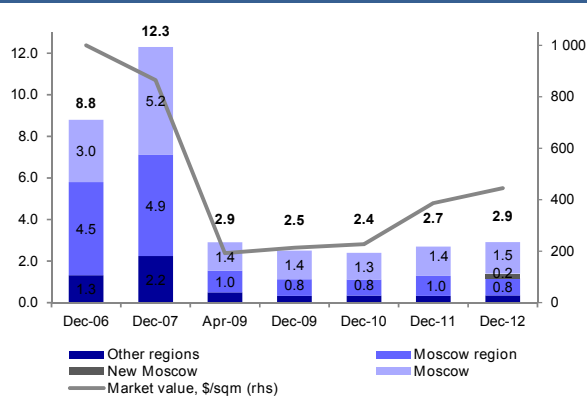
Source: Company

Figure 126: Portfolio dynamics over time (unsold NSA, m sqm), 2009-2012



Source: Deutsche Bank

Figure 127: Projects' portfolio dynamics over time (market value, USDbn)



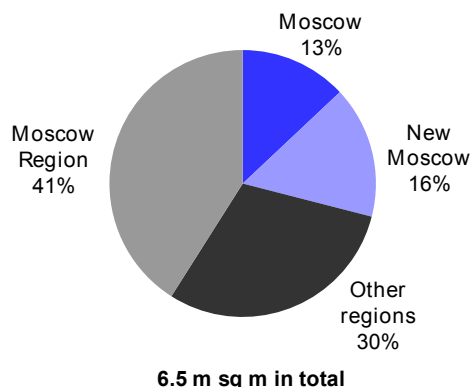
Source: Company data based on CBRE valuation report

The unfortunate timing of the expansion into the regions, accompanied by balance sheet issues and ultimate change of the controlling shareholder, saw management



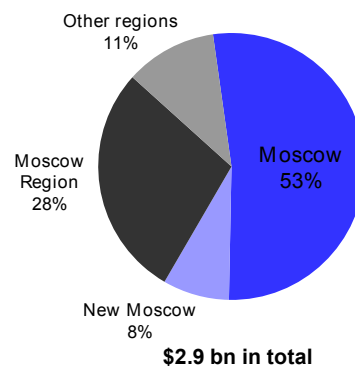
recalibrating the strategy and adopting a more focused approach. The company reshuffled the structure of its projects' portfolio by cutting the share of low-margin regional projects. This proved to be a reasonable step, which resulted in lower asset intensity for the business, facilitating cash flow management, and improving the margin/returns outlook. Note that the average value of PIK's projects in Moscow stands at USD1,814/sqm (2102 valuation report), which compares with USD288/sqm and USD169/sqm in the Moscow region and in provincial areas, respectively.

Figure 128: NSA by geography, 2012



Source: Company based on 2012 CW valuation report

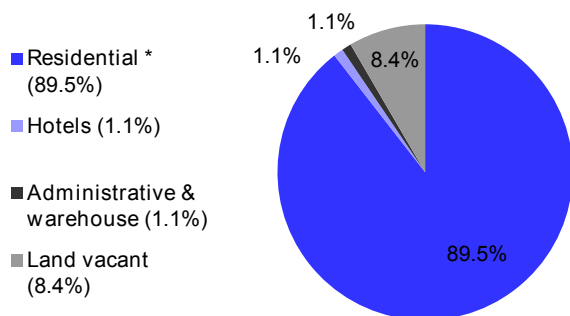
Figure 129: NSA by market value, YE12



Source: Company based on 2012 CW valuation report

Today, PIK's portfolio consists of 87 projects and eight vacant land plots. Residential projects with build-in commercial and social infrastructure comprise the most sizable part of PIK's project portfolio. There are only two active non-residential projects: a warehouse project and a hotel complex, which both represent only 0.9% of total portfolio's market value.

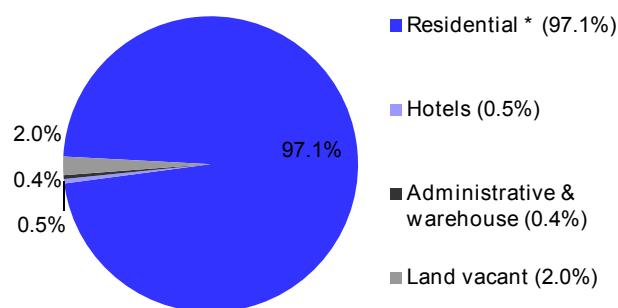
Figure 130: Projects split by type (# of projects), YE12



Source: Company data

* Residential projects including commercial infrastructure

Figure 131: Projects split by type (market value), YE12



Source: Company data based on 2012 CW valuation report

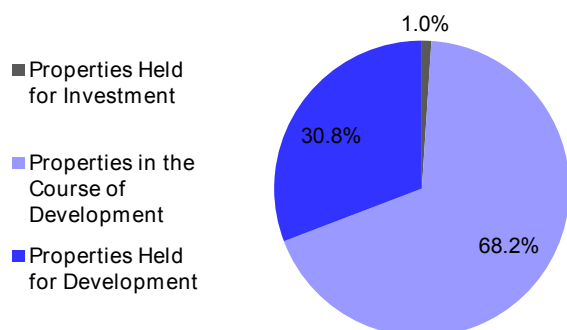
* Residential projects including commercial infrastructure

The structure of PIK's portfolio evolved strongly throughout 2012, as the company started a number of relatively large projects. The share of properties held for development declined from 58.1% of total unsold net sellable area in 2011 to 30.8% in 2012, due to ongoing portfolio optimization. Although we welcome management efforts to achieve a more balanced portfolio, we highlight that current land bank seems sufficient for only four years of development in Moscow (based on our estimates).



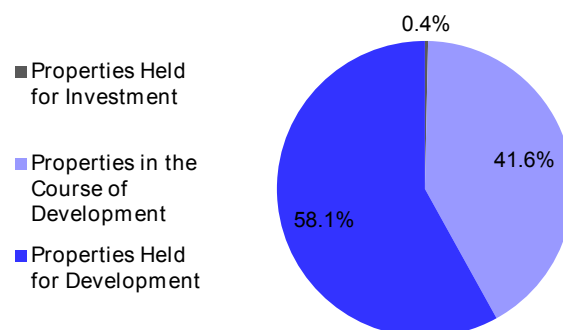
Moscow is the most profitable region for PIK, which may encourage the company to shop for projects more aggressively. Generally, the existing land bank gives PIK seven to nine years of development potential, based on 1.3m sqm of gross annual completions.

Figure 132: Projects split by stage of development (unsold NSA), FY12



Source: Company data

Figure 133: Projects split by stage of development (unsold NSA), FY11



Source: Company data based on 2012 CW valuation report

Despite balance sheet limitations, the company made several acquisitions in 2012, totaling c. 370k sqm of NSA with around 83% of total area located in the MMA. We highlight, however, that liquidity issues have forced PIK to adopt a more prudent and disciplined approach to projects' selection. In this context, PIK started acquiring new projects in the MMA through co-investment agreements. This relationship allows the group to save on land acquisition and social infrastructure investments; however, on the other hand, co-investment agreements are less profitable. On proprietary projects, PIK targets a gross profit margin in excess of 30% for Moscow, and higher than 25% for Moscow/Other regions.

Figure 134: New projects acquired in 2012

Region	Project	NSA, '000 sqm	Region share
Moscow		51.8	14%
	Zarechnaya street, 4AB	32.6	
	Varshavskoye sh. 14	19.2	
Moscow region		254.7	69%
	Putilkovo	39.6	
	Drozhino 1,2	65.7	
	Bobrovo	149.4	
Other regions		61.4	17%
Krasnodar	Rostovskoye sh.	47.4	
Perm	25 Oktyabrya street., 77	14	
Total additions		367.9	100%

Source: Company data

Construction and industrial segments

Construction and industrial segments combine contracting and production activities, which are consumed both internally and externally. The manufacturing of pre-fabricated panels and assembly-related services is a core part of the segment. Note that PIK



controls two out of three reinforced concrete panel plants in Moscow, namely DSK-2 and DSK-3. According to the company, the cumulative capacity of the DSKs, located in the MMA, is approximately 900,000 sqm of prefabricated housing per year.

Figure 135: PIK's prefabricated reinforced concrete panels installed capacity

Name	Acquisition date	PIK's Share *	Location	Capacity
DSK 2	2001	98%	Moscow	
Prefabricated panels, '000 sq m/year				460
DKS 3	2005	87%	Moscow	
Prefabricated panels, '000 sq m/year				480
100 KGI	2005	92%	Moscow region	
Prefabricated panels, '000 sq m/year				165
NSS	2007	100%	Kaluga region	
Prefabricated panels, '000 sq m/year				80
Ready-mixed concrete, '000 m3/year				150
480 KGI	2007	100%	Tula region	
Prefabricated panels, '000 sq m/year				165
Total prefabricated capacity, '000 sq m/year				1,350

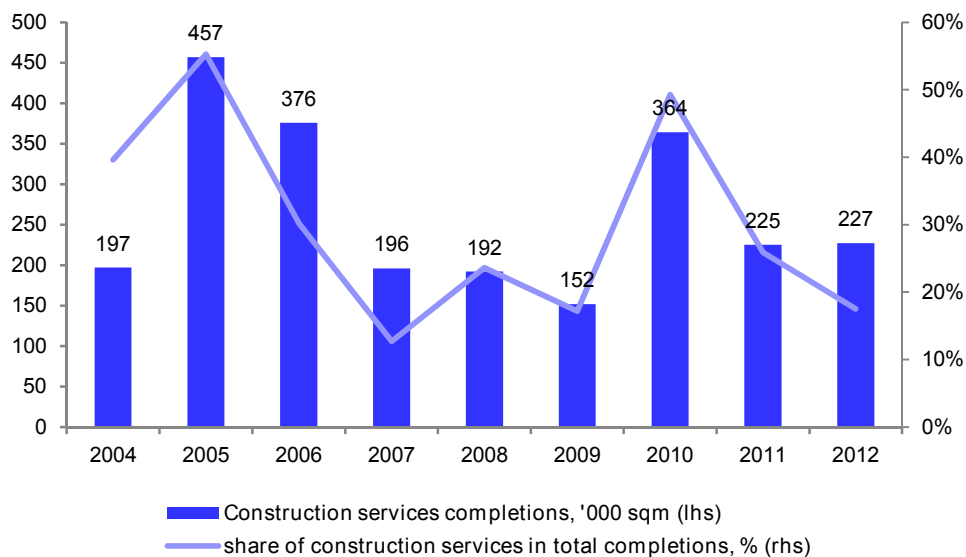
Source: Company data

* Data is effective as of September 2011

PIK offers construction services to third parties, which helps to maintain capacities utilized. The share of residential completions, rendered to the third parties in total residential completions of the group, varies depending on the state of own pipeline, reaching almost 50% in 2010. We do not expect the share of third-party construction services to expand materially further given our constructive view on the short-to-medium term fundamentals of the sector and PIK's pipeline of projects.



Figure 136: Construction service completions



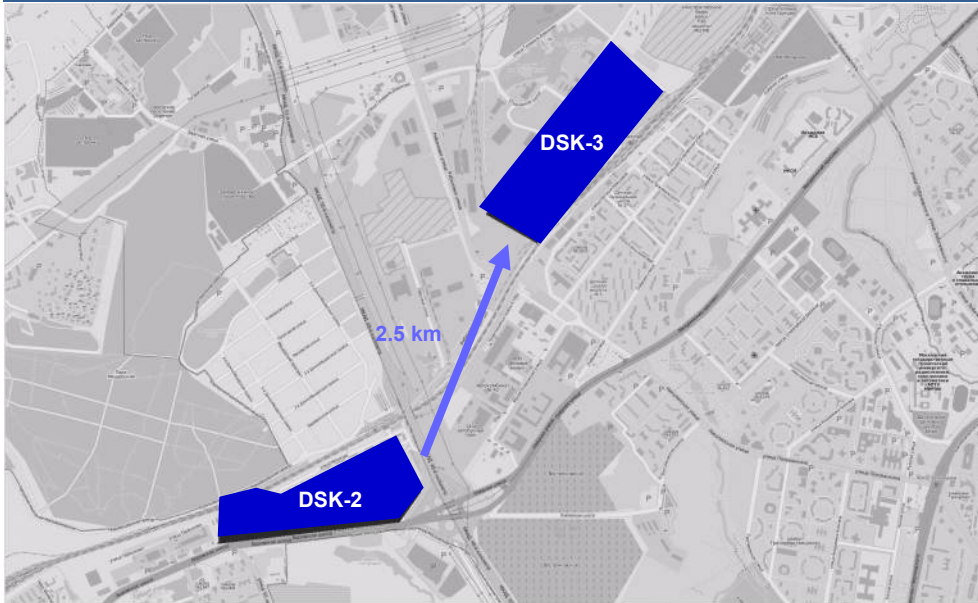
Source: Company data, Deutsche Bank

Recently, PIK announced a plan to integrate DSK-2 and DSK-3, in an effort to optimize asset structure and achieve cost savings. According to the company's presentation, equipment from DSK-2 will be relocated to DSK-3, while the combined capacity of the plant is expected to grow to 950,000 sqm of prefabricated economy-class housing per year. Successful implementation of the project should deliver some efficiencies, such as economy on modernization and operational efficiencies, including the centralization of management functions and creation of a single service and purchases center. The company estimates the cumulative annual savings from the merger of around RUB1.5bn (c. USD50m), which can add 2-4pp to the gross/EBITDA margin.

The released area from the relocation of the DSK-2 plant will be used for new residential real estate development. According to management, it is going to be a medium-sized project of over 200,000 sqm of NSA with a duration of 7.5 years and expected start of pre-sales in 2015. Based on the company's data, we estimate the NAV of the project at USD78m.



Figure 137: DSK-2 and DSK-3 plants are located in close proximity to each other

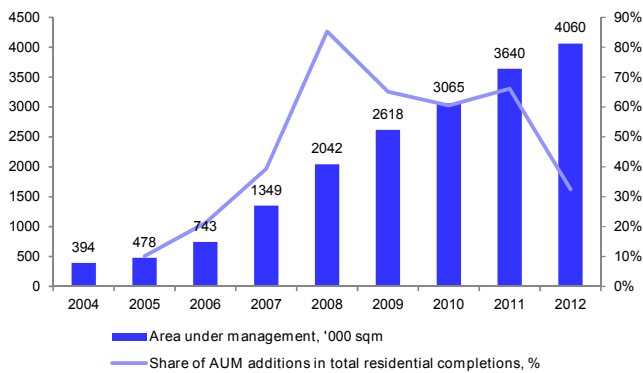


Source: Company

Other operations

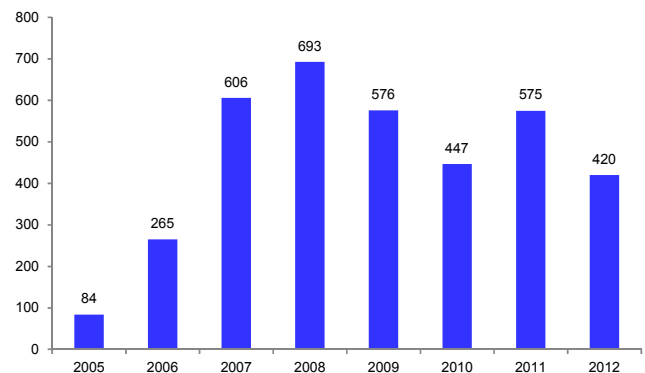
The activities of this segment are primarily related to maintenance services for residential buildings, commercial properties, underground garages and parking. PIK provides a wide range of services, including inspections of buildings, grounds, plumbing and heating systems. The group also maintains the water supply, sewage systems and electrical, power and heating supplies. In addition, PIK provides security services, concierge services, waste removal, cleaning of the common areas and snow removal using its own fleet of vehicles. The segment also includes some other activities, such as transportation of concrete panels, and renting out of premises in former plants and other buildings, pending permits and approvals for future redevelopment.

Figure 138: Area under management



Source: Company data, Deutsche Bank

Figure 139: Additions into AUM, '000 sqm



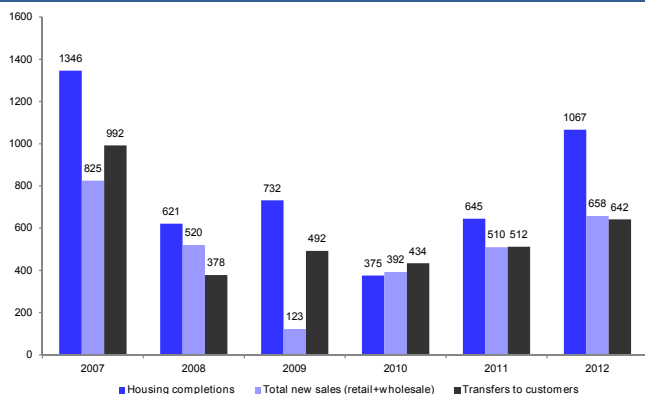
Source: Company data, Deutsche Bank



Financial analysis and forecasts

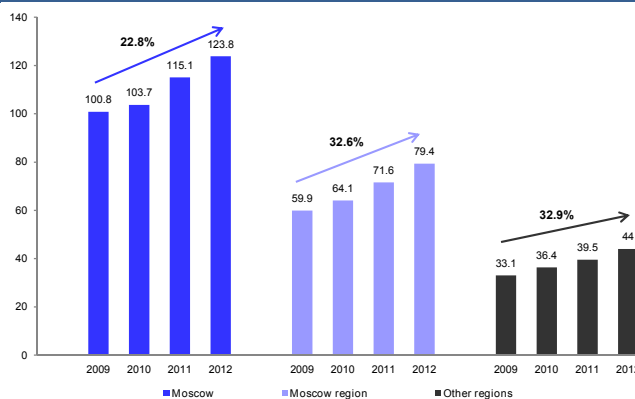
PIK has been reporting a steady recovery in completions, sales and transfers of housing over the last three years, and finished FY12 with record cash collections and completions (ex-2007). The company booked 1,067th sqm of gross completions (+65% YoY), presold 658th sqm of housing (+29% YoY), and transferred to customers 642th sqm of residential real estate (+25% YoY). Strong volume growth was also accompanied by stronger residential prices, which rose by 22.8%/32.6%/32.8% (vs. FY08) in Moscow/Moscow region/other regions, respectively, vs. CPI growth of only 21.9% for the same period.

Figure 140: Housing transfers, completions and sales, '000 sq. m



Source: PIK, Company data

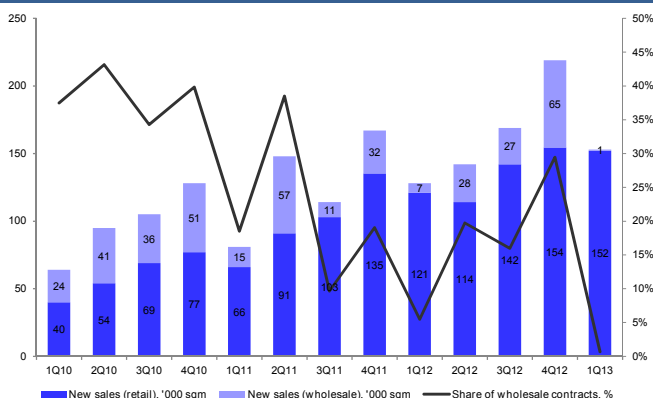
Figure 141: Average realizable price dynamics for PIK's housing 2009-2012, '000 RUB/sqm



Source: PIK, Company data

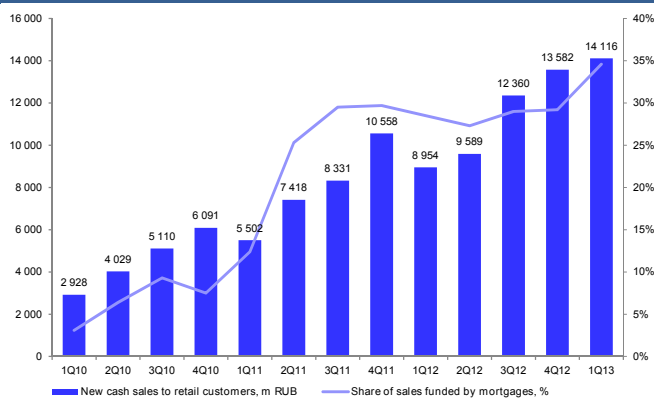
The share of PIK's wholesale residential sales declined steadily from 45% in 2010 to almost zero in 1Q 2013. We expect this development to be supportive of the group's profitability given the retail premium. Another important trend, in our view, is the share of retail sales funded by mortgages, which reached a three-year high of almost 35% in 1Q 2013.

Figure 142: Share of wholesale sales is declining...



Source: PIK, Company data

Figure 143: ...while share of mortgage sales is steadily edging up



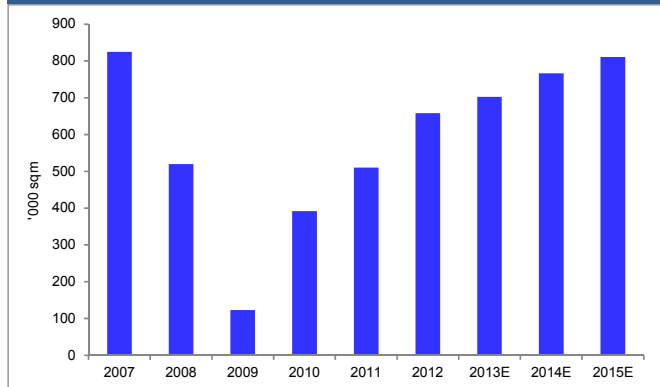
Source: PIK, Company data

Under the existing projects' pipeline, PIK should reach more than 800th sqm of pre-sales in 15E, which would match the record level achieved in 2007. This should boost



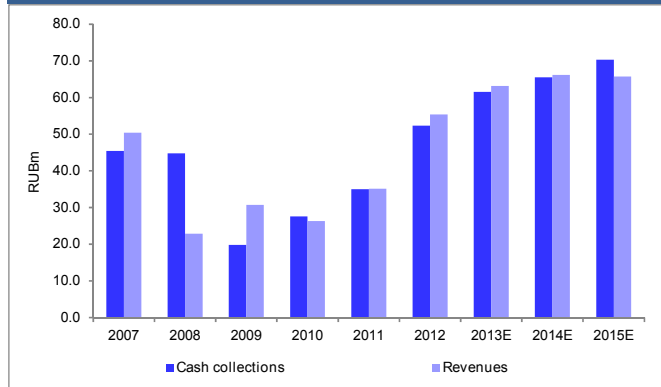
cash collections, which we expect to post a 10% CAGR in 2012-2015E, driven by the 7% pre-sales CAGR in 2012-2016E and housing price inflation. Note that PIK guided for total gross 2013 collections of RUB69-73bn, which includes construction services and other segments' contributions. We estimate that 2012-2015E revenues should record somewhat lower growth rates (6% CAGR) due to deferred recognition. Note that our model assumes that PIK will be able to maintain a gross completion level of approximately 1.0m sqm per annum starting in 2014E. We highlight, however, that the current portfolio and project development schedule suggest that the share of Moscow in overall completions is set to decline to 15% in 2015E (vs. 26% in 2012). This is an issue that the company will have to address in the near-term in order to mitigate the possible impact on margins.

Figure 144: Pre-sales are set to exceed 0.8m sqm in 2015E, on our estimates



Source: PIK, Deutsche Bank

Figure 145: We forecast gross cash collections to post a 10% CAGR in 2012-2016E



Source: PIK, Deutsche Bank

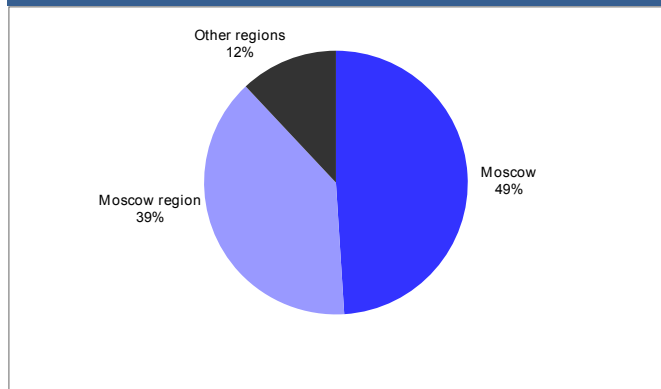
We expect the group's top line to expand at a 5% CAGR, as lower construction segment revenues (one of the measures implemented by the company to improve margins) are set to dilute the superior growth rates of residential real estate and other segments. We expect the MMA to remain the key focus region for PIK, sustainably generating c.90% of total revenues, which is inline with the company's strategy of concentrating business activity in Russia's largest region.

Figure 146: Consolidated top line is set to expand at a 16% CAGR, on our estimates



Source: PIK, Deutsche Bank

Figure 147: MMA will remain the focus region for PIK, we believe



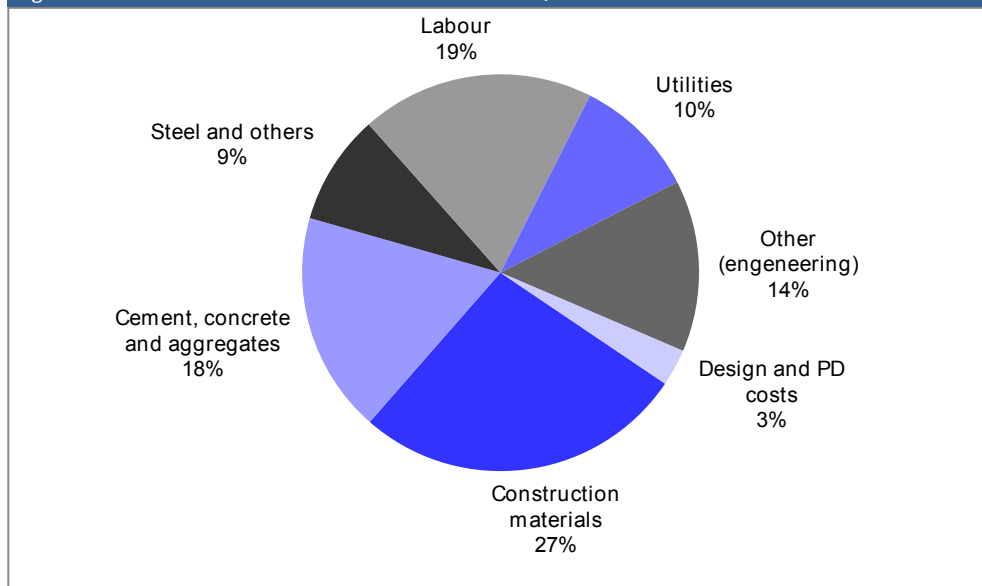
Source: Deutsche Bank

Our construction cost projections are consistent with our housing price forecasts, growing at below CPI rates. We still expect pressure on real estate developers' margins,



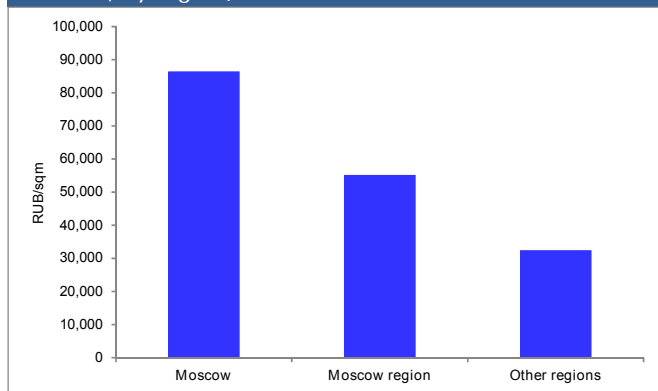
however, as cost inflation should post slightly higher growth rates. We model separately each item of the cash construction costs, based on in-house projections, and then applying an average growth rate to total development costs per sqm. We assume that cash construction costs across Russia are broadly similar, with key difference related to the cost of land and social obligations levied on developers.

Figure 148: Cash construction costs breakdown, 2012



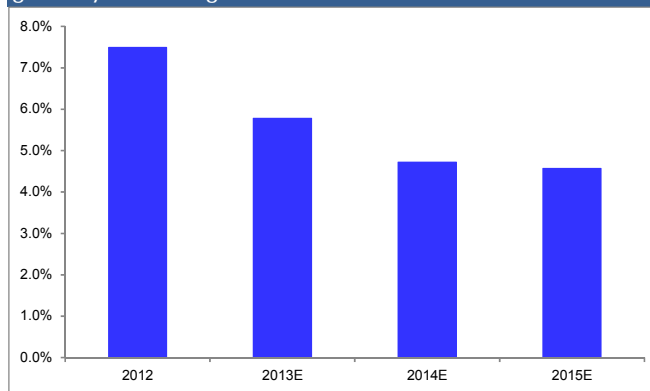
Source: Deutsche Bank

Figure 149: Construction costs/sqm (incl. land and social liabilities) by region, 2012



Source: PIK, Deutsche Bank

Figure 150: We project cash construction cost/sqm to grow by an average of 5% in 2013E-2015E

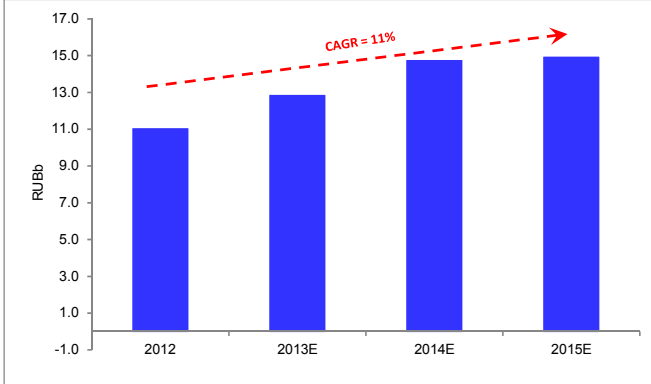


Source: PIK, Deutsche Bank

We forecast the EBITDA CAGR at 11% in 2012-2015E, mostly driven by volumes, which should also be accompanied by margin expansion. Our projections suggest that the EBITDA margin is set to increase from 16.7% in 2012 to 20.4% in 2015E, as the revenue mix improves and the focus increases on the real estate development business in the MMA, fixed costs decline, volumes grow, and the positive impact from asset streamlining kicks in. PIK targets around 20% EBITDA margin in the longer term, which is broadly in line with our estimates.

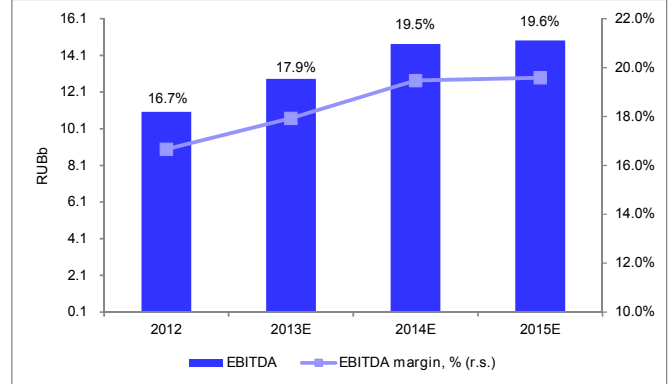


Figure 151: We forecast EBITDA to achieve an 11% CAGR in 2012-2015E...



Source: PIK, Deutsche Bank

Figure 152: ...accompanied by solid EBITDA margin expansion

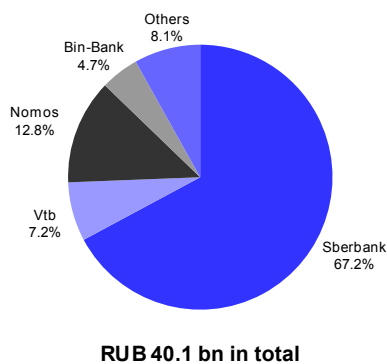


Source: PIK, Deutsche Bank

Debt: less of an issue now

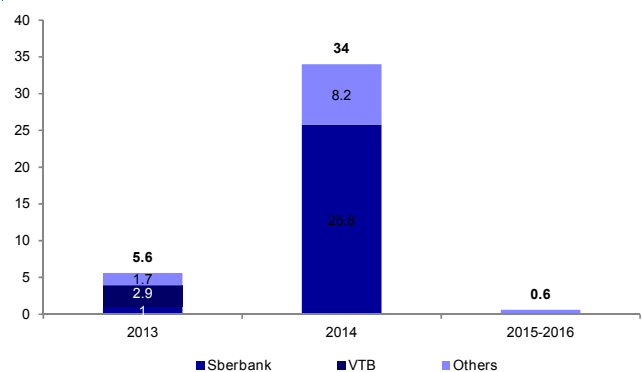
PIK's net debt as of end-2012 stood at RUB36.8bn (USD1.21bn), implying net debt/EBITDA ratio of 3.4x. According to the company, Sberbank is the group's largest creditor (67% of the outstanding debt), followed by VTB (7% of the debt). The repayment schedule is skewed towards next year with approximately RUB34bn (around 85% of total debt) to be paid in 2014, which suggests that debt restructuring/refinancing is likely to occur, taking into account our operating cash flow forecasts for 2013-2014E. We believe PIK should be able to reach an agreement with Sberbank on the upcoming repayment, given the long-lasting relationship with the financial institution, which is also supported by the state-issued guarantee for approximately RUB14bn. The company pays a weighted average interest rate of 12.3% on its portfolio, while 95.9% of PIK's debt is denominated in rubles. PIK is currently re-negotiating with Sberbank and other banks the cost of borrowing, guiding for lower interest costs as financials improve. Moreover, we expect the debt structure and repayment terms to change in favor of PIK. We assume the weighted average interest cost to decline to 11% in 2014E, which should be a sustainable level.

Figure 153: Debt by lenders (April 2013)



Source: PIK

Figure 154: Debt repayment schedule (as of June 2013, RUB bn)



Source: PIK

Excessive leverage limits PIK's ability to grow; hence management views de-leveraging as a key priority. During the last couple of years the bulk of PIK's internal cash flow

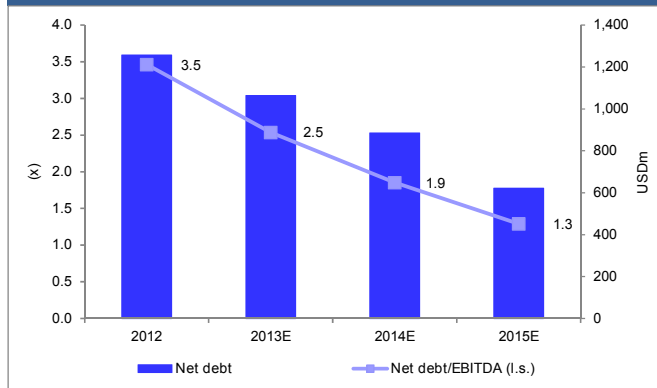


generation was directed towards debt repayment. Note that PIK reduced its net leverage by 14% (or c.USD200m) in 2012, and we estimate the company should be able to repay all of its debt organically by 2016E.

Recent SPO gave liquidity a boost. Talks about PIK returning to equity capital markets finally materialized in June 2013. The company commented on a number of occasions that it viewed new equity raising as one of the ways to repair the balance sheet and ensure growth optionality. Recall that initially PIK planned an SPO in 2010, which was rescheduled due to unfavorable market conditions, only to be postponed again in 2011. In December 2012, PIK's shareholders approved an additional share issue, while on 29 April 2013, the company decided to launch the preemptive rights period (which ended on 20 May 2013), and was notified later that Nafta Moskva (controlled by S. Kerimov) intended to participate in the additional share issue, committing a minimum of USD150m. On 7 June 2013, PIK announced that it raised USD330m (+40% capital increase) through the accelerated share offering and open subscription. The company said that intended to use at least 50% of the net proceeds from the capital increase for deleveraging, with the rest planned to be used for investment in new projects and general corporate purposes.

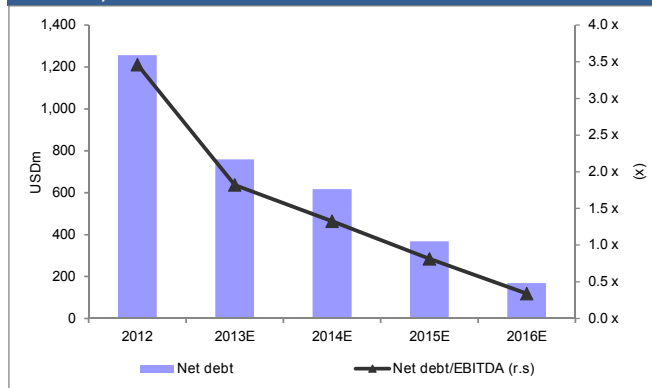
Although the deal is dilutive to our valuation (c. 10% impact on our target valuation); we believe the strong commitment of the core shareholders to the business, through additional capital injection, should be welcomed by the market, as it could have more important longer-term implications for PIK's equity story. Moreover, the stronger balance sheet should provide greater comfort in the volatile macro environment to creditors, equity investors and management, as well as improve growth optionality.

Figure 155: PIK should have de-levered organically by 2016E ...



Source: PIK, Deutsche Bank

Figure 156: ...however, equity raising should allow the group to reach a comfortable net leverage ratio as soon as next year



Source: PIK, Deutsche Bank

Ownership structure and corporate governance

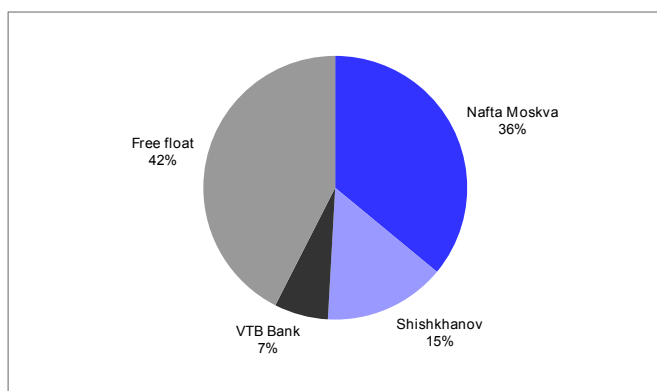
Suleyman Kerimov controls 36.0% of PIK though the investment vehicle Nafta Moskva Group. Mikhail Shishkhanov owns 14.9% of PIK through Gilt Partners Ltd. and Bin-bank, while VTB Bank owns approximately 6.6% of the company's shares, with the remaining 42.5% considered free float.

Recall that Nafta Moskva became the key PIK shareholder in April 2009, when the company had difficulties refinancing and restructuring its debt portfolio. We note that according to the company's filings, PIK's founding shareholders Kirill Pisarev and Yuri



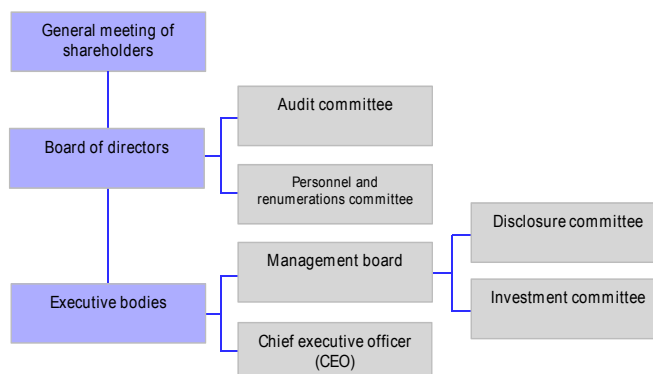
Zhukov have the option to buy out the 20% stake owned by Holborner Services and the right of first refusal on a 1% stake of Lacero Trading through Cyprus' offshore Maritrade Investments and Forienst Investments, controlled by Zhukov and Pisarev respectively. Forienst Investments has the option to acquire 8.23% of the company's shares, while Maritrade Investments has the option to acquire the rest (11.71%). The right of first refusal on Lacero Trading's stake is effective for an indefinite period, while the option to buy out Holborner Services' stake is expiring in March 2014.

Figure 157: PIK's ownership structure as of June 2013



Source: PIK

Figure 158: PIK Group's governing bodies



Source: PIK

Valuation: 12m target price of USD3.0/GDR

We value PIK using DCF methodology with a terminal growth period. Our DCF is based on a WACC of 14.0%, with an RROE of 15.7% (a risk-free rate of 7.5% and an equity risk premium of 8.2%), an after-tax cost of debt of 9.8%, and a terminal growth rate of 3%, which reflects our long-term assumptions for residential real estate sector growth in Russia.

Figure 159: PIK's DCF valuation

RUBm	2013E	2014E	2015E	2016E	2017E	TV
EBIT	11,897	13,459	13,192	15,046	15,986	16,466
Tax on EBIT	(2,379)	(2,692)	(2,638)	(3,009)	(3,197)	(3,293)
Depreciation	860	860	860	860	860	886
Changes in WC	1,421	(1,522)	1,434	(2,203)	(1,450)	(1,494)
Capex	(3,360)	(3,360)	(3,360)	(3,360)	(2,860)	(3,086)
Free cash flow	8,438	6,745	9,488	7,334	9,339	9,479
Discount factor	1.00	0.88	0.77	0.68	0.60	0.60
PV of Free cash flows	8,438	5,931	7,336	4,985	5,582	5,666

RWACC	13.7%	WACC calculation	
Terminal growth rate	3.0%	Risk-free rate	7.5%
FCF, 2013-2017	32,273	Standard equity risk	4.0%
Terminal value	52,813	Corporate governance	3.0%
EV, RUBm	85,086	Liquidity risk	1.2%
Net Debt, RUBm	23,233	Required ROE	15.7%
Minority Interest, RUBm	407	After-tax cost of debt	8.8%
Equity value (RUBm)	61,446	Debt/equity	40.0%
Target price, GDR (USD)	3.0	Required WACC	13.7%

Source: Deutsche Bank



Dividends

PIK does not have a formal dividend policy approved. The decision regarding interim/final dividends is approved at the AGM, but the amount of the dividends cannot be greater than those recommended by the Board of Directors. The company confirmed to us that dividends are on the agenda; however, the current priorities are skewed towards de-leveraging.



Model updated: 12 July 2013

Running the numbers

Emerging Europe

Russia

Property

Etalon Group

Reuters: ETLNGq.L

Bloomberg: ETLN LI

Buy

Price (12 Jul 13) USD 3.83

Target Price USD 5.98

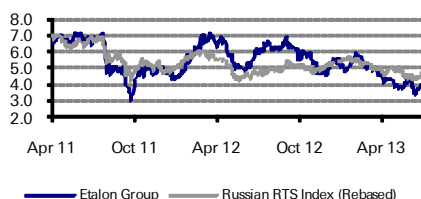
52 Week range USD 3.38 - 6.90

Market Cap (m) EURm 856
USDm 1,118

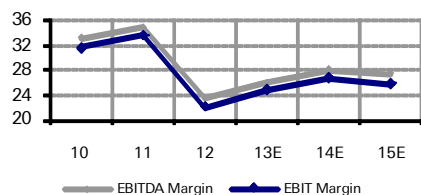
Company Profile

Etalon Group is one of Russia's largest residential real estate developers, which is focused on large-scale residential complexes, targeting the lower middle class and upper economy class price segments. The company's development pipeline stands at 1.8m metres of NSA.

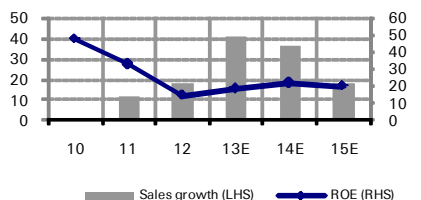
Price Performance



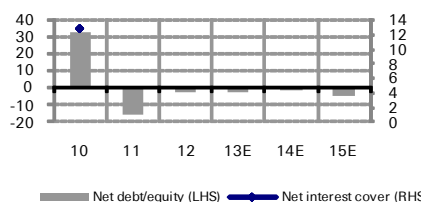
Margin Trends



Growth & Profitability



Solvency



Fiscal year end 31-Dec

	2010	2011	2012	2013E	2014E	2015E
Financial Summary						
DB EPS (RUB)	4,141.20	26.83	17.05	26.21	37.53	42.20
Reported EPS (RUB)	4,141.20	26.83	17.05	26.21	37.53	42.20
DPS (RUB)	34.00	0.00	0.00	0.00	0.00	0.00
BVPS (RUB)	10,834.4	111.9	128.9	155.2	192.7	234.9
Weighted average shares (m)	1	273	292	292	292	292
Average market cap (RUBm)	na	44,557	52,187	36,510	36,510	36,510
Enterprise value (RUBm)	na	39,436	51,585	35,913	36,811	33,760
Valuation Metrics						
P/E (DB) (x)	na	6.1	10.5	4.8	3.3	3.0
P/E (Reported) (x)	na	6.1	10.5	4.8	3.3	3.0
P/BV (x)	0.00	1.35	1.29	0.81	0.65	0.53
FCF Yield (%)	na	nm	nm	nm	nm	7.3
Dividend Yield (%)	na	0.0	0.0	0.0	0.0	0.0
EV/Sales (x)	nm	1.7	1.9	0.9	0.7	0.5
EV/EBITDA (x)	nm	5.0	8.2	3.6	2.5	2.0
EV/EBIT (x)	nm	5.2	8.7	3.8	2.7	2.1

Income Statement (RUBm)

Sales revenue	20,316	22,741	26,894	38,074	52,027	61,490
Gross profit	9,238	10,853	9,400	14,109	20,036	23,035
EBITDA	6,711	7,909	6,326	9,867	14,597	16,852
Depreciation	286	265	417	452	737	1,022
Amortisation	0	0	0	0	0	0
EBIT	6,425	7,644	5,909	9,415	13,860	15,830
Net interest income(expense)	-509	136	545	545	432	249
Associates/affiliates	0	0	0	0	0	0
Exceptionals/extraordinary	0	0	0	0	0	0
Other pre-tax income/(expense)	126	1,245	72	72	72	72
Profit before tax	6,042	9,025	6,526	10,032	14,363	16,151
Income tax expense	1,355	1,585	1,526	2,346	3,358	3,776
Minorities	59	108	21	32	46	52
Other post-tax income/(expense)	0	0	0	0	0	0
Net profit	4,628	7,332	4,979	7,654	10,959	12,322
DB adjustments (including dilution)	0	0	0	0	0	0
DB Net profit	4,628	7,332	4,979	7,654	10,959	12,322

Cash Flow (RUBm)

Cash flow from operations	-1,184	-3,873	-4,124	1,230	750	5,173
Net Capex	-298	-609	-773	-1,952	-2,237	-2,522
Free cash flow	-1,482	-4,482	-4,897	-722	-1,487	2,650
Equity raised/(bought back)	0	13,028	-13	0	0	0
Dividends paid	-38	0	0	0	0	0
Net inc/(dec) in borrowings	2,174	1,532	6,588	-3,632	-4,976	-3,382
Other investing/financing cash flows	-434	770	-5,446	749	636	453
Net cash flow	220	10,848	-3,768	-3,605	-5,827	-279
Change in working capital	-6,109	-8,628	-7,572	-6,159	-10,356	-7,771

Balance Sheet (RUBm)

Cash and other liquid assets	3,977	15,811	17,586	13,981	8,154	7,875
Tangible fixed assets	1,660	2,009	2,380	3,880	5,380	6,880
Goodwill/intangible assets	0	0	0	0	0	0
Associates/investments	39	88	60	60	60	60
Other assets	30,873	40,876	53,490	66,358	80,275	90,436
Total assets	36,549	58,784	73,516	84,279	93,869	105,251
Interest bearing debt	8,126	10,406	16,636	13,004	8,028	4,646
Other liabilities	15,855	15,322	18,817	25,525	29,086	31,477
Total liabilities	23,981	25,728	35,453	38,529	37,115	36,123
Shareholders' equity	12,109	32,684	37,653	45,309	56,267	68,589
Minorities	459	372	408	440	487	538
Total shareholders' equity	12,568	33,056	38,063	45,749	56,754	69,128
Net debt	4,149	-5,405	-950	-977	-125	-3,229

Key Company Metrics

Sales growth (%)	0.6	11.9	18.3	41.6	36.6	18.2
DB EPS growth (%)	-6.2	-99.4	-36.4	53.7	43.2	12.4
EBITDA Margin (%)	33.0	34.8	23.5	25.9	28.1	27.4
EBIT Margin (%)	31.6	33.6	22.0	24.7	26.6	25.7
Payout ratio (%)	0.8	0.0	0.0	0.0	0.0	0.0
ROE (%)	47.7	32.7	14.2	18.5	21.6	19.7
Capex/sales (%)	1.6	3.2	3.1	5.1	4.3	4.1
Capex/depreciation (x)	1.2	2.7	2.0	4.3	3.0	2.5
Net debt/equity (%)	33.0	-16.4	-2.5	-2.1	-0.2	-4.7
Net interest cover (x)	12.6	nm	nm	nm	nm	nm

Source: Company data, Deutsche Bank estimates

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Etalon Group: focus on bottom-up fundamentals

Overview

Etalon Group has always claimed that it has been pursuing a strategy that would set attainable growth targets without stretching the existing resources. Despite having built a relatively large business in Saint Petersburg (11% market share by completions in 2012), with completions expected to reach 459th sqm in 2013E (all-time high) and growing to 631th sqm in 2015E (based on the current portfolio of projects), the company still boasts one of the strongest balance sheets in the sector. This has been achieved through the IPO and selective investment approach, which we welcome; however, the stock fell under pressure after management revised its IPO guidance in November 2012. The sell-off on governance concerns and poor communication saw the stock de-rate rather dramatically; however, the name is now trading at an attractive discount to the fundamental value of its business (on our forecasts); thus we rate the stock Buy. Moreover, we note that recent comments from the top management team and controlling shareholders suggest that negative market feedback has been recognized, which should improve communication and disclosure.

Etalon Group's key projects are located in Saint Petersburg and the MMA, the most attractive housing markets in Russia, in our view. The company focuses on the construction of high-rise large-scale comfort class residential complexes, fully integrated with supporting infrastructure, such as schools, medical clinics and shopping centers. Etalon Group has grown from an industrial construction arm of the Ministry of Electronics into one of the largest residential real estate developers, which boasts a vertically integrated business model (producing bricks, aerated concrete, ready-mix concrete and reinforced concrete). The group still operates the industrial construction division, which provides general contracting and subcontracting services.

The company boasts an extensive sales network with representative offices located in 11 largest cities in Russia, along with 20 more locations in Russia, covered by local sales agents with an established relationship with the group, which is quite unique. We note that the model of regional sales is particularly suitable to Etalon due to its specific targeted customer base (relatively wealthy individuals by Russian standards). We note that the share of regional sales in Etalon's total new contract sales varies from 28% to 37%, according to the company.



Figure 160: Wide sales network across the most country's prosperous regions ensures Etalon Group has up to 37% of sales in MMA and SPMA

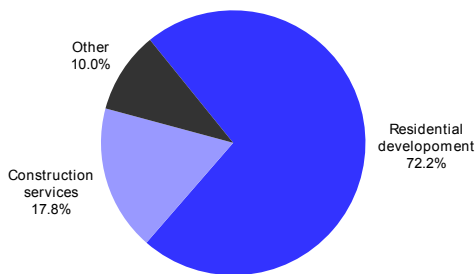


Source: Etalon Group

The business of Etalon Group is divided into three business units:

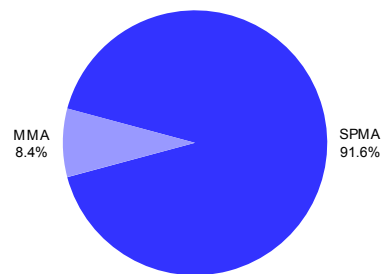
- **Residential development**, which includes the actual development, marketing and sale of residential complexes;
- **Construction services** provide services intra-group and to third parties
- **Other**, including sale of construction materials, development and sale of stand-alone commercial premises, services related to the sale and maintenance of existing premises.

Figure 161: Etalon's revenues distribution by reportable segments, FY12 ...



Source: Etalon Group

Figure 162: ... and by geography, FY12



Source: Etalon Group

Residential development

Residential real estate development is the core business of the group, which contributed c. 72% to the consolidated top line in 2012. The company's geographical exposure had been historically limited to the SPMA, but in 2008 the group entered the MMA market by acquiring the Emerald Hills project. By the end of 2012, the value of the group's portfolio reached c. USD2.4bn, according to JLL's valuation.



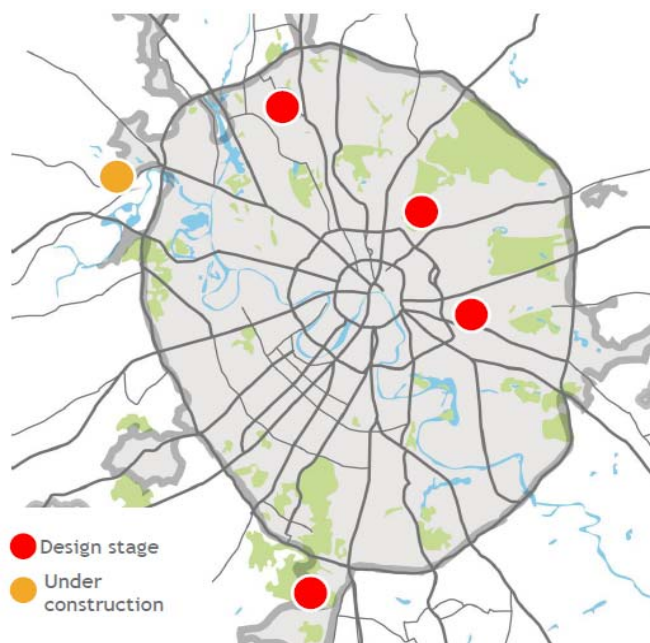
Etalon's developments pipeline consisted of 15 projects as of 31 December 2012, with total sellable area of 5.75m sqm (and 3.57m sqm of unsold NSA). The majority of projects are located in the SPMA, where the group has ten projects with total unsold area at 2.17m sqm, with the remaining five projects located in the MMA. Currently, the group is actively developing six projects in the SPMA and Emerald Hills project in the MMA, which is so far the only project under active development in this area, while the four remaining projects are still in the design stage.

Figure 163: Portfolio of projects in SPMA



Source: Etalon Group

Figure 164: Projects in MMA



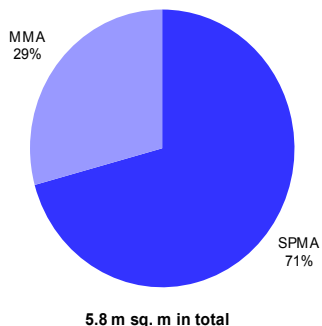
Source: Etalon Group

The share of MMA in Etalon's development pipeline stood at 29% (by total NSA) and 40% by unsold NSA in end-2012, which is explained by the fact that most of its projects (four of a total of five) in the area are still at the design stage, as the group is relatively new to the region. Once the outstanding projects move to a more developed stage, we expect the MMA share to increase, exceeding SPMA projects by 2017E (based on the current portfolio). One interesting observation is the value of the portfolio (estimated by JLL), where geographical analysis unveils equal value per square meter in both regions. This may seem counter-intuitive; however, note that most Etalon's projects in SPMA are located close to the city centre, while most of its projects in the MMA are either in the Moscow region or on the outskirts of Moscow.

The structure of Etalon's portfolio by the stage of development looks fairly balanced, with c. 42% of projects being in the construction stage and c. 52% of projects being in the design stage, with the remainder completed but unsold. A reasonable inventory of projects at the design stage (c. 2.1m sqm of total sellable area) should sustain the company's development activity for the next five to six years, based on 2012 completions, and almost four years of development, based on FY13E completions. Although we welcome the focus on efficient working capital management, we believe Etalon's land bank could be comfortably increased, given the company's balance sheet situation and management's strategic goal to sustain around 700th of completions per annum.

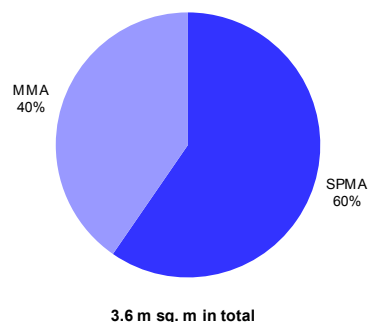


Figure 165: Total NSA split by geography, YE12



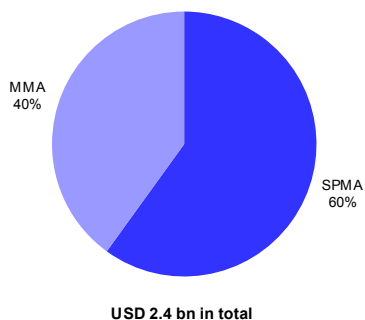
Source: Etalon Group

Figure 166: Unsold NSA breakdown, YE12



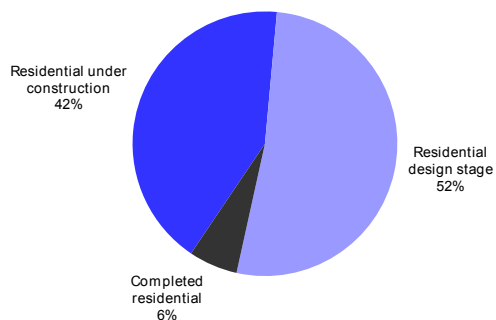
Source: Etalon Group

Figure 167: Value of the portfolio by geography, YE12



Source: Company based on JLL valuation report

Figure 168: Portfolio by stage of development (unsold NSA), YE12



Source: Etalon Group

Etalon acquired four new projects in 2012 with a total area of 883th sqm, addressing concerns on land bank sufficiency. The largest one, Galactica, representing c.74% of total saleable area, is located in the SPMA. The company is now looking for potential acquisitions of new projects to secure its construction program for 2017-2020 and beyond. As a few large projects are still in the design stage, Etalon faces little pressure to step up with M&A activity, and is instead focusing on selective deals with targeted gross margins in excess of 30%. The solid financial position is supportive of such an approach, in our view.



Figure 169: New projects acquired in 2012

Region	Project	NSA, '000 sqm*	Region share	Expected completion year
MMA		203	23%	
	Prospekt Budennogo	64		2017
	Alekseevskiy district	138.9		2018
SPMA		682.1	77%	
	Tukhachevskogo street	24.3		2013
	Galactica	657.8		2021
Total additions		885	100%	

Source: Etalon Group

* NSA attributable to Etalon

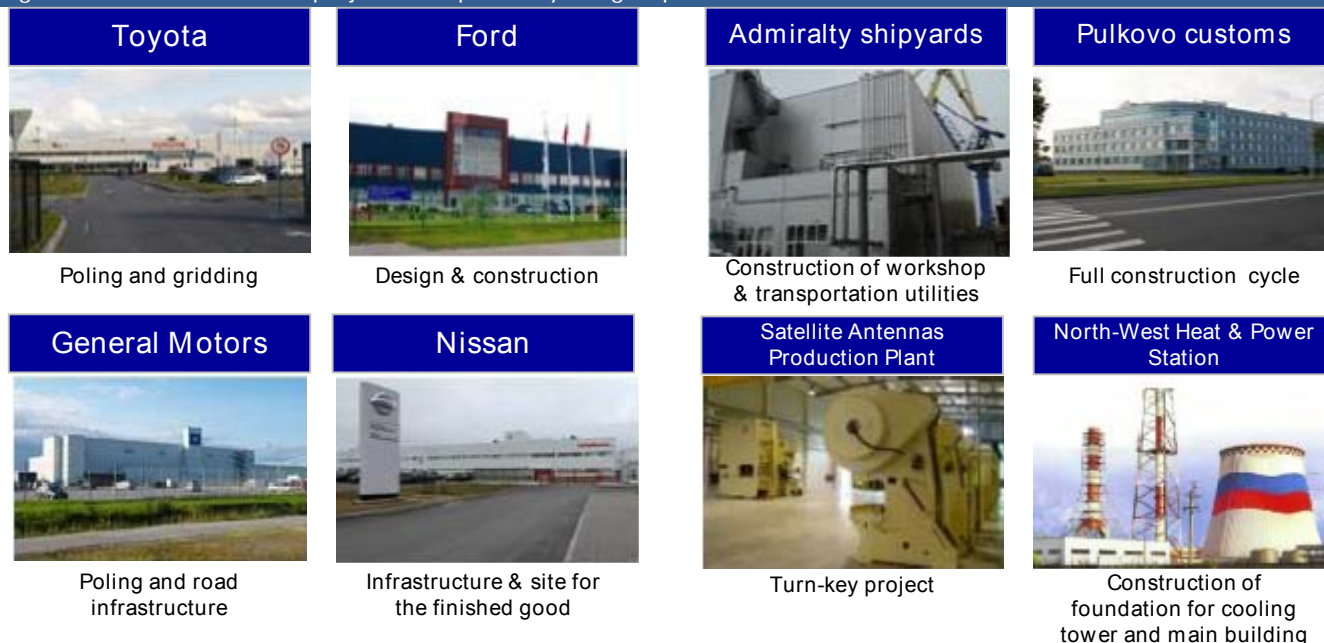
Construction services

Etalon is one the leading industrial construction companies in the North-Western region. The segment activities include general contracting and subcontracting services rendered to both international and domestic clients. Etalon also provides construction services to its own subsidiaries for the construction of residential and commercial properties. The company has a solid track record of successfully completed projects, which include various industrial/commercial facilities, such as heat & power stations, hotels, shipyards, fitness centers, and car assembly plants. Currently, Etalon's pipeline features two large projects, Nissan (c.RUB5.0bn) and ExpoForum (c.RUB14.0bn), which are in the final stages of completion.

Although the segment is less profitable than residential real estate development, Etalon plans to increase its significance going forward, due to its low capital intensity and relatively stable cash inflows. Moreover, the provision of high quality construction services to large international/local companies facilitates brand awareness. Note the segment's activity is currently limited to the North-Western region, where the company boasts a strong footprint.



Figure 170: Some industrial projects completed by the group



Source: Etalon Group

Building materials, maintenance and other

Etalon has the following building material production capacities:

- A brick plant producing ceramic bricks of different sizes and hues with total capacity of 35m nf bricks per annum;
- Ready-mix concrete batching plants with aggregate capacity of 204th m³, where Etalon can produce ready-mix concrete in a wide range of specifications;
- Reinforced concrete plant with aggregate capacity of approximately 42th m³ of reinforced concrete structures and aerated concrete.

Leasing and engineering services are primarily related to the fleet of tower cranes, which Etalon leases. In 2010, Etalon's tower cranes fleet consisted of 38 units.

Other activities include services related to registration of ownership rights for flats acquired and after market maintenance, and the provision of services to the completed projects developed by the company.

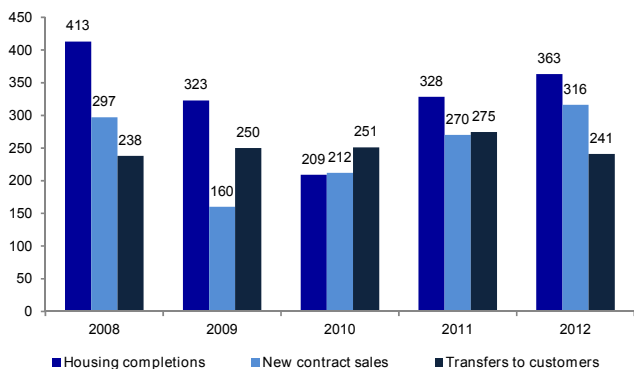
Financial analysis and forecasts

The dynamics of Etalon's housing completions, new contract sales and housing transfers during the years of crisis and following rebound look similar to its public peers, although the dip in Etalon's completions and new contract sales was relatively less profound compared with the more leveraged LSR and PIK. Etalon finished 2012 with record-high cash collections of 316th sqm (+17% YoY) and second-highest-ever residential completions of 363th sqm (+10.6% YoY). The 12.4% YoY decrease in FY12 housing transfers is primarily related to the late commissioning of the Emerald Hills and Orbit projects in 4Q12 and inability of customers to sign acceptance acts before the end of 2012. The steady growth in sales and completions was accentuated by



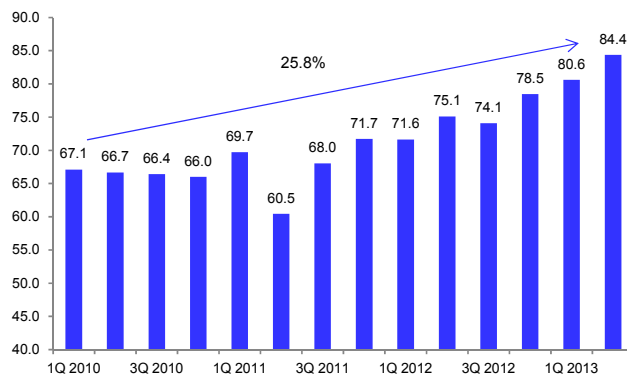
commensurate growth in average realizable prices for Etalon's projects, which have growth by 25.8% to date since the beginning of 2010.

Figure 171: Housing transfers, completions and sales, '000 sqm



Source: Etalon Group

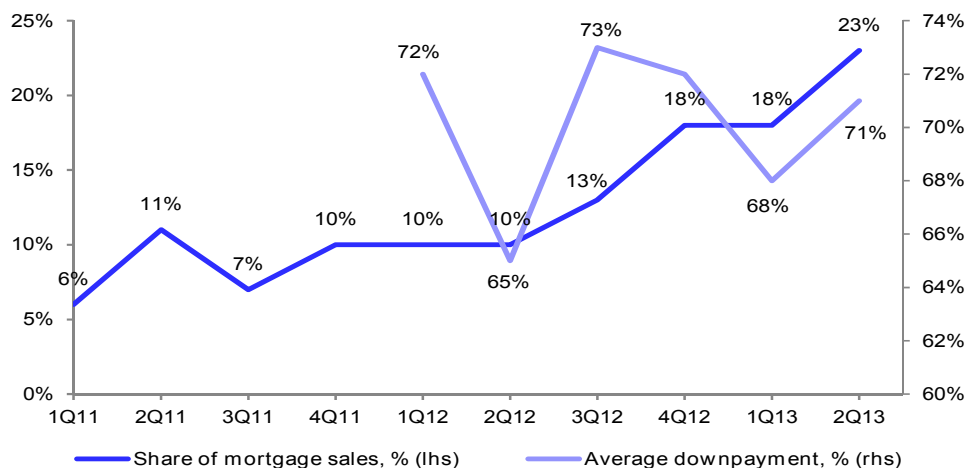
Figure 172: Average realizable price dynamics for Etalon's housing



Source: Etalon Group

The share of mortgage sales in Etalon's total revenue has been steadily growing since 2011 and reached its record-high milestone of 23% in 2Q 2013, thanks to the company's ongoing efforts to establish and maintain its relationship with banks. We note that the share of Etalon's mortgage sales is still low compared with peers and market average; therefore, we see potential for further growth in the share of mortgage financed deals. The growing availability of mortgage financing widens the potential customer base of Etalon, in our view, at the same time reducing the company's need to expand its working capital by providing installment plans to customers. Note that in 2Q13 the average down payment for Etalon's apartments was 71%, implying that approximately 29% of the residential area was sold in credit. The company sees the average down payments level at above 50% as acceptable.

Figure 173: Mortgage sales and average down payment dynamics



Source: Etalon Group

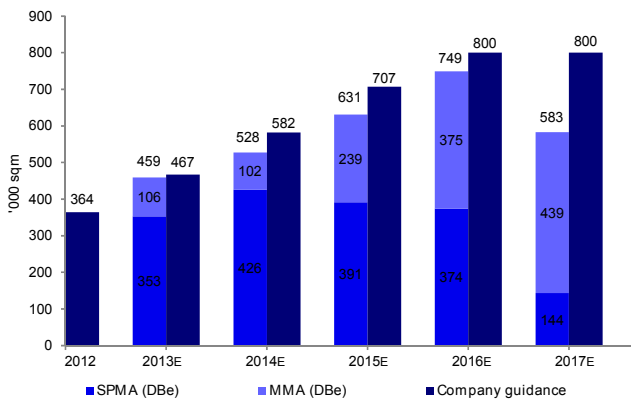
We expect annual residential completions to expand at a 20.0% CAGR in 2012-2015E. Our estimates look slightly more conservative than the company's guidance, which reflects our cautious view on the timing of certain projects' completion. The dip in completions by 22% in 2017 reflects the gradual depletion of the company's residential



portfolio by this time and the need for Etalon of new projects' acquisitions in order to secure its operations in 2017 and further.

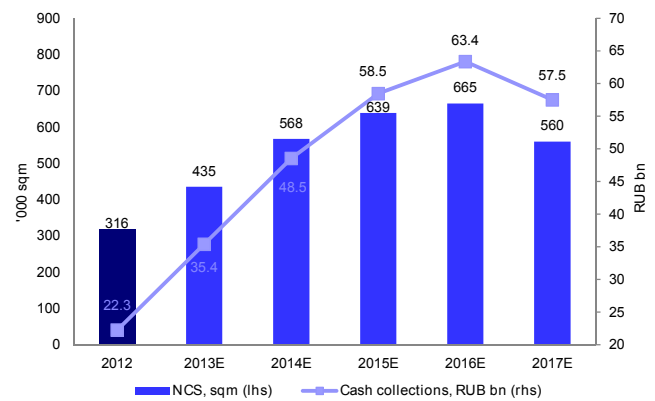
We forecast cash collections to post a 26% CAGR in 2012-2015E, driven by an 18% CAGR 2012-2015E new contract sales and 7.9% average price growth (due to a combination of price inflation and product mix gains). According our estimates, 2012-2015E revenue should record a 40% CAGR in 2012-2015E, mainly due to the low base effect, as some 2012 transfers are to be posted in 1H 2013 due to late housing commissioning in 2012. We highlight that MMA completions are expected to grow year over year and to reach parity with SPMA completions in 2016.

Figure 174: We expect completions to see a 20% CAGR in 2012-2015E



Source: Etalon Group, Deutsche Bank

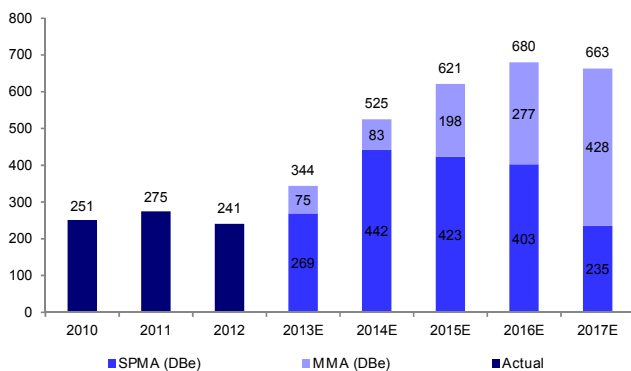
Figure 175: New contract sales in real terms are set to expand with a 20% CAGR in 2012-2016E



Source: Etalon Group, Deutsche Bank

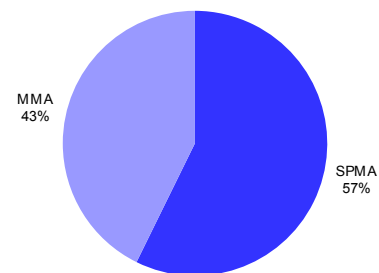
Housing transfers are poised to reach 620th sqm in 2015E, on our numbers, demonstrating a 37% CAGR in 2012-2016E. We expect 2013 transfers to grow by 42.7% year-over-year as a significant part of 2012 sales from the lately commissioned Orbit and Emerald Hills projects should be posted as transfers in 1H 2013. Although the MMA and SPMA completions are set to reach parity by 2016, the share of the MMA in 2016 transfers is expected to be lower than the SMPA's share, as the dynamics of transfers usually lag completions by 1-2 years.

Figure 176: We forecast transfers to post a 30% CAGR in 2012-2016E



Source: Etalon Group, Deutsche Bank

Figure 177: SPMA will remain the largest contributor to revenues by 2016

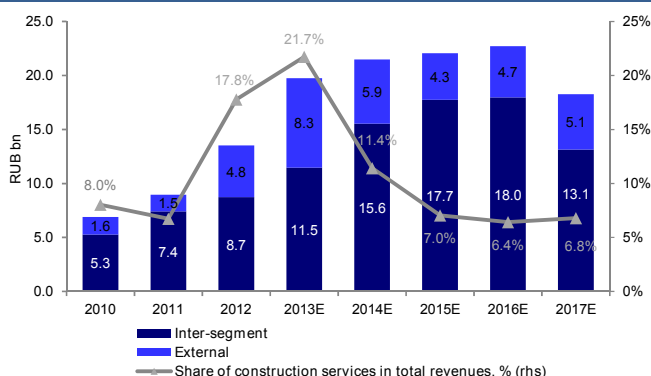


Source: Deutsche Bank



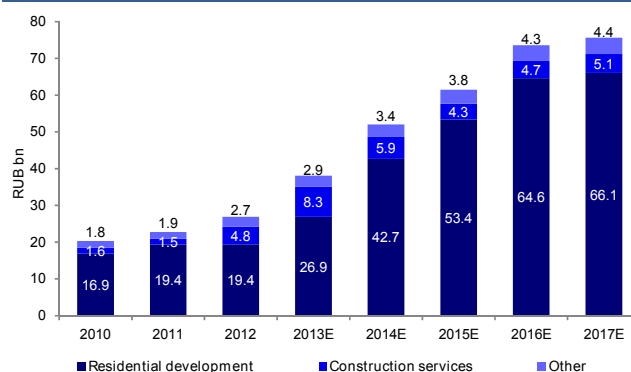
We expect Etalon Group's consolidated top line to expand at a 31.7% CAGR in 2012-2015E, driven by the 40.0% CAGR in 2012-2015E of the residential development segment, negative 3.3% CAGR in 2012-2015E of construction services business and 12.3% CAGR in 2012-2015E of other segments. Note that the share of industrial construction revenues in total group revenues increased to 17.8% in FY12 vs. 8.4% on average in 2008-2011, as revenues from Etalon's two largest industrial projects, Nissan and ExpoForum, were recognized in 2012. We project the share of construction services to edge up further up to 21.7% in 2013, as we expect the bulk of the revenue from the RUB5.0bn contract with Nissan to be recognized this year, while the bulk of the RUB14.0bn contract with ExpoForum should be recognized in FY14. Post-2014, we forecast the share of construction revenues to sustain at 6.7%.

Figure 178: Construction services revenues will post a negative 2012-2015E CAGR of 3.3%, on our estimates



Source: Etalon Group, Deutsche Bank

Figure 179: Consolidated top line is set to expand at a 31.7% CAGR in 2012-2015E, on our estimates



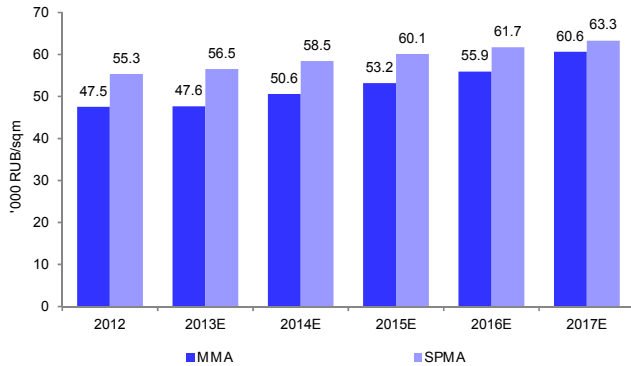
Source: Etalon Group, Deutsche Bank

Our construction cost projections are generally consistent with our housing price forecasts, growing at below CPI rates. We expect cost inflation to post slightly higher growth rates compared with housing prices, which should put some pressure on Etalon's margins in the medium term. We model each item of the cash construction costs for the MMA and SPMA separately, based on our in-house projections, and then apply the average growth rate to the total per sqm development cost.

We see the EBITDA reaching a 38.6% CAGR in 2012-2015E, driven by strong volumes growth in the residential development sector. Our projections suggest that the EBITDA margin is set to increase from 24% in 2012 to 27% in 2015E. We note, however, that such growth in profitability is somewhat misleading due to the low base (FY12 EBITDA margin of 24% vs average FY09-11 EBITDA margin of 35%). The margin recovery in FY13-14 is a combination of mix improvements and decline in the share of the low-margin construction services segment in 2014E.

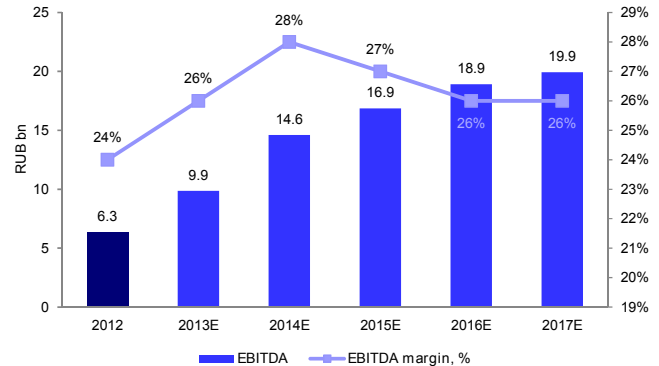


Figure 180: Construction costs/sqm (incl. land and social liabilities) by region



Source: Etalon Group (2012), Deutsche Bank

Figure 181: We forecast EBITDA to expand at a 31.5% CAGR in 2012-2016E

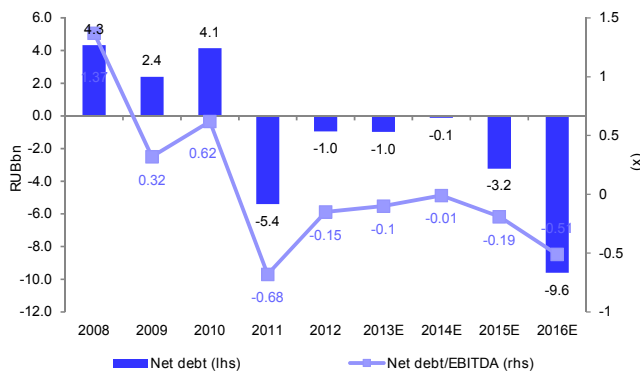


Source: Etalon Group (2012), Deutsche Bank

Debt: conservative approach to leverage

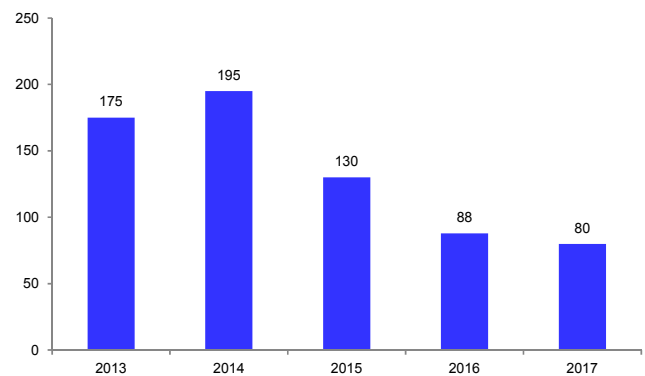
Etalon boasts the strongest balance sheet among its public peers, with a USD31m net cash position by end-2012. The proceeds from the IPO in 2011 significantly reduced Etalon's net debt, bringing it into negative territory. As of end-2012, the gross debt stood at c. USD548m with the estimated weighted average cost of debt at approximately 10%. Etalon's debt is fairly evenly distributed across different maturity dates, and it has a relatively long maturity profile with the final payment in 2017E.

Figure 182: Etalon's net debt development (our estimates)



Source: Etalon Group (2008-2012), Deutsche Bank

Figure 183: Etalon's debt repayment schedule YE12, USD m

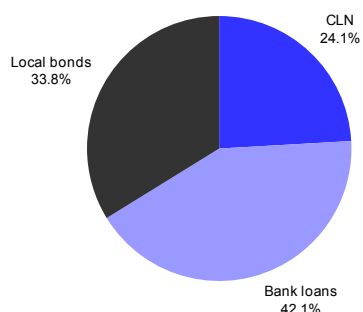


Source: Etalon Group

Etalon uses different borrowing sources with bank loans, representing 42.1% of total loan portfolio, while 24.1% and 33.8% are attributable to credit-linked notes and local bonds, respectively. We note that only half of the debt portfolio is denominated in rubles, while the remaining half is a mix of USD- and EUR-denominated loans, which exposes Etalon to currency risk; however, low leverage makes this risk immaterial, in our view.

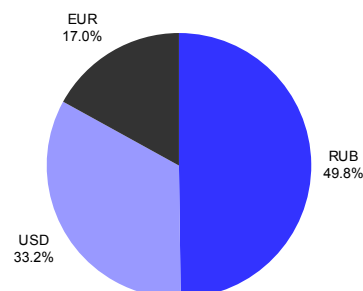


Figure 184: Debt composition by type of credit facility
 YE12 ...



Source: Etalon Group

Figure 185: ... and by currency, YE12



Source: Etalon Group

Valuation: 12m target price of USD5.89/GDR

We value Etalon using DCF methodology with a terminal growth period. Our DCF is based on a WACC of 15.8%, with an RROE of 17.5% (a risk-free rate of 7.5% and an equity risk premium of 10%), an after-tax cost of debt of 7.3%, and a terminal growth rate of 4%, which reflects our long-term assumptions for residential real estate sector growth in Russia and our expectation that Etalon's growth rate will slightly outpace the market.

Figure 186: Etalon Group's DCF valuation

RUBm	2013E	2014E	2015E	2016E	TV
EBIT	9 415	13 859	15 830	17 605	18 310
Tax on EBIT	-1 883	-2 772	-3 166	-3 521	-3 662
Depreciation	452	737	1 022	1 307	1 360
Changes in WC	-6 159	-10 356	-7 771	-5 858	-6 093
Capex	-1 952	-2 237	-2 522	-2 807	-1 360
Free cash flow	-127	-769	3 393	6 726	8 555
Discount factor	1.0	0.86	0.75	0.64	0.64
PV of Free cash flows	-127	-664	2 530	4 332	5 510
RWACC	15.80%		WACC calculation		
Terminal growth rate	4.00%		Risk-free rate		7.50%
FCF, 2013-2016 (RUBm)	3 133		Standard equity risk		4.00%
Terminal value (RUBm)	46 707		Corporate governance		4.00%
EV (RUBm)	53 320		Liquidity risk		2.00%
Net Debt, (RUBm)	-950		Required ROE		17.50%
Minority Interest (RUBm)	408		After-tax cost of debt		7.30%
Equity value (RUBm)	53 320		Debt/equity		20.00%
Target price GDR (USD)	5.97		Required WACC		15.8%

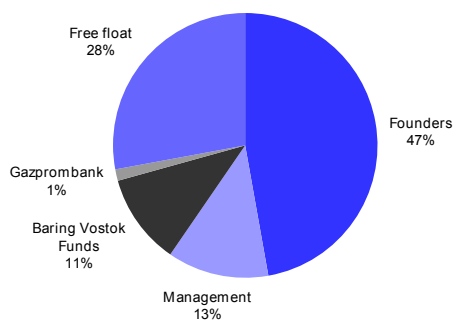
Source: Deutsche Bank



Ownership structure and corporate governance

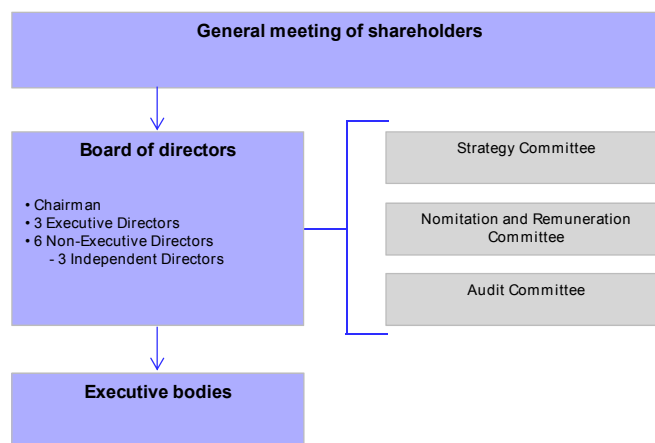
Viacheslav Zarenkov, Founder and Chairman of the Board of Directors, and persons related to him, control 47.2% of Etalon Group. Management owns 12% of the company, Baring Vostok controls over 11%, and 27.9% of shares are considered free float.

Figure 187: Etalon's ownership structure as of April 2011



Source: Etalon Group

Figure 188: Group's governance structure



Source: Etalon Group

Dividends

Etalon does not have a formal dividend policy approved. Up until recently, the group positioned itself as a growth story and had not considered paying dividends. At the last meeting held on 5 July 2013, Etalon's Board of Directors issued a recommendation to develop a formal dividends policy and present it by 15 October 2013.



Model updated: 12 July 2013

Running the numbers

Emerging Europe

Russia

Property

LSR

Reuters: LSRGq.L

Bloomberg: LSR LI

Hold

Price (12 Jul 13) USD 4.03

Target Price USD 4.40

52 Week range USD 3.52 - 5.15

Market Cap (m) EURm 1,590
USDm 2,078

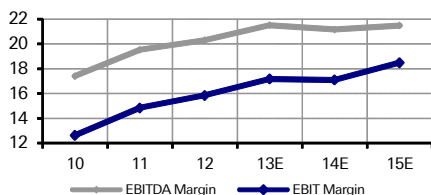
Company Profile

LSR is a vertically integrated real estate developer and construction materials company, which boasts strong positions in most business segments it operates. The company's development pipeline stands at 4.5m metres of NSA.

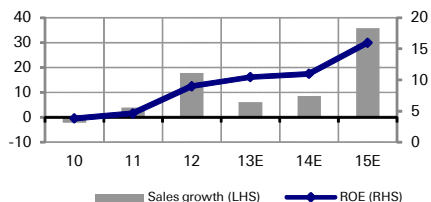
Price Performance



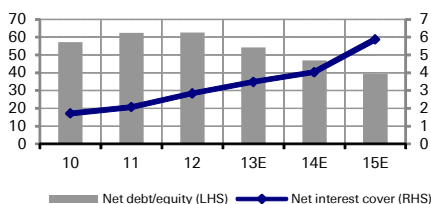
Margin Trends



Growth & Profitability



Solvency



Fiscal year end 31-Dec

Financial Summary

	2010	2011	2012	2013E	2014E	2015E
DB EPS (RUB)	3.44	4.79	9.61	11.95	13.60	22.02
Reported EPS (RUB)	3.44	4.79	9.61	11.95	13.60	22.02
DPS (RUB)	0.00	0.00	0.00	0.00	0.00	0.00
BVPS (RUB)	102.8	104.4	109.8	118.9	128.9	146.8
Weighted average shares (m)	515	515	515	515	515	515
Average market cap (RUBm)	123,942	101,718	71,612	67,836	67,836	67,836
Enterprise value (RUBm)	154,366	135,494	107,061	100,988	98,930	97,267

Valuation Metrics

P/E (DB) (x)	70.0	41.2	14.5	11.0	9.7	6.0
P/E (Reported) (x)	70.0	41.2	14.5	11.0	9.7	6.0
P/BV (x)	2.60	0.99	1.13	1.11	1.02	0.90
FCF Yield (%)	nm	3.0	nm	5.5	5.7	5.5
Dividend Yield (%)	0.0	0.0	0.0	0.0	0.0	0.0
EV/Sales (x)	3.1	2.6	1.8	1.6	1.4	1.0
EV/EBITDA (x)	17.8	13.4	8.6	7.2	6.6	4.7
EV/EBIT (x)	24.5	17.6	11.1	9.1	8.2	5.5

Income Statement (RUBm)

Sales revenue	49,950	51,910	61,123	64,859	70,369	95,545
Gross profit	15,456	17,094	21,620	23,922	25,579	33,405
EBITDA	8,688	10,136	12,411	13,958	14,892	20,531
Depreciation	2,381	2,432	2,724	2,815	2,863	2,873
Amortisation	0	0	0	0	0	0
EBIT	6,307	7,704	9,687	11,143	12,029	17,658
Net interest income/(expense)	-3,680	-3,710	-3,418	-3,202	-2,988	-3,008
Associates/affiliates	0	0	0	0	0	0
Exceptionals/extraordinary	-95	-410	211	0	0	0
Other pre-tax income/(expense)	-36	152	-61	0	0	0
Profit before tax	2,496	3,736	6,419	7,941	9,041	14,651
Income tax expense	754	1,302	1,506	1,826	2,079	3,370
Minorities	-28	-34	-38	-42	-46	-61
Other post-tax income/(expense)	0	0	0	0	0	0
Net profit	1,770	2,468	4,951	6,157	7,007	11,342
DB adjustments (including dilution)	0	0	0	0	0	0
DB Net profit	1,770	2,468	4,951	6,157	7,007	11,342

Cash Flow (RUBm)

Cash flow from operations	-2,470	7,329	5,166	8,739	8,359	8,204
Net Capex	-4,668	-4,326	-6,194	-5,000	-4,500	-4,500
Free cash flow	-7,138	3,003	-1,028	3,739	3,859	3,704
Equity raised/(bought back)	11,892	0	0	0	0	0
Dividends paid	0	-1,629	-2,070	-1,485	-1,847	-2,102
Net inc/(dec) in borrowings	-5,641	6,050	1,067	-5,771	-1,848	2,413
Other investing/financing cash flows	-777	-3,965	801	0	0	0
Net cash flow	-1,664	3,459	-1,230	-3,517	164	4,015
Change in working capital	-6,446	3,042	-2,400	-190	-1,466	-5,950

Balance Sheet (RUBm)

Cash and other liquid assets	1,327	5,195	3,967	450	614	4,629
Tangible fixed assets	32,852	37,329	39,907	40,592	40,729	40,856
Goodwill/intangible assets	4,567	4,880	4,949	6,449	7,949	9,449
Associates/investments	152	126	192	192	192	192
Other assets	67,323	79,332	88,763	97,917	109,366	128,172
Total assets	106,221	126,862	137,778	145,600	158,850	183,298
Interest bearing debt	31,703	38,922	39,475	33,704	31,856	34,269
Other liabilities	21,373	33,992	41,601	50,565	60,548	73,405
Total liabilities	53,076	72,914	81,076	84,269	92,404	107,674
Shareholders' equity	52,945	53,773	56,569	61,240	66,401	75,641
Minorities	200	175	133	91	45	-17
Total shareholders' equity	53,145	53,948	56,702	61,331	66,446	75,624
Net debt	30,376	33,727	35,508	33,254	31,242	29,640

Key Company Metrics

Sales growth (%)	-2.1	3.9	17.7	6.1	8.5	35.8
DB EPS growth (%)	-62.5	39.4	100.6	24.4	13.8	61.9
EBITDA Margin (%)	17.4	19.5	20.3	21.5	21.2	21.5
EBIT Margin (%)	12.6	14.8	15.8	17.2	17.1	18.5
Payout ratio (%)	0.0	0.0	0.0	0.0	0.0	0.0
ROE (%)	3.8	4.6	9.0	10.5	11.0	16.0
Capex/sales (%)	9.8	9.5	11.3	7.7	6.4	4.7
Capex/depreciation (x)	2.1	2.0	2.5	1.8	1.6	1.6
Net debt/equity (%)	57.2	62.5	62.6	54.2	47.0	39.2
Net interest cover (x)	1.7	2.1	2.8	3.5	4.0	5.9

Source: Company data, Deutsche Bank estimates

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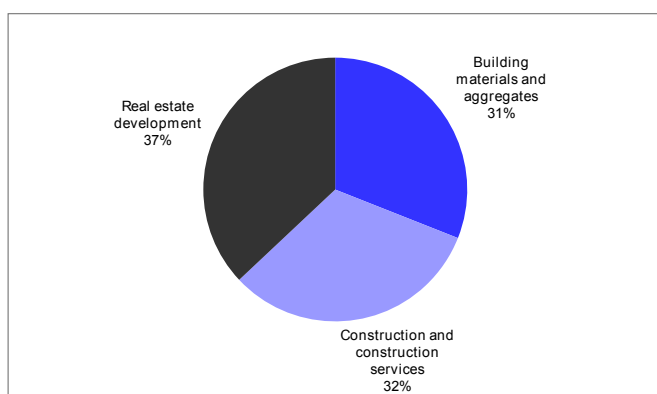


LSR Group: growth priced in

Overview

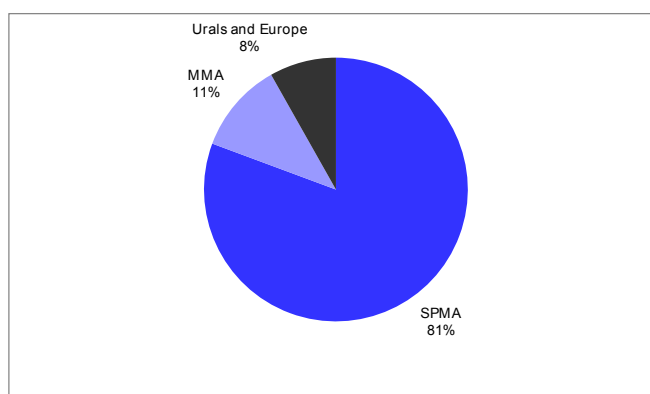
LSR is the largest real estate developer in SPMA, as well as one of the leading building materials producers in the region. The group is a vertically integrated diversified construction and development company, which views upstream assets as one of its core competitive strengths. LSR's operations are largely located in three geographical regions, including the MMA, SPMA and Urals (Yekaterinburg, primarily); however, the SPMA (Saint Petersburg, specifically) remains the main top-line contributor; generating 81% of consolidated revenues in FY12.

Figure 189: Revenues by business segment, 2012



Source: LSR Group

Figure 190: Revenues by geographical segment, 2012



Source: LSR Group

The business of LSR is divided into three major segments:

- Building materials and aggregates
- Construction and construction services
- Real estate development

Building materials

LSR's building materials segment comprises both mining and manufacturing assets. The company operates a number of mining/production facilities (mostly in the SPMA), which supply finished goods to both internal and external customers. Recall that LSR started as a producer of building materials, evolving, at a later stage, into a vertically integrated holding with a greater focus on real estate development and construction services; however, the segment has always been a core business for the management and controlling shareholders. Although the strategic focus shifted towards the development segment at a certain stage of the company's life, LSR continued investing in the construction materials business, maintaining its long position in upstream products.

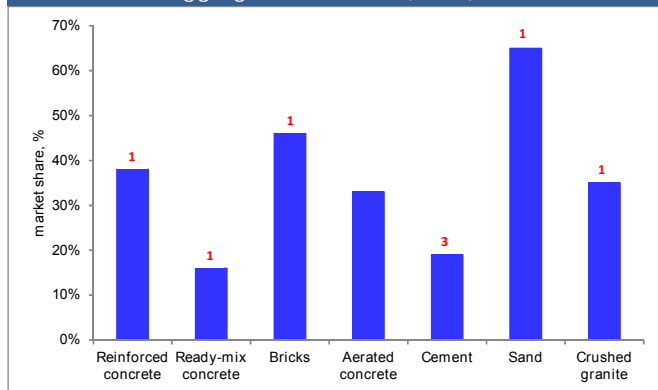
LSR produces a wide range of building materials (including aggregates), and is the leading producer in the SPMA. Since construction material consumption is normally regional, a dominant market position strengthens producers' bargaining power;

LSR's building materials segment comprises both mining and production assets



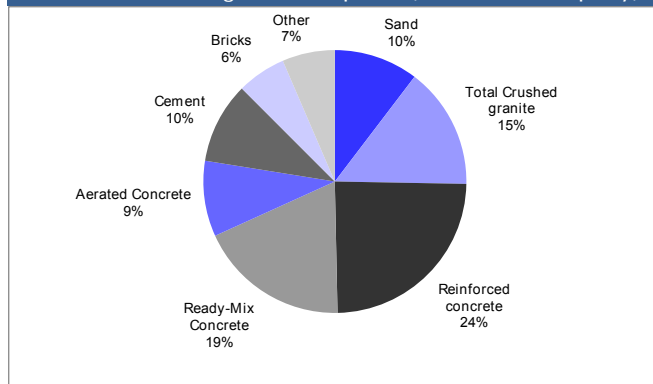
therefore, the company's strategy has been protecting its market share in the most attractive/lucrative product segments (i.e. aggregates), and even increasing it. In this context, we highlight that LSR's market share in the SPMA's sand market in 2013 was close to 70%, making the company the supplier of choice for most infrastructure projects, and supporting price discipline in the region.

Figure 191: LSR is the leading producer of building materials and aggregates in SPMA (2012)



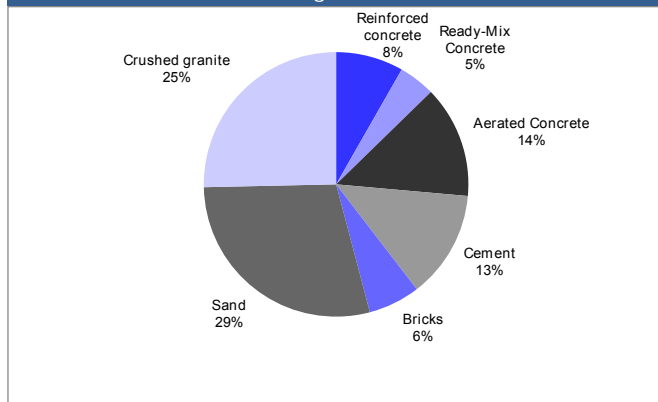
Source: LSR Group, Reshenie, Deutsche Bank

Figure 192: Different types of concrete account for more than 50% of the segment's top line (incl. inter-company)...



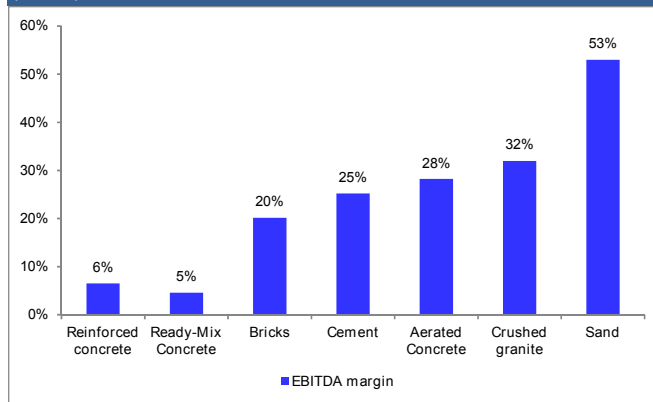
Source: LSR Group

Figure 193: ...however, sand and crushed granite are the main contributors to the segments' EBITDA, and...



Source: Deutsche Bank

Figure 194: ...the most profitable construction materials (2012)

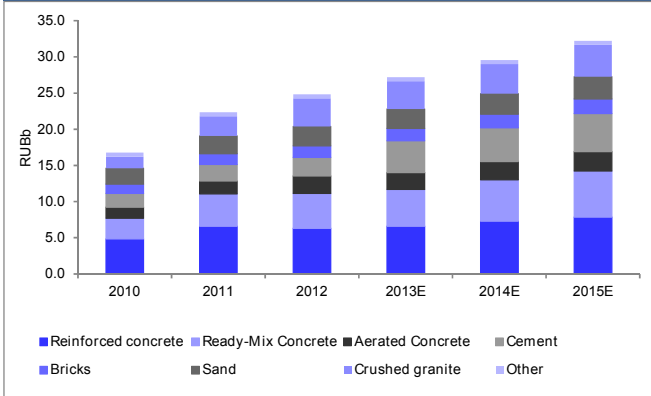


Source: Deutsche Bank

The segment is set to remain an important contributor to the group's earnings; however, building materials will not be the major driver of the company's financial performance, on our estimates. That said, we highlight that most of the company's organic growth projects have been delivered, while new capacities are in the process of ramping up; therefore, production growth, if any, will have only a limited impact on the segment's top line. Our building material price expectations are largely conservative, given Deutsche Bank's demand/supply forecasts, which suggests that margin pressure can be overcome only by mix improvements/better cost control, which could be difficult to achieve. On the back of that, we project the segments' EBITDA to see a 7% CAGR in 2012-2015E, while the EBITDA margin should remain in the range of 17-18%.

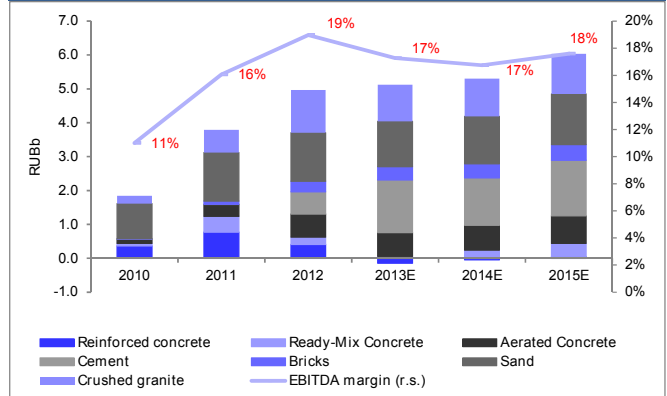


Figure 195: We forecast the segment's revenues to post a 9% CAGR in 2012-2015E, while...



Source: LSR Group, Deutsche Bank

Figure 196: ...EBITDA should expand at a 7% CAGR in 2012-2015E, implying margin pressure



Source: LSR Group, Deutsche Bank

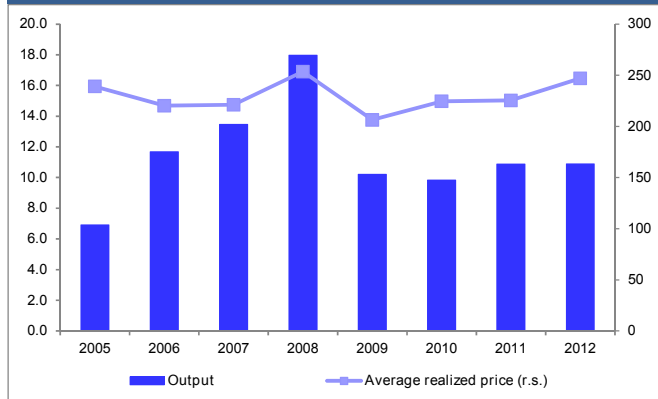
Sand is a relatively small... The company is the only producer of high-quality sea sand in the region, which is one of the key ingredients for building materials. LSR reported 92m³ of total sand reserves as of 31 December, 2011, which implies more than seven years of reserve life at the current production levels of c.17m³ per annum. The company constantly seeks way to replenish the reserve base by acquiring new licenses. Prices for sand in SPMA have been relatively resilient, as demand has been well supported by the ongoing infrastructure investment in the region (the most sand-intensive type of construction activity), and "special" projects. In this context, we highlight the Sea (Marine) Façade project, which envisaged approximately 476ha of land reclamation from the Neva Bay in the Gulf of Finland. In 2008, the first phase of reclamation works was completed, as an area of 150 hectares was reclaimed for the port building. Since then, the construction work has been suspended due to financing issues, which saw a dip in LSR's sand production volumes in 2009 and thereafter. The second and third stage of the project are under consideration; therefore, in the absence of a positive development with the project we expect only marginal growth in regional sand consumption. For more details on the sand demand/supply, please refer to the industry overview section of this report.

Sand

...but lucrative business for LSR. The strong regional footprint and market discipline ensured that sand prices remained relatively resilient in 2008-2009, which helped the business stay nicely profitable, while a recovery thereafter saw the EBITDA margin expanding to 53% in 2012. Although we expect margins to move lower going forward, our demand/supply suggests that sand will remain a very lucrative business for LSR. We forecast sand prices to grow at an average of 1.3% in 2013E-2015E, which, coupled with low single-digit sales growth forecasts, puts top-line growth at a 4.4% 2012-2015E CAGR. Our CPI estimates imply that cost pressure is set to intensify, which should be reflected in somewhat lower margins and an essentially flat EBITDA CAGR in 2012-2015E.

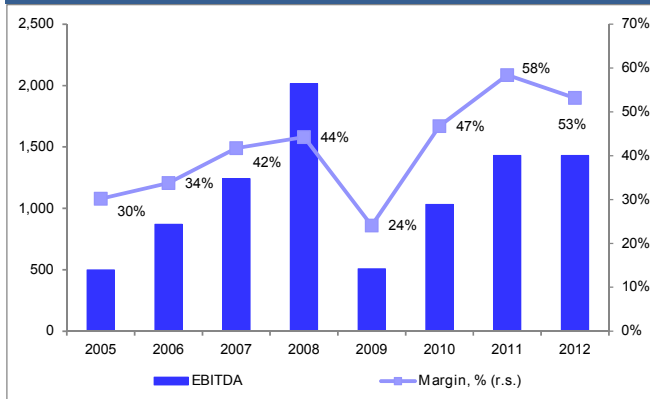


Figure 197: Prices for sand have been relatively resilient, RUB/t



Source: LSR Group

Figure 198: Sand is a lucrative product for LSR, RUBm



Source: LSR Group, Deutsche Bank

Crushed granite is another regional product, where LSR successfully competes against key peers, boasting the number-one position in the SPMA. The company owns mining assets in the Leningrad region and Urals, using the material for both internal needs and external supplies. We estimate that LSR's market share in the SPMA in 2012 was c. 40%, which we expect to sustain given the limited import threat and relative scarcity of easily available reserve base. The crushed granite market in SPMA is less concentrated than the sand market, which has natural implications for producers' bargaining power, and hence the margin differential. Nevertheless, LSR's crushed granite division recorded a very strong performance in 2012, as EBITDA doubled YoY, while profitability exceeded 30%, driven by higher prices and sales volumes. Since the company's mines are already operating at above 80% utilization rates, we forecast output expansion at LSR to moderate going forward, which, coupled with below inflation realized prices growth, should see margins slipping below 25% in the longer term, on our estimates.

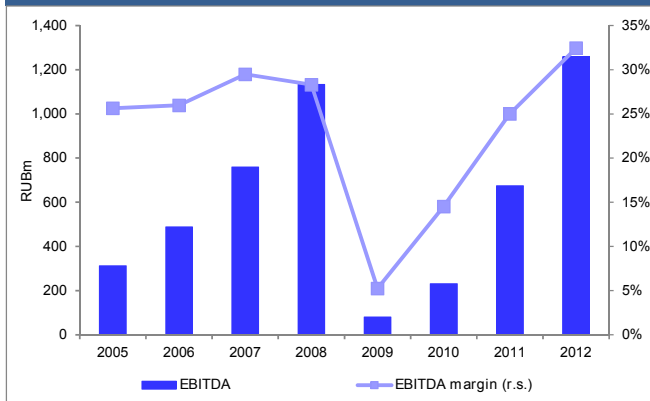
Crushed granite

Figure 199: Realized prices for crushed granite have been volatile



Source: LSR Group

Figure 200: Crushed granite's profitability was the highest in 2012



Source: LSR Group

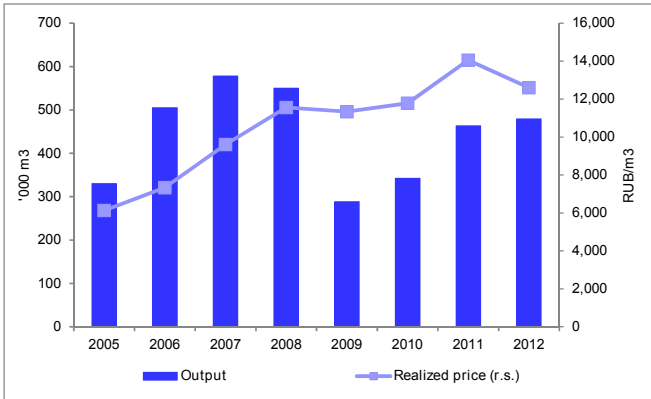
LSR operates more than 1.0m m3 of reinforced concrete capacity. The company controls five plants in SPMA, which cumulatively supplied approximately 38% of the SPMA market in 2012, and one plant in the Moscow and Urals regions each. Although LSR's footprint in the home market seems strong, we highlight that the company's market share has been on a decline, contracting from 51% in 2008 to less than 38% in 2012, driven by new capacity ramp-up in the region and intensifying competition.

Reinforced concrete



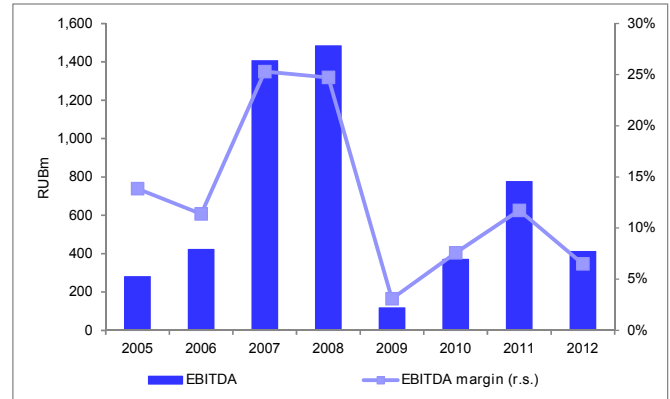
Consequently, the division's profitability (EBITDA margin) declined from 25% in 2008 to 8% in 2012. Our market forecasts suggest that the competitive backdrop is set to intensify further; therefore, we do not foresee meaningful margin recovery in the medium term and project a further contraction in profitability, which should normalize at high-single-digit levels in the longer term.

Figure 201: Lack of price momentum...



Source: LSR Group

Figure 202: ...has kept division's margins under pressure

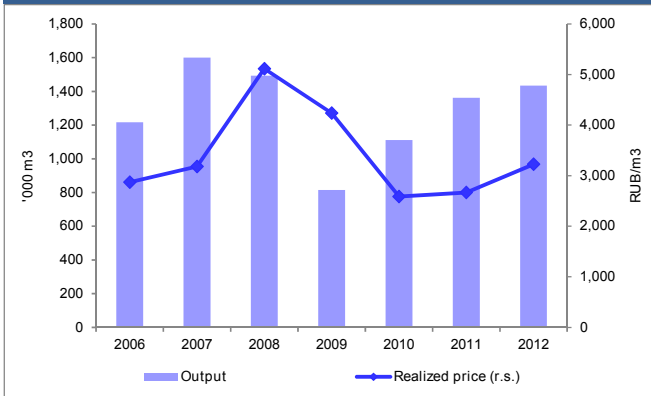


Source: LSR Group

Ready-mix concrete is a competitive market with low entry barriers. LSR is the number-one producer in the region with a 16% market share in 2012, although this figure has been consistently declining since 2006 (when it was recorded at 28%). The company controls 14 ready-mix plants with combined annual production capacity in excess of 3.0m m³, located in the SPMA, MMA and Urals. Demand for the product is seasonal; hence ready-mix concrete plants normally run below nominal capacity, which ranged from 26% to 70% in the case of LSR (in 2004-2012). Most production facilities employ similar technology, while the manufacturing process is relatively simple and scalable. Ready-mix concrete business is structurally low-margin; hence we do not project any meaningful expansion in the profitability for the industry/LSR's division.

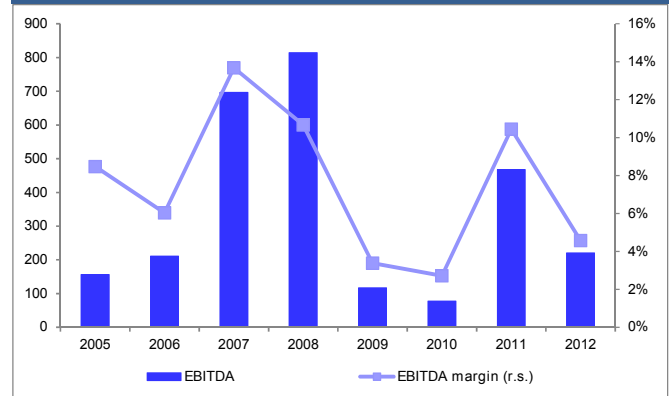
Ready-mix concrete

Figure 203: Ready-mix concrete plants normally run below nominal capacity



Source: LSR Group, Deutsche Bank

Figure 204: Ready-mix concrete business is structurally low-margin



Source: LSR Group

LSR was among the first aerated concrete producers in NW Russia, getting the benefit of educating customers and grabbing market share, which reached 60% in 2008. Intensifying competition from international producers, which set up local production facilities, saw LSR's market share almost halving by the end of 2012. We highlight that

Aerated concrete



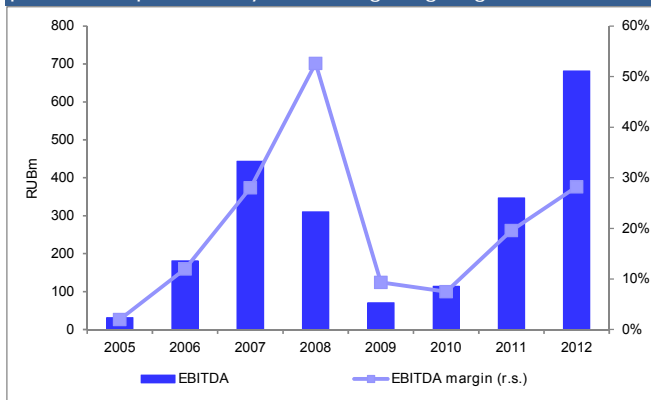
LSR is also a sizeable player in the Ukrainian market, where its plants' cumulative capacity is larger than in Russia. Our demand/supply model for the SPMA suggests that the market is becoming saturated, which could be aggravated by the additional plants expected to be ramped up by Stroykomplekt and EuroAeroBeton, making us cautious on the price/margin outlook; hence we anticipate downward pressure on producers' profitability in the region going forward. Upside risks to our forecasts (LSR case) relate to a stronger-than-expected performance in the Ukrainian market.

Figure 205: LSR plants in Russia and Ukraine are fully utilized



Source: LSR Group

Figure 206: We anticipate downward pressure on producers' profitability in NW region going forward



Source: LSR Group

LSR is the largest supplier of bricks to the Saint Petersburg and Leningrad region, boasting 46% market share in 2012, which is expected to somewhat increase, along with the ramp-up of the new brick plant. Recall that the company completed the construction of the production facility in December 2012, which will be able to manufacture up to 160m nf per annum. The plant is located close to a clay deposit with LOM of more than 100 years of production, and it will replace two older plants, while both sites will be used for residential development projects. The new facility is more efficient and its product mix is more tailored towards the specific demand pattern of the SPMA (i.e. it is able to produce select types of bricks, which had been previously imported into Russia). Overall, the anticipated operational and mix improvements should help LSR maintain the division's profitability at the current level, despite the rather challenging sector outlook.

Bricks

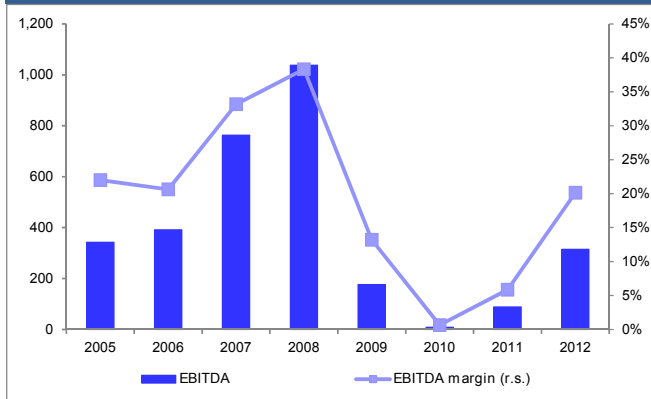


Figure 207: Revised production strategy: from quantity to quality



Source: LSR Group

Figure 208: Mix improvements and efficiency gains should help profitability to sustain



Source: LSR Group

The company's cement project has always been a questionable enterprise, in our view.

Started before 2008, when the regional market faced a deficit, the plant was completed only in 2011, reaching commercial production in 2012. An additional 1.9m tons of supply in the SPMA market or 4.3m tons of annual cement consumption seemed excessive to us; however, LSR managed to sell 1.2m tons of cement (both locally and export), guiding for higher output in 2013. We believe growing production will ultimately have an impact on the market balance, pushing it into surplus; hence we project lower YoY cement prices in 2013E. The asset should still be generating EBITDA margin in excess of 30% for the entire period of our forecasts; however, we highlight that the project's economics are somewhat suboptimal, as the plant is an NPV-negative project, which we estimate at USD185m (assuming full capacity utilization, Deutsche Bank estimated cement prices and USD510m of committed capex).

Cement

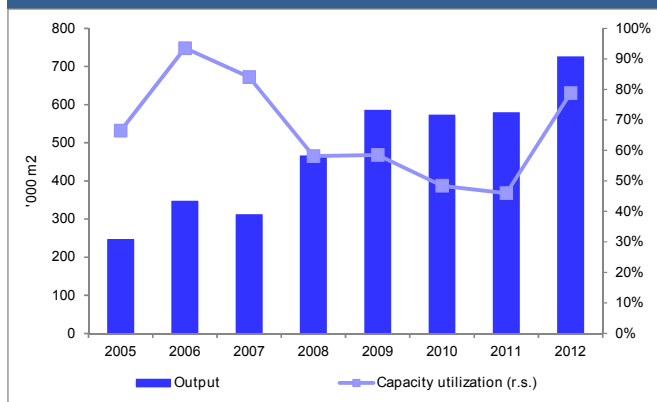


Construction and construction services

LSR's construction services division includes three business units that offer tower crane services, pile driving services and building materials transportation services. It is a relatively small division, normally generating c.5% of the group's EBITDA, which is used mostly for in-house needs; however, spare equipment capacity would be monetized by providing services to third parties. We expect the division's profits to grow in line with the group's development business.

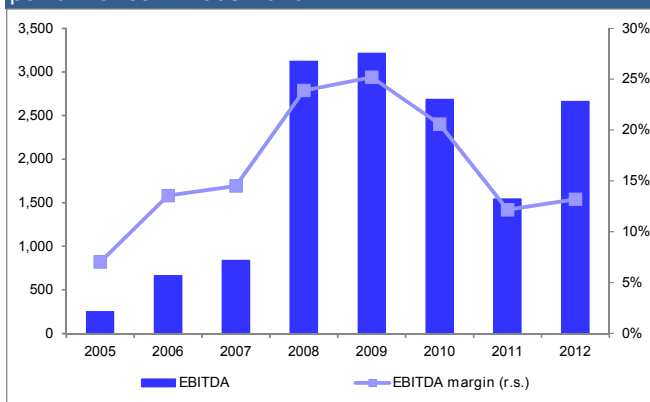
The construction segment combines all activities related to LSR's unit, performing general contractor work and operations related to the pre-fabricated construction business. The company is able to produce more than 900,000m² of pre-fab housing per annum, which is used for own development projects (c. 50% of revenues in 2012) and third-party construction. In 2012, the group's factories transferred to customers 725,000m² of pre-fabricated housing (+25% YoY), recording almost 80% capacity utilization. Note that starting from 2012, LSR changed the segment's presentation, including reinforced concrete items related to pre-fab construction into the segment. We highlight that the segment demonstrated record sales in 2012; however, the best financial results were achieved in 2008-2010, which was the most difficult period for the sector. According to the company's 2009 annual report, the segment's outperformance was driven by state-sponsored low cost pre-fab housing construction, for which LSR was among the key suppliers.

Figure 209: LSR produced record pre-fab sales in 2012...



Source: LSR Group

Figure 210: ...however, the division showed its best performance in 2008-2010

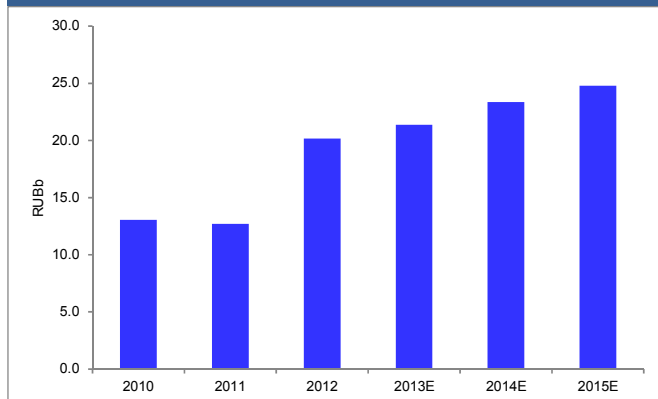


Source: LSR Group

The segment is an important part of the group's strategy, in the context of increasing exposure to the mass-market housing segment. Since LSR is not planning any sizeable investments into capacity expansion at the existing factories, we model only marginal increases in capacity utilization rates going forward, implying that the segment's organic growth profile is rather limited. That said, we project gradual improvement in the run-rates to c.90% in 2015, and an average of 3% per annum price inflation, which translates into top-line growth at a 7% CAGR in 2012-2015E. Economies of scale, as well as ongoing modernization of the factories located in Moscow and Yekaterinburg, will protect the margins, resulting in some expansion, we believe. Based on the above, we project the segment's EBITDA to see an 11.5% CAGR in 2012-2015E.

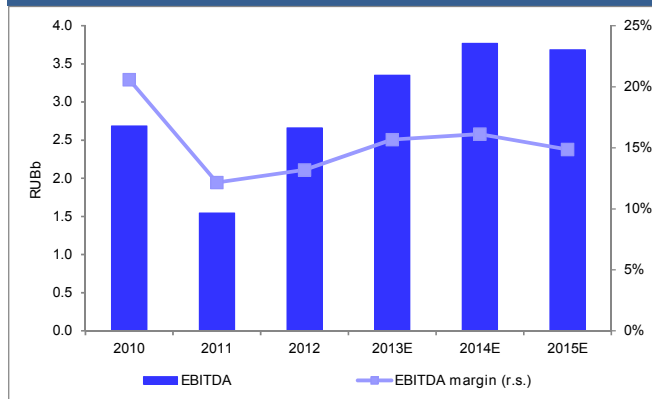


Figure 211: We project revenues to mark a 7% CAGR in 2012-2015E...



Source: LSR Group, Deutsche Bank

Figure 212: ...accompanied by margin expansion, which puts EBITDA growth rates at an 11.5% CAGR in 2012-2015E

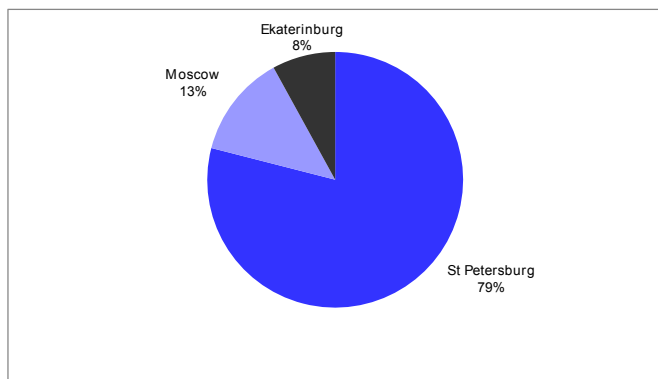


Source: LSR Group, Deutsche Bank

Real estate development

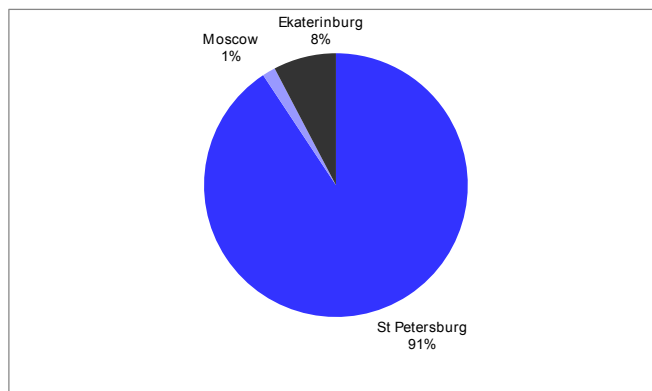
LSR has grown from a regional producer of building materials into a leading real estate developer in the SPMA. It is also seeking expansion into the MMA and Yekaterinburg. Despite the recent move into other areas, LSR still boasts the strongest footprint in the home region, where most of its other business are also concentrated. As of end-2012, c.79% of the group's portfolio (by NSA) was located in the SPMA, where the company has a balanced pipeline of projects in all major segments, ranging from pre-fab and mass market construction to elite real estate. That said, we highlight that LSR's market share in 2012 elite housing completion in the SPMA was approximately 99%, according to the company presentation. LSR's position in MMA and Yekaterinburg is less dominant; hence, the group mostly develops mass-market projects there (with some exceptions in Moscow). However, the share of those regions has been on the rise, growing to more than 20% of the group's total portfolio in 2012 (by NSA) vs. c. 9% in 2007.

Figure 213: Breakdown of portfolio by region (NSA, 2012)



Source: LSR Group

Figure 214: Breakdown of portfolio by region (NSA, 2007)



Source: LSR Group

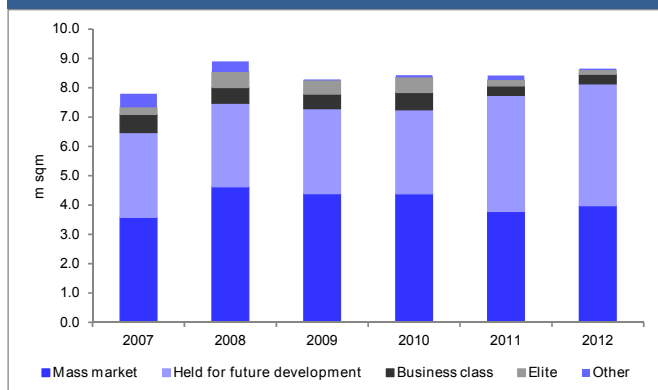
As of the end of 2012, LSR's NSA amounted to 8.6m sqm, with a market value of c. RUB120bn (as per the report by Cushman and Wakefield), which is largely located in the SPMA (c. 80%). The portfolio's NSA looks larger relative to its public peers, PIK and



Etalon; however, a more in-depth analysis unveils that 50% of it relates to two large projects in the SPMA (Tsvetnoy Gorod and Oktyabrskaya Embankment) and one project in the MMA (New Domodedovo). Although these three projects alone can sustain more than ten years of LSR's development activity in the respective regions, we believe the company may face difficulties realizing such housing volumes on the outskirts of Moscow and Saint Petersburg. Adjusted for those projects, LSR's portfolio should still sustain approximately ten years of development, which we find reasonable.

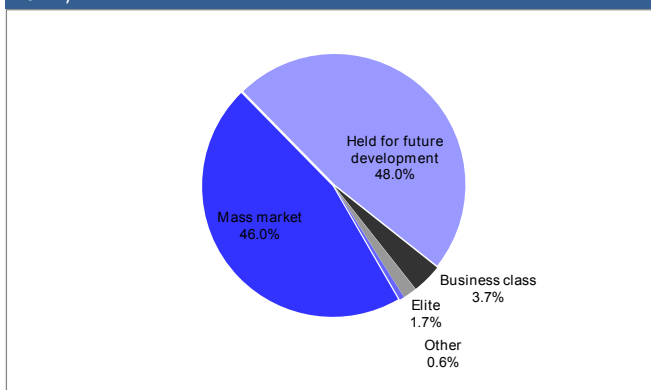
LSR's portfolio consists of 38 projects, most of which are residential projects with build-in commercial and social infrastructure. The structure of LSR's portfolio did not evolve much in 2007-2012; however, we highlight that the share of elite and business class projects have been declining sustainably, amounting to 1.7%/3.7% of the total NSA in 2012 vs. 6.0/6.0% in 2007, which is important in the context of the segment's margin outlook. We partly attribute this development to the expansion undertaken by the company into the MMA and Yekaterinburg, where LSR's lobbying power is weaker; however, we also note that the premium in Saint Petersburg has been falling.

Figure 215: Portfolio's development by NSA, 2007-2012



Source: LSR Group

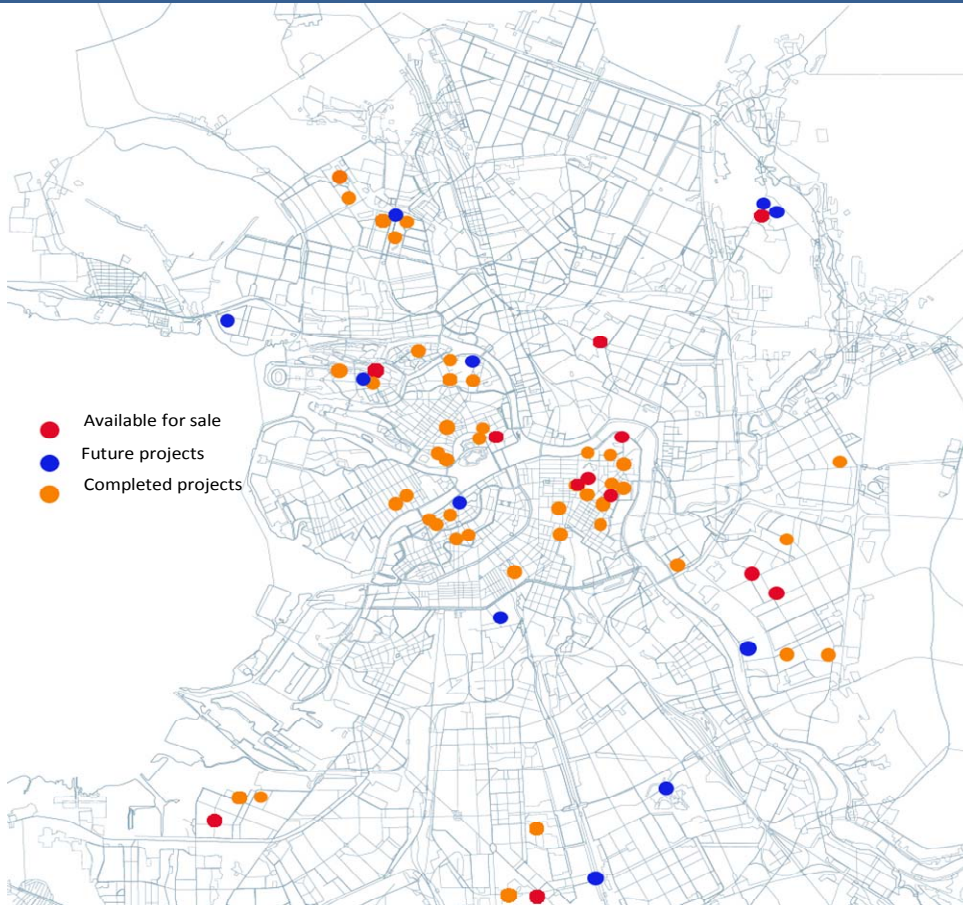
Figure 216: Breakdown of portfolio by segment (NSA, 2012)



Source: LSR Group



Figure 217: LSR's projects in SPMA



Source: LSR Group

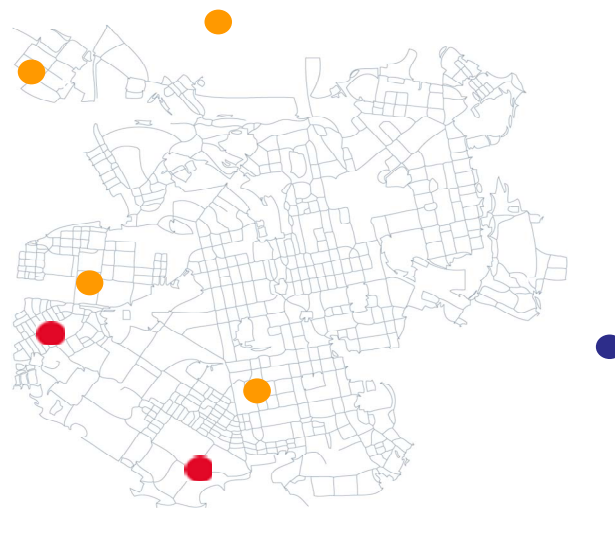


Figure 218: LSR's projects in SPMA



Source: LSR Group

Figure 219: LSR's projects in Yekaterinburg

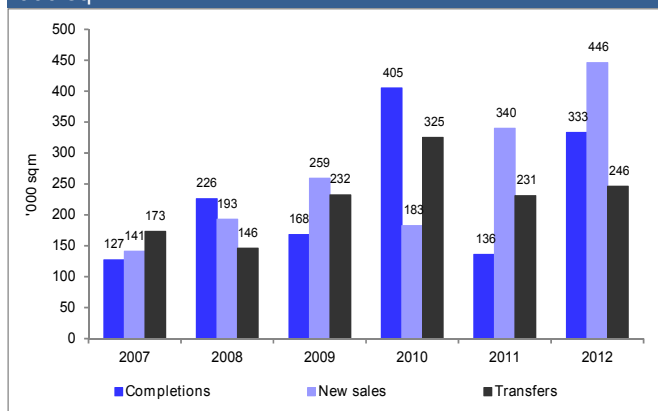


Source: LSR Group

Financial analysis and forecasts

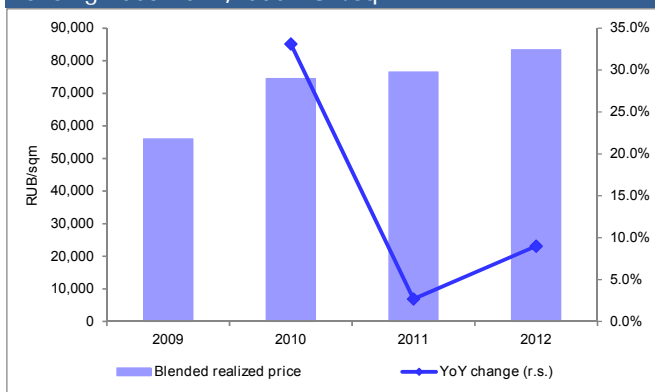
LSR has been reporting healthy growth in new sales over the past five reporting periods (with the exception of 2010), finishing FY12 with record new sales collections and completions (ex-2010). The company booked 333th sqm of gross completions (+145% YoY), presold 446th sqm of housing (+31% YoY), and transferred to customers 246th sqm of residential real estate (+6% YoY). Strong volume growth was also accompanied by stronger residential prices, which rose by c. 9% YoY (blended average realized price) vs. CPI growth of only 5.1% YoY.

Figure 220: Housing transfers, completions and sales, '000 sq. m



Source: LSR Group

Figure 221: Average realizable price dynamics for LSR's housing 2009-2012, '000 RUB/sqm



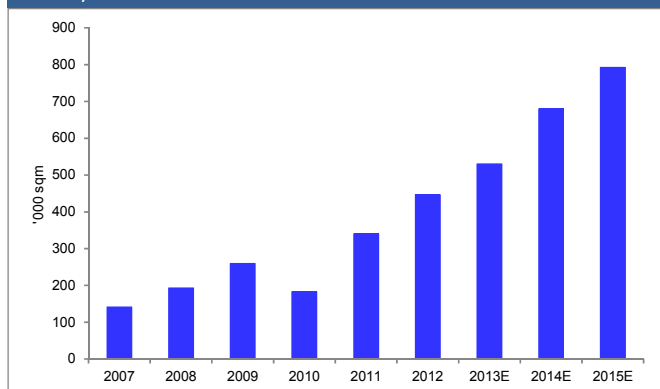
Source: LSR Group

Under the existing projects' pipeline, LSR should reach almost 800th sqm of pre-sales in 2015E. This should boost cash collections, which we expect to post a 24% CAGR in 2012-2015E, driven by a 21% pre-sales CAGR in 2012-2015E and housing price inflation. Note that LSR guided for total 2013 pre-sales of 570th sqm, implying 19% YoY growth, which compares with our estimate of 530th sqm. The increase should be



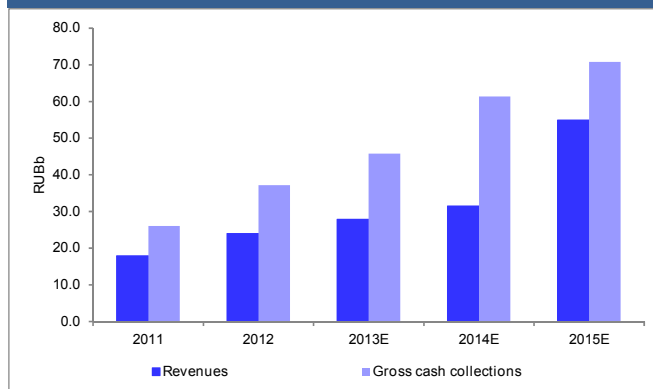
largely driven by the newly launched Murinskiy Kvartal project in Saint Petersburg, higher pre-sales for the New Domodedovo project in the Moscow region, and Michurinskiy in Yekaterinburg. The strong increase in pre-sales in 2011-2012, which should continue in 2013E-2015E, implies that 2012-2015E revenues should also record healthy growth rates (31% CAGR), due to deferred recognition. Note that our model assumes that LSR will be able to maintain the gross completions level of approximately 0.9m sqm per annum starting in 2016E, with Saint Petersburg remaining the anchor region for the company.

Figure 222: Pre-sales are set to reach almost 0.8m sqm in 2015E, on our estimates



Source: LSR Group, Deutsche Bank

Figure 223: We forecast gross cash collections to expand at a 10% CAGR in 2012-2016E



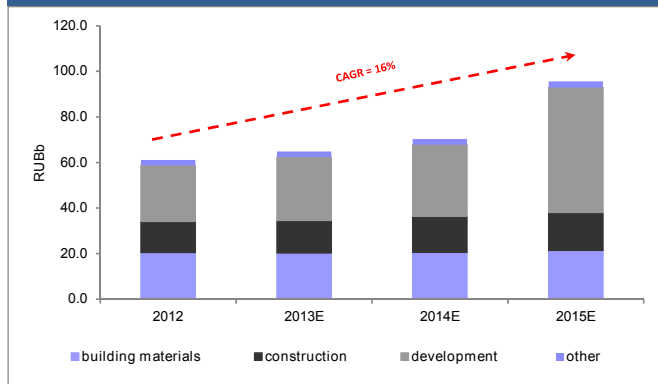
Source: LSR Group, Deutsche Bank

We expect the group's top line to expand at a 16.0% CAGR in 2012-2015E, as the superior growth rates projected in the development segment will be diluted by relatively the weaker performance of other businesses. Note that the building materials division (including aggregates) should post a 7% CAGR in 2012-2015E, driven by limited organic growth momentum and our conservative view on prices, while construction and construction service segment revenues are set to expand at a 9% CAGR in 2012-2015E (Deutsche Bank forecasts). Our construction cost projections are consistent with our housing price forecasts, growing at below CPI rates. We still expect pressure on real estate developers' margins, however, as cost inflation should post slightly higher growth rates.

We forecast EBITDA expanding at an 18.3% CAGR in 2012-2015E, mostly driven by the development segment. EBITDA growth will be accompanied by flat margins, on our numbers, driven by the cautious price outlook for housing and building materials, limited organic growth and little mix improvement.

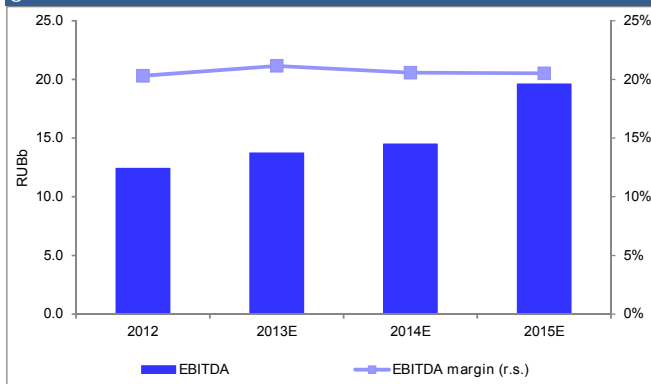


Figure 224: Consolidated top line is set to expand at a 16.0% CAGR, on our estimates...



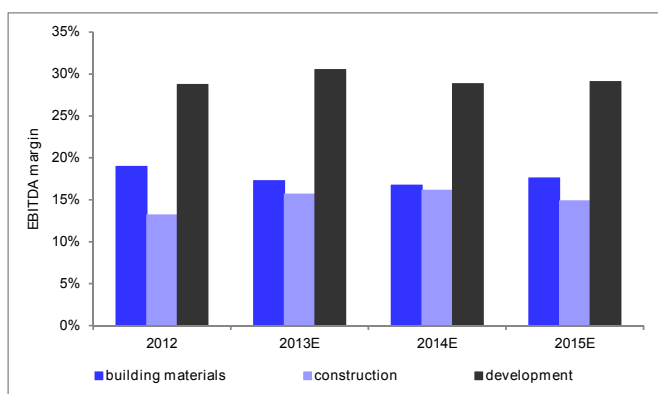
Source: LSR Group, Deutsche Bank

Figure 225: ...while EBITDA is projected to post similar growth rates



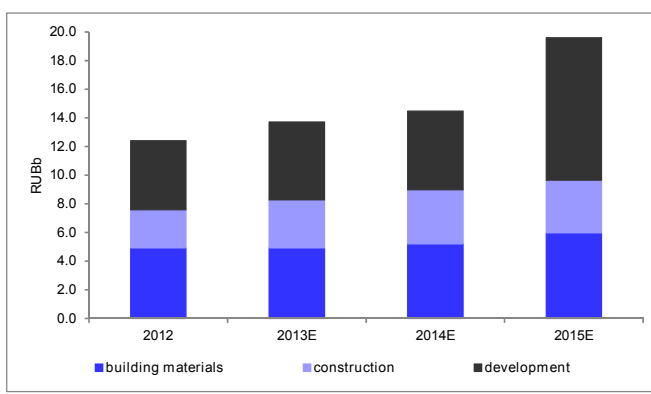
Source: LSR Group, Deutsche Bank

Figure 226: EBITDA margin trends by segment



Source: LSR Group, Deutsche Bank

Figure 227: EBITDA breakdown by segment



Source: LSR, Deutsche Bank

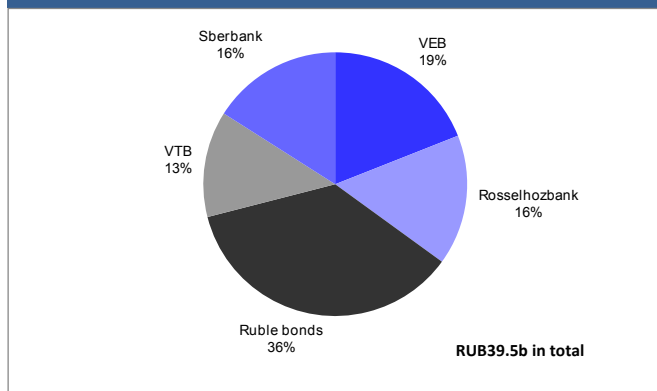
* including inter-company

Debt: focus on de-leveraging

LSR's net debt as of end-2012 stood at RUB35.5bn (USD1.1bn), implying a net debt/EBITDA ratio of 2.9x. According to the company, Russian state-controlled banks are the group's largest creditors (62% of the outstanding debt), while the remainder is public debt in the form of ruble bonds. The repayment schedule is skewed towards next year, with approximately 33% of the outstanding debt to be repaid in 2014; however, the company has been negotiating refinancing, which we believe is likely to be agreed upon, given the group's track record, solid cash flow outlook, and completion of the major capital investment projects. LSR disclosed that it pays a weighted average interest rate of 9.0 % on its portfolio, while 99.0% of its debt is denominated in rubles.

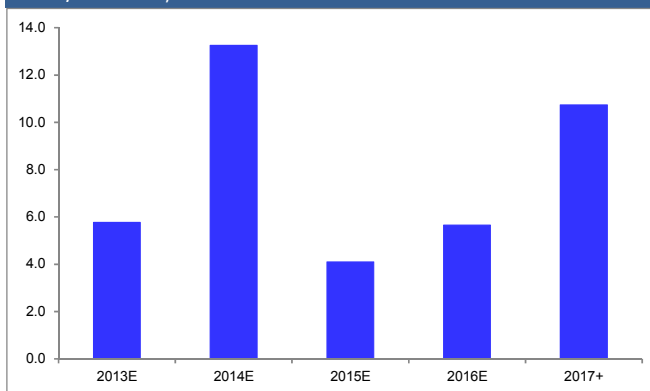


Figure 228: Debt structure by lender, 31 December 2012



Source: LSR Group

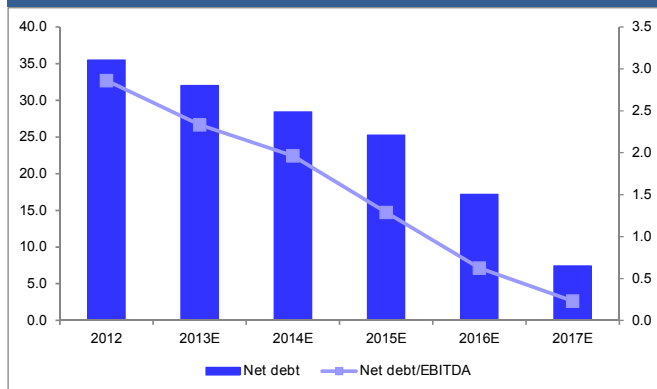
Figure 229: Debt repayment schedule (as of 31 December 2012, RUB bn)



Source: Deutsche Bank, LSR Group

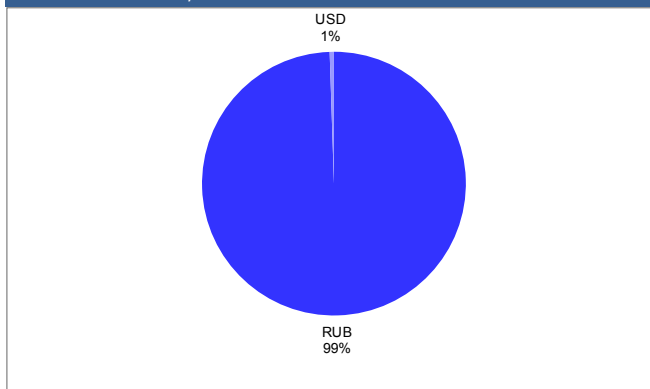
Although management believes the company's finances are stable, we welcome the recent declaration of a greater focus on de-leveraging. The company commented that most of the organic growth projects in the capital-intensive building materials segment have been delivered, while no new major investments are being planned at this stage. Most newly-launched assets have started generating cash flows, which should speed up debt repayment, and we estimate the company should be able to repay all of its debt organically by 2017E. LSR mentioned that its annual maintenance capex budget stands at approximately RUB2.5-3.0bn per annum, which should be comfortably covered by operating cash flows. We also assume that the company will spend RUB2.0-2.5bn per year for land bank replenishment.

Figure 230: Net leverage ratio should drop below 2.0x by 2015E



Source: LSR Group, Deutsche Bank

Figure 231: Most debt is ruble-denominated (as of 31 December 2012)



Source: LSR Group

Valuation: 12m target price of USD4.4/GDR

We value LSR using DCF methodology with a terminal growth period. Our DCF is based on a WACC of 14.5%, with an RROE of 16.5% (a risk-free rate of 7.5% and an equity risk premium of 8%), an after-tax cost of debt of 8.0%, and a terminal growth rate of 3%, which reflects our long-term assumptions for residential real estate sector growth in Russia and our expectation that LSR's growth rate will be in line with the market's.



Figure 232: LSR's DCF model

RUBm	2013E	2014E	2015E	2016E	2017E	TV
EBIT	11,143	12,029	17,658	25,169	29,582	30,469
Tax on EBIT	(2,229)	(2,406)	(3,532)	(5,034)	(5,916)	(6,094)
Depreciation	2,815	2,863	2,873	2,882	2,890	2,977
Changes in working capital	(190)	(1,466)	(5,950)	(7,514)	(10,037)	(10,338)
Capex	(5,000)	(4,500)	(4,500)	(4,500)	(4,500)	(2,977)
Free cash flow	6,540	6,521	6,550	11,004	12,019	14,037
Discount factor	1.00	0.87	0.76	0.67	0.58	0.58
PV of Free cash flows	6,540	5,693	4,992	7,323	6,983	

Source: Deutsche Bank

Figure 233: LSR's DCF model (continued)

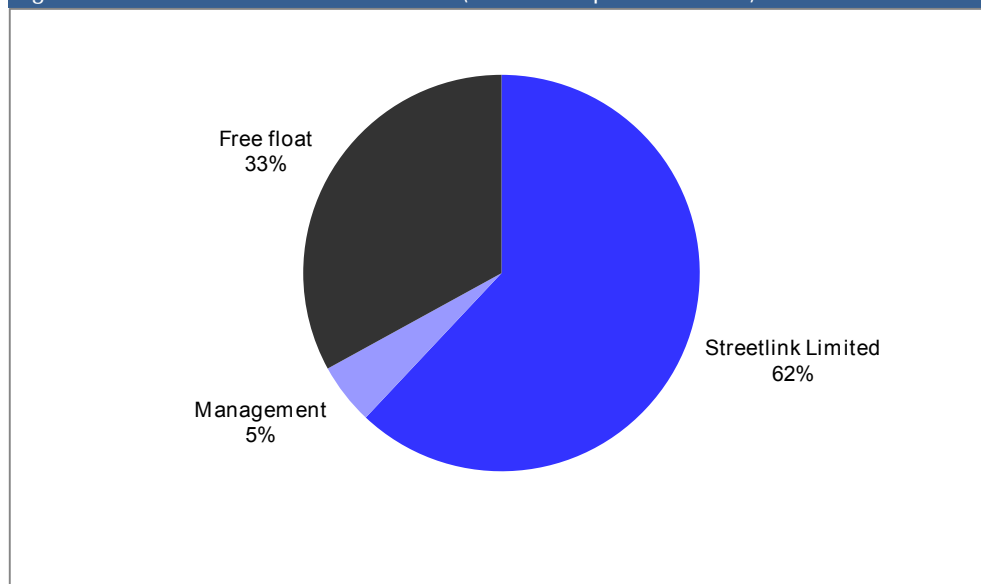
RWACC	14.5%	WACC calculation	
Terminal growth rate	3.0%	Risk-free rate	7.50%
FCF, 2013-2017 (RUBm)	31,531	Standard equity risk	4.00%
Terminal value (RUBm)	70,685	Corporate governance	3.00%
EV (RUBm)	102,216	Liquidity risk	2.00%
Net Debt, (RUBm)	33,254	Required ROE	16.50%
Minority Interest (RUBm)	133	After-tax cost of debt	8.00%
Equity value (USDm)	2,249	Debt/equity	30%
Target price GDR (USD)	4.4	Required WACC	14.5%

Source: Deutsche Bank

Ownership structure

Andrey Molchanov, the founder of the group, controls 62% of LSR through the investment vehicle Steetlink Limited. The company went public in 2007, placing a 12.5% stake on the LSE and MICEX and raising USD772m. Management controls 5% of the group, while the remaining 33% is considered free float.

Figure 234: LSR's shareholder structure (as of 30 September 2012)



Source: LSR Group



Dividends

LSR is the only Russian public real estate developer that pays dividends. According to formal dividend policy, the company targets to distribute at least 20% of the consolidated IFRS net income in the form of dividends; however, management guided for a payout ratio in the range of 30-35% for the next couple of years, which implies an average dividend yield of 3.5% in 2013E-2015E.



Risks and valuation

PIK

Outlook

PIK is Russia's largest residential real estate developer, boasting the strongest footprint in the country's most attractive region, the MMA (15.9% market share by completions, 2012). The unfortunate timing of the expansion into the regions before 2008, accompanied by balance sheet issues and ultimate change of the controlling shareholders, saw management recalibrating its strategy, adopting a more focused approach. The recently conducted SPO, supported by core shareholders, helped repair the company's balance sheet, easing pressure on cash flows and alleviating key concerns related to financial risks, as well as giving management a chance to focus on execution. The stock is trading below our target valuation; hence, we rate it a Buy with a 12-month target price of USD3.5/GDR.

Valuation

We value PIK using DCF methodology with a terminal growth period. Our DCF is based on a WACC of 14.0%, with an RROE of 15.7% (a risk-free rate of 7.5% and an equity risk premium of 8.2%), an after-tax cost of debt of 9.8%, and a terminal growth rate of 3%, which reflects our long-term assumptions for residential real estate sector growth in Russia.

Risks

Macro slowdown and lower-than-expected demand for residential housing, as well as excessive supply of housing, are among the key downside risks for the sector/company. Company-specific risks include construction delays, leading to delays in projects' commissioning and/or revenues' recognition. We also note the relatively high debt level, which could pose financial risks in the case of a pronounced macro slowdown.

Etalon

Outlook

Etalon Group is a relatively large residential developer in Saint Petersburg (11% market share by completions in 2012), with completions expected to reach 459th sqm in 2013E (all-time high), growing to 631th sqm in 2015E (based on the current portfolio of projects). The company boasts one of the strongest balance sheets in the sector, which has been achieved through an IPO and selective investment approach, which we welcome; however, the stock fell under pressure after management revised its IPO guidance in November 2012. The sell-off on governance concerns and poor communication saw the stock de-rating rather dramatically; however, the name is now trading at an attractive discount to the fundamental value of its business (on our forecasts); thus we rate the stock Buy. We note that recent comments from the top management team and controlling shareholders suggest that the negative market feedback has been recognized, which should improve communication and disclosure.

Valuation

We value Etalon using DCF methodology with a terminal growth period. Our DCF is based on a WACC of 15.8%, with an RROE of 17.5% (a risk-free rate of 7.5% and an equity risk premium of 10%), an after-tax cost of debt of 7.3%, and a terminal growth rate of 4%, which reflects our long-term assumptions for residential real estate sector



growth in Russia and our expectation that Etalon's growth rate will slightly outpace the market.

Risks

Macro slowdown, lower-than-expected demand for residential housing, as well as excessive supply of housing, are among the key downside risks for the sector/company. Company-specific risks include construction delays, leading to delays in projects' commissioning and/or revenue recognition. We also note poor communication and disclosure as one of the key concerns.

LSR

Outlook

LSR, as one of the leading real estate developers and building materials producers in the SPMA/MMA/Urals, seems well positioned to monetize its strong footprint in the respective areas, which are expected to outperform Russia's average housing market growth rates in the next 12-24 months. The balanced portfolio of development projects, coupled with newly launched construction materials facilities, bode well for the margin outlook and cash flow profile, which is important in the context of the company's leverage situation. We rate the stock Hold on valuation grounds with a 12-month target price of USD4.4/GDR.

Valuation

We value LSR using DCF methodology with a terminal growth period. Our DCF is based on a WACC of 14.5%, with an RROE of 16.5% (a risk-free rate of 7.5% and an equity risk premium of 8%), an after-tax cost of debt of 8.0%, and a terminal growth rate of 3%, which reflects our long-term assumptions for residential real estate sector growth in Russia and our expectation that LSR's business will grow in line with the market.

Risks

Macro slowdown and lower-than-expected demand for residential housing/building materials, as well as excessive supply of housing/building materials, are among the key downside risks for the sector/company. Construction cost inflation, against the backdrop of slower increase in prices for real estate, may result in deteriorating profitability for developers. Company-specific risks include construction delays, leading to delays in projects' commissioning and/or revenues recognition. Among the upside risks we note a better-than-expected macro environment and lower interest rates.



Appendix 1

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Buy: Based on a current 12-month view of total share-holder return (TSR = percentage change in share price from current price to projected target price plus projected dividend yield), we recommend that investors buy the stock.

Sell: Based on a current 12-month view of total share-holder return, we recommend that investors sell the stock

Hold: We take a neutral view on the stock 12-months out and, based on this time horizon, do not recommend either a Buy or Sell.

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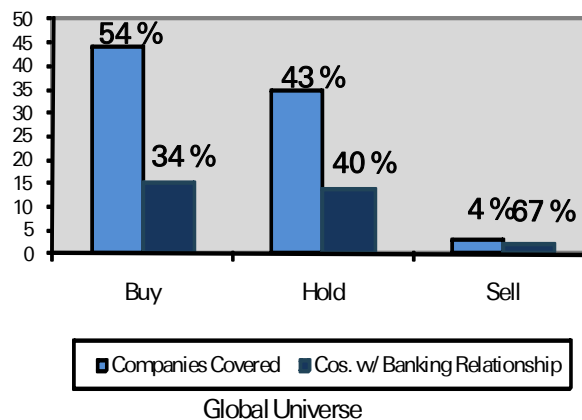
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