

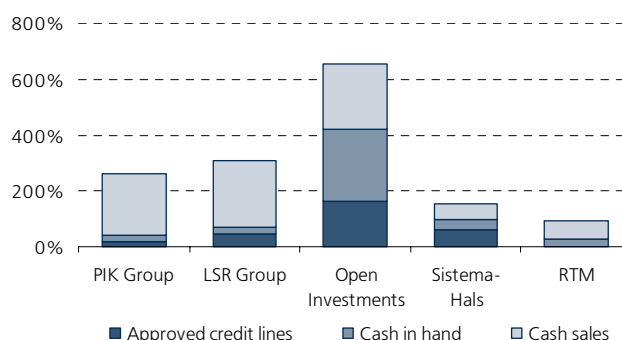
# Russian Developers

## Finding a Cure for STD

As credit markets have frozen, real estate companies have to prepare themselves for the difficult months ahead of meeting their short-term debt (STD) maturities. The turbulence of financial markets has greatly increased the cost of funding, which translates into greater leverage and price correction risks. In this environment, investors should be increasingly stock specific in their real estate exposure. We see Open Investments as the safest, LSR Group as the most promising and point to PIK Group's speculative upside, while we are concerned about the high risks associated with RTM and Sistema-Hals.

- With financing virtually impossible and likely to remain tight, developers will face increased costs of financing and insolvency risks. Investors should focus on their ability to cover the short-term maturities from existing cash resources. Otherwise, shareholders face the risk of adverse structural change and dilution.
- We expect housing prices in the mass market to go down by 10-15% within the next 12 months, and 15-20% in the more volatile upscale segment. Additionally, we believe that commercial property prices will go down 15-25% y-o-y in the next 12 months on the back of stagnating rental incomes and forced sales.
- Unlike on Western markets, short-term liquidity problems rather than any decline in consumer buying power are the main causes of the downturn in Russian real estate. We still believe in the strong upside of the development sector in the longer term, when economic expansion in Russia is set to continue.
- We initiate coverage of Russian developers with BUY recommendations for low-risk Open Investments and LSR Group, as well as the more speculative PIK Group, and HOLD recommendations for Sistema-Hals and RTM.

### Cash availability as a share of short-term debt



Source: Troika estimates

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## Investment Summary

### Market view

Given the post-Soviet vacuum in quality commercial space and huge backlogged demand for housing stock, the development sector in Russia embeds strong upside that has a solid long-term growth outlook. However, in light of the current liquidity crisis, the financing risks are clearly the main short-term driver for the stocks. To help navigate these tricky waters we summarize the main market exposures and key financing risks of the businesses that we cover.

#### Real estate market segment exposure

	PIK Group	LSR Group	Open Investments	Sisema-Hals	RTM
Residential segment	...	..	..	.	
Commercial segment		.	.	..	.
Economy pricing segment	...	.			..
Upscale pricing segment		.	...	...	.
Exposure to Moscow market	..		...	.	.
Exposure to regional markets	.	...			..

Source: Troika estimates

#### Risk exposure

	PIK Group	LSR Group	Open Investments	Sisema-Hals	RTM
Short-term debt	High	Medium	Medium	High	Medium
Long-term debt	Medium	High	High	Medium	Medium
Cash flow visibility	Low	High	Low	Low	High
Risk connected with market segment	Low	Medium	Medium	High	High

Source: Troika estimates

### REAL ESTATE MARKET REMAINS PROMISING IN LONG RUN

In the long term, real estate remains a segment with one of the most promising growth prospects in the Russian economy. Backlogged demand, along with economic growth, suggests that the prime commercial estate market could double by 2015, while the housing market possesses the highest annual volume growth. The building materials and construction market is set to enjoy volume growth of at least a 20% CAGR through 2015 on the back of investments in development and infrastructure.

### LIQUIDITY CRISIS INCREASES SHORT-TERM UNCERTAINTIES...

In the shorter term, we consider demand and supply distortion due to increased uncertainties and vanishing liquidity on the part of both developers and their customers a risk. While the main players in the development market may change dramatically post-crisis, the survivors will definitely come out stronger and ready to execute their postponed pipelines to a market hungry for supply.

### ... WHICH WE EXPECT TO TRIGGER PRICE CORRECTION ACROSS SEGMENTS

We see the potential for a 10-25% downward correction in real estate prices in the next 12 months, as the more liquidity-squeezed developers opt for price cutting alongside price adjustments, which will cause an increase in capitalization rates. Developers' margins in the regions will erode faster due to initially lower levels. The falling property prices may also exert downward pressure on construction and building material costs (also driven by falling commodity and energy prices), which is negative for producers of building materials but helpful for developers in general.

### HOUSING MARKET IS OVERPRICED

We believe that the residential sector is overpriced, and are wary of higher pricing uncertainty. In our view, mass-market apartment housing carries the lowest pricing risk due to its comparative affordability and larger buyer base. Given that the liquidity crisis is still unfolding, we anticipate housing prices in the mass market falling by 10-15% in the next 12 months, compared with a 15-20% decrease in more volatile elite housing segment.

**MOSCOW MASS MARKET TO BE MORE DEFENSIVE**

However, we expect Moscow's residential mass market to undergo a smaller y-o-y price correction, helped by state tenders in the Moscow area. The city's government has already budgeted \$2 bln in municipal orders and has indicated plans to consume up to 50% of new housing supplied during 2008. We believe that these state buys will be particularly beneficial to PIK Group, which has a working relationship of supplying social housing to Moscow. We expect every deep-pocketed local Russian government to support developers under various schemes.

**MORTGAGES BECOMING MORE EXPENSIVE, GREATER DEPOSITS REQUIRED**

Importantly, banks are already considering the potential of a correction in housing prices, as they have increased the down payment requirement from 10% to 30% for mortgage financing. Though rates have seen a spectacular 500 bps increase since the start of the credit crunch in July 2007 – to as high as 15% in dollars and 18% in rubles – the main banks still continue mortgage lending, which remains a decisive source of liquidity for the housing market.

**COMMERCIAL SPACE TO SUFFER FROM FORCED SALES AND STAGNATING RENTALS**

We expect commercial prices to go down 15-25% y-o-y on the back of stagnating rental incomes and increased refinancing costs. Though the commercial space is priced more adequately, this vulnerable stock makes up a big chunk of the relatively liquid estate pledged at banks, and is becoming more susceptible to abrupt increases in the property offering as forced selling becomes prevalent. However, compared with Western lows, Russian legislation requires significantly longer lead times (six to 12 months) for the banks to sell the pledged property, and we thus believe that the chances of a chain reaction occurring are limited. In our view, the value of unfinished commercial property may fall as much as 50% in a market with many sellers and very few buyers. The St Petersburg administration is prepared to buy out distressed unfinished projects in its area, though we expect this to be at significant discounts to recent high prices.

With the growth here supported by strong underlying fundamentals, we estimate the prime commercial space to be priced adequately in the long term. However, the upside in this sector is bottlenecked by scarce financing and long cash-back periods. Conversely, residential developments are self financing due to presales.

## Valuation

In the current environment, the use of NAV as a value indicator becomes complicated due to a few factors caused by increased short-term refinancing risks:

- The value of a developer's NAV may be undermined by sharply increased restructuring and dilution risks.
- As the cornered developers are ready to pay high premiums, the costs of refinancing short-term debt may become higher than the return on the projects;
- The developers may start monetizing part of their unfinished projects at low prices, which, in conjunction with an expected drop in real estate prices, may cannibalize the future cash flows from the developer's portfolios.

As the financial risks of individual developers diverge rapidly, so does the quality of their NAVs, and the refinancing risks become central to investment decisions. The more a stock drops, the higher the dilution and refinancing risks become, undermining the perceived upside to NAV, thus favoring those developers with strong internal cash generation capacity and limited refinancing needs.

In the view of NAV uncertainty, we regard SOTP DCF as the most objective tool for fair value appraisal. We compare results from multi-scenario DCF with ranges calculated from P/NAV and EV/EBITDA multiple analysis of Russian and foreign peers.

We have applied 50-400 bps premiums on the company level over our already conservative base cost of equity in order to quantify the impact of financing risks on execution and the long-term cost of capital. In addition, we applied further discount premiums (300-600 bps) at the project level to reflect the execution risks within individual projects, depending on their status. Thus, each company has a range of discount rates applied to its SOTP. This leaves us with significant room to upgrade our indicative ranges as conditions improve.

### Indicative price ranges

	Applied discount rate, %	Valuation range, \$	Target price, \$	NAV per share, \$ (as of 1H08)	Discount to NAV
Open Investments	14.9–21.9	83–146	130	276.4	–64%
PIK Group	15.4–22.4	6.0–15.9	11	25.7	–84%
LSR Group	14.4–22.4	4.0–10.9	8	10.8	–87%
Sistema Hals	18.4–25.4	0.5–2.01	0.9	11.5	–93%
RTM Development	17.4–23.4	0.5–0.97	0.95	4.9	–85%

Source: Troika estimates

### LSR GROUP: BEST RISK/REWARD PROPOSITION

We initiate coverage of LSR Group with a 12-month target price of \$8.00 per GDR and a BUY recommendation. Operating across the full chain of development and building materials businesses, the company has grown quickly to become the market leader in Russia's Northwest. LSR Group has unique industry exposure and excellent transparency. Ambitious yet prudent regional expansion alongside diversified cash flows offers long-term upside and a cushion against near-term credit risks. Following the correction, the company is now trading at an 87% discount to its NAV, with the rest of businesses effectively being offered for free. We believe that under current market conditions, LSR Group offers the best risk/reward proposition.

### PIK GROUP: HIGH UPSIDE TO SWEETEN RISKS

We recommend PIK Group as a speculative play, with a 12-month target price of \$11.00 per GDR. The historically strong growth is now ensured by regional diversification, and we believe that the company has significant opportunities to capitalize on adverse market conditions. Through vertical integration of the prefabricated construction division, the developer controls its execution and cost risks, while offering investors additional exposure to the construction business in Russia. However, in light of the liquidity crisis, we remain cautious on the developer's ability to meet its large short-term debt maturities, but point out that PIK Group's near-term cash flows can be sufficiently hedged by purchases by the Moscow government. Recalling the developer's regular 60% premium to its NAV in the past, we believe that the long-term reward outweighs short-term risks.

With their respective foot prints in Moscow and St Petersburg, PIK Group and LSR Group today replicate their business models into faster growth in regional cities, offering investors the best diversified portfolios of mass market residential construction, development pipelines of over seven years and volume growth CAGRs of 20%. Thanks to the short development cycles and apartment presales, the development businesses are cash creative, allowing both developers to consolidate the market, as many other developers decrease the supply of new space due to insufficient project finance.

#### **OPEN INVESTMENTS: LOWEST RISK PROFILE**

We reinitiate coverage of Open Investments with a target price of \$130 per share and a BUY recommendation. Rapidly emerging as one of the main land players in Moscow Region, the company enjoys local lobbying power and defensive positions. The developer's asset value may benefit somewhat from decreased supply in the market. We believe that the longer-term expectation of stock recovery creates an interesting risk/reward opportunity on the back of current market weakness together with the low risk of an equity-financed developer.

Thanks to its rich cash reserves, Open Investments is the most expensive Russian developer on P/NAV and EV/EBITDA; however, it has the highest immunity against near-term insolvency risks. In the long term, we remain skeptical about the company's ability to spread its existing experience over mass market suburban developments with less proximity to Moscow.

#### **RTM: SPECULATIVE RISK/REWARD PROPOSITION**

Reflecting high short-term risks, we reinitiate coverage of RTM with a HOLD recommendation and a 12-month target price of \$0.95 per share. RTM has a sensible business model, which together with regional diversification provides the company with strong long-term growth potential, though this is undermined by tightening financial markets and high leverage in the short term. Around three quarters of the developer's project portfolio is already income generative, which gives it a real NAV. Monetizing RTM's income-generative retail space and fully paying off its debt would maximize the shareholder value; however, the company is foregoing this option as time passes. RTM is now trading at an 85% discount to its NAV, and considering the dilution and financing risks, we believe that the risk/reward position remains moderate.

#### **SISTEMA-HALS: EVEN MORE SPECULATIVE RISK/REWARD PROPOSITION**

We have a HOLD recommendation on Sistema-Hals, with a target price of \$0.90 per GDR. Rather than as a property company, Sistema-Hals emerges as a limited purpose niche-play developer. A lucrative property portfolio, thanks to predominantly Moscow-located development sites in high-demand areas, provides a solid base for a nice mix of shorter-term high-end residential projects and longer-term commercial projects. However, we remain aware of financing and dilution risks in light of the liquidity crisis and a generally high debt load. With its main cash flows still years ahead and undermined by current high interest payments, the company now trades at a 93% discount to its NAV, which we believe merely addresses the increased risk perceptions in light of the current market weakness.

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## Financing Risks

### Short-term debt refinancing to become the main value driver

Given the scarce funding, developers' ability to secure sufficient financing in the near to medium term is currently perceived to be the key risk and the principle driver for stock prices. The inability to meet short-term maturities could escalate value-destructive forced sales, even with generally underleveraged developers. But the alternative – potential equity injections – could increase the risk of minority shareholder dilution in light of weak stocks, with both discounting the upside potential to NAV. The real estate development industry is perhaps the most vulnerable to financing turbulence, which is especially true for Russia, given the prevalence of short-term debt in portfolios and aggressive, last-minute investments.

We believe that during a liquidity crisis, capex-intensive developers face increasing financing risks, which in light of weak stocks, now translates into stronger dilution risks for minority shareholders. It also discounts the shareholder's ability to realize upside from the price/NAV. Underleveraged Open Investments, PIK Group and LSR Group are at little risk of dilution. However, PIK Group and LSR Group have significant short-term maturities. In the shadow of increased end-user demand risks, both developers still maintain high chances of servicing their debt obligations, and we like LSR Group's diversified cash flow sources.

Debt restructuring – converting debt into equity – is common practice for increasing the financial health and improving capital structure. This method is good for the company as an operating entity; however, it assumes partial or full dilution for existing shareholders, who are replaced by the former debt holders.

Given that RTM and Sistema Hals have deep pocketed shareholders behind them, equity injections remain a viable option (RTM has its rights issue upcoming) to decrease leverage. Following the strong correction, the market value of developers has sunk well below the value of their debt, which could translate into major dilution risks for minority shareholders.

To quantify the impact of financing risks on execution and the long-term cost of capital, we apply individual risk premiums of 50-400 bps over the base cost of equity in our SOTP DCF models.

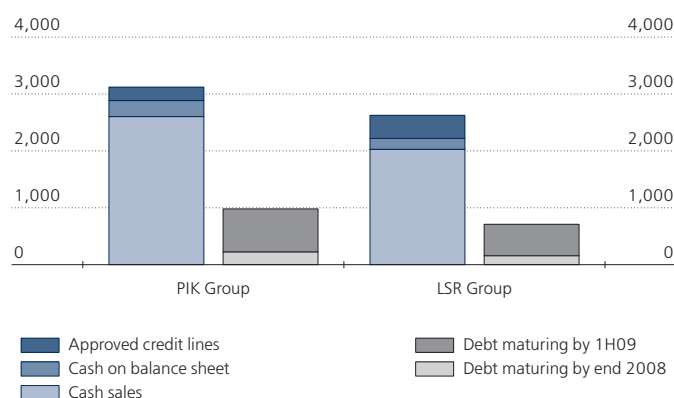
A stock correction increases the potential for minority shareholder dilution, even with much safer developers like Open Investments, should the deep-pocketed strategic investors decide to make more aggressive capital investments via equity injections. The minority shareholder would then have either to inject more cash into their pre-emptive rights or see their stake in the company decline.

The increased uncertainty with financing and high stock volatility translates into higher execution risks, as we believe that the developers will have to refinance their debt at premium costs.



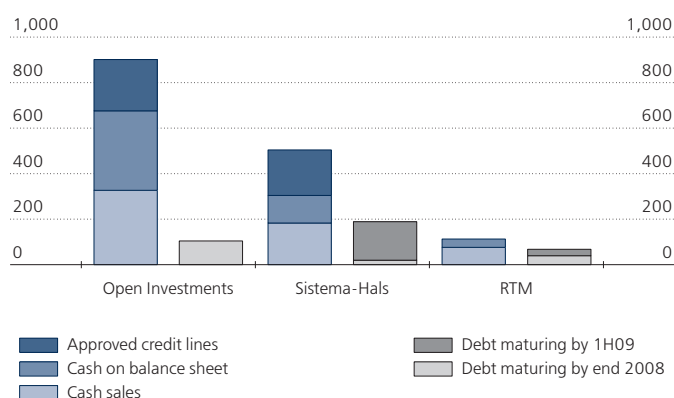
## Short-term solvency analysis

Cash reserves and short-term debt breakdown



Source: Troika estimates

Cash reserves and short-term debt breakdown (continued)



Source: Troika estimates

### PIK GROUP'S SOLVENCY HEAVILY DEPENDENT ON OPERATING CASH IN-FLOWS

PIK Group has generally low leverage; however, it faces the threat of large short-term maturities. In order to service \$1.3 bln of short-term debt, the developer will have to either refinance its dues in part or fully at a significant (or value-destructive) premium, or redeem the short-term debt from its operating cash flows, potentially cannibalizing its working capital as its pre-sales schedule may be distorted. The developer sources its pre-sales from a single market segment and we do not rule out a situation whereby end-user demand declines sharply in the next few months. We believe that the first difficulties will be evident in the regions, where demand is heavily reliant on now unavailable mortgage financing and slower growth in disposable income. However, we estimate that there will be certain inertia-driven demand, for the next two to three months, as the population still has significant cash on hand budgeted for buying a primary residence (and only part of them will hold onto it for a possible price correction). On the positive side, PIK Group has high flexibility to suspend any project where it does not see sufficient demand. In addition, we believe that the disruptions in the sales schedule will be initially offset by purchases in the public sector, where the Moscow government has committed \$2 bln already. We believe that adding 100 bps to 14.4% of base cost of equity addresses those risks on the conservative side.

Sensitivity of interest expense to changes in refinancing costs, \$ mln

		Interest expense, 2008E (205.5)	Interest expenses, 2009E (188.8)
Interest variation	15.0%	(300.0)	(338.7)
	10.0%	(268.5)	(288.8)
	5.0%	(237.0)	(238.8)
	0.0%	(205.5)	(188.8)

Source: Troika estimates

Sensitivity of net margin to changes in refinancing costs

		Net margin, 2008E	Net margin, 2009E
Premium to refinance STD	15.0%	-2.5%	-2.6%
	10.0%	-1.7%	-1.7%
	5.0%	-0.8%	-0.9%
	0.0%	0.0%	0.0%

Source: Troika estimates

### LSR GROUP: APPEARS PRUDENT, BUT STILL...

We assign an equal 100 bps risk premium to LSR Group's development segment; however, we apply a different logic. Considering the lower execution risks and independence of the business, we have applied a base cost of equity of 14.4% to LSR Group's cash flows from non-development business segments). The company also has generally low leverage and 70% lower short-term debt (compared with PIK Group), but still considerable short-term maturities, the refinancing of which will come at significant premium cost. LSR Group plans to redeem about half of its short-term dues from its operating cash flows, and, compared with PIK Group, we see fewer risks in doing this, thanks to the fact that LSR Group has a much more diversified revenue stream and that it was prudent in anticipating the liquidity crisis. A large portion of the company's operating cash flows is generated by the chain of building materials operations, which will certainly be affected by the development downturn; however, it will provide a solid cash flow cushion thanks to large state-funded investments in infrastructure development in the Northwest. Residential space form 75% of the company's real estate portfolio, where the projects are either in the self-financing stage or can

be suspended. On the downside, one quarter of LSR Group's portfolio is in capital intensive and long-cycle commercial real estate developments. The company was reasonably prudent in postponing construction starts wherever possible; however, it will have to carry forward those already started.

#### Sensitivity of interest expense to changes in refinancing costs, \$ mln

		Interest expense, 2008E (138.5)	Interest expense, 2009E (202.0)
Interest variation	15.0%	(180.2)	(285.4)
	10.0%	(166.3)	(257.6)
	5.0%	(152.4)	(229.8)
	0.0%	(138.5)	(202.0)

Source: Troika estimates

#### Sensitivity of net margin to changes in refinancing costs

		Net margin, 2008E	Net margin, 2009E
Premium to refinancing STD	15.0%	-2.1%	-3.2%
	10.0%	-1.4%	-2.1%
	5.0%	-0.7%	-1.1%
	0.0%	0.0%	0.0%

Source: Troika estimates

### OPEN INVESTMENTS: EQUITY FINANCING NOW TURNS INTO A BLESSING

We assign the lowest risk premium of 50 bps to Open Investments. We believe that the company faces the lowest near-term insolvency risks. The developer has historically been equity financed and entered the liquidity crisis with low leverage and significant headroom between its cash balances and short-term debt maturities. Open Investment's current residential (outskirt) developments have reached the self financing stage and will provide sufficient cash flows to cover its operating expenses for the foreseeable future. However, the developer attributes roughly one quarter of its portfolio to capital intensive commercial projects. Open Investments remains positive about completing a few large projects, which is long-term value additive, but can meanwhile drain their cash resource, in our view.

#### Sensitivity of interest expense to changes in refinancing costs, \$ mln

		Interest expense, 2008E (34.3)	Interest expense, 2009E (47.7)
Interest variation	15.0%	(42.4)	(64.0)
	10.0%	(39.7)	(58.6)
	5.0%	(37.0)	(53.2)
	0.0%	(34.3)	(47.7)

Source: Troika estimates

#### Sensitivity of net margin to changes in refinancing costs

		Net margin, 2008E	Net margin, 2009E
Premium to refinancing STD	15.0%	-1.9%	-2.1%
	10.0%	-1.2%	-1.4%
	5.0%	-0.6%	-0.7%
	0.0%	0.0%	0.0%

Source: Troika estimates

### SISTEMA-HALS: FINANCING RISKS HIGH...

Sistema-Hals is generally overleveraged, and in particular faces significant short-term debt maturities during 1H09. Since the company's operating cash flows are by far insufficient to cover its short-term debt, we believe that Sistema-Hals will face three value-destructive options: refinance the debt at high premium cost; monetize the part of its unfinished portfolio; or raise more equity or restructure debt. The risks of restructuring stay high, as most of the company's long-term debt is owned by VTB, a single lender that may find legal grounds for requiring premature redemption. Lastly the value of Sistema-Hals is heavily dependant on its commercial real estate projects under construction, which the developer has to either complete or discard at a discount. On the positive side, Sistema-Hals enjoys the support of its sister companies in Sistema; however, the worsening markets undermine the chances that Sistema itself will devote all its resources to bailing out Sistema-Hals. We believe that our 400 bps premium to the cost of equity merely addresses the minority risks in the current environment.

#### Sensitivity of interest expense to changes in refinancing costs, \$ mln

		Interest expense, 2008E (136.5)	Interest expense, 2009E (228.5)
Interest variation	15.0%	(151.8)	(275.3)
	10.0%	(146.7)	(259.7)
	5.0%	(141.6)	(244.1)
	0.0%	(136.5)	(228.5)

Source: Troika estimates

#### Sensitivity of net margin to changes in refinancing costs

		Net margin, 2008E	Net margin, 2009E
Premium to refinancing STD	15.0%	-4.0%	-12.4%
	10.0%	-2.7%	-8.3%
	5.0%	-1.3%	-4.1%
	0.0%	0.0%	0.0%

Source: Troika estimates

### RTM: OPTIONS TIGHTEN AS TIME PASSES

Under the same logic as we apply to Sistema-Hals, but considering that RTM's debt portfolio is more diversified; we assign a 350 bps risk premium to RTM. The company also carries high leverage and faces elevated long and short-term financing risks. Unlike Sistema-Hals, RTM has no strong parent

looking over its shoulder. On the positive side, the main part of RTM's property portfolio is already income generating. Before the liquidity crisis, the company could raise some \$700 mln if it decided to exit from its income-generating retail space, and would be net positive after closing all its debt. We believe that RTM still enjoys fair chances of employing the aforementioned strategy and it still could get a healthy price for its space (supported by the sharp drop in retail space completions). Given that RTM's interest expense exceed its operating cash flows from rental revenues, we believe that the company will only add shareholder value if it monetized its assets and pays off its debt. However, the company has low cash reserves and high immediate maturities, and we view it likely that RTM will either choose to attract equity (from its new deep-pocketed strategic investor), or the company will be forced to restructure its debt or sell its assets; all of which comes at the expense of minority investor value.

**Sensitivity of interest expenses to changes in refinancing costs, \$ mln**

		Interest expense, 2008E (60.7)	Interest expense, 2009E (101.9)
Interest variation	15.0%	(64.3)	(109.0)
	10.0%	(63.1)	(106.7)
	5.0%	(61.9)	(104.3)
	0.0%	(60.7)	(101.9)

Source: Troika estimates

**Sensitivity of net margin to changes in refinancing costs**

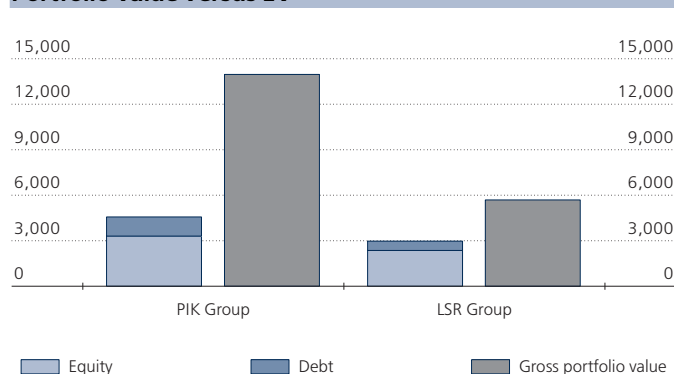
		Net margin, 2008E	Net margin, 2009E
Premium to refinance STD	15.0%	-4.1%	-6.3%
	10.0%	-2.7%	-4.2%
	5.0%	-1.4%	-2.1%
	0.0%	0.0%	0.0%

Source: Troika estimates

## Applying risk premiums to valuation methodology

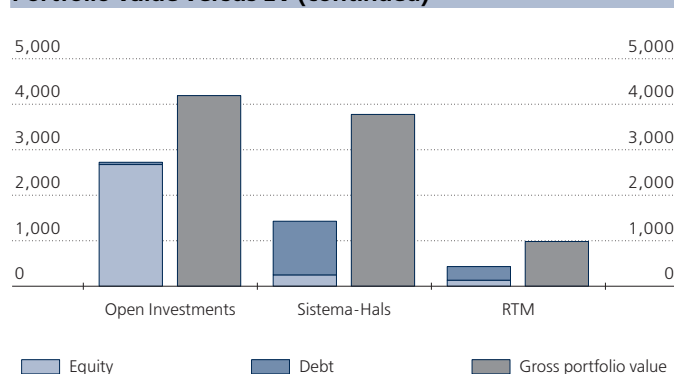
The companies have very different profiles in respect to debt and equity and they all carry very different risk profiles.

**Portfolio value versus EV**



Source: Troika estimates

**Portfolio value versus EV (continued)**



Source: Troika estimates

We have applied individual risk premiums for base cost of equity in our SOTP DCF models in order to quantify the impact of financing risks on execution and long-term cost of capital. Apart from general market risks, we have distinguished the following factors which we believe are the most decisive for developers' liquidity risks.

- Leverage
- Short-term maturities
- Flexibility to suspend capex
- Single lender risk

## Leverage

We see few long-term financing risks for PIK Group, LSR Group and Open Investments, as all three are underleveraged and enjoy decreasing debt burdens thanks to growing operating cash flows. All three also have indicated their plans to increase long-term borrowings, which in the longer run will both optimize their capital structures and debt portfolios, in our view.

### Debt coverage ratios

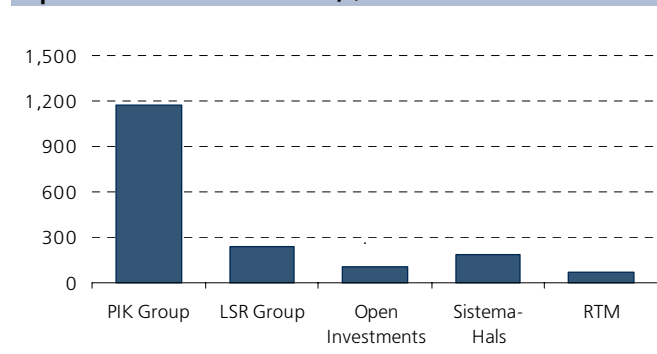
	PIK Group	LSR Group	Open Investments	Sistema-Hals	RTM
Current ratio	1.3	2.0	5.0	3.8	1.7
Quick ratio	0.3	0.6	0.9	1.3	1.3
Net Debt/EBITDA	1.4	2.5	3.6	18.4	12.4
Interest cover	0.2	3.9	2.7	0.5	0.7

Source: Troika estimates

As a result of aggressive borrowing against long-cycle commercial projects, RTM and Sistema-Hals have found themselves in a situation where interest expense grows faster than operating cash flow, leaving no other option but to monetize part of their property or borrow more to service debt. This becomes a value-destructive factor, which along with increasing execution risks and growing interest rates, undermines the value of future cash flows.

## Short-term maturities

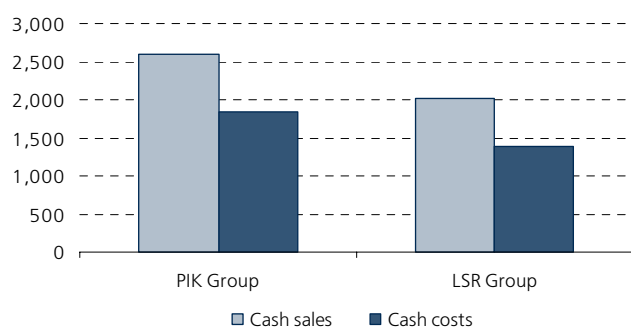
### Exposure to short-term debt, \$ mln



Source: Troika estimates

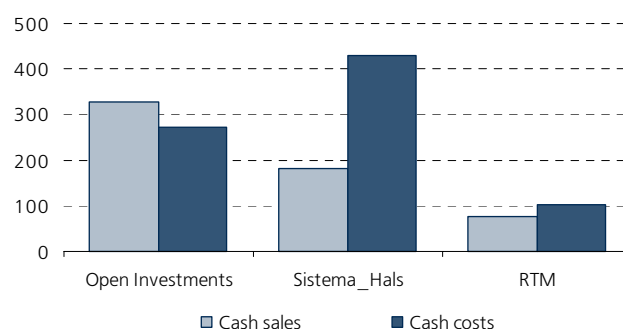
## Flexibility to suspend capex

Cash sales related to capex in 2008E, \$ mln



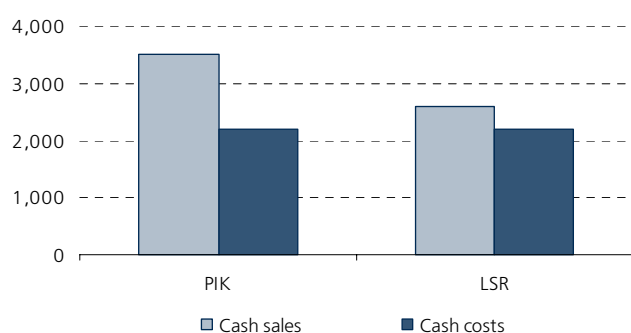
Source: Troika estimates

Cash sales related to capex in 2009E, \$ mln



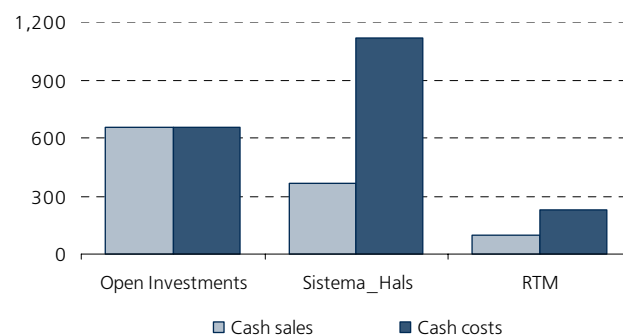
Source: Troika estimates

Cash sales related to capex in 2008E, \$ mln (continued)



Source: Troika estimates

Cash sales related to capex in 2009E, \$ mln (continued)



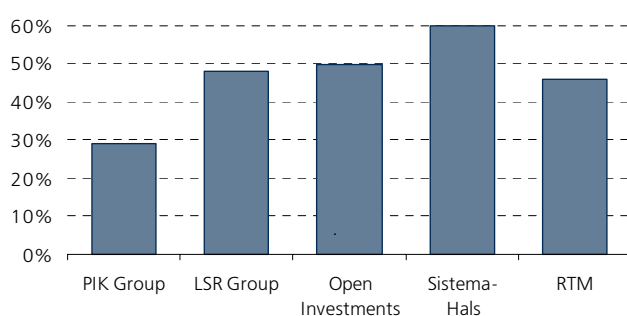
Source: Troika estimates

We believe that PIK Group has the highest flexibility to suspend its capex thanks to short-cycle projects that are self-financed via pre-sales. All the company has to do is to freeze the build-up of its future pipeline. Open Investments and LSR Group, due to their partial exposure to long-term commercial development, will have limited flexibility to suspend costs in the projects already under construction. However, these two can move around the costs for more remote projects. Also, LSR Group can continue investing the planned \$1.2 bln in its building materials equipment only under the condition that long-term and low-cost EU export financing is provided. RTM and Sistema-Hals appear to be the least flexible due to their much higher exposure to commercial real estate and high interest expense, which leaves them with little time to wait. Thus, RTM and Sistema-Hals would have to aggressively borrow to finish their projects, or monetize those projects rather quickly and at a considerable discount to their fair values, in our view.

## Single-lender risk

With \$700 mln out of its \$900 in long term debt owed to VTB, Sistema-Hals carries significant single-lender risks, should credit conditions suddenly change (we believe that the loan was provided under certain covenants, which may be challenged due to the company's increasing debt load). As previously mentioned, the developer may be forced by the bank to restructure debt or make premature settlements, which would imply massive dilution for shareholders.

### Exposure to single lender



Source: Troika estimates

We estimate the developers' ability to meet short-term dues, either from operating cash flows or cash reserves, such as cash on accounts or committed credit lines from the banks.

Wherever possible, we separate short-term debt maturing by end 2008 and by end 1H09. PIK Group has the highest short-term maturities, with around \$0.5 bln for each period. We expect the company to collect enough cash to service its dues. However, we remain alert that PIK Group's cash flows, exposed to a single market (the developer operates in mass market residential segment across Russian cities and we believe that the demand in regions, which was based on high disposable income growth expectations, may be altered), may see interruptions due to lower mortgage finance availability and possible price corrections, and that the developer might not have secured sufficient cash reserves. LSR Group has lower short-term dues and a more diversified cash flow base thanks to its exposure to the building materials business and a diversified development portfolio. Open Investments is, perhaps, the winner in this context due to its rich back-up reserves. Sistema-Hals will be challenged to refinance around \$0.25 bln by 1H09, which we believe will be done either through more expensive borrowings or via selling unfinished projects, a value-destructive proposition in both cases. RTM has reliable but insufficient operating cash flows to refinance its near-term maturities, which we estimate at around \$40 mln, by year end. However, the company should be covered by the rights issue to commence in October 2008 (87 mln shares or 50% of share capital pre-dilution).

## Risk premium methodology

Having looked into four factors, we have applied scoring (0 for no risk, 1 for low risk, 2 for medium risk, and 3 for high risk) for each of these factors, and assigned 50 bps premium for each score in order to come out with individual risk premiums. In order to quantify the impact of financing risks on execution and long-term cost of capital, we then apply the derived individual risk premiums for base cost of equity in our SOTP DCF models.

### Financing risk matrix

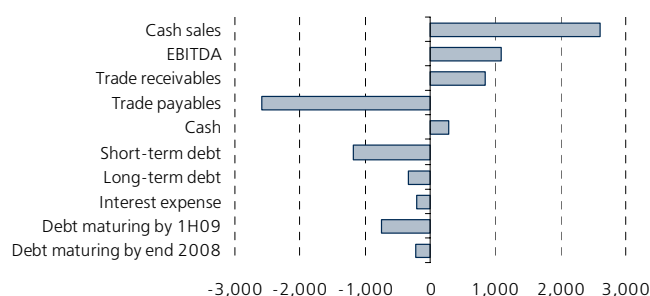
	PIK Group	LSR Group	Open Investments	Sistema-Hals	RTM
Leverage	0	0	0	3	3
Short-term refinancing risks	2	1	0	2	2
Capex flexibility	0	1	1	2	2
Single-lender risk	0	0	0	1	0
Sum	2	2	1	8	7
<i>Risk premium per points, bps</i>	50	50	50	50	50
<b>Suggested risk premium, bps</b>	<b>100</b>	<b>100</b>	<b>50</b>	<b>400</b>	<b>350</b>

Source: Troika estimates

## Cash snapshot: where it stands in the company accounts

For the sake of visual analysis of near-term (by June 30, 2009) positives and negatives of company cash flows, below we have given the snapshots of most important cash sources and expenditure items which could influence the developers' near-term solvency.

### PIK Group cash flow breakdown, \$ mln



Source: Troika estimates

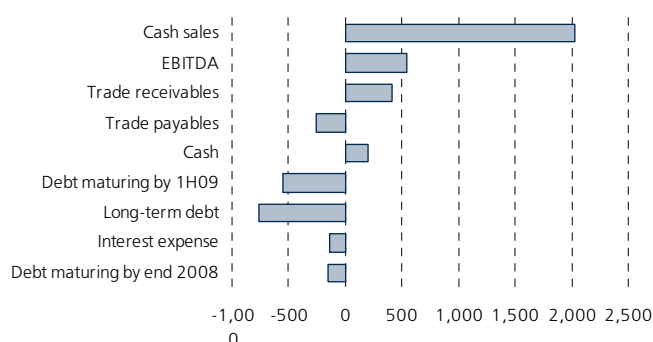
### PIK Group debt breakdown by maturity and lender

	\$ mln	Maturity
<b>Long-term debt</b>		
Sberbank	147.0	Jun '11
Sberbank	192.0	Jun '10
	<b>339.0</b>	
<b>Short-term debt</b>		
Raiffeisen	47.7	Dec '09
Evrofinans Mosnarbank	50.0	Jul '09
Sberbank	38.4	May '09
Absolut Bank	57.0	Jan '09
VTB Bank	108.0	Dec '08
Morgan Stanley Senior Funding Inc	150.0	Oct '08
Sberbank	8.0	Oct '08
ORGRESBANK	12.0	Nov '08
ROSBANK	95.0	Nov '08
Other short-term debt	610.0	During 1H09
	<b>1,176.1</b>	
<b>Total</b>	<b>1,515.1</b>	

Source: Troika estimates

Aggressive investments during 1H08 drained PIK Group's cash resources. Suddenly caught in the liquidity crisis, the developer now faces challenges to refinance its large short-term dues and has to heavily count on the stability of its rich cash collections.

### LSR Group cash flow breakdown, \$ mln



Source: Troika estimates

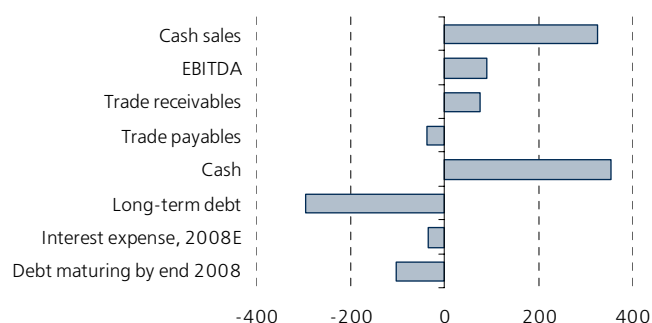
### LSR Group debt breakdown by maturity and lender

	\$ mln	Maturity
<b>Long-term debt</b>		
Uralsib	200.0	Aug '13
PSB	25.0	Dec '12
Sberbank	16.0	Mar '11
Sberbank	35.0	Jul '09
	<b>276.0</b>	
<b>Short-term debt</b>		
Deutsche bank	150.0	Mar '09
Sberbank	84.0	Dec '08
	<b>234.0</b>	
<b>Total</b>	<b>510.0</b>	

Source: Troika estimates

Thanks to rebalancing its portfolio toward long-term debt, LSR Group will be able to meet its short-term maturities with minor effort, in our view

#### Open Investments cash flow breakdown, \$ mln



Source: Troika estimates

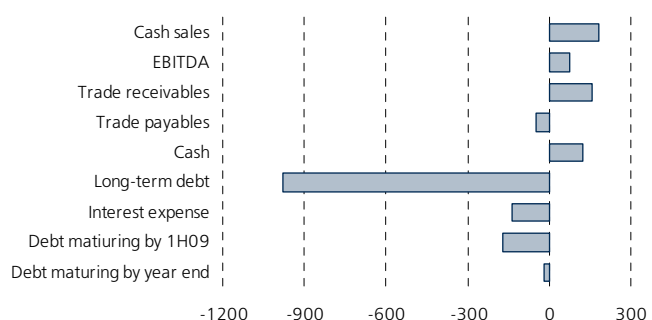
#### Open Investments debt breakdown by maturity and lender

	\$ mln	Maturity
<b>Long-term debt</b>		
ING	199.9	Jan '13
Rosbank	22.5	Jan '12
Saving bank of RF	16.0	Sep '10
Raiffeisen	50.0	Jan '10
Other	8.0	
<b>Total</b>	<b>296.4</b>	
<b>Short-term debt</b>		
Sberbank	3.0	Dec '08
ING	100.0	Dec '08
<b>Total</b>	<b>103.0</b>	
<b>Total</b>	<b>399.4</b>	

Source: Troika estimates

Historically an equity financed company, Open Investments now enjoys the fruits of its rich cash reserves and low short-term maturities, which significantly reduce the insolvency risks at the company. Growing operating cash flows comfortably cover the interest expenses

#### Sistema-Hals cash flow breakdown, \$ mln



Source: Troika estimates

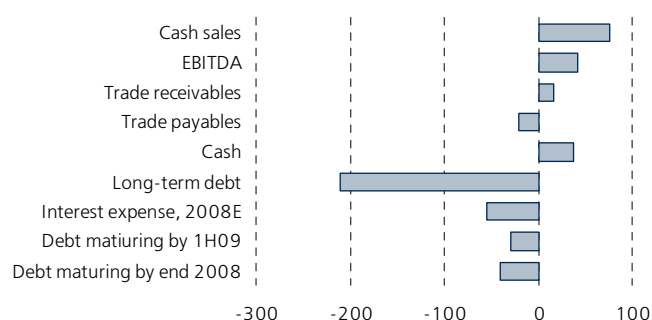
#### Sistema-Hals debt breakdown by maturity and lender

	\$ mln	Maturity
<b>Long-term debt</b>		
Vnesheconombank	56.0	Jul '14
VTB	500.0	Aug '12
VTB	200.0	Nov '12
Merill Lynch	57.5	Jun '11
Gazprombank	26.0	Jun '11
InvestTorgBank	12.0	Jun '11
East-West United bank	96.0	Dec '10
Elvistorg Ltd	29.0	Nov '09
<b>Total</b>	<b>976.5</b>	
<b>Short-term debt</b>		
Alfabank	94.0	Apr '09
MGTS	57.0	Dec '08
Infocom Ltd	38.0	Nov '08
<b>Total</b>	<b>189.0</b>	
<b>Total</b>	<b>1,165.5</b>	

Source: Troika estimates

In order to repay its debt maturing during 1H09, the Sistema-Hals will need to monetize a number of its most liquid assets at a significant discount to quoted prices or make an equity injection, we believe.

#### RTM cash flow breakdown, \$ mln



Source: Troika estimates

#### RTM debt breakdown by maturity and lender

	\$ mln	Maturity
<b>Long-term debt</b>		
C.R.R. BV	125.0	Mar '11
Svedbank	25.0	Dec '10
C.R.R. BV	55.0	Nov '09
Souz	6.3	Jul '09
<b>Total</b>	<b>211.3</b>	
<b>Short-term debt</b>		
Trust bank	15.0	Apr '09
Other	37.0	Nov '08
Svyaz bank	19.0	Oct '08
<b>Total</b>	<b>71.0</b>	
<b>Total</b>	<b>282.3</b>	

\*\$55 mln put option is due Nov '08

Source: Troika estimates

The rights issue to commencing in October should raise sufficient cash to cover RTM's near-term dues, we believe, High leverage leaves the developer no choice but to make further equity injections or to monetize the part of its assets



# Russia's Real Estate Market

## Overview

### Russian real estate companies: portfolio breakdown \$mln

	PIK Group	LSR Group	Open Investments	Sistema-Hals	RTM
Office	1,422	1,664	1,207	1,837	–
Retail	336	–	–	–	670
Residential (apartments)	6,304	3,084	–	704	116
Residential (suburban)	99	144	1,042	369	–
Land plots	–	791	1,919	431	–
<b>Total</b>	<b>8,161</b>	<b>5,683</b>	<b>4,168</b>	<b>3,341</b>	<b>786</b>

Source: Companies, DTZ Troika estimates

In the long run, Russian real estate market remains strong. End-user demand, driven by a robust economy, is growing at high rates for retail turnover and real disposable income. In shorter run, we will see both demand and supply falling due to increased uncertainties and vanished liquidity on both supplier and consumer side. We see the potential for 15-25% downward correction within the next 12 months in real estate prices Commercial and residential property values (currently at a high) may decline amid forced selling, rising refinancing rates and stagnating incomes. However, we do not expect a chain reaction, as compared with western lows, Russian legislation requires significantly longer lead times (six to 12 months) for banks to monetize the pledged real estate. The falling property prices may put downward pressure on construction and building material costs (as well driven by falling commodity and energy prices), negative for building materials producers like LSR Group, but helpful for developers in general.

In the long run, we estimate that prime retail and office space are priced adequately. The growth here is supported by strong underlying fundamentals, in our view; however, the upside in this sector is bottlenecked by scarce financing and long cash-back periods. Conversely, residential developments are self-financing due to pre-sales, but we estimate the residential sector to be overpriced and are wary of higher pricing uncertainty. We believe that the mass market apartment housing carries the lowest overpricing risk due to it being more affordable and having a larger buyer base. We find organized suburban developments to be unreasonably overpriced, and therefore doubt that the success of a few high-end developments can spread to other large-scale mass market cottage communities that are two-three hours away from Moscow by car.

Backlogged demand, along with economic growth, suggests that the prime retail real estate market could double by 2015, while the housing market possesses the highest annual volume growth. While office markets largely remain skewed toward metropolitan areas (especially Moscow and, to a lesser extent St Petersburg), the growth in retail and residential real estate is driven increasingly by the regions. The building materials and construction market, on which LSR Group is a leading player, is set to enjoy volume growth of at least 20% (CAGR) through 2015 on the back of investments in development and infrastructure. However, the building materials and construction market may soften in the short term due to imports and a temporary slowdown in construction.

That said, we believe that in longer run PIK Group is the best positioned to tap into market growth thanks to its full exposure to mass market apartment housing and regional expansion. LSR Group, in addition to its balanced development portfolio with increasing exposure to the mass market segment and regional exposure, should also capture the volume and margin growth along the construction chain, thanks to its vertically integrated model. RTM is well diversified to take a share of the increasing regional demand for organized retail space. Sistema-Hals possesses a handful of lucrative Moscow based commercial projects, but the company has no strategy for further initiations. Open Investments is among the strongest brands to drive the value out of suburban land in Moscow area; however, we remain uncertain about the volume growth and price sustainability in this sector.

In light of further tightening on debt markets and falling equity prices, and considering that refinancing costs are objectively expected to be 400-700 bps higher than initially forecast, the ability to complete lucrative projects in the portfolio – the ability to source funds sufficient to realize the projected NPVs in cash – has become the cornerstone of a developer's value. Among the companies we cover, PIK Group and LSR Group, with negative to zero cash-back periods, may have opportunities of consolidating the market. Meanwhile, overleveraged Sistema-Hals and RTM, which

have cash-back periods of five to eight years but have lucrative commercial development portfolios, should pace their growth to survive through hard times.

As smaller developers' growing insolvency has resulted in a considerable backlog in construction and the supply of new space, we expect an increase in unfinished projects on offer to considerably soften prices. This could downplay the value of unfinished projects, especially for costly and long term commercial ones. The most vulnerable, in our view, is Sistema-Hals, which has the greatest portion of unfinished commercial projects and a limited ability to borrow.

However, the delayed supply of commercial space will boost demand for offices that are already operational or close to completion, which is obviously good for those developers with a large share of office space that is finished or close to completion. RTM tops this list, with over 75% of its portfolio already generating rental income. But the company has exhausted its borrowing capacity and has to think about portfolio refinancing or equity options. On balance, commercial real estate developers have limited capacity for growth due to financing shortfalls.

We favor PIK Group and LSR Group, as they have solid exposure to the mass market residential segment and are capable of financing their growth through pre-sales, thanks to their strong reputation. In the longer run, we like the enormous potential of Russia's residential market, ensured by huge potential demand and strong growth in disposable income. However, in the shorter term, we are concerned by the continuous appreciation of real estate prices in the country, especially in its central cities. We think that the residential market is overheated and we see higher chances of prices escalating further on the back of limited supply. We keep in mind that liquidity, supply and prices are largely based on the solvency of high-income buyers, who make up 20% of the population. Further, if elite class buyers' disposable incomes fail to catch up with growing residential prices and mortgage rates, the risk that new buyers could default on mortgage loans increases, which may lead to a significant price correction (yet on a limited scale, as most property is mortgage free).

We see significant risks of developers taking on higher cost in anticipation of price growth and are partial to those that work in the mass market segment. We believe that PIK Group and LSR Group, developers with large residential portfolios and the ability to finance growth through pre-sales, are now the best positioned to consolidate the market, but remain cautious of the risk of them over investing in market consolidation.

## Commercial real estate

### RECENT TRENDS

The completions in commercial real estate will be hit hardest by the liquidity crisis, as this segment requires the highest upfront cash investments with no presales or long-term financing available. In the drive for liquidity we expect the commercial property market to start softening, led by increased offer of unfinished projects (with forced selling prevalent). We believe that rental revenues will stagnate, as the retail and corporate sectors reduce their expenses, while prices for commercial properties may be adjusted downward due to higher refinancing costs (leading to 15-25% price correction). Though the commercial space is priced more adequately, this vulnerable stock makes up a big chunk of the relatively liquid estate pledged at banks, and is becoming more susceptible to abrupt increases in the property offering as forced selling becomes prevalent. While there will be no short-term winners, players like LSR Group and Open Investments who still can finish their prime commercial space developments will still benefit from decreased supplies.

### LONGER-TERM VIEW

Unlike the sentiment-driven residential real estate market, commercial real estate in Russia is backed by a strong business rationale that ensures its efficiency.

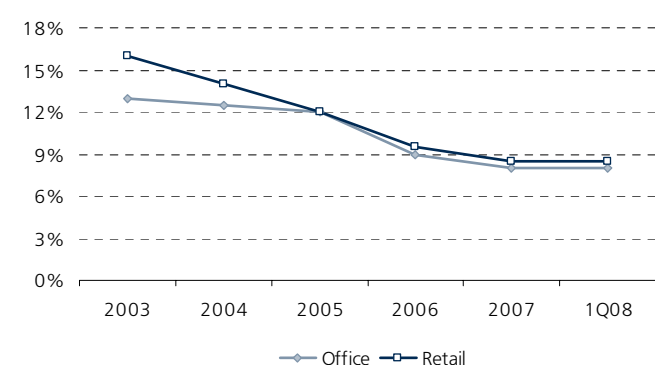
With real estate prices correcting on Western markets due to weak fundamentals and a high mortgage burden, Russian commercial real estate is enjoying continual growth. This is thanks to strong end-user demand coming on the back of a robust economy, translating into strong growth figures for retail turnover and real disposable income.

The demand for prime office space still remains highly skewed toward Moscow, especially the city's center, which exerts upward priced pressure due to limited supply. Contrarily, demand for quality retail space is rapidly spreading into the regions, aided by strong consumption growth of late. As regards volume, we see greater opportunities for developers that have diversified regional portfolios of retail space development.

As the supply of commercial space has fallen considerably, halted by the growing insolvency of smaller developers, we expect the increased offer of unfinished projects to soften prices, which could lead to reassessment of the value of unfinished projects in the developers' portfolios. That said, the delayed supply of commercial real estate will boost demand for already operational space. For this reason, we like developers with large shares of commercial space that is operational or close to completion.

Retail still remains more attractive for investors than the office segment due to relatively easier construction and lower requirements. However, we have witnessed considerable yield compression in recent years in big cities where the market is somewhat saturated. This fact has led the gap between yields in the office and retail sectors to narrow, and we expect the gap to remain very small in the future.

### Office versus retail yields



Source: Cushman & Wakefield, Troika estimates

Capitalization rates for office space in Russia, at 8-9%, remain among the highest in the world. We estimate that the tax-adjusted prime rental yields are in equilibrium with capitalization rates. The capitalization rates closely trace the tax-adjusted cost of debt (re)financing, given that completely operational commercial property is fully refinanced either through leaseback or commercial

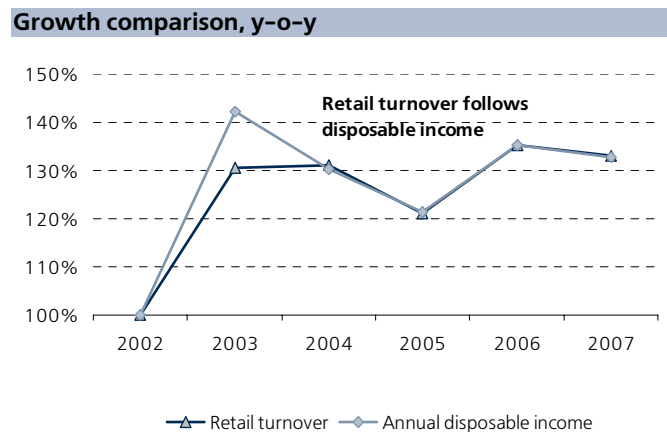
mortgage options. This correlation is provided by the investment efficiency; if one were to debt finance commercial property with the goal of collecting its future rental cash flows, then it should be expected that the rental yield at least returns the cost of financing. Along with decreasing debt financing costs, yields have compressed significantly since 2003 as a function of upward adjusting commercial real estate prices.

Yield compression came to a halt in 2007, as the liquidity crisis pushed up financing costs. Within the next two years, we do not expect any noticeable yield compression as the costs of refinancing may rise even further from their current levels.

## RETAIL MARKET

We view retail property as the most attractive commercial real estate segment, as it is a natural beneficiary of Russia's buoyant retail market expansion. The country's retail market has been growing at a CAGR of 32% over 2004-07, and we expect it to climb another 36% y-o-y to \$579 bln this year. We forecast an almost doubling of the market to \$962 bln by 2012, fueled by growing disposable income, proliferation of consumer lending, a high propensity to spend and changing lifestyles.

We expect disposable income to grow an average of 7.5% in real terms over the next three to five years. Meanwhile, consumer lending should continue soaring, with outstanding private debt tripling in the next three years to \$404.6 bln in 2010, which should cause savings to be retained. Currently, savings do not generally exceed 5% of individual incomes, with the largest figures being in the low double-digits.



Besides robust retail growth itself, an important factor underpinning acute demand for modern retail property is the changing structure of the retail market. We expect the growing satisfaction of basic needs to cause the non-food retail market segment to slightly outpace food retail. We forecast the former to grow at a CAGR of 14% over 2008-12, compared with the 13% average expected for food retail, with the key beneficiary being the shopping mall property market.

Another structural change is retail market consolidation. Russia's retail market is currently very fragmented, as exemplified by food retail, where the top 10 retailers account for roughly 12% of overall market value, compared with 30-50% in Europe. It is estimated that in most other segments of Russia's retail market, the level of fragmentation is commensurate. The last three years saw the market consolidating rapidly, with the key players growing 40-50% per year. Once the liquidity crisis is over, we expect this trend to persist in the coming years, with the main retailers expanding 35-40% annually on M&A and aggressive organic openings, which, in our view, should further bolster demand for quality retail property. On the back of increasing competition in the Moscow area and St Petersburg, the growth strategies of most retail majors increasingly targets Russia's regions, suggesting growing demand for modern retail property in regional cities.

Russia's retail sector has shown spectacular growth over the last few years, albeit from a low base. This supports the strong demand for modern retail space, translating into high occupancy rates and accurate forecasts of developers' future cash flows.

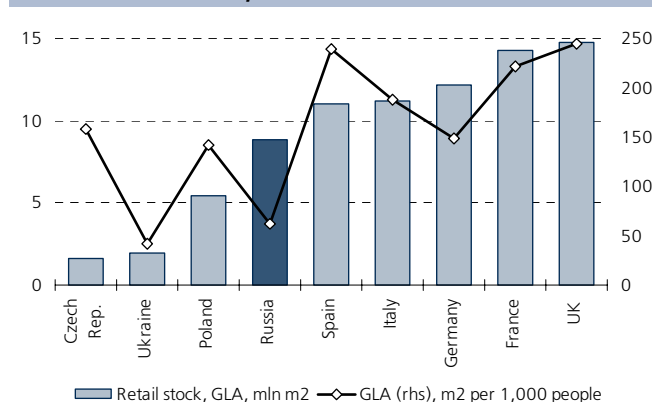
**Potential retail space demand, 2007**

GDP in market prices, \$ bln	1,341
Retail turnover, \$ bln	441.2
Average budget for rent (10%), \$ bln	44.1
Average rent rate, \$/m <sup>2</sup>	800
<b>Potential demand for retail space, mln m<sup>2</sup></b>	<b>55.1</b>
<b>Existing stock, mln m<sup>2</sup></b>	<b>16.0</b>
Value of all transactions (if all properties are sold at 9% yield), \$ bln	490.2
Average sale price, \$/m <sup>2</sup>	8,900

Source: State Statistics Service, Troika estimates

We think that the potential demand for quality retail space will continue to grow along with the consumer sector, leading to new construction. When thinking in terms of demand distribution between tenant types, we believe that the biggest share of retail space will be occupied by anchor tenants, followed by average-size retailers.

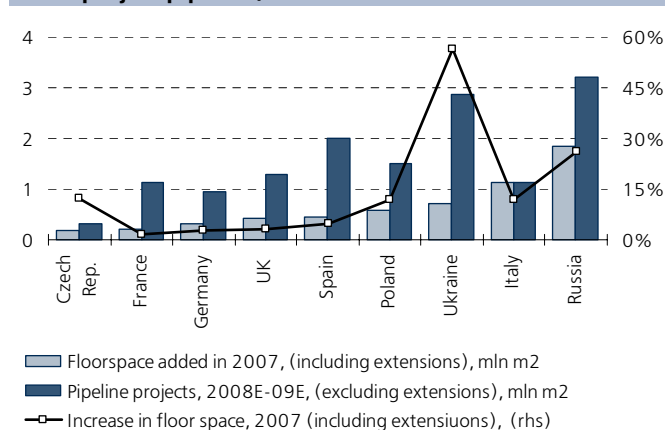
The shortage and value appreciation of retail space ensures high demand for new floor space, as most anchor tenants view the underlying space as an investment and as a hedge against rental risks.

**Retail stock in Russia, mln m<sup>2</sup>**

Source: Jones Lange LaSalle, Troika estimates

Along with dynamic growth in the retail real estate sector, Russia remains strongly undersupplied in retail floor space per capita. Retail space in Moscow (331 m<sup>2</sup> per capita) and St Petersburg (655 m<sup>2</sup>) is at the upper end of Western Europe averages, while the Russian regions suffer from severe undersupply. We estimate that it will take an additional 15 mln m<sup>2</sup> of new retail space across the country to reach the average European level. Backed by the booming retail sector, and the population's willingness to pay high prices, Russia is one of the leading countries in Europe in commissioning new retail space.

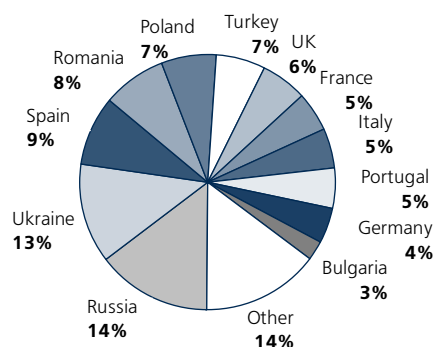
The pipeline of retail projects in the near future puts Russian in first place both in terms of expected property completions and floor space growth rates. The number of projects in the course of development is double the amount commissioned last year. In addition to new construction, we expect several additions to be built on existing projects.

**Retail project pipeline, mln m<sup>2</sup>**

Source: Jones Lange LaSalle, Troika estimates

Russia's share in the pipeline of retail projects in Europe is the largest, accounting for more than one seventh of the region's total. If all the projects that have been announced on the market are completed, it will bring the total retail stock in Russia close to the level in Germany and a little behind that in France.

#### Retail project pipeline breakdown by country, 2008E-09E



Source: Cushman & Wakefield, Troika estimates

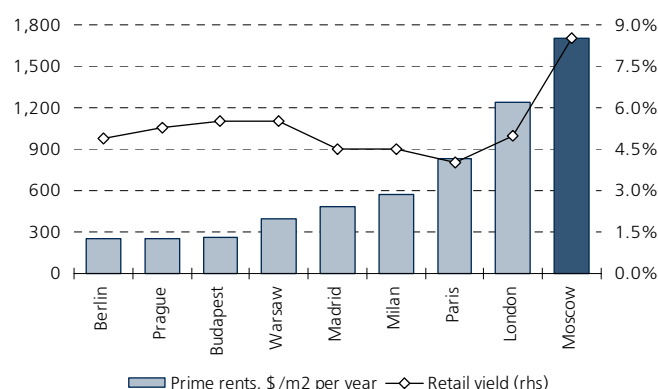
Most of the country's retail space is still concentrated in its "two capitals", Moscow and St Petersburg. At the same time, the level of project completion in the regions is picking up pace. There is still a gap between Moscow and St Petersburg – which still experience undersupply of quality retail space – on the one side, and the remaining cities – which for the past two to three years have been targeted for regional expansion by federal developers – on the other. This incentivizes many companies to focus on new construction sites on the back of a growing retail market. While the first wave of retail developers has targeted big regional cities with population over 1 mln, the second wave is considering building at the sub-regional level. A growing number of projects are appearing in cities with population under 500,000, and even 300,000. However, regardless of the impressive short-term performance on regional markets (cap rates in the regions began to overpass those in Moscow and St Petersburg as markets in the capital cities saw a large amount of new retail space added over a very short period), medium and long-term operational results on average can be rather modest due to a very young "consumption culture".

We point out that retail real estate market saturation does not come only from the amount of shopping centers on the market. In Moscow and St. Petersburg, the market is seeing increasing demand for retail space better designed for customer satisfaction. Thus, many earlier developments may experience falling traffic and occupancy as consumer sophistication rises.

#### Rent analysis of a sample store, industry average

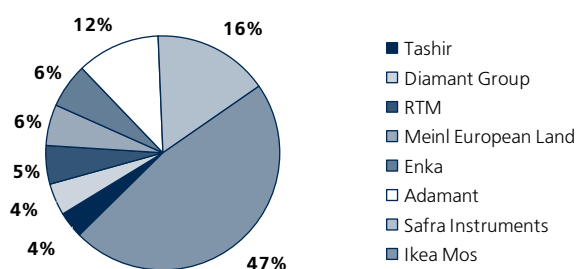
	2007E	2008E	2009E	2010E
<b>Anchor tenants</b>				
Net revenues per m <sup>2</sup> of GSA	7,143	8,945	10,539	12,155
LFL sales	24%	25%	18%	15%
Gross margin	30%	30%	29%	29%
Fixed costs/revenues	12%	12%	12%	12%
Rental costs/revenues	7%	6%	6%	6%
EBITDA margin for mature store	11%	11%	11%	11%
<b>Rental expenses, \$/m<sup>2</sup></b>	<b>500</b>	<b>580</b>	<b>632</b>	<b>680</b>
<b>Shopping galleries</b>				
Net revenues per m <sup>2</sup> of GSA	8,333	10,436	12,295	14,180
LFL sales	24%	25%	18%	15%
Gross margin	50%	50%	49%	49%
Fixed costs/revenues	12%	12%	12%	12%
Rental expense/revenues	24%	22%	21%	19%
<b>EBITDA margin for mature store</b>	<b>14%</b>	<b>15%</b>	<b>16%</b>	<b>17%</b>
<b>Rental expenses, \$/m<sup>2</sup></b>	<b>2,000</b>	<b>2,320</b>	<b>2,529</b>	<b>2,718</b>
<b>LFL breakdown</b>				
Average check	25%	27%	19%	17%
CPI	11.9%	13.5%	9.0%	7.5%
Real consumption growth	13.1%	13.0%	10.0%	9.0%
Traffic	-1%	-1%	-1%	-1%
Competition	-1%	-1%	-1%	-1%
<b>PPI</b>	<b>21.0%</b>	<b>16.0%</b>	<b>9.0%</b>	<b>7.5%</b>

Source: Troika estimates

**Rents and yields**

Source: Jones Lange LaSalle, Troika estimates

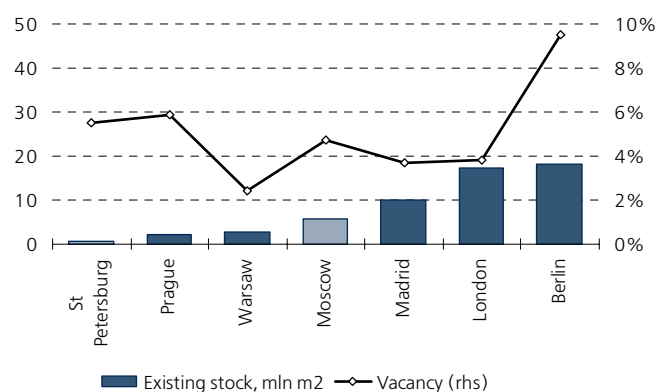
Thanks to high demand and limited supply, rental rates for retail space have been growing above ruble PPI inflation throughout the last few years. We believe that retailers will be able to support the average rental rate growth going forward, at least matching ruble PPI, thanks to faster same-store revenue growth on the back of a strong increase in consumer spending.

**Distribution of income-generating retail stock among largest developers, 2007**

Source: Troika estimates

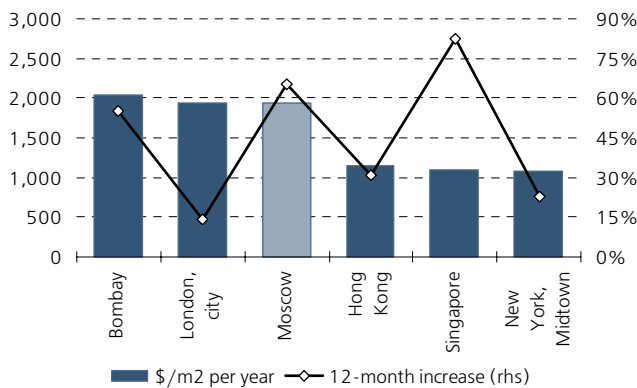
**OFFICE SPACE**

Moscow by far outweighs the regional capitals in office supply per capita; this is not a big surprise considering that Moscow still accounts for over 70% of Russian turnover and every single corporation on the federal level tends to have representation in the country's capital. However, the city remains severely undersupplied when compared with western capitals.

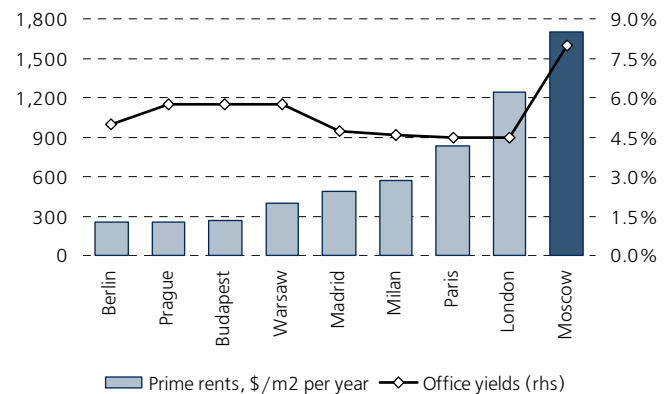
**Vacancy rates for office premises**

Source: Colliers, Troika estimates

Vacancy rates in Russia are inflated due to high inflow of new office space, which typically has higher vacancy during the initial year of operation. Adjusting for this would bring the country's rate down by roughly 200 bps. This puts the vacancy rate at a record low, which comes on the back of strong demand and undersupply.

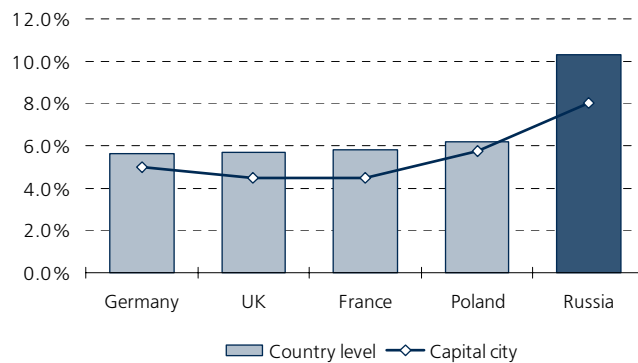
**Office rental rate growth in world centers, 2007**

Source: CBRE, Troika estimates

**European office market, prime rental rates and yields**

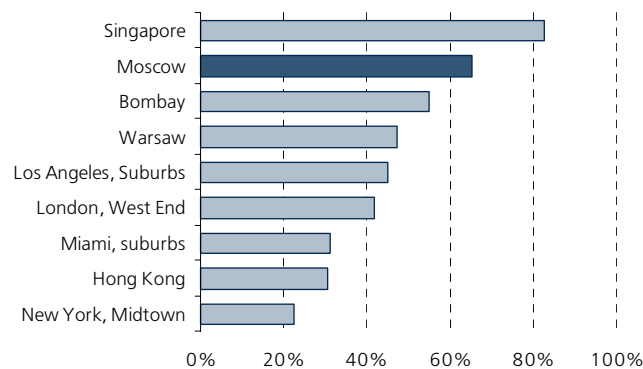
Source: Jones Lange LaSalle, Troika estimates

Moscow's office market has one of the highest rental rates in the prime (class A and B+) segment, but it also has the highest rental yields. Based on average comparisons, it may appear that prime office rentals in the capital are overvalued. However, as we will see on residential markets, the language of averages does not translate to the situation on Moscow real estate market. Prices are driven by supply and demand, and considering that along with the highest rental rates, Moscow has one of the lowest vacancy rates, it is obvious that the market is ready to pay the price.

**Office yields at country and city levels**

Source: Jones Lange LaSalle, Cushman &amp; Wakefield, Troika estimates

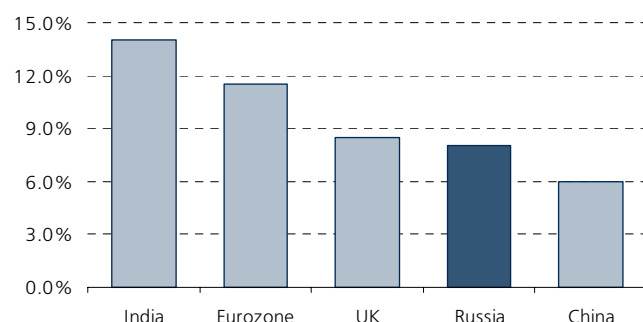
As previously noted, Moscow accounts for most of Russia's prime office space, and this contributes to the country's average rental rates being higher than those in Western countries.

**Fastest growing office markets, 2007, y-o-y change in occupation costs**

Source: CBRE, Troika estimates

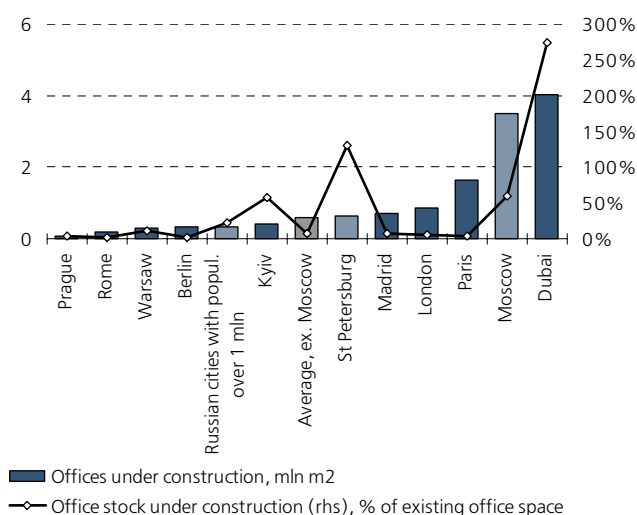
Moscow's office market has so far demonstrated high growth rates, albeit from low base, thanks to high demand backed by robust economic expansion.



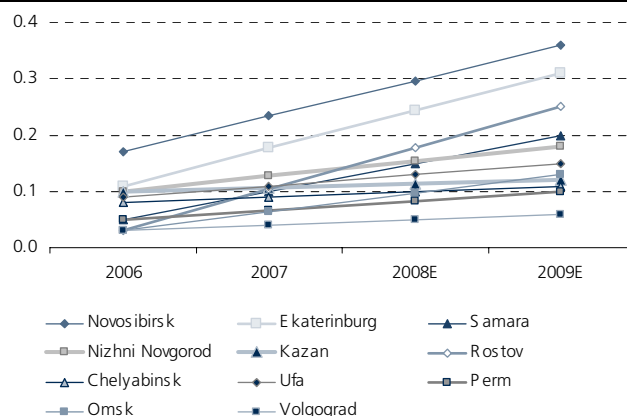
**Office rent appreciation due to dollar exchange rate fluctuations, 2007, y-o-y**


Source: CBRE, Troika estimates

Regular rental contracts with anchor tenants hedge the property owner against sharp fluctuations in the ruble/bi-currency exchange rate. In the medium term, the developer generally has limited ability to increase the anchor's rent against ruble inflation; however, it can do so by increasing rent for small boutiques.

**Office premises under construction, mln m<sup>2</sup>**


Source: Colliers, Troika estimates

**Office stock in Russian regions, mln m<sup>2</sup>**


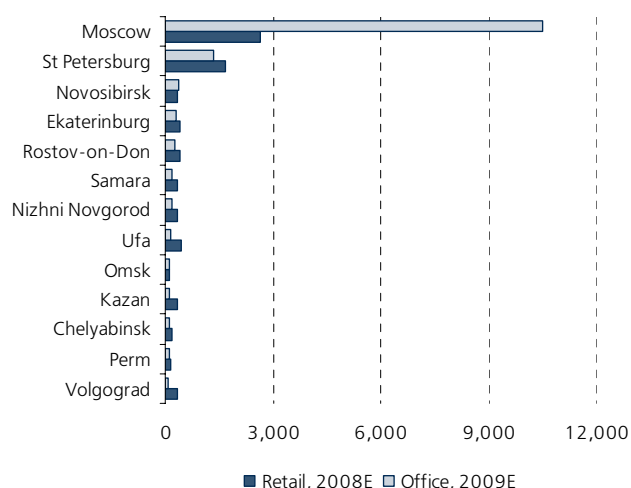
Source: Colliers, Troika estimates

**Estimated commercial real estate stock, 2008E-09E, '000 m<sup>2</sup>**

	Retail, 2008E	Office, 2009E
Volgograd	352	60
Perm	147	100
Chelyabinsk	168	120
Kazan	338	125
Omsk	121	130
Ufa	446	150
Nizhni Novgorod	350	190
Samara	338	200
Rostov-on-Don	420	260
Ekaterinburg	408	310
Novosibirsk	343	365
St Petersburg	1,676	1,326
Moscow	2,654	10,500

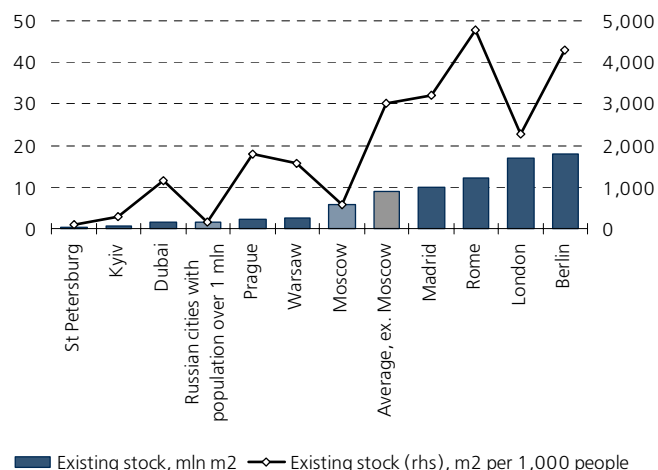
Source: Jones Lange LaSalle, Troika estimates

Moscow by far outstrips regional capitals by the office supply per 1,000 inhabitants. This is not surprising, considering that Moscow still accounts for over 70% of Russia's turnover and every corporation at the federal level tends to have representation in the country's capital.

Office premises under construction, '000 m<sup>2</sup>

Source: Colliers, Troika estimates

## Office stock in Europe



Source: Colliers, Troika estimates

However, Moscow remains severely undersupplied when compared with Western capitals. As all other large cities in Russia significantly lag Moscow in office space supply, the country overall looks rather undersupplied. The superior demand dictates the high rental rates that businesses are prepared to pay for prime locations in Moscow and regional capitals.

## Potential Class A and B office space demand, 2007

GDP in market prices, \$ bln	1,340.9
GDP ex. salaries of personnel, \$ bln	729.0
Retail turnover, \$ bln	441.2
Corporate GDP ex. Retail, \$ bln	287.8
Average budget for rent (5%), \$ bln	14.4
Average rent rate, \$/m <sup>2</sup>	800
<b>Potential demand for office space, mln m<sup>2</sup></b>	<b>17.99</b>
<b>Existing stock, mln m<sup>2</sup></b>	<b>7.98</b>
Value of all transactions (if all properties are sold at 8.5% yield), \$ bln	169.3
Average sale price, \$/m <sup>2</sup>	9,400

Source: State Statistics Service, Troika estimates

The aggregate A and B-class stock in Russia's main cities (11 cities with population over 1 mln plus Moscow and St Petersburg) is estimated at 8.12 mln m<sup>2</sup> of net rentable area.

Though the \$800/m<sup>2</sup> in annual rent may seem comparatively exaggerated, we argue that the average rent in Russia objectively reflects the picture of supply and demand. Moreover, our calculations show that Russia's economy, at its current levels, can support over 18 mln m<sup>2</sup> of prime office space at an annual rate of \$800/m<sup>2</sup>. We have based these calculations on our estimates that corporations spend an average of up to 5% of their turnover on representation expenses (excluding retail companies, which spend up to 10%). This shows that demand for office space in Russia could support more than twice the existing stock at the aforementioned price.

## Residential market

### RECENT TRENDS

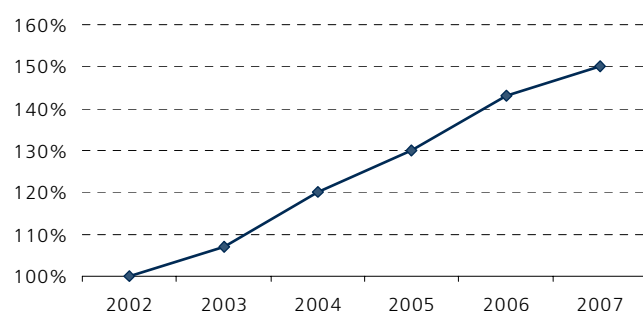
In the residential segment, we expect the weakness to come on the back of higher cost and lower availability of mortgage financing, as well as due to increased disposable income uncertainty. We believe that the regions and remote areas will experience price correction first, as the number of small developers will be willing to cut their prices by 20-30% in order to attract some liquidity. We expect the mass market residential prices in central regions to appear more defensive simply due to limited supply and municipal buys. The transaction volumes in the upper residential segment (including gated communities), where prices went through the roof, were down even before the recent liquidity problems. Here we expect to see either significant price correction, as the holders of business class investment property start releasing their investments, or massive loss of liquidity.

Importantly, the banks are already considering the risks of about 20% y-o-y price correction in the housing segment, as they have increased the down payment requirement from 10% to 30% for mortgage financing. Though the mortgage financing rates have seen spectacular 500 bps increase since the start of credit crunch in July 2007, to as high as 15% in dollars and 18% in rubles per annum, the main banks still continue mortgage lending, which remains a decisive source of liquidity for the housing market.

### LONGER-TERM VIEW

In the longer run, we like the huge potential of Russia's residential market, ensured by great potential demand and strong disposable income growth.

#### Russian disposable income growth, y-o-y



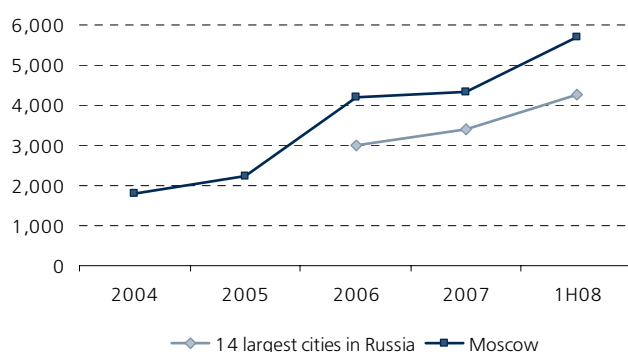
Source: Euromonitor, Troika estimates

However, we are concerned with the continuous appreciation of real estate prices in Russia, especially in central cities. We view real estate in Russia as overpriced on average and believe that high prices are only sustained by the specific demand and supply structure and a very low level of mortgages. As the initial liquidity to the housing market is supplied mainly through mortgages granted to elite buyers (top income quintile), the sensitivity of prices to mortgage rates and the elite class' standing should rise dramatically within the next few years. So far, rental rates have returned only a fraction of market prices, and demand has been supported by speculative interest in rising prices.

In the best case, we see prices rising at the level of CPI growth and slower than disposable income for a few years, allowing the latter to catch up and the former two to normalize on the back of inflation, growing rental yields and decreasing mortgage rates.

However, it is more likely that prices will escalate further on the back of limited supply, and there is significant risk of developers taking on higher-cost, larger-scale projects in anticipation of price growth. The higher prices grow, the less support and liquidity they find, and the greater the chances that new buyers will default on their mortgages. Moreover, more expensive projects imply a better chance that negative returns will be realized, should prices correct or stagnate.

### Residential real estate prices in Moscow and Russia, \$/m<sup>2</sup>

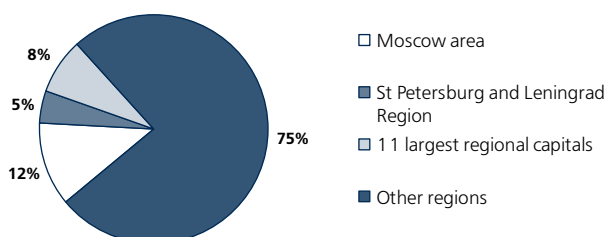


Source: Bloomberg, Troika estimates

Russia's residential real estate market started to emerge in 1992, when the prevailing majority of residents were entitled to privatize their municipal apartments. The apartments in the center of Moscow could then be bought for a price equal to just 1 m<sup>2</sup> in today's prices. With one major drop during the 1998 default, housing prices in Russia have posted spectacular growth since then.

The residential market is very sentiment driven, as the average household views their apartment as holding some fundamental (last resort) value, and hardly anyone considers the apartment from the perspective of opportunity costs/alternative investments. Thus, sales occur only when households are forced to sell; otherwise, the appetite for high prices is insatiable.

### Housing stock by region



Source: State Statistics Service, Troika estimates

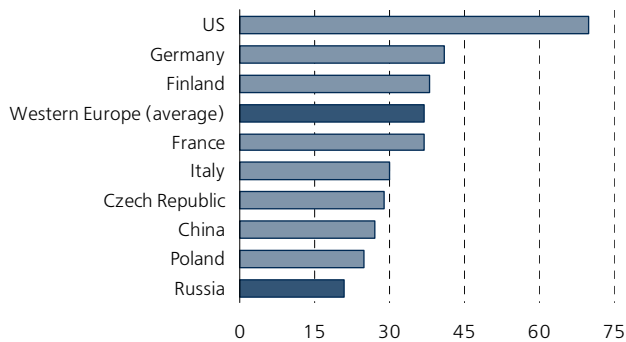
Housing stock in Russia currently totals some 3 bln m<sup>2</sup>. The residential market's total capitalization in 2007 was \$5.4 trln, or quadruple that year's GDP. Considering how housing prices have risen over 1H08, the current figure has moved closer to \$6 trln.

Russia's residential market is rapidly developing in two main directions, namely traditional multistory apartment buildings in urban areas and suburban townhouses (gated residential communities) within driving distance of major cities. The townhouse concept is rather new to Russia, as Soviet-era dachas are a far cry from this type of housing. Cottage communities in proximity to a city are increasingly being considered an alternative to residing in metropolitan areas.

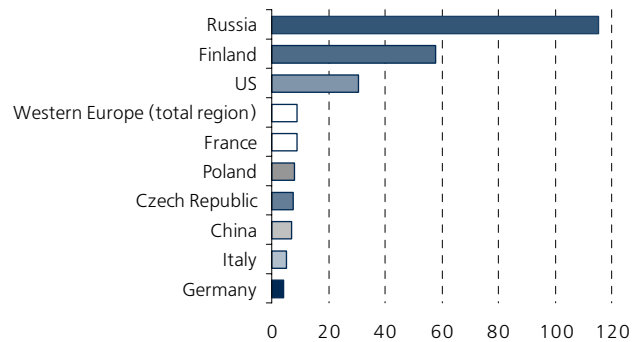
## Apartment buildings

### SUPPLY

Unlike the fairly fragmented townhouse market in Russia, the secondary and primary segments of the traditional urban housing market exhibit high price correlation and co-influence, which is understandable in light of the high liquidity in apartment buildings and the ease of matching prices within one neighborhood. In fact, primary market prices regularly reflect the cost of production as a marginal premium over the secondary market, and production costs are set as the long-term pricing bottom. Reciprocally, the secondary market reacts accordingly to cost inflation for primary offerings. Strikingly, Russia, which has the largest territory and one of the lowest population densities in the world, also has one of lowest per capita housing stock figures.

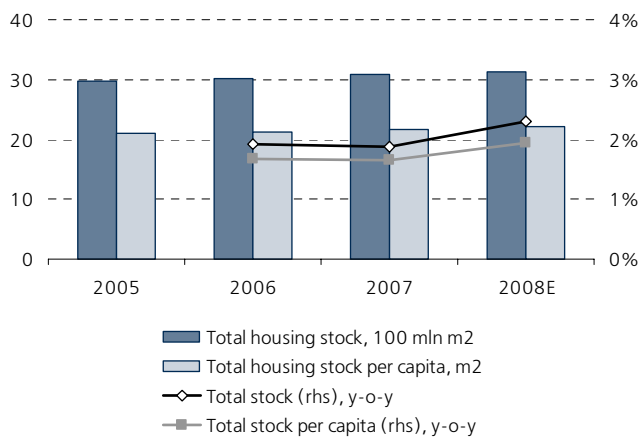
**Average housing area per capita, m<sup>2</sup>**

Source: UNECE, Troika estimates

**Territory per capita, km<sup>2</sup>/person**

Source: UNECE, Troika estimates

This phenomenon was largely determined by Soviet-era housing standards, which limited the housing stock per person to 15-20 m<sup>2</sup> on average, and the post-Soviet decline in housing completions was offset by a shrinking population. Another factor was the high concentration of people around key economic and administrative centers.

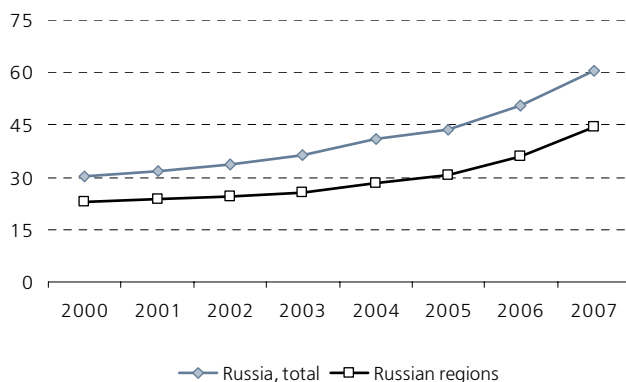
**Total housing stock in Russia**

Source: State Statistics Service, Troika estimates

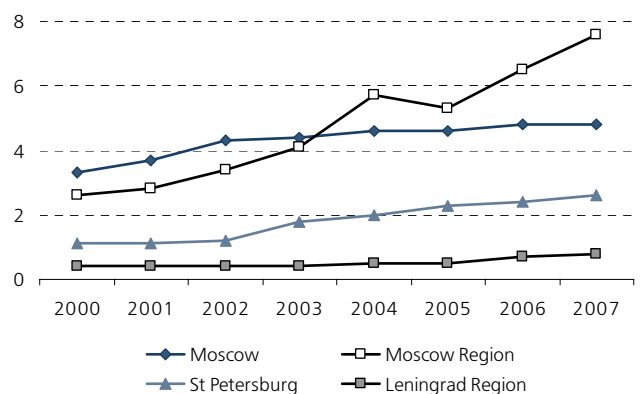
**New residential construction**

Source: State Statistics Service, Troika estimates

The country's total housing stock is currently on the rise. However, construction activity slowed in 1H08, the level of new housing completions inching up a mere 6% YTD, due to liquidity problems that smaller developers are facing, in our view.

**Residential stock trends, Russia and the regions, mln m<sup>2</sup>**

Source: Open Investments, State Statistics Service, Troika estimates

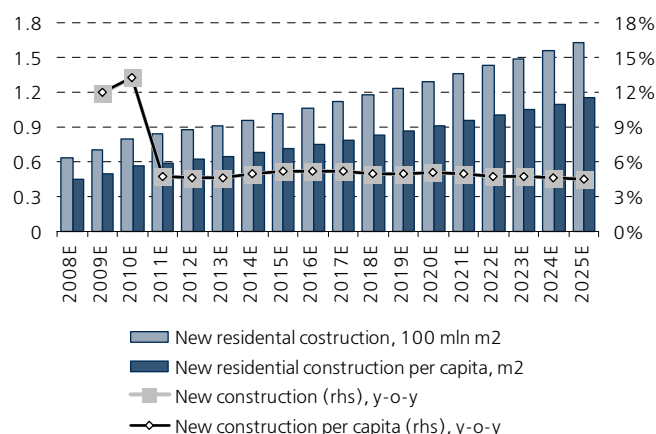
**Residential stock trends, Moscow and St Petersburg, mln m<sup>2</sup>**

Source: Open Investments, State Statistics Service, Troika estimates

Subject to buying-power sufficiency, we expect housing stock per capita in Russia to gradually close the gap with western averages, supported by the increasing weight of suburban residential developments. Our estimates for potential demand are also supported by forecasts in the "Federal strategy for massive residential construction" project. According to the strategy, the current housing

stock is expected to rise by around 2 bln m<sup>2</sup> by 2025 to 5 bln m<sup>2</sup>. This would bring housing stock per capita to the average level of 33-36 m<sup>2</sup>.

#### Forecast new housing completions\*

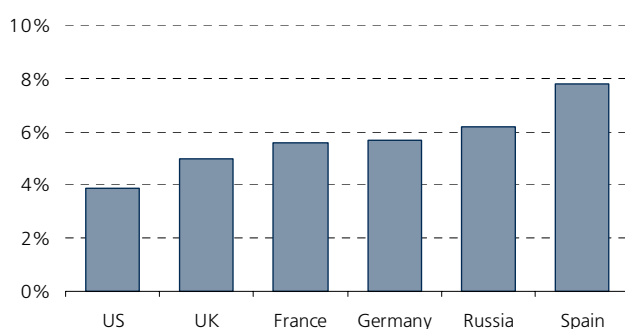


\* according to strategy for massive residential construction

Source: Regional Strategy Ministry, State Statistics Service, Troika estimates

We are currently observing a considerably high level of investment/GDP, which is in line with Western countries. The peculiarity of Russia is that most residential investment is still directed at apartment building construction. Considering the investment backlog during 1991-2000 and the somewhat higher construction costs in Russia, we expect the country's investment/GDP ratio to exceed that in Western Europe, should Russians' buying power continue to rise at its current pace.

#### Residential investment/GDP, 2007

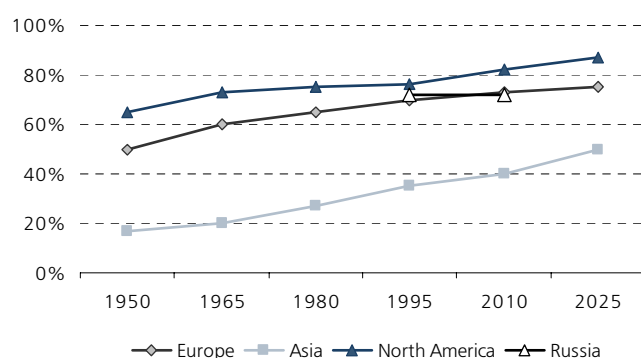


Source: IMF, Troika estimates

#### DEMAND

On the demand side, we see strong potential for supply trends to be supported. Of the current housing stock, 80% was built during the Soviet era and is becoming increasingly depreciated. We see the potential for housing per capita demand in Russia as much higher than that on developed markets.

Another driver of housing demand is the country's further urbanization. Of the current population, 75% live in urban areas (excluding suburban townhouses, which are in fact the part of the urban infrastructure). This ratio, high compared with other BRIC countries and the average European level, is similar to that in the US.

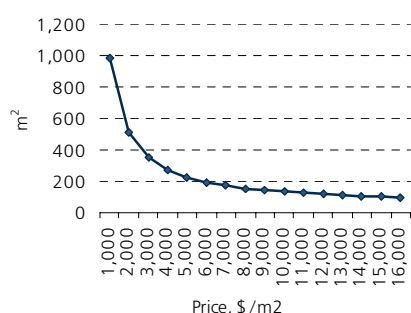
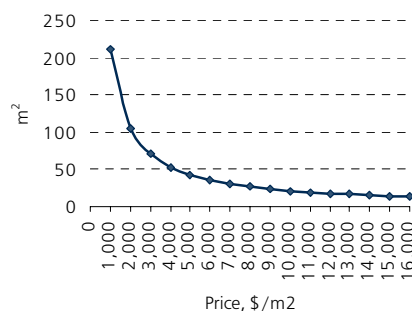
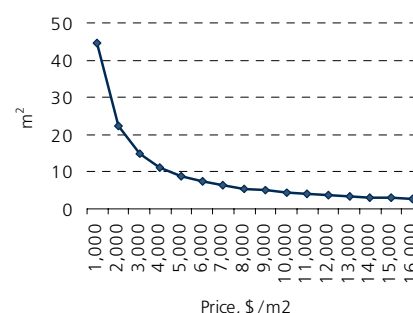
**Urban population as a % of total**

Source: UN, State Statistics Service, Troika estimates

The continuous migration from Russian villages will transplant roughly 1% of the population to cities over the next 10 years, we believe. This migration will largely offset the opposite migration to townhouses and the decline in urban population due to the negative birth rate.

Most Russians are likely to expand their residences, and we estimate the minimum potential demand for housing stock for next decade at 1.5 bln m<sup>2</sup>.

However, at today's average prices, potential demand translates into over \$3 trln in private and budget investments. Meanwhile, with current incomes and mortgage rates, Russian residents can realize only around 30% of the aforementioned demand.

**Projected 10-year demand for housing in Russia****Projected 10-year demand for housing in Moscow****Projected 10-year demand for housing in St Petersburg**

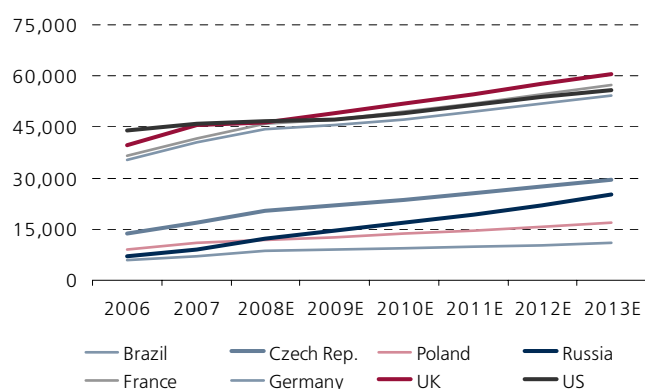
Source: State Statistics Service, Troika estimates

While the Moscow market accounts for over 20% of the anticipated demand in dollar terms, we view the regions as more promising due to the following factors.

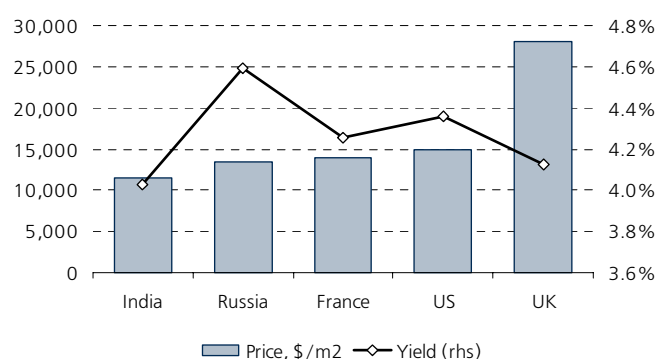
- As there is the possibility of imposed constraints for land available for development, the developers may meet only part of the housing stock demand in Moscow, while the remaining supply will have to be provided by the secondary market. The same logic applies to the St Petersburg metropolitan area. Thus, we favor developers with growing exposure to Moscow and Leningrad regions and large Russian cities.
- Disposable income has higher potential for increasing in regions (albeit from a low base), which may effectively translate into stronger demand and a better price environment.

**PRICES**

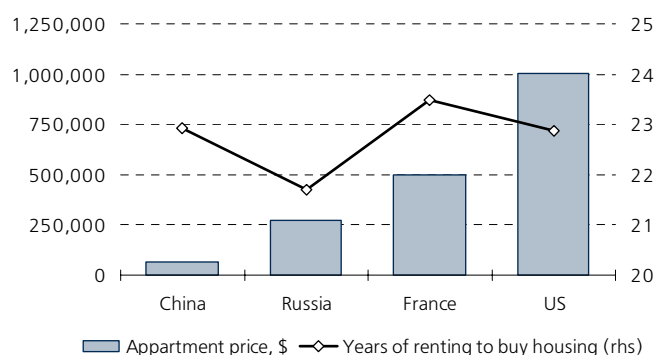
As prices for upscale and elite housing climbed up to Western levels far ahead of disposable income, Moscow found itself on the top of the list of countries with peaking housing prices/income ratios, and it is still rising. With an average GDP per capita level among BRIC and Western European countries, the Russian capital has some of the highest apartment prices.

**GDP per capita, \$**

Source: IMF, Troika estimates

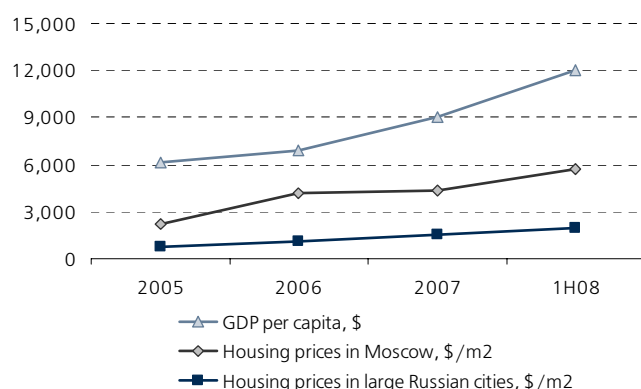
**Global prices for upscale apartments**

Source: Global Property Guide, Troika estimates

**Rental years required to generate the price of an apartment (based on average m<sup>2</sup> per capita)**

Source: IMF, Troika estimates

We expect Russia's nominal GDP per capita in rubles, which is a fair approximation of disposable income, to grow at a CAGR of 18%, or a total of around 70%, over 2008-13. We are concerned that the greater part of this growth is backed by high commodity prices, and the smaller part is based on increasing productivity in the other economic sectors. In recent years, housing price increases in Russia have lagged average disposable income growth, making housing comparatively cheaper.

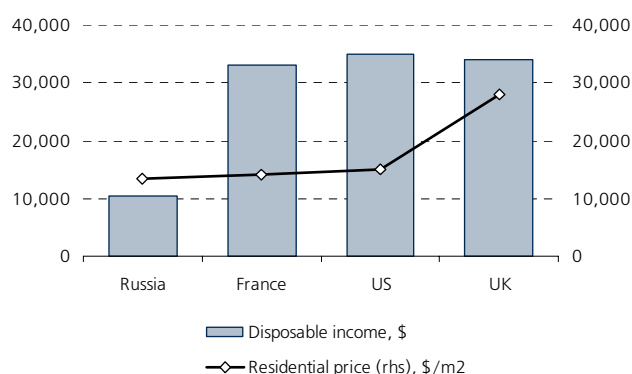
**Average disposable income and housing prices**

Source: IMF, Troika estimates

However, we are concerned that real estate prices could escalate further on the back of limited supply. This implies significant risk of developers taking on higher-cost, larger-scale projects in anticipation of price growth. The higher prices rise, the less support and liquidity they find, and the greater the chances that new buyers will default on mortgage loans. And the more expensive the development project becomes, the higher the chances that it realizes negative returns, should prices correct or stagnate.

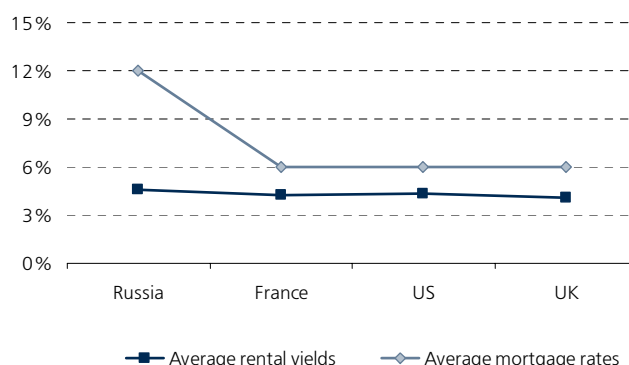


### Disposable income vs residential prices for prime apartments



Source: Eurostat, Troika estimates

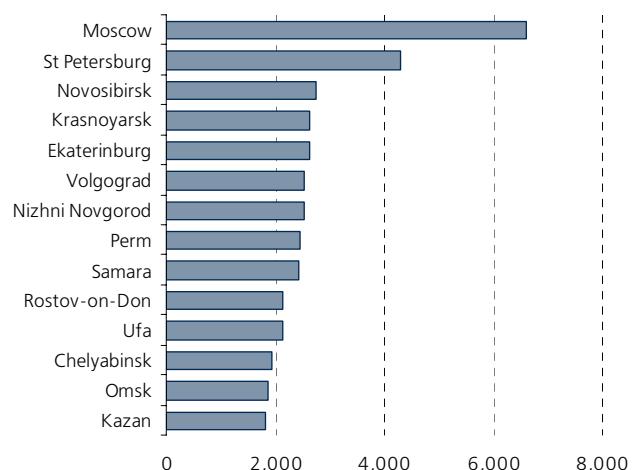
### Mortgage rates vs cap rates and rental yields



Source: Global Property Guide, Troika estimates

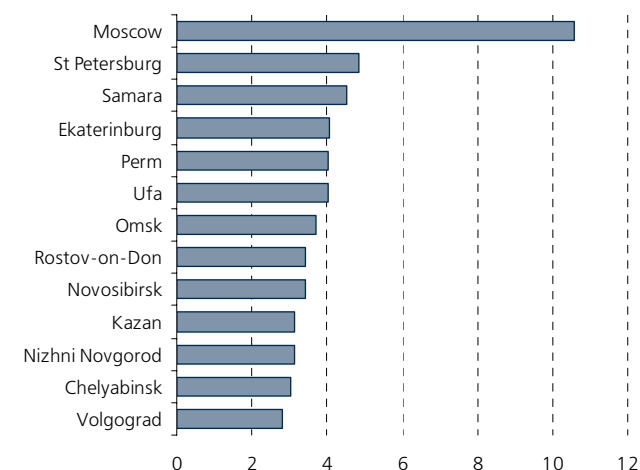
Moreover, the significant spread between rental yields and capitalization rates (which we stress should be close to the mortgage finance rates in efficient markets) suggests that investing into apartments in Russia is a value-destructive proposition as, everything else being equal, rental income in Russia returns only 50-60% of the apartment price. In other words, if the house is fully mortgage financed and then let, the landlord will realize 300-400 bps of negative spread.

### Housing prices, 1Q08, \$/m²



Source: IMF, Troika estimates

### Annual personal income, \$ '000

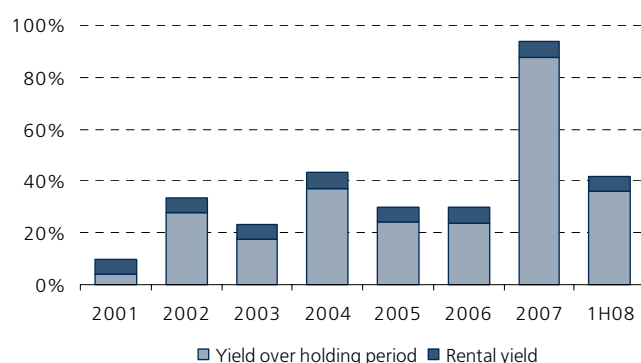


Source: IMF, Troika estimates

### PRICE ENVIRONMENT

As rental rates have historically lagged real estate prices, a low rental yield/price ratio would give a negative DCF value to any investment in real estate in Russia. However, rental yields were largely neglected while prices appreciated, which provided investors with triple-digit yields for holding periods since 1999.

### Property rental yields in Moscow



Source: Bloomberg, Troika estimates

So what would happen if real estate prices flatten out after hitting a ceiling, making it unattractive for speculative buyers? We should see either rental yields effectively increasing to close the gap with mortgage financing rates, which could happen either via a rebound in rental yields or a drop in mortgage rates. Alternatively – and more likely – real estate prices would correct as speculative players start taking profit in a flat price environment.

### MOSCOW MARKET: IS THE BUBBLE ABOUT TO BURST?

The Moscow real estate phenomenon should be viewed apart from other Russian cities and separate from the vast majority of capital cities. We believe that Moscow is rapidly growing into a world capital, and that the true understanding of pricing levels can be achieved only in comparison with other world capitals such as New York, London, Hong Kong and Beijing. The difference between global centers and other, perhaps equally sized cities is that the demand for real estate in world capitals is not limited just by the region or the country, but is instead spread over a much larger population base, which views the city as a “dream”, something to strive for. The pressure of inward migration in world centers and the limited supply of residential space then return premium pricing and rental levels. As a matter of fact, the world centers have higher business flows, which then translate into average incomes adequate for the local residential pricing. Those who cannot afford the cost life are basically replaced by more successful newcomers.

We believe that there is a similar size of demand in Moscow as in other world capitals. As Moscow is still in the process of becoming a world capital, average incomes are still significantly lower than in the other important global cities, while housing prices are on the same or at higher levels due to its specific demand structure.

The 2006 rally in Moscow real estate prices caused many concerns about decreasing liquidity. However, after a minor correction in 1H07, and despite an average 200 bps increase in mortgage rates, real estate continued to appreciate. While the growth could have been driven by such factors as strong demand and inflationary hedging, a significant part of it could have just been inertia as the last investors get into the game.

How long can the Moscow market possibly sustain its current average price of \$6,500/m<sup>2</sup>, often for questionable-quality residential space, given that households can afford just above half the current market price, and given that the rental value returns only half of the extant market price? Should we sound the market bubble alarm bell now that \$13,000/m<sup>2</sup> in a central location (roughly a 30% premium to New York prices) is considered kind of a “good deal”?

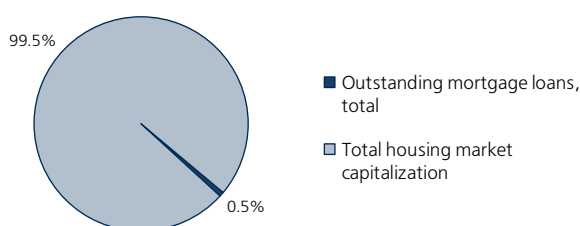
We keep in mind that the residential real estate markets in Moscow and Russia are not in equilibrium and that comparison with Western markets should be done carefully in order to account for current fundamental differences.

Taking a closer look at the structure of supply and demand in Moscow answers many of our concerns, but we are still left with a strong aftertaste of an overpriced market and risks of a price correction, should economic growth slow or the first signs to of selling emerge.

While Moscow’s residential market competes with the world’s main megalopolises in terms of capitalization, it is based on significantly lower asset turnover. The mortgage burden is a fraction of that in Western countries, and mortgages are provided against the purchase or improvement of residential space only, which means that mortgages go mainly to higher-income quality and house buyers.

In contrast to many Western cities, Moscow's population has lower chances of being caught in a downward spiral of residential housing sales as interest rates increase or real incomes shrink.

### Mortgage load in Russia



Source: Eurostat, Troika estimates

Only the top 20% of the population can indeed afford to buy housing at current price levels. This small portion of the population in fact creates the primary demand for real estate and supports the high prices due to limited supply. Thus, the top quintile (by income), the main mortgage consumer, supplies liquidity to the market. The rest of the population, otherwise not eligible for housing at current prices, multiplies turnover volumes by exchanging Soviet-inherited apartments for bigger spaces either in more affordable areas or via partial primary financing (through mortgages, private loans or personal savings).

Most of the population with low income does not contribute to real estate market liquidity (only to the rental market if at all). And as owners of debt-free real estate, they are not under pressure to sell their apartments.

All that being said, it takes a smaller base of high-income population to support what we considered to be bubbled prices in Moscow.

A similar logic applies to St Petersburg and regional markets. However, the major difference between Moscow and regional capitals and even the Northern Capital (St Petersburg) is that Moscow is becoming one of the world's financial centers, with subsequent high immigration flows and rapid change to the demographic map (income-wise).

### RENTAL MARKETS

Moscow's rental market, while mostly informal, is quite significant thanks to the large inflow of job migrants from Russia and the CIS. While the data on rental rates are open market information and are quoted quite accurately, the size of the market can only be estimated, as very few transactions are actually registered through state bodies.

As a consequence of a shrinking local population (before accounting for the effect of immigration), many local households in Moscow inherited second and third properties, and this essentially formed the city's rental market. Some households that have moved to townhouses in Moscow's suburbs, have also contributed their apartments to the rental market. These apartments, which carried little if any immediate cash investment, were being rented out for residual cash flows at lower rates than the effective return on investment would require. Speculative investors in real estate pretty much followed the same logic, as they have thus far been more focused on the holding period returns thanks to price appreciation rather than on rental yields.

During a few periods when real estate prices were taking a breather, we saw rent yields trying to close the gap somewhat. However, we do not expect rental rates to grow enough ahead of the underlying asset's price in the short term to close that gap.

St Petersburg's rental market, in our opinion, should demonstrate similar patterns to Moscow, perhaps with a few year's lag, as economic growth and job migrants have been flowing into the Northern Capital more recently.

Rental yields in Moscow and St Petersburg stood at 6.4-5.5% per annum throughout 2007 and the start of 2008. In regional centers, we estimate rental yields to be higher at 7.4%-6.6% per annum, albeit on much lower volumes. Regional cities have much smaller job migration, which leads to smaller demand. However, the supply of apartments for rent is adequately smaller as a relatively smaller portion of households participate in the rental market. Thus, the rental market is fairly illiquid and skewed to the higher end, which then leads to higher yields.

**Monthly rental rates for typical 30 m<sup>2</sup> unit, \$**

	2007	1H08
<b>Moscow</b>	<b>1,300</b>	<b>1,430</b>
<b>St Petersburg</b>	<b>700</b>	<b>770</b>
Nizhni Novgorod	500	550
Irkutsk	450	495
Rostov-on-Don	500	550
Novosibirsk	450	495
Vladivostok	450	495
Krasnodar	500	550
Khabarovsk	500	550
<b>Average Russia</b>	<b>500</b>	<b>550</b>

Source: Eurostat, Troika estimates

**Market price versus capitalization**

	2007	2008E	2009E	2010E
Disposable income	16.70%	22%	22%	22%
CPI	11.9%	13.5%	9.0%	7.5%
Housing stock per capita, m <sup>2</sup>	20	20	23	26
Average disposable income, \$/year	16,928	20,653	25,196	30,739
Consumer basket, \$/year	(4,800)	(5,448)	(5,938)	(6,384)
Disposable income net of consumer basket, \$/year	12,128	15,205	19,258	24,356
Other regular expenses, \$/year	(3,639)	(4,561)	(5,777)	(7,307)
Double net disposable income, \$/year	8,490	10,643	13,481	17,049
Average mortgage rates = cap rates	12%	14%	14%	13%
Rental yield	5%	6%	7%	8%
<b>Average price that Muscovites can afford, \$/m<sup>2</sup></b>	<b>3,537</b>	<b>3,801</b>	<b>4,186</b>	<b>5,044</b>
Market price, \$/m <sup>2</sup>	4,700	6,500	7,085	7,616
Rent-out value \$/m <sup>2</sup>	1,958	2,786	3,543	4,687

**Sensitivity analysis**

Disposable income distribution, \$/year

Quintile 1	2,713	3,166	3,862	4,712
Quintile 2	5,238	6,113	7,458	9,099
Quintile 3	9,541	11,134	13,584	16,572
Quintile 4	19,269	22,487	27,434	33,470
Quintile 5	56,778	66,260	80,837	98,622

Source: Eurostat, Troika estimates

On 2008E incomes, the average Moscow resident can afford to pay no more than \$3,800/m<sup>2</sup>, given the ability to get a mortgage at 14% per year. In terms of rental revenues, the average value of residential real estate is still at \$3,000/m<sup>2</sup>, just half of the average market price. Thus, Moscow's residential market appears almost 100% overpriced in terms of average buying power and rental yields. However, this high price level is a function of a limited supply and is supported by higher income buyers, though on low volumes.

**Housing price affordability by income quintile**

	2007	2008	2009	2010
Average price that Muscovites can afford, \$/m <sup>2</sup>	16,928	20,653	25,196	30,739
Quintile 1	(609)	(571)	(451)	(346)
Quintile 2	128	166	330	562
Quintile 3	1,383	1,422	1,662	2,110
Quintile 4	4,220	4,260	4,673	5,610
<b>Quintile 5</b>	<b>15,160</b>	<b>15,203</b>	<b>16,282</b>	<b>19,103</b>

Source: State Statistics Service, Troika estimates

As mentioned above, the Moscow bubble is sustained by the specific structure of supply and demand, which limits the supply of real liquidity to the top quintile of the population. St Petersburg and regional cities paint the same picture, though on a different scale.

**Real estate prices in Russia (ex. Moscow and St Petersburg)**

	2007	2008E	2009E	2010E
Disposable income growth, nominal	16.70%	22%	22%	22%
CPI growth, nominal	11.9%	13.5%	9.0%	7.5%
Housing stock per capita, m2	20	20	23	26
Average disposable income, \$/year	6,010	7,333	8,946	10,914
Consumer basket, \$/year	(2,400)	(2,724)	(2,969)	(3,192)
Disposable income net of consumer basket, \$/year	3,610	4,609	5,977	7,722
Other regular expenses, \$/year	(1,083)	(1,383)	(1,793)	(2,317)
Double net disposable income, \$/year	2,527	3,226	4,184	5,405
Average mortgage/capitalization rates	12%	14%	14%	13%
Rental/capitalization yield	6%	7%	8%	9%
<b>Average price that Russian can afford, \$/m<sup>2</sup></b>	<b>1,053</b>	<b>1,152</b>	<b>1,299</b>	<b>1,599</b>
Market price, \$/m <sup>2</sup>	1,600	2,300	2,507	2,695
Rent-out value \$/m <sup>2</sup>	800	1,088	1,365	1,787
<b>Sensitivity analysis</b>				
Income distribution by quintile, \$/year	2,007	2,008	2,009	2,010
Quintile 1	1,827	2,132	2,601	3,173
Quintile 2	3,388	3,953	4,823	5,884
Quintile 3	5,048	5,891	7,187	8,768
Quintile 4	7,539	8,798	10,733	13,095
Quintile 5	15,410	17,983	21,940	26,766
Disposable income \$/year	2,007	2,008	2,009	2,010
<b>Average price that Russian can afford \$/m<sup>2</sup></b>	<b>6,010</b>	<b>7,333</b>	<b>8,946</b>	<b>10,914</b>
Quintile 1	(167)	(148)	(80)	(4)
Quintile 2	288	307	403	558
Quintile 3	772	792	917	1,155
Quintile 4	1,499	1,518	1,688	2,051
<b>Quintile 5</b>	<b>3,795</b>	<b>3,815</b>	<b>4,124</b>	<b>4,882</b>

Source: State Statistics Service, Dailystroy, Troika estimates

The liquidity, once supplied to the residential real estate market, revolves around five times, we estimate, before eventually getting invested into primary space offered. As buyers down the chain are just marginally adding to the cash they raised by selling their initially mortgage-free apartments, they come under little if any mortgage burden, and households continue paying unreasonably high prices for the space they buy. As the mortgage load in Moscow and Russia in general remains low, and as most households are driven by sentiment rather than rationality, they just stop selling when real estate prices drop, which dries up liquidity.

However, as we have seen, liquidity is supported by buyers in the top quintile, who in fact take on an increasingly heavier mortgage burden due to the confluence of real estate prices rising ahead of disposable income and higher mortgage rates. We are wary of the increasing mortgage burden, as many affluent buyers take a heavy load in anticipation of steep increase in incomes.

## Suburban residential development

While in the long term we expect strong growth to come from organized suburban development around big cities in Russia, we have a pessimistic view of its short-term outlook at current price levels and in light of general social and economic drivers.

Prices for cottages and private houses seem overinflated to us. Boosted by low-volume purchases by wealthy families looking for a safer and cleaner environment for their children, cottage prices in Moscow Region are much higher than those in comparable Western cities on price to quality.

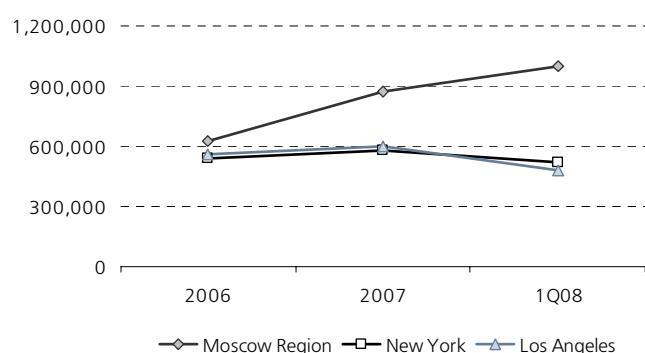
Unlike urban housing developments, the gated suburban communities involve longer stages of infrastructure development and heavy upfront investment in amenities. With pre-sales available, gated communities attract more careful buyers and see slower demand growth due to what we consider to be exaggerated prices and much lower volumes.

As the rental market for cottages is still rudimentary, the abnormally high carrying costs (communal and security charges) may turn the value of holding a cottage negative.

As the buyer market matures, we see the shift from buying to seasonal rental of cottages as a threat for current prices for primary cottage developments. Due to fragmented pricing, alternative local developments at lower costs may form increasing competition to organized, larger-scale communities.

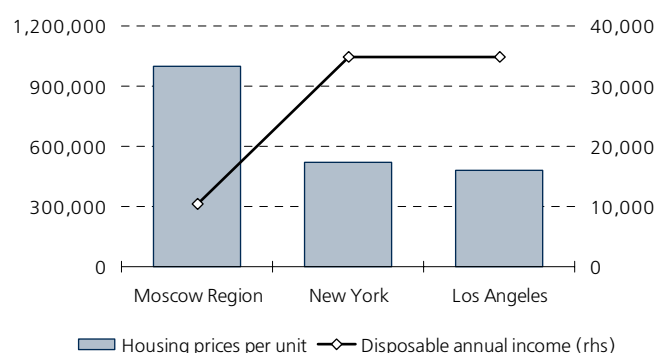
In addition to escalating costs, prices in suburban developments have been driven by the oligopoly of a few large-scale developers, which currently own most of the land bank in Moscow Region. As demand is limited to the speculators themselves, any single sale of the assets can push prices down dramatically.

**Suburban housing price comparison, \$ per unit**



Source: US National Association of Realtors, Blackwood, Troika estimates

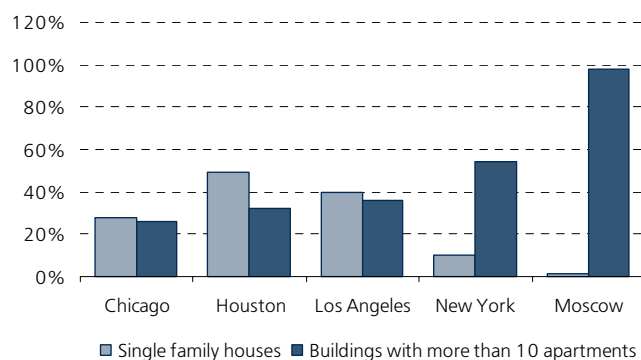
**Housing prices and disposable income, \$**



Source: IMF, Troika estimates

The sustainability of cottage communities as alternatives to city apartments strongly depends on the development of proper suburban transportation infrastructure, including railroad and highway junctions, parking and the improved quality of public transportation. Otherwise, the idea of mass exit to outside the Moscow Ring Road (Russian abbreviation: MKAD) may lose its attractiveness due to traffic jams, which on average cost commuters hours of driving between work and home.

**Structure of housing stock by city**



Source: US Census Bureau, Open Investments, Troika estimates

Moscow suburban development at large is repeating the trends seen in Western countries of increasing number of low-storey construction.

There is no clear line between the city and the suburban developments. While proximity to the MKAD is a price driver, there are no other defined criteria for distinguishing the prestige between different areas, based on distance from center or geographic location.

Unlike apartment buildings, where development is increasingly consolidated by a few specialist metropolitan players, suburban development is more fragmented due to lower entry barriers.

Demand for suburban housing has been held back by the following factors.

- **Inertia.** Russians are driven by major cities and still view life in the suburbs as offering limited opportunities.
- **Accessibility.** The railroads and roads still do not allow for comfortable and time-effective daily travel to Moscow's business areas.
- **Lack of social infrastructure and amenities.** These areas cannot compare with urban centers.
- **Availability of alternative investments.** As suburban houses in the Moscow area are still viewed as second homes, their high prices suggest better investment alternatives in other countries.

The structure of the top 10 largest lessors in Moscow Region has remained mostly unchanged in the past several years. We have seen some expansion among the remaining companies, the most recent example being Open Investments, which has doubled its land bank.

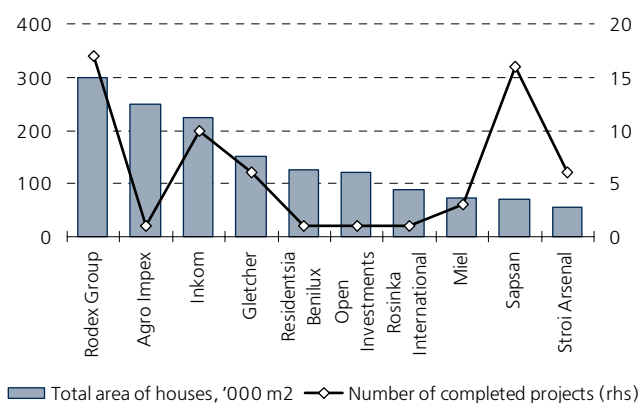
### Largest land owners in Moscow

Land bank, '000 ha	Location of land plots
PromSvyazNedvizhimost	70 Odintsovsky, Vosvresensky, Istrinsky, Solnechnogorsky, Naro-Fominsky
Ist-Line	64 Domodedovsky
Vizavi	40 Volokolamsky, Egoriyevsky
Vash Finansovy Popechitel	35 Ruzsky
RDI group	29 Leninsky, Naro-Fominsky
Coalco	23 Domodedovsky
Absolut	20 Krasnogorsky, Naro-Fominsky, Leninsky
Wimm-Bill-Dann	16 Odintsovsky, Istrinsky
Znak	16 Krasnogorsky, Dmitrovsky, Volokolamsky, Shatursky
Marshall Capital	15 Serpukhovskoy
Marins Group	13 Mozhaisky, Shakhovskoy, Chekhovskoy, Ruzsky, Ramensky
Mashtab	13 Leninsky
Gektar	13 Istrinsky, Mozhaisky, Voskresensky, Krasnogorsky, Egoriyevsky
OPIN	6 Klinsky
Metropol	4 Kashirsky

Source: Kommersant, Troika estimates

As few players have oligopolized the land bank, the suburban development business has thus far remained more of a land play, with few intentions to invest in infrastructure or actual real estate projects. We believe that this market structure suggests rather high risks of land price fluctuations. The prices for land, which have risen dramatically, may fall just as dramatically, should any of the oligopolies initiate or be forced to sell its land bank.

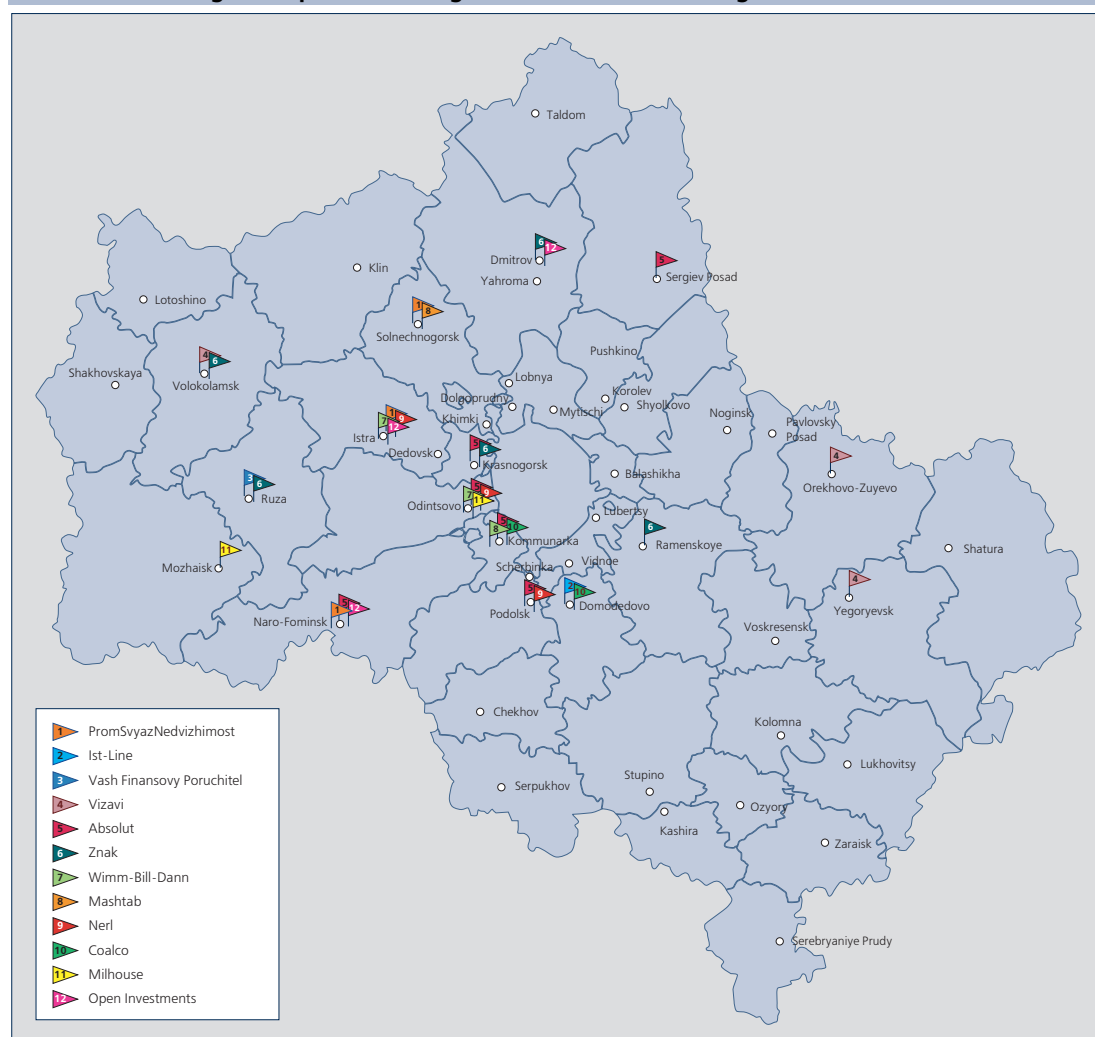
### Largest cottage developers in Moscow Region



Source: Forbes

Natural attractions or infrastructure hubs serve as catalysts for selecting land plots for suburban development. Thus, the land bank is purchased in advance in anticipation of future infrastructure development by municipality or bigger commercial players.

### Distribution of large land parcels among investors in Moscow Region



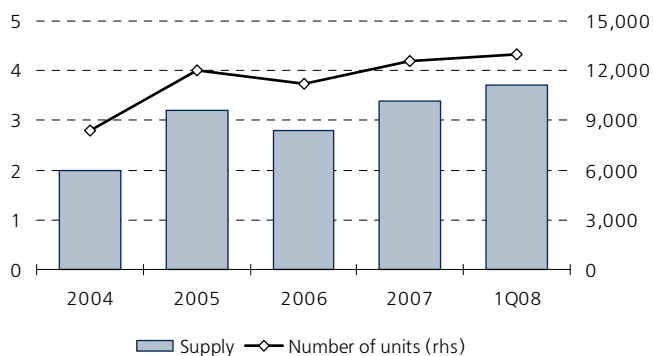
Source: Kommersant, Troika estimates

The largest share of land supply is attributed to plots located 30-80 km from the MKAD. The majority of the plots for sale constitute small land parcels with an average size of 2,000 m<sup>2</sup>, located outside organized communities. The share of organized residential communities that offer land plots without a construction contract is currently limited at 10%.

### SUPPLY

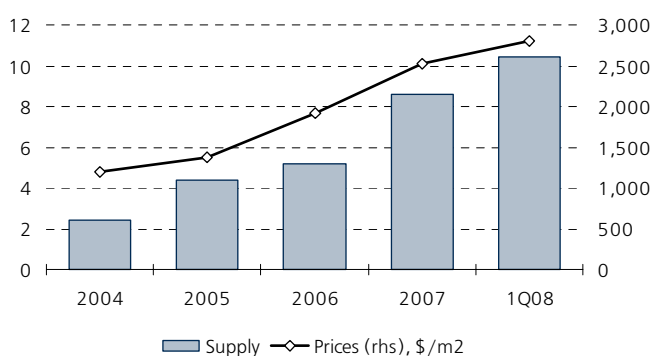
The massive shift to residential suburban development occurred together with the general housing boom in Moscow. Since 2004, the market has been rapidly growing in size and capitalization.

#### Supply of suburban residential communities, including distant houses, eop, mln m<sup>2</sup>



Source: Miel, Troika estimates

#### Supply of suburban residential communities, including distant houses, eop, \$ bln

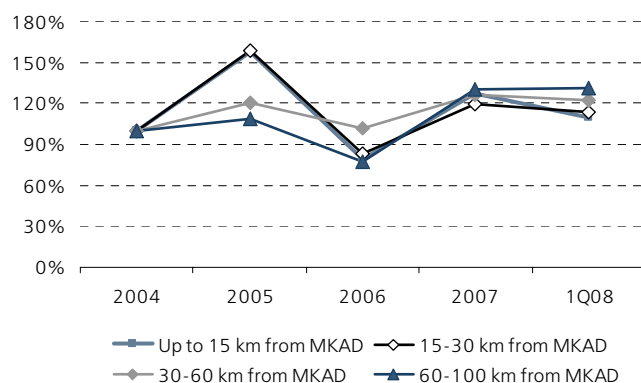


Source: Miel, Troika estimates



The mapping of investments in suburban developments is largely driven by such catalysts as the first successful pilot projects and the infrastructure development around the pilots. Thus, we see very uneven and abrupt flow of investment by geographic location.

#### Supply trends for suburban residential communities, including distant houses, eop, \$ bln

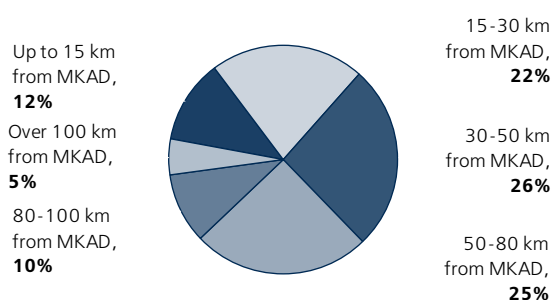


Source: Miel, Troika estimates

Historically, the most exclusive suburban properties have been located in western Moscow Region, in particular on Rublevo-Uspenskoye, Novorizhskoye and Kaluzhskoye highways. These streets have a large concentration of upscale real estate, comparably good transport access and cleaner environments.

The most escalated prices are for land within 20 km of the MKAD. While 50 km from the MKAD is still regarded as suitable for primary homes, further than that is already considered recreational or seasonal property, thus suggesting higher demand closer to natural attractions.

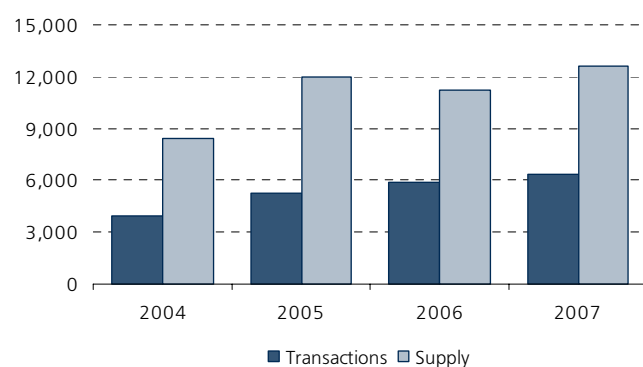
#### Land plot supply in western Moscow Region



Source: Blackwood, Troika estimates

As of 1H08, there were 600 organized residential communities in Moscow Region, half of which were fully or partly available for purchase. Notably, 80% of the properties for sale were located in the western part of Moscow Region, an area that is considered to have a concentration of upscale properties. Since the beginning of the year, this market saw a 6% increase in the amount of completed projects, most of which are located on Novorizhskoye and Dmitrovskoye highways.

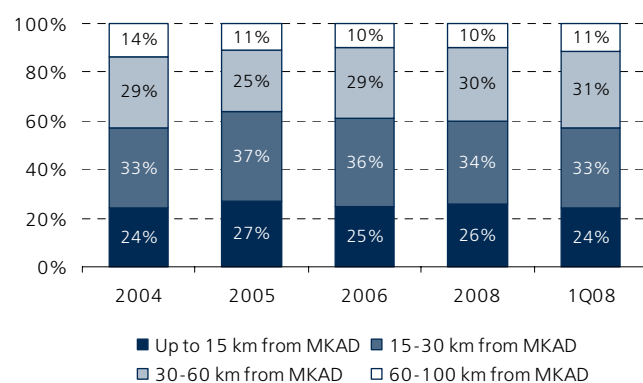
### Transactions with residential suburbs, units



Source: Companies, Vesco Consulting, Troika estimates

Of the existing supply, 60% is located a medium distance from Moscow, or 15-50 km from the MKAD. Meanwhile, we have observed an increase in transactions for properties located more than 50 km from the MKAD in recent years.

### Suburban residential community supply structure, eop, \$ bln



Source: Miel, Troika estimates

The typical suburban residential community is limited to 100 houses and infrastructural units, such as retail properties, schools and sports facilities. The size of a house and adjacent land plot usually depends on the property's architectural concept, but rarely exceeds 400 m<sup>2</sup> for a houses and 2,000 m<sup>2</sup> for land plots.

### Typical suburban development project description

Average area, ha	18.0
Average number of houses	83.0
Average house, m <sup>2</sup>	350.0
Average land plot, 100 m <sup>2</sup>	21.0
Average house price (including price of land plot), \$/m <sup>2</sup>	3,900
Semi-detached house community	
Average area, ha	13.5
Average number of apartments	95.0
Average apartment, m <sup>2</sup>	235.0
Average land plot, 100 m <sup>2</sup>	3.5
Average apartment price (including price of land plot), \$/m <sup>2</sup>	3,300

Source: IRN, Troika estimates

Among the important factors that determine the concept of a given suburban development is the class association and image of the area in which it is located. Those areas that mostly offer upscale projects generally have larger houses and land plots.

**Typical suburban project development description by location**

	Number of organized communities, units	Average house, m <sup>2</sup>	Average land plot, 100 m <sup>2</sup>	Average house price (including price of land plot), \$/m <sup>2</sup>
Rublevo-Uspenskoye highway	31	790	36	6,764
Novorizhskoye highway	63	462	30	4,761
Minskoye highway	15	390	28	5,184
Kyivskoye highway	18	437	23	4,151
Dmitrovskoye highway	50	309	17	3,152
Kaluzhskoye highway	46	420	24	3,720
Yaroslavskoye highway	16	271	17	2,412

Source: Blackwood, Troika estimates

**PRICES**

Prices for suburban residential properties usually include the land cost, as a result of which a property's end price largely depends on its location.

**Average land plot prices in Moscow Region by location, \$ per 100 m<sup>2</sup>**

	Up to 15 km from MKAD	15–30 km from MKAD	Over 30 km from MKAD
Rublevo-Uspenskoye highway	45,000-420,000	16,000-150,000	–
Ilyinskoye highway	35,000-200,000	–	–
Novorizhskoye highway	60,000-130,000	20,000-130,000	10,000-23,000
Minskoye highway	25,000-58,000	9,000-30,000	7,500-20,000
Kyivskoye highway	20,000-50,000	24,000-46,000	7,000-35,000
Dmitrovskoye highway	15,000-40,000	5,000-95,000	3,000-11,500
Kaluzhskoye highway	18,000-40,000	25,000-40,000	4,000-29,000
Yaroslavskoye highway	12,000-40,000	8,000-30,000	6,000-30,000

Note: Includes utility connection prices.

Source: Blackwood, Troika estimates

Prices for more remote territories are visibly lower, although they can also grow considerably depending on their surroundings and the availability of utility connections.

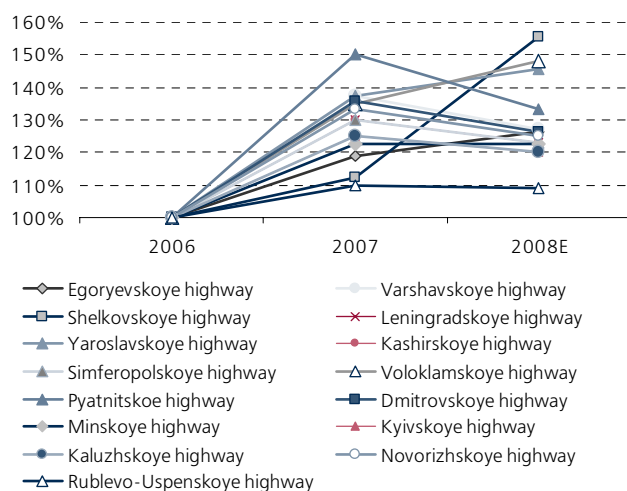
**Price appreciation for land plots located  
45–50 km from MKAD, \$ per 100 m<sup>2</sup>**

	Price, \$ per 100 m <sup>2</sup>		
	2006	2007	2008E
Egoryevskoye highway	4,000	4,750	6,000
Varshavskoye highway	4,000	5,500	7,000
Shelkovskoye highway	4,000	4,500	7,000
Leningradskoye highway	5,000	6,500	8,000
Yaroslavskoye highway	4,000	5,500	8,000
Kashirskoye highway	5,000	6,500	8,000
Simferopolskoye highway	5,000	6,500	8,000
Yaroslavskoye highway	5,000	6,750	10,000
Pyatnitskoye highway	6,000	9,000	12,000
Dmitrovskoye highway	7,000	9,500	12,000
Minskoye highway	10,000	12,250	15,000
Kievskoye highway	10,000	12,500	15,000
Kaluzhskoye highway	12,000	15,000	18,000
Novorizhskoye highway	15,000	20,000	25,000
Rublevo-Uspenskoye highway	25,000	27,500	30,000

Source: Kommersant, Troika estimates

Land prices in Moscow Region have been rising for a number of years, driven by market oligopoly, limited supply and entry barriers for smaller developers. The market has thus far been limited to relatively small numbers of upper and upper-middle class buyers. Once market volumes begin to grow, we are hard pressed to believe that prices will remain at an average 100-150% premium to comparable housing in the West.

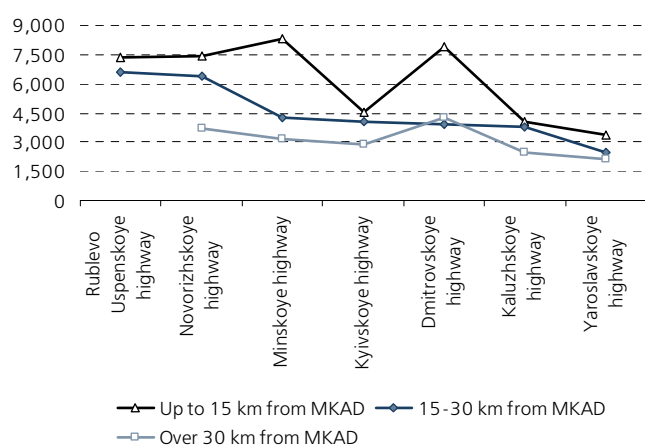
### Price trends for land plots located 45–50 km from MKAD



Source: Kommersant, Troika estimates

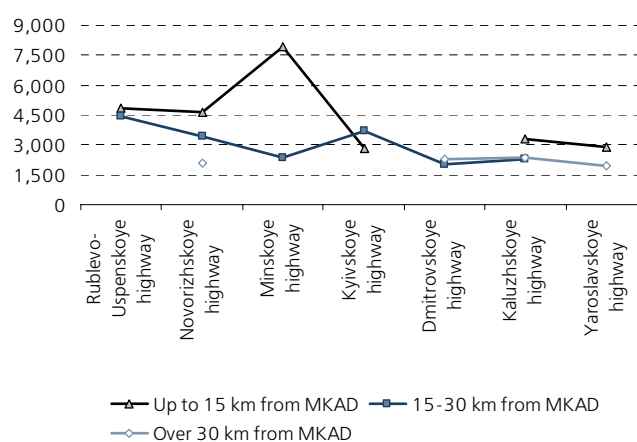
In 2008, prices for houses in organized residential communities average \$3,600/m<sup>2</sup>. Semi-detached houses (townhouses) are generally 20-30% cheaper, at \$2,800/m<sup>2</sup>. Houses that are located outside of organized communities average a 40% price discount to those in such communities due to a lack of infrastructure and amenities. However, we believe that together with general infrastructure development, individual development (as opposed to that by professional developers) will become a stronger price-limiting factor for organized communities.

### Average single-family house prices in suburban residential communities under development, \$/m<sup>2</sup>



Source: Blackwood, Troika estimates

### Average semi-detached house prices in suburban residential communities under development, \$/m<sup>2</sup>

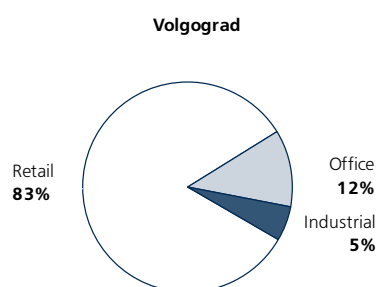


Source: Blackwood, Troika estimates

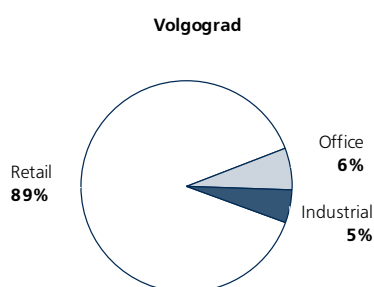
The majority of supply is limited by the floor price bracket of \$400,000-500,000 for a house situated on 1,500-2,000 m<sup>2</sup> of land within 40-50 km from the MKAD. Prices for both houses and land plots located in organized residential communities are expected to climb 30-40% during 1H08.

## Appendix 1. Real estate market structure in big regional cities of Russia

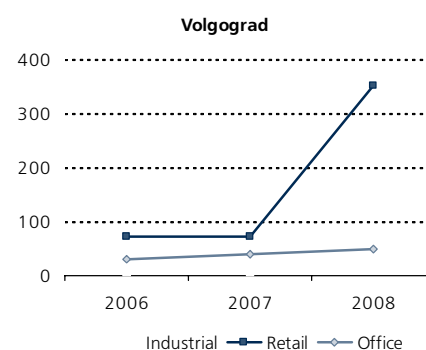
**Total commercial real estate stock in 2008**



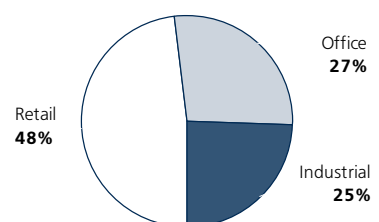
**New commercial real estate stock in 2007**



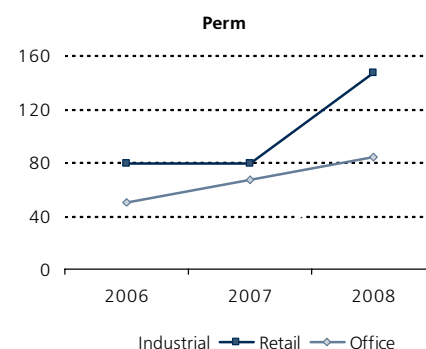
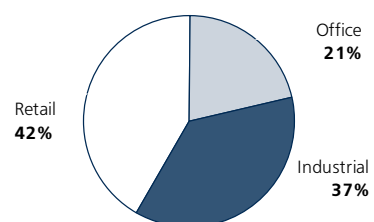
**Commercial real estate stock dynamics**



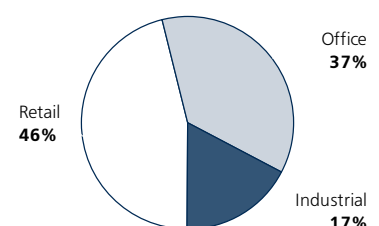
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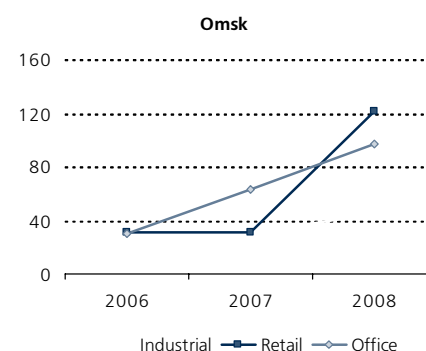
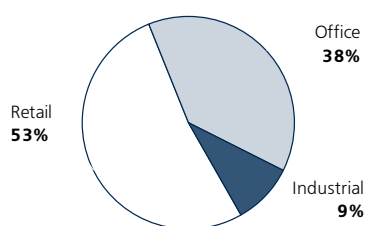
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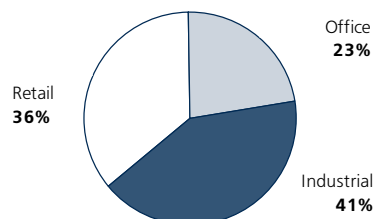
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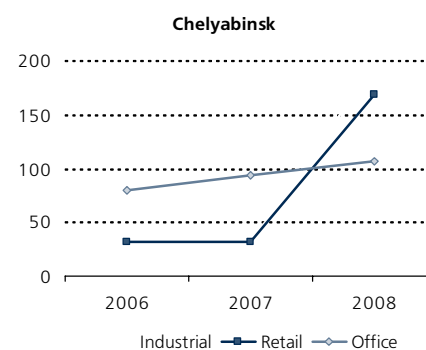
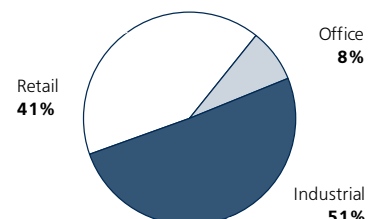
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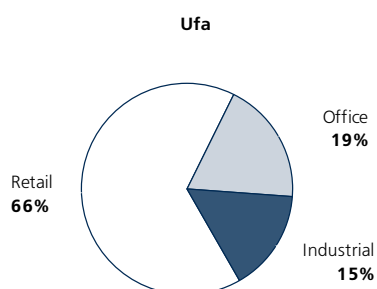
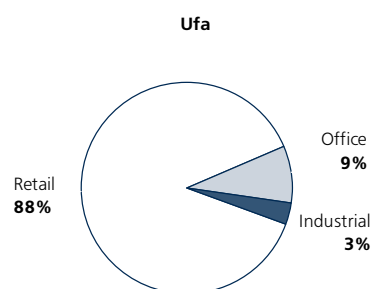
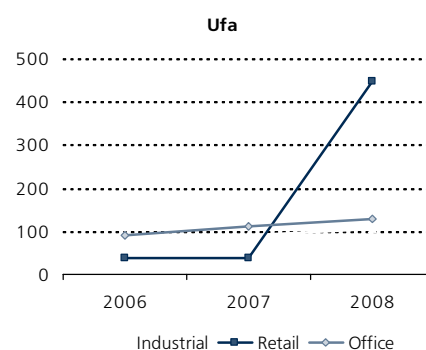
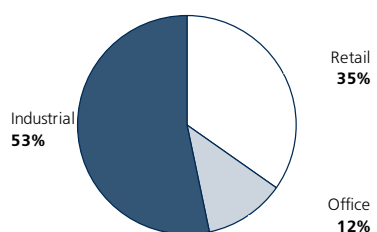
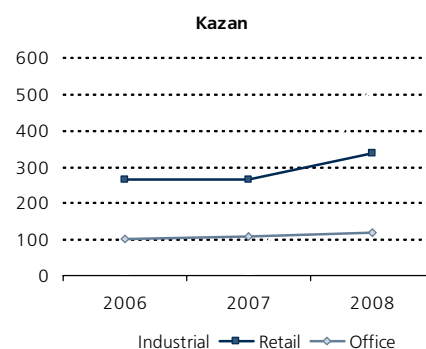
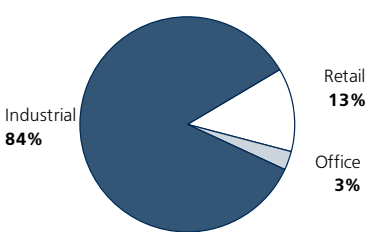
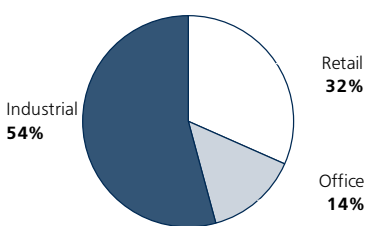
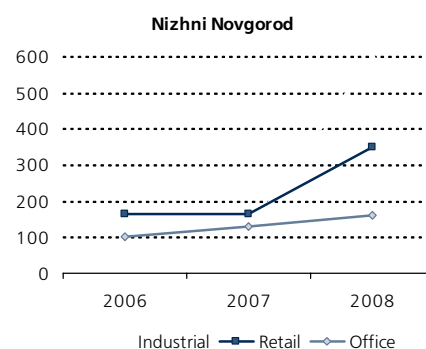
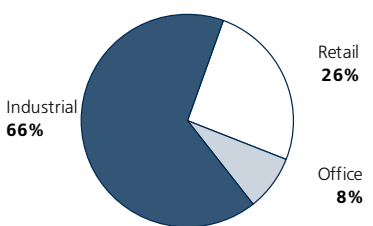
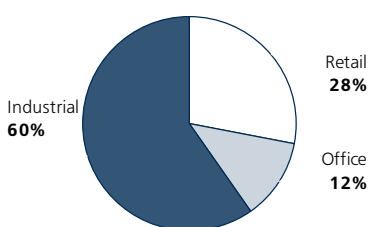
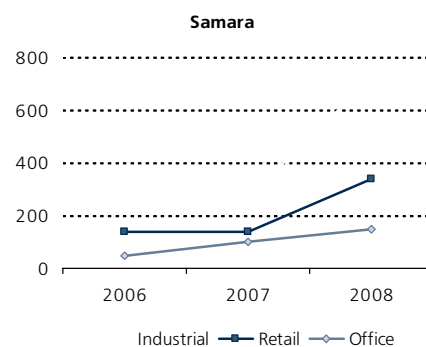
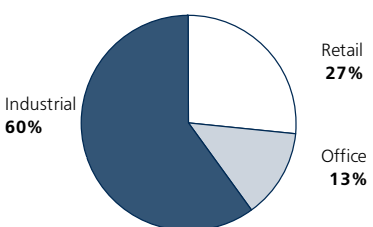
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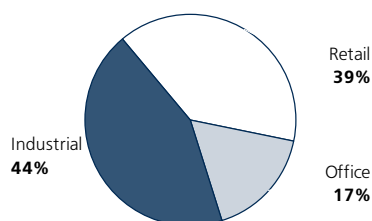
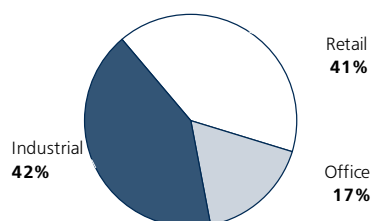
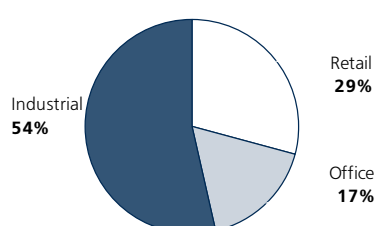
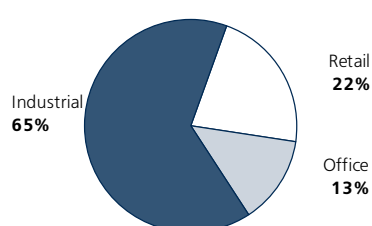
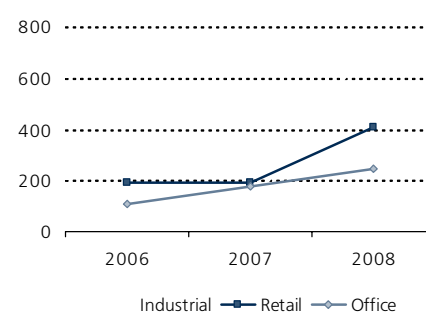
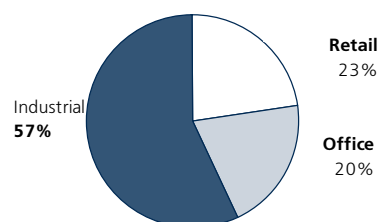
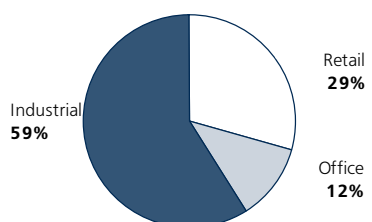
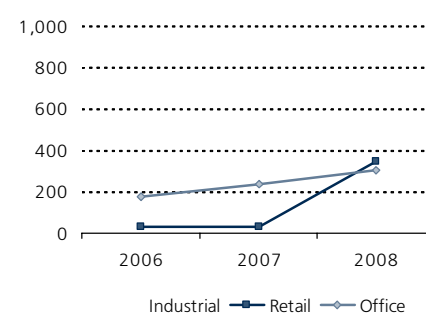
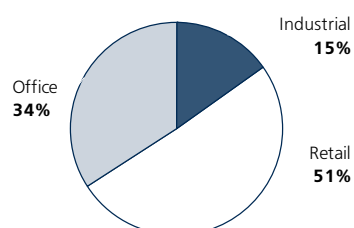
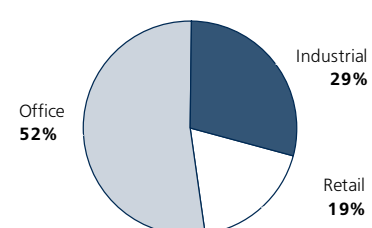
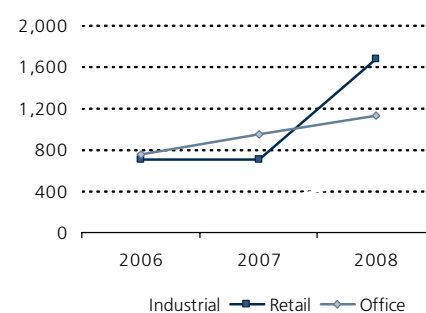
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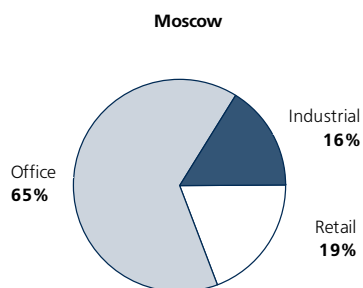
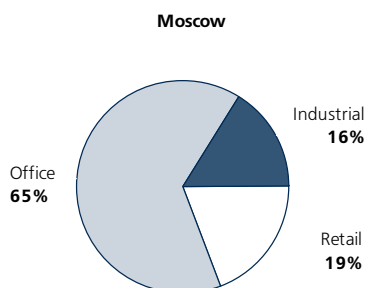
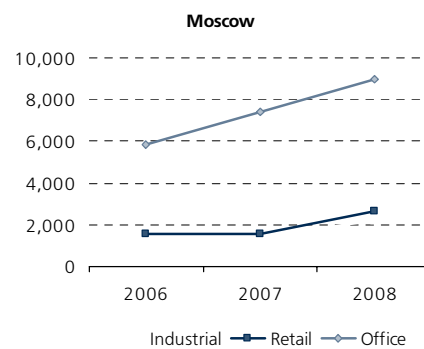
Source: Jones Lang LaSalle, Troika

**Total commercial real estate stock in 2008****New commercial real estate stock in 2007****Commercial real estate stock dynamics****Kazan****Kazan****Nizhni Novgorod****Nizhni Novgorod****Samara****Samara**

Source: Jones Lang LaSalle, Troika

**Total commercial real estate stock in 2008****Rostov-on-Don****New commercial real estate stock in 2007****Rostov-on-Don****Commercial real estate stock dynamics****Rostov-on-Don****Ekaterinburg****Ekaterinburg****Yekaterinburg****Novosibirsk****Novosibirsk****Novosibirsk****St Petersburg****St Petersburg****St.Petersburg**

Source: Jones Lang LaSalle, Troika

**Total commercial real estate stock in 2008****New commercial real estate stock in 2007****Commercial real estate stock dynamics**

Source: Jones Lang LaSalle, Troika



GDR	PIK LI
Recommendation	BUY
Last price	\$4.50
Target price	(from \$38.50) \$11.00
Upside	144%
Free float	17%
Common	PIKK RU
Recommendation	NOT RATED
Last price	\$4.45
Market cap	\$2,220 mln
Enterprise value	\$3,413 mln
ADT, 100 days	\$5.2 mln

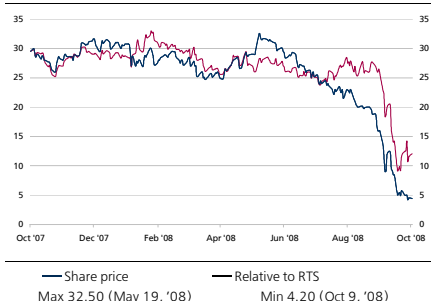
Prices as of October 10, 2008

**Key data**

	2006	2007	2008E	2009E
<b>Financials (IFRS), \$ mln</b>				
Revenues	1,595	2,807	3,231	4,563
EBITDA	368	979	1,079	927
EBIT	343	947	1,030	869
Net income	187	726	627	517
EPS, \$	0.38	1.47	1.27	1.05
<b>Profitability</b>				
EBITDA margin	23%	35%	33%	20%
EBIT margin	21%	34%	32%	19%
Net margin	12%	26%	19%	11%
<b>Price ratios</b>				
P/S	1.4	0.8	0.7	0.5
EV/EBITDA	8.6	3.0	3.2	3.7
P/E	11.9	3.1	3.5	4.3
P/CF	16.9	neg	65.2	neg
<b>Growth</b>				
Revenues	–	76%	15%	41%
EBITDA	–	166%	10%	-14%
EPS	–	289%	-14%	-17%

**Price performance, %**

	1 mo	3 mo	6 mo	YTD
GDR	-71.9	-82.7	-82.5	-85.2
Relative to RTS	-55.6	-55.2	-55.8	-60.0

**Price performance, \$**

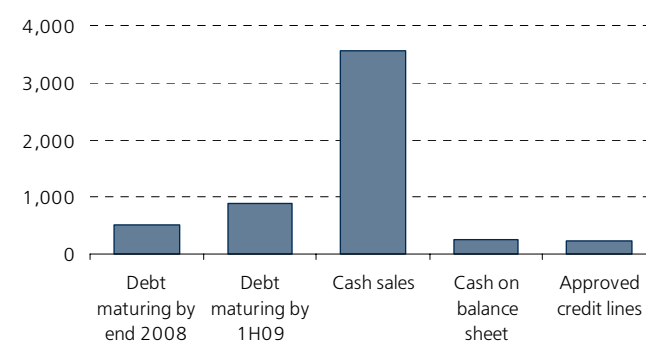
Source: Bloomberg, Troika Dialog

# PIK Group

## Anchoring for Safe Seas

We are reinitiating coverage of PIK Group with a target price of \$11.00 per GDR and a BUY recommendation. The historically strong growth is now insured by regional diversification and we believe that PIK has significant opportunities to capitalize on adverse conditions in the market. The 83% discount to NAV has priced in the high short-term debt refinancing risks, we believe. Compared with the previous 60% premium to its NAV, we view the current market weakness as creating an attractive risk/reward proposition in the longer term.

- PIK Group offers the best exposure to mass-market residential development (where the risks of a price correction are lower than in the elite residential market) with growing regional diversification. The company's in-house capacity in screening and securing land plots continuously contributes to its future pipeline and adds strongly to the value of its ongoing business.
- The developer's ability to service its large short-term debt obligations from its rich operating cash flows is currently undermined by potential interruptions in sales schedules. However we believe that municipal support will assist in greatly reducing those risks.
- The company's apartment presales, backed by its reputation, return the highest cash conversion ratio thanks to short-term residential projects. The developer is in a good position to grab more market share, as the supply of new apartments from competitors has slowed.
- The developer's self sufficiency in pre-fabricated panel manufacturing provides it with visible control over execution and inflationary risks, resulting in high cost competitiveness and one of the strongest mass-market brands.
- In light of weak markets; however, we remain cautious regarding the increased housing price correction and liquidity risks. We have applied a 500 bps higher risk-free rate and equity premiums in our scenario-based SOTP DCF valuation, and have carefully considered the market's weakness, thus arriving at a 12-month target price of \$11.00 per GDR.

**Cash reserves and short-term debt breakdown**

Source: Troika estimates

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## Target price revision

We reinitiate coverage of PIK Group with a target price of \$11.00 per GDR and a BUY recommendation to reflect the company's solid operating performance and rapid regional expansion. In light of the increasing bankruptcy risks in the sector, we view the group's strong cash-generating capacity as a cornerstone for its value in the medium term. In other words, we believe that the company can survive the generally hard times and deliver upside to investors.

We believe that the developer's ability to generate business beyond the visible horizon and its position to capitalize on current market weakness should put it at a premium to many of its peers. However, we lower our 12-month target price to \$11.00 per GDR, taking into account the near-term reality of increased risks of financing and the downward trends on the global real estate market, with falling comparable multiples (EV/EBITDA, P/NAV). We apply a higher risk-free rate and equity-risk premium to account for this and use a scenario-based SOTP approach that incorporates three pricing scenarios to address the higher execution risks for the company's remote projects.

## TRIGGERS

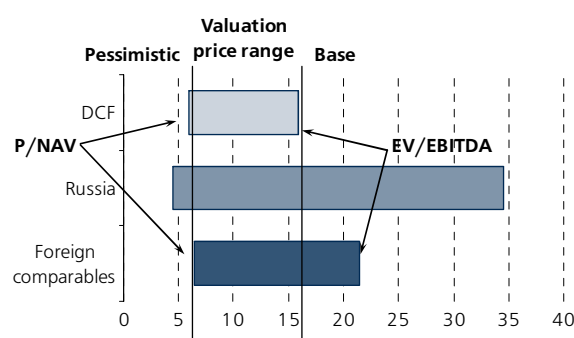
- PIK Group has seen its market cap drop below its NAV for the first time since its IPO. However, the company was always prized for its drive and ability to expand continuously over its reported project portfolio. As market sentiment improves, the company may regain its usual significant premium to NAV.
- Moreover, the group now trades at deep discount due to perceived insolvency risks. We expect the stock to recover along with PIK Group successfully meeting its short-term maturities and the liquidity situation improving in the market.
- The company's cash collections are well supported by state tender in Moscow and Moscow Region, which softens the impact on PIK Group in case of housing price corrections.

## RISKS

- The group relies on its cash sales in order to redeem around \$400 mln of its STD. However, we do not rule out a scenario with demand falling-off dramatically and PIK Group's pre-sales not being completed as planned due to a sharp drop in mortgage financing and consumer confidence.
- PIK Group has large STD maturities upcoming, which it may be forced to redeem. The developer should generate enough cash flow to cover its dues in emergency cases; however, we are wary that over-manipulating its working capital may affect the group's operating performance and result in completion failures.
- We see the group refinancing its debt at a significant premium, which should exert downward pressure on net income.
- In case of an industry downturn, PIK Group will be left with higher fixed costs of its prefabricated vertical construction.
- We believe that residential real estate in Russia is highly overpriced, which increases the chances of a price correction. However, PIK Group's pricing risks are partially mitigated, as the mass market residential has lower correction and liquidity risks, while the group has a significant cushion in its margins thanks to its low cost structure.
- We remain aware of the fact that PIK Group may overstretch its financing abilities in its drive for rapid expansion.

## Valuation

We view SOTP DCF as the most objective tool for fair value appraisal. In order to obtain a consensus of income and comparison approaches to valuation, we reconcile results from a multi-scenario DCF with ranges calculated from P/NAV and EV/EBITDA analysis of Russian and foreign peers. To arrive at our target price, we use the overlap intervals of both multiples with DCF figures. Considering the company's medium financing risks, which translate into below-average execution risks, we set our target price at \$11.00 per GDR.

**Implied valuation range, \$ per share**

Source: Bloomberg, Troika estimates

We stress the fact that the PIK Group's fair equity value is based on real cash flows rather than on promises, which sets the company above most of its peers. We also note that its current discount to its NAV is a matter of current market weakness.

EV/EBITDA comparables imply higher value ranges for PIK Group than those implied by P/NAV, which is a function of the superiority of PIK Group's EBITDA (in the case of Russian peers, we have excluded any gains from property revaluation, and thus decreased many EBITDA forecasts for 2008), while the majority of comparables trade at deeper discount to their NAVs.

We set our 12-month target price at \$11.00 per GDR, which lies in between the ranges implied by Russian and Western EV/EBITDA comparables and fundamental values implied by the SOTP DCF under our base and pessimistic scenarios.

PIK Group trades at bigger discount to its western comparables on EV/EBITDA, which is a function of both the falling operating margins of western comparables and higher emerging-market multiples. As we believe that Russian developers' stocks are strongly influenced by Western markets, while having fairly limited exposure to other emerging markets, we conservatively take a discount from the top range implied by EV/EBITDA in light of downward-sloping comparables.

**SCENARIO-BASED SOTP DCF****SOTP valuation, \$ mln**

	Total
Held for investment	78
In course of development	3,465
Held for development	4,557
PV of terminal value	1,713
<b>Total portfolio</b>	<b>9,813</b>
EV of prefabricated panel production and assembly	867
PV of corporate overheads	(1,656)
Debt implied tax shield	139
<b>EV</b>	<b>9,162</b>
Net debt	(1,261)
Minority interest	(44)
Fair equity value	7,857
Number of GDRs mln	493
Equity value, \$ per GDR	15.93
Current price, \$ per GDR	4.50
<b>Upside</b>	<b>254%</b>

Source: Troika estimates

We have used a SOTP discounted cash flow valuation approach to account for various risks, through adjusted discount rates that projects face depending on their level of completion.

We have directly calculated the cash flows from more than 670 of the group's developments, applying a base equity cost but different risk premiums to projects completed and held as investments, projects in course of development and remote projects classified as those held for development. As the base for our calculation, we have used project-specific data from the appraiser's report whenever available, such as the gross and net retail areas, the percent and date of completion and costs incurred. We then made our own assumptions on the remaining development costs and cost inflation.

We have used our calculations on the real data provided in the company's portfolio report, such as completion dates and prices, which leads to jumps in figures and margins y-o-y. We believe that the company will, in fact, report smoother figures.

We have discounted the free cash flows through equity cost of financing and then added back the tax shield implied by the company's debt. We have used different risk premiums depending on the status of the development projects that returned costs of equity equal to 15.4% for Properties Held for Investment (PHI), 17.4% for Properties in the Course of Development (PCD) and 22.4% for Properties Held for Development (PHD) in the ownership structure.

#### Real estate price growth scenarios, y-o-y

	2007A	2008E	2009E	2010E	2011E	2012E
Pessimistic	30%	-20%	-30%	8%	7%	6%
Base	30%	0%	0%	8%	7%	6%
Optimistic	30%	20%	15%	10%	7%	6%

Source: Troika estimates

- To address the pricing risks, we have used three possible price-behavior scenarios.
- The pessimistic scenario simulates our vision of a strong price correction in 2008-09, following the previous aggressive price growth in 1H08 and triggered by the increase in cost of financing in the commercial sector and lower mortgage availability in the residential sector.
- In our pessimistic scenario, we assume that PIK Group will freeze all of its unviable projects and realize higher value.
- In our base case, prices grow at a rate slightly below ruble PPI inflation, as real estate in Russia largely serves as an inflationary hedge (except in 2008-09 where we assumed flat price scenario).
- As base prices, we have used 95% of 2008 prices, as estimated by CBRE in its appraisal report. Otherwise, we have used our estimations.
- We have assume that in the longer term, development costs will grow slightly ahead of prices, as we believe that prices are already high, while inflationary pressures in Russia remain strong.

#### Cost inflation in development, y-o-y

	2007	2008E	2009E	2010E	2011E	2012E
<b>Moscow</b>						
Panel	30%	8%	8%	8%	8%	8%
Monolith	30%	10%	10%	10%	10%	10%
Monolith economy	30%	10%	10%	10%	10%	10%
Parking	30%	10%	10%	10%	10%	10%
<b>Regions</b>						
Panel	30%	10%	10%	10%	8%	8%
Monolith	30%	12%	12%	12%	10%	10%
Monolith economy	30%	12%	12%	12%	10%	10%
Parking	30%	12%	12%	12%	10%	10%

Source: Troika estimates

- Our DCF model yields an enterprise value of \$9,162 mln under our base-case scenario.
- Subtracting 1H08 net debt of \$1,261 mln and minority estimate of \$210 mln, our estimate returns a fair equity value of \$7,857 mln, or \$15.93 per GDR.
- Our forecasts assume that PIK Group will complete all of the space as listed in the property portfolio by CBRE for the years mentioned. As revenues and EBITDA have no single trend due to the aforementioned, we do not make any EBITDA growth assumptions.
- We also see the company remaining free cash flow negative until 2010 under our base-case scenario.
- We have made assumptions for projects added by PIK Group in the interim, which are not yet reflected in CBRE's appraisal report. In particular, we have added the St Petersburg project, with 1.3 mln m<sup>2</sup> of NSA to be developed by 2014.
- We have forecast cash flow up to 2020 in order to include the most remote projects. To account fro the terminal value added by PIK Group's recurring development business, we have assumed a post-forecast cash flow generated by the annual completion of 4 mln m<sup>2</sup> of net retail space at a price of \$5,000 per m<sup>2</sup> and a gross margin of 30%.

- Finally, we have allocated the portion of discounted negative cash flows from SG&A costs in order to account for corporate overheads.
- A noticeable difference in our valuation of portfolio from those of official appraisers is that we account for income tax, which is more accurate from an equity holder's point of view.

#### Sensitivity of base scenario, \$ per share

		Discount rate						
		-6%	-4%	-2%	0%	2%	4%	6%
Terminal growth rate	4.5%	23.68	20.60	18.20	16.31	14.78	13.53	12.48
	4.0%	23.42	20.39	18.04	16.17	14.67	13.42	12.38
	3.5%	23.17	20.20	17.88	16.05	14.56	13.33	12.29
	3.0%	22.93	20.01	17.74	15.93	14.46	13.24	12.21
	2.5%	22.70	19.83	17.60	15.81	14.36	13.15	12.14
	2.0%	22.47	19.66	17.47	15.71	14.27	13.08	12.07
	1.5%	22.26	19.50	17.34	15.61	14.19	13.00	12.00

Source: Troika estimates

#### Sensitivity of pricing scenarios, \$ per share

		Discount rate				
		-4%	-2%	0%	2%	4%
Pessimistic		8.6	7.1	6.0	5.2	4.6
Base		20.0	17.7	15.9	14.5	13.2
Optimistic		33.1	29.9	27.4	25.2	23.3

Source: Troika estimates

As PIK Group expands its lower-margin regional developments, its fair equity value will become increasingly sensitive to price fluctuations, making the value of the company riskier in light of the current high-cost and high-price environment.

The aforementioned confirms our grounds for applying higher discount rates in addition to addressing the increasing risk free rate and equity premiums.

#### Discount rate calculation

Risk-free rate	7.4%
Standard equity premium	7.0%
Base cost of equity	14.4%
Liquidity-risk premium	0.5%
Other risk premium	0.5%
Financial risks	0.0%
<b>Cost of equity for PHI</b>	<b>15.4%</b>
Completion risks	1.0%
Mid-term financing risks	0.0%
Cyclicality-risk premium	1.0%
<b>Cost of equity for PCD</b>	<b>17.4%</b>
Execution risk	3.0%
Long-term financing risks	3.0%
<b>Cost of equity for PHI</b>	<b>22.4%</b>

Source: Troika estimates

#### FINANCIAL ANALYSIS

##### PIK Group debt, eop, \$ mln

	2006	2007	2008E	2009E	2010E	2011E	2012E	2013E
Net debt/EBITDA	2.2	0.6	1.3	1.7	1.1	1.0	2.9	0.0
Interest coverage	0.5	0.5	0.2	0.2	0.3	0.3	0.2	0.1

Source: Troika estimates

PIK Group has strong internal resources and our feeling is that the developer will manage to meet its high short-term maturities by end 2008, given that the company's operations go uninterrupted. However, we remain alert that PIK Group's cash flows, exposed to a single market sector, may see interruptions due to lower mortgage finance availability and possible price corrections, and that the developer might not have secured sufficient cash reserves. We will need more guidance from the company in the interims, and the developer promised to think about providing more regular updates on its cash collections.

The 50% y-o-y gross debt increase to \$1.4 bln was, however, accompanied by a 27% decrease in net debt in 2007. In contrast, in 1H08, the group saw a modest 8% increase in gross debt to \$1,411 mln along with a 78% y-o-y increase in net debt to \$1,261 mln, as the developer's cash was spent on major acquisitions of sites in St Petersburg and A101 in Moscow Region.

**PIK Group debt breakdown, \$ mln**

	<b>Dec 31, '07</b>	<b>Jun 30 '08</b>
Short-term debt	985	1,326
Long-term debt	426	216
Gross debt	1,411	1,525
Cash	695	264
Short-term debt	70%	59%
Long-term debt	30%	41%

Source: Troika estimates

As of 1H08, PIK Group had over 80% of its debt portfolio attributed to STD at \$1326 mln, and we expect the interest expenses during 2008 to add another \$190 mln.

The company has about \$1,326 mln in STD maturing by June 30, 2009 (\$500 mln by end 2008). We believe that PIK Group is going to refinance \$300 mln through markets, most probably through private debt placements. With the negotiations under way, another \$200 mln is expected to be refinanced through commercial banks.

The company's current cash reserves are anywhere between \$50-150 mln, and the group counts on its internal cash flows to redeem the remaining \$400 mln of its short term maturities. Thus PIK Group's cash collection/pre-sale ability becomes crucial for the company's survival through the current fragile market environment.

Importantly, PIK Group will freeze all its investment plans for 2009 and the remainder of 2008 and will focus on reducing its short term dues in the light of tight credit markets.

Under our worst case, if PIK Group fails to borrow against sequential loan repayments, the company could still repay its closest maturities through manipulating its working capital. If PIK Group has to redeem in full its short-term loans, the company could still do so via rich operating cash flows and with revenues that are double short-term dues (which gives a large cushion even if real estate prices fall).

The fivefold y-o-y growth in intangible assets are due to large additions of development rights as the company secures its future developments pipeline. The rights are being disposed of as the underlying real estate is developed and transferred to the buyers (the regular cycle is five-seven years). Trade and other receivables jumped 227% y-o-y to \$735 mln, as trade receivables, which make-up 80% of the total figure, increased fivefold during the same period due to a rise in receivables against prefab panels and construction services.

**BUSINESS MODEL**

PIK Group is one of the largest Russian developers of mass-market residential apartments, with its traditional markets in the Moscow area, and rapidly expanding into regional centers. The company's typical developments are large apartment blocks that are standard economy-class residential high-rises in suburbs; these are shell and core, with ground floors designed for offices and with small stand-alone retail centers. Within a year of commissioning, PIK Group regularly exits from the developed space entirely, having passed all of the costs and benefits of ownership and site management to third parties.

The turnaround timing and low construction costs are key to the developer's success, as it funds most of its growth through pre-sales and is rapidly expanding into lower price regions. Thus, it aims to replicate its well-tested business model of in-house prefab-panel construction in regions where it reaches sufficient scale to invest in prefab-panel production plants

In the Moscow area, the developer uses in-house prefabricated panel technologies for over 60% of its annual completion. In-house prefab panel construction significantly shortens the construction cycle (six to 10 months, compared with 18 months for cast-in-place construction) and lowers construction costs through retained construction margins and increased bargaining power over third-party contractors. In the regions, the company uses economy-class cast-in-place construction technologies through third party contractors and faces a longer construction cycle of up to 18 months.

Wherever possible, PIK Group integrates the upper and lower rings of its development chain to the extent necessary to control the execution, meaning timing, costs and demand. PIK Group has hands-on control over the process of land and development rights acquisition, which gives it strong control over costs and the certainty of filling the future pipeline. This is a conveyor-like process, where the company plans to invest around \$1 bln per year in its land bank for future developments. PIK Group outsources architectural design, which, to our understanding, should be quite a routine process, considering that the vast majority of its development is mirrored blocks of prefab panel or low-cost monolith high-rises.

PIK Group carries almost 100% of its sales in-house, which, in light of the moderate fixed costs, allows it to pass the 3-5% savings on agent commission on to end buyers. More importantly, immediate access to the company gives end buyers a feeling of fairness and transparency, an important image-supportive factor for a developer that strongly relies on its ability to generate the cash necessary through pre-selling apartments.

With development as the business driver, vertically integrated prefabricated panel production and construction capacity of 1.3 mln m<sup>2</sup> of NSA per year is designed to service PIK Group's development in the Moscow area. The group is developing around 200,000 m<sup>2</sup> for the Moscow municipality at marginal profit, which is more seen as a tool for political lobbying than as a third-party transaction.

#### **COMPANY OVERVIEW**

PIK Group is the largest publicly traded Russian real estate developer (very few non-public ones may challenge its supremacy in Russia), with the primary focus being on mass-market residential development. Originally Moscow-area based, PIK Group is rapidly increasing its exposure to Russia's regions, continuously building up its land bank for future developments in cities with over 1 mln inhabitants. The group reported a 61% increase in its development portfolio in 2007, to 14.2 mln m<sup>2</sup> of unsold area; PIK Group's extensive track record in executing sizeable development projects, having completed around 6.5 mln m<sup>2</sup> of housing since its inception in 1994, enables the company to finance the most of its growth through presales, a clear competitive advantage in tight financial markets, in our view.

The company's vertically integrated business model entails all the main stages of the development process, from the production of prefabricated materials and design to construction and sales. The company has strong in-house capacity in screening and securing land plots to continuously feed its future pipeline. Its self sufficiency in pre-fabricated panel manufacturing in the Moscow area provides it with visible control over execution and inflationary risks, a business model that it is now extrapolating into the regions to uphold its expansion.

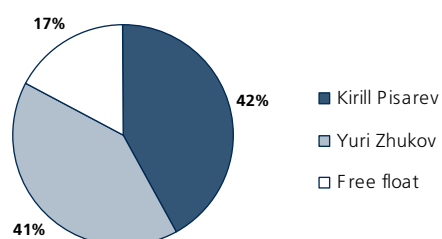
Founded in 1994, the company initially focused on investing in development projects and mortgage finance, and was geographically limited to Moscow. In 2001, it began diversifying into industrial activities, having acquired a Moscow-based concrete panel manufacturer. In 2005, it consolidated another Moscow plant and Moscow Region-based prefabricated panel producer. In 2003, it began its first development projects in Moscow Region. The project in Rostov-on-Don marked the start of its regional expansion in 2004. In June this year, it entered the St Petersburg market on the back of a lucrative acquisition of a promising land plot in the city centre. In May this year, it entered the distressed Kazakhstan real estate market through the establishment of a local subsidiary. An important milestone of regional expansion was the acquisition of Stroyinvestregion, a major regional developer, in 2006.

Going forward, PIK Group should retain its focus on mass-market residential development as its core business. The company may increase its exposure to retail property, capitalizing on the complex development of communities, while maintaining a light weighting of other market segments in its portfolio. The group targets an average 20% y-o-y increase in its annual completions on the back of a continued increase in the scale and geography of its developments. Through continuous improvement of operating efficiency on the back of newer building technologies and economies of scale, it should be able to build competitive advantages in most of its new entry markets. We expect regional M&A and distressed buyouts to be another important driver for the group; thanks to its positive cash flows and access to debt financing at reasonable costs, PIK Group is now gaining relative momentum as overall construction slows in Russia due to scarce financing.

#### **IPO, STOCK PERFORMANCE AND SHAREHOLDER STRUCTURE**

PIK Group conducted its IPO in May 2007, at which it placed almost 16% of its common stock on a diluted basis, raising total IPO proceeds of \$1.93 bln (half of the issue was attributable to the new share issue) for a market cap of \$12.3 bln, making it the largest European real estate company and the largest non-REIT real estate firm globally. Since its debut, the stock has lost 82% as a result of weak markets. In June, weak market demand forced PIK Group to abandon its plans to offer a total of \$500 mln in primary and secondary stock. Yury Zhukov and Kirill Pisarev, the group's key shareholders and co-founders, with 42.2% and 41.4% equity stakes, respectively, jointly control the absolute majority in the company.

### Ownership structure



Source: Company

### PROPERTY PORTFOLIO

The gross portfolio value was appraised by CBRE at \$12.3 bln as of end-2007. In addition, CBRE appraised the value of additions during 1H08 at \$1,660 mln. Appraisers do not account for taxes.

A development portfolio of 15.7 mln m<sup>2</sup> of NSA makes PIK Group the largest listed developer at present. Also evidenced by its historical portfolio expansion, the company has a strong ability to feed the pipeline further thanks to its strong cash positions and execution ability.

Mass-market residential real estate accounts for around 85% of the group's portfolio. With the investment property weight still mostly contributed by Moscow projects, and the assets under construction mainly allocated in Moscow Region, PIK Group's future portfolio will be ever more overweight in regional completions, judging from the company's pipeline and expansion strategy.

PIK Group has announced the creation of a private equity fund for direct investment in third-party projects. Thanks to its strong cash position and great expertise in development projects, the company should be able to tap into promising projects under lucrative conditions, as the project market continues to soften due to lack of financing. The fund's initial capital is expected to be \$500 mln, however, the additional value of the fund can be judged only after the project portfolio is built and the track record becomes visible.



Net selling area by city, m <sup>2</sup>			
	Held for investment	In course of development	Held for development
<b>Moscow</b>	64	1,612	2,074
<b>Moscow Region</b>			
Dmitrov	6,878	136,452	428,766
Dolgoprudny	–	69,517	217,576
Eremeevo	–	–	100,942
Khimki	418,406,58	1,208,573	387,656
Kommunarka	–	–	1,023,350
Korolev	–	–	212,022
Lubertsy	34,886	285,737	229,040
Mamyri	–	–	17,229
Myakininskaya Poima	–	–	97,500
Mytishi	–	98,993	782,027
Odintsovo	–	0	116,961
Scherbinka	–	29,817	–
Yakhroma	–	–	297,840
<b>Regions</b>			
Kaliningrad	82,427	7,571	476,861
Svetlogorsk	–	–	456,037
Azov	–	–	595,646
Kaluga	–	44,115	521,299
Nizhni Novgorod, Avtozavodskoy District	–	38,112	257,721
Nizhni Novgorod, Delovaya Street	–	5,908	15,196
Nizhni Novgorod, Kanavinskiy District	–	101,722	–
Novorossiisk	–	193,195	567,991
Obninsk	–	73,885	243,551
Omsk	–	379,951	2,793,185
Perm	–	59,216	365,610
Rostov-on-Don	–	18,649	258,472
Rostov-on-Don, Center	–	5,738	65,361
Rostov-on-Don, North	–	–	279,318
Taganrog	–	74,586	78,752
Yaroslavl	15,866	120,433	110,012
<b>TOTAL:</b>	<b>140,121</b>	<b>2,953,782</b>	<b>10,997,995</b>

Source: Troika estimates

**PIK Group IFRS financials, \$ mln**

	2006	2007	2008E	2009E	2010E	2011E	2012E
<b>INCOME STATEMENT</b>							
<b>Revenues</b>	<b>1,595</b>	<b>2,807</b>	<b>3,231</b>	<b>4,563</b>	<b>6,693</b>	<b>6,548</b>	<b>4,495</b>
COGS	(1,227)	(2,082)	(2,174)	(3,431)	(5,102)	(4,847)	(3,624)
Gross income	368	725	1,057	1,132	1,591	1,702	871
Gross margin	23.1%	25.8%	32.7%	24.8%	23.8%	26.0%	19.4%
SG&A	(75)	(162)	(218)	(263)	(342)	(361)	(332)
<b>EBITDA</b>	<b>368</b>	<b>979</b>	<b>1,079</b>	<b>927</b>	<b>1,311</b>	<b>1,407</b>	<b>610</b>
<b>Adjusted EBITDA</b>	<b>368</b>	<b>979</b>	<b>1,079</b>	<b>927</b>	<b>1,311</b>	<b>1,407</b>	<b>610</b>
EBITDA margin	23.1%	34.9%	33.4%	20.3%	19.6%	21.5%	13.6%
DD&A	(26)	(32)	(49)	(57)	(62)	(66)	(71)
EBIT	343	947	1,030	869	1,249	1,341	540
Interest income	(30)	(73)	(206)	(189)	(172)	(168)	(178)
Forex gain	–	–	–	–	–	–	–
Other gains	108	386	191	–	–	–	–
Pre-tax income	312	873	824	681	1,077	1,172	362
Income tax	(126)	(146)	(198)	(163)	(259)	(281)	(83)
Minority interest	0	(1)	–	–	–	–	–
Exceptionals	–	–	–	–	–	–	–
<b>Net income</b>	<b>187</b>	<b>726</b>	<b>627</b>	<b>517</b>	<b>819</b>	<b>891</b>	<b>279</b>
<b>Adjusted net income</b>	<b>187</b>	<b>726</b>	<b>627</b>	<b>517</b>	<b>819</b>	<b>891</b>	<b>279</b>
Net margin	11.7%	25.9%	19.4%	11.3%	12.2%	13.6%	6.2%
<b>EPS, \$</b>	<b>0.38</b>	<b>1.47</b>	<b>1.27</b>	<b>1.05</b>	<b>1.66</b>	<b>1.81</b>	<b>0.56</b>
<b>Adjusted EPS, \$</b>	<b>0.38</b>	<b>1.47</b>	<b>1.27</b>	<b>1.05</b>	<b>1.66</b>	<b>1.81</b>	<b>0.56</b>
<b>BALANCE SHEET</b>							
<b>Assets</b>							
Cash and equivalents	43	693	291	51	96	135	68
Receivables	210	736	847	1,196	1,754	1,716	1,178
Inventories	1,471	2,044	3,740	5,102	4,617	3,970	4,716
Other current assets	170	146	168	233	337	330	229
Total current assets	1,894	3,619	5,045	6,581	6,804	6,151	6,191
Total non-current assets	602	1,534	2,619	2,370	2,790	3,212	3,771
Total assets	2,496	5,153	7,665	8,951	9,594	9,363	9,962
<b>Liabilities</b>							
Short-term borrowings	532	983	1,136	904	904	904	1,112
Payables	995	1,330	2,578	3,617	3,233	2,061	2,548
Other current liabilities	40	40	4	4	4	4	4
Total current liabilities	1,567	2,353	3,718	4,525	4,141	2,969	3,664
Long-term borrowings	382	425	700	686	686	686	686
Other non-current liabilities	170	328	477	513	720	770	395
Total non-current liabilities	552	753	1,178	1,198	1,406	1,456	1,081
Total liabilities	2,119	3,106	4,896	5,723	5,547	4,425	4,745
Minority interest	16	51	54	53	53	53	53
Equity	378	2,046	2,769	3,228	4,047	4,938	5,216
Total liabilities and equity	2,496	5,153	7,665	8,951	9,594	9,363	9,962
<b>Net debt/(cash)</b>	<b>870</b>	<b>715</b>	<b>1,545</b>	<b>1,539</b>	<b>1,493</b>	<b>1,455</b>	<b>1,731</b>
<b>CASH FLOW STATEMENT</b>							
<b>Net income</b>	<b>187</b>	<b>726</b>	<b>627</b>	<b>517</b>	<b>819</b>	<b>891</b>	<b>279</b>
Minority interest	0	(1)	–	–	–	–	–
DD&A	(26)	(32)	(49)	(57)	(62)	(66)	(71)
Working capital change	(76)	(810)	(1,808)	(1,711)	(74)	685	(208)
Other assets change	(30)	223	1,358	1,072	(180)	(1,125)	115
<b>Operating cash flow</b>	<b>132</b>	<b>(121)</b>	<b>34</b>	<b>(64)</b>	<b>626</b>	<b>517</b>	<b>256</b>
Maintenance capex	(108)	(147)	(142)	(73)	(95)	(99)	(104)
Expansionary capex	(315)	(658)	(599)	255	(382)	(387)	(528)
Other investments	111	269	(219)	(54)	(104)	7	100
<b>Investing cash flow</b>	<b>(311)</b>	<b>(536)</b>	<b>(960)</b>	<b>128</b>	<b>(581)</b>	<b>(479)</b>	<b>(532)</b>
Change in debt	193	415	428	(247)	–	–	208
Dividends paid	–	–	–	–	–	–	–
Share issues/(purchases)	–	897	96	(58)	–	–	–
Other	–	–	–	–	–	–	–
Financing cash flow	193	1,312	524	(304)	–	–	208
Forex effects	–	(5)	–	–	–	–	–
<b>Net change in cash</b>	<b>14</b>	<b>650</b>	<b>(402)</b>	<b>(240)</b>	<b>46</b>	<b>38</b>	<b>(67)</b>
<b>RATIOS</b>							
P/E	11.9	3.1	3.5	4.3	2.7	2.5	8.0
EV/EBITDA	8.6	3.0	3.2	3.7	2.6	2.4	5.9
P/BV	5.9	1.1	0.8	0.7	0.5	0.4	0.4
ROE	49.5%	35.5%	22.6%	16.0%	20.2%	18.0%	5.3%
ROIC	12.9%	19.0%	10.1%	7.7%	12.1%	11.6%	2.0%
Dividend per share, \$	0	0	0	0	0	0	0
Dividend yield	–	–	–	–	–	–	–
P/S	1.4	0.8	0.7	0.5	0.3	0.3	0.5
P/CF	16.9	neg	65.2	neg	3.5	4.3	8.7
Revenue growth	–	76%	15%	41%	47%	-2%	-31%
EBITDA growth	–	166%	10%	-14%	41%	7%	-57%
EPS growth	–	289%	-14%	-17%	58%	9%	-69%

Source: Company, Troika Dialog estimates

GDR	LSRG LI
Recommendation	BUY
Last price	\$1.45
Target price	\$8.00
Upside	452%
Free float	13%

Market cap	\$679 mln
Enterprise value	\$2,068 mln
ADT, 100 days	\$2.8 mln

Prices as of October 10, 2008

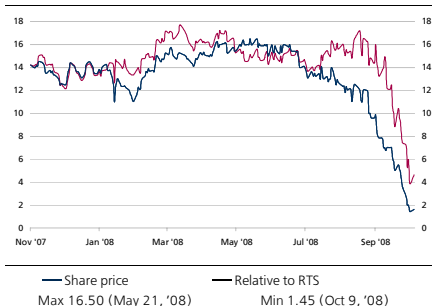
## Key data

	2006	2007	2008E	2009E
<b>Financials (IFRS), \$ mln</b>				
Revenues	777	1,403	2,025	2,588
EBITDA	93	309	547	712
EBIT	92	248	469	615
Net income	36	348	248	310
EPS, \$	0.09	0.74	0.53	0.66
<b>Profitability</b>				
EBITDA margin	12%	22%	27%	27%
EBIT margin	12%	18%	23%	24%
Net margin	5%	25%	12%	12%
<b>Price ratios</b>				
P/S	0.9	0.5	0.3	0.3
EV/EBITDA	12.6	4.1	3.8	3.8
P/E	17.0	2.0	2.7	2.2
P/CF	30.1	neg	neg	2.0
<b>Growth</b>				
Revenues	–	81%	44%	28%
EBITDA	–	231%	77%	30%
EPS	–	773%	-29%	25%

## Price performance, %

	1 mo	3 mo	6 mo	YTD
GDR	-82.9	-89.3	-90.6	-90.0
Relative to RTS	-73.1	-72.2	-76.2	-72.9

## Price performance, \$



Source: Bloomberg, Troika Dialog

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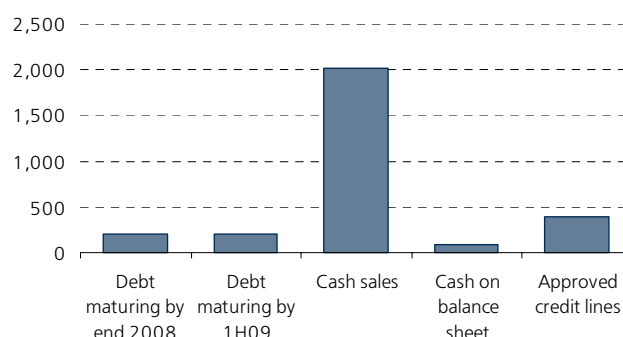
# LSR Group

## Survival of the Fittest

We initiate coverage of LSR Group with a target price of \$8.00 per GDR and BUY recommendation. Operating across the full chain of development and building materials businesses, the company has grown quickly to become the market leader in Russia's Northwest. Ambitious yet prudent regional expansion alongside diversified cash flows offers long-term upside and a cushion against near-term credit risks. The stock is now trading with an 87% discount to its NAV, the rest of businesses effectively being offered for free. LSR Group has unique industry exposure and excellent transparency. We believe that the current market weakness creates a lucrative risk/reward proposition in the longer term.

- Organized as a chain of integrated but independent business units, including building materials and aggregates production, and construction services (transport and cranes), LSR Group is the only real estate company with interest along the whole value chain.
- Pre-sales and diversified operating cash flows increase LSR Group's ability to finance its balanced development portfolio, which has an expanding outlook toward the regions and the residential mass market.
- The group's fully vertically integrated business allows it to tap volume growth and margin expansion across the entire industry chain, while the building materials business will continue to benefit from the state's multi-billion dollar infrastructure investments and sufficiently hedge near-term cash flow.
- This non-development side of the business makes up more than half of the company's total EBITDA, but its value is not reflected at the current market cap, as the company is trading with a discount to its NAV.
- Altogether, LSR Group's vertically integrated business units enjoy the synergetic effect of cost efficiency and guaranteed supplies, which, added to the fact that it controls a significant portion of local raw material sources, ensures the inter-defensiveness of the company's business model in the Northwest.
- In light of weak markets, however, we remain cautious regarding increased overpricing and downturn risks. We have applied a 500 bps higher risk-free rate and equity premiums in our scenario-based SOTP DCF valuation, and have strongly considered downward-looking comparable stocks, thus arriving at a 12-month target price of \$8.00 per GDR.

## Cash reserves and short-term debt breakdown, \$ mln



Source: Troika Dialog estimates

## Target price revision

We initiate coverage of LSR Group with a target price of \$8.00 per GDR and BUY recommendation. In light of the increasing bankruptcy risks in the sector, we view the group's fast growth, diversified cash flows and prudent investment policy as a major mitigating factor for credit risks and as a cornerstone for its value in the medium term. In other words, we believe that the company can survive the generally hard times and deliver upside to investors. The developer's ability to generate business beyond the visible horizon and its position to capitalize on current market weakness should put it at a premium to many of its peers. However, on a 12-month horizon, we expect to see modest upside, taking into account the medium-term reality of increased costs of financing and the downward trends on the global real estate market, with falling comparable multiples (EV/EBITDA and P/NAV). We use higher discount rates to address the increasing risk-free rate and equity premiums. Through a scenario-based SOTP approach, we address the higher execution risks for the company's remote projects, and use three pricing scenarios.

### TRIGGERS

- LSR Group has published solid 1H08 results (53% y-o-y revenue growth and 83% EBITDA expansion). However, the group reported a 99% y-o-y drop in net income, which was due to non-cash items and was thus irrelevant (the group recognized a non-cash revaluation loss versus a gain a year ago). This triggered a massive and unjustified correction, which we believe gives the stock additional room for upside once the market returns to rationality.
- LSR Group has seen its market cap drop below its NAV for the first time since its IPO. However, the developer has always been prized for its drive and ability to expand continuously over its reported horizon. As market sentiment improves, the company may regain its usual significant premium to NAV.
- The discount to NAV, in due course, suggests that the significant additional value of its construction and building materials business, which contributes more than 50% to the overall EBITDA, is being neglected. As market sentiment improves, we expect LSR Group's market cap to gradually unwind the market value of all its business divisions.

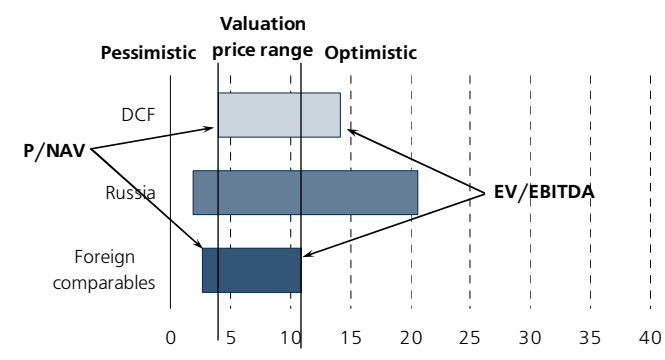
### RISKS

- In the case of an industry downturn, LSR Group would be left with the heavy fixed costs of its production vertical. Prefabricated construction and construction services are the most vulnerable, as they source 40% of their business in-house. Building materials might also take a hit as development slows.
- However, sales in ready-mix concrete and aggregates, which jointly contribute over one quarter of LSR Group's EBITDA, should remain strong thanks to large state investments in infrastructure and road construction.
- The slowdown, along with growing developer insolvency, creates risks that the company could build up large account receivables as the supplier of services and materials.
- We believe that residential real estate in Russia is highly overpriced, which increases the chances of a correction. One quarter of the value in LSR Group's portfolio comes from elite residential projects, where prices are the most volatile and liquidity is poor.
- One quarter of the group's development portfolio value comprises capital-intensive prime commercial real estate projects with long payback periods (four to nine years). This could drain the developer's cash resources; however, LSR Group can mitigate this risk by postponing projects.
- Commercial and residential property values (which are currently high) may decline, as forced selling becomes prevalent. Though the commercial space is priced more adequately, this vulnerable stock makes up a big chunk of the relatively liquid estate pledged at banks, and is becoming more susceptible to abrupt increases in the property offering (the first wave may be triggered by developers trying to sell unfinished and non-profile projects, and the second wave, months later, will be triggered by banks trying to realize the collateralized property) due to the rising insolvency of developers.

## Valuation

We view SOTP DCF as the most objective tool for fair value appraisal. With that in order to obtain a consensus of income and comparison approaches to valuation, we reconcile results from multi-scenario DCF with ranges calculated from P/NAV and EV/EBITDA multiples' analysis of Russian and foreign peers. In order to arrive at our valuation range we've used the overlap intervals of both multiples with DCF figures. Considering the company's low financing risks, which translate into below-average execution risks, we set our target price at \$8.00 per GDR.

### Implied valuation range, \$ per GDR



Source: Bloomberg, Troika Dialog estimates

We stress the fact that the LSR Group's equity value is based on real and growing cash flows rather than on promises, which sets the company above most of its peers. We also note that its current discount to NAV, which is a matter of current market weakness, effectively appears much stronger when adjusted for the non-development part of the business.

EV/EBITDA comparables imply higher value ranges for LSR Group than those implied by P/NAV, which is a function of the superiority of the company's EBITDA (in the case of Russian peers, we have excluded any gains from property revaluation, which thus decreases many EBITDA forecasts for 2008), while the majority of comparables trade at a deeper discount to their NAVs (as mentioned, if adjusted for the value of LSR Group's building materials business, a P/NAV average that is at least 50% higher should be quoted).

We set our 12-month target price at \$8.00 per GDR, which lies in between the ranges implied by Russian and Western EV/EBITDA comparables and fundamental value range implied by the SOTP DCF.

LSR Group is trading at significant discount to its western comparables on EV/EBITDA, which is a function of both the falling operating margins of western peers and higher EM multiples (excluding Russia). As we believe that Russian developers' stock is strongly influenced by Western markets, while having fairly limited exposure to other EMs, we conservatively take a discount from the top range implied by EV/EBITDA in light of downward-sloping comparables.

## SCENARIO-BASED SOTP DCF

## SOTP DCF calculation

<b>Portfolio valuation \$ mln</b>	
Held for investment	71
In course of development	83
Held for development	1,341
PV of terminal value	535
<b>Total portfolio</b>	<b>2,030</b>
<b>Construction and building materials</b>	
Building materials	1,123
Aggregates	944
Construction	270
Construction services	209
<b>Total construction and building materials</b>	<b>2,546</b>
PV of corporate overheads	(609)
Debt implied tax shield	288
EV	4,255
Net debt	(1,100)
Minority interest	(28)
<b>Fair equity value</b>	<b>3,127</b>
Number of GDRs, mln	468
Equity value, \$ per GDR	6.68
Current price, \$ per GDR	1.45
<b>Upside</b>	<b>361%</b>

Source: Company, Troika Dialog estimates

Given the complexity of LSR Group's businesses, we use an SOTP DCF valuation to arrive at independent values for separable segments. In addition, this type of valuation allows accounting for various risks through adjusted discount rates that projects face depending on their level of completion.

We have directly calculated the cash flows from more than 58 of the group's developments, applying a base-equity cost but different risk premiums to projects completed and held as investment, projects in the course of development and remote projects classified as those held for development. As the base for our calculation, we use project-specific data from the appraiser's report whenever available, such as the gross and net retail areas, the percent and date of completion and costs incurred. We then make our own assumptions about remaining development costs and cost inflation.

We base our calculations on real data provided in the company's portfolio report, such as completion dates and prices, which leads to y-o-y jumps in figures and margins. We believe that the company will, in fact, report smoother figures.

We then discount the forecasted cash flows from LSR Group's other business lines – namely construction, construction services, building materials and aggregates – to derive the values of those businesses as separate entities. We also reconcile all internal cash flow operations, the values derived as a result those cash flows return the minimum extrinsic values of LSR Group's non-development divisions.

We discount the free cash flows via the equity cost of financing and then add back the tax shield implied by the company's debt. We use different risk premiums depending on the status of the development projects, which return costs of equity equal to 15.4% for Properties Held for Investment (PHI), 17.4% for Properties in the Course of Development (PCD) and 22.4% for Properties Held for Development (PHD). We then use a base cost of equity at 14.4% to discount non-development related cash flows.

## Real estate price growth scenarios, y-o-y

	2007	2008E	2009E	2010E	2011E	2012E
Pessimistic	30%	-20%	-30%	10%	7%	6%
Base case	30%	0%	0%	8%	7%	6%
Optimistic	30%	20%	15%	10%	7%	6%

Source: Troika estimates

To address the pricing risks, we use three possible price-behavior scenarios.

- The pessimistic scenario simulates our vision of a strong price correction in 2008-09, following the previous aggressive price growth in 1H08 and triggered by the increase in cost of financing in the commercial sector and the lower mortgage availability in the residential sector.
  - In our pessimistic scenario, we assume that LSR Group would freeze all its unviable projects (projects with negative margins) and realize higher value.

- In our base case, prices grow at a rate slightly below ruble PPI inflation, as real estate in Russia largely serves as an inflationary hedge.
  - As base prices, we use 2008E prices, as estimated by DTZ in its appraisal report. Otherwise, we have used our estimations.
  - We have assumed that in the longer term, development costs will grow slightly ahead of prices, as we believe that prices are already high, while inflationary pressures in Russia remain strong.

#### Cost inflation in development, y-o-y

	2007	2008E	2009E	2010E	2011E	2012E
<b>Moscow</b>						
Panel	30%	8%	8%	8%	8%	8%
Monolith	30%	10%	10%	10%	10%	10%
Monolith economy	30%	10%	10%	10%	10%	10%
Parking	30%	10%	10%	10%	10%	10%
<b>Regions</b>						
Panel	30%	10%	10%	10%	8%	8%
Monolith	30%	12%	12%	12%	10%	10%
Monolith economy	30%	12%	12%	12%	10%	10%
Parking	30%	12%	12%	12%	10%	10%

Source: Troika estimates

- Our DCF model yields an EV of \$4,255 mln under our base scenario.
- Subtracting our estimate of 1H08 net debt of \$1,100 mln and minority interest of \$28 mln, our estimate returns an equity value of \$3,127 mln, or \$6.68 per GDR.
- Our forecasts assume that LSR Group will complete all of the space as listed in the property portfolio by DTZ for the years mentioned. As revenues and EBITDA have no single trend due to the aforementioned, we do not make any EBITDA growth assumptions.
- We also see the company remaining free cash flow negative until 2011 under our base case.
- We forecast cash flow through 2020 to include the most remote projects. To account for the terminal value added by LSR Group's recurring development business, we assume a post-forecast cash flow generated by the annual completion of 4 mln m<sup>2</sup> of net retail space at a price of \$5,000/m<sup>2</sup> and a 30% gross margin.
- Finally, we allocate the portion of discounted negative cash flows from SG&A costs to account for corporate overheads.
- A noticeable difference in our valuation of portfolio from those of official appraisers is that we account for income tax, which is more accurate from an equity-holder's point of view.

#### Sensitivity of base case, \$ per GDR

		Discount rate						
		-6%	-4%	-2%	0.0%	2%	4%	6%
Terminal growth rate	4.5%	21.65	14.13	9.90	7.13	5.15	3.67	2.53
	4.0%	20.22	13.56	9.62	6.96	5.05	3.60	2.48
	3.5%	19.08	13.07	9.36	6.81	4.95	3.54	2.44
	3.0%	18.16	12.65	9.13	6.68	4.87	3.48	2.40
	2.5%	17.39	12.28	8.93	6.55	4.79	3.43	2.36
	2.0%	16.74	11.95	8.74	6.44	4.71	3.38	2.33
	1.5%	16.18	11.67	8.58	6.33	4.64	3.33	2.30

Source: Troika estimates

#### Sensitivity of asset pricing scenarios, \$ per GDR

	Discount rate				
	-4%	-2%	0%	2%	4%
Pessimistic	9.18	6.10	4.02	2.53	1.43
Base	12.65	9.13	6.68	4.87	3.48
Optimistic	21.96	17.42	14.08	11.49	9.44

Source: Troika estimates

Compared with other developers, LSR Group's equity value is less sensitive to real estate price fluctuations, thanks to its more stable cash flows from the building materials and construction businesses. However, the value of the company is still highly exposed to real estate prices, which are also the main driver of the entire industry chain that LSR Group represents.

This confirms our grounds for applying higher discount rates in addition to addressing the increasing risk-free rate and equity premiums.

**Discount rate calculation**

Russian risk-free rate	7.4%
Standard equity-risk premium	7.0%
Base cost of equity	14.4%
Liquidity-risk premium	0.5%
Other risk premium	0.0%
Financial-risk premium	0.0%
<b>Cost of equity for PHI</b>	<b>14.9%</b>
Completion-risk premium	1.0%
Medium-term financing risks	0.0%
Cyclicality-risk premium	1.0%
<b>Cost of equity for PCD</b>	<b>16.9%</b>
Execution-risk premium	3.0%
Long-term financing-risk premium	3.0%
<b>Cost of equity for PHI</b>	<b>21.9%</b>

Source: Troika estimates

**FINANCIAL ANALYSIS**

To our best understanding, LSR Group is in a position that is protected from any defaults or insolvency in the near term thanks to the company's rich cash flows and prudent financial policy.

Among the other companies in the sector that we cover, LSR Group ranks in the middle of the list on net debt/EBITDA.

The developer is currently servicing debt with residual maturity of around \$320 mln, of which \$250 mln were attracted by the group as long-term loans in 1H08.

The heaviest part of cash flows for debt service is distributed in 2009-11, when four of the old loans reach maturity.

As of end 1H08, LSR Group had almost half of its debt portfolio attributed to short-term debt at \$534 mln, and we expect the interest expenses during 2008 to add another \$150 mln.

By end 2009, the company will have only \$200 mln left to refinance from its short-term dues, which it can do with relative ease, thanks to its operating cash flows.

If LSR Group had to refinance its short-term dues at a 300-500 bps premium, the company would experience around a 7% increase in its interest expense for 2008 and 15% for 2009. This would be easily absorbed by EBITDA.

Under our worst case, if LSR Group fails to borrow against sequential loan repayment, the company still could service debt through manipulating its working capital. If LSR Group has to redeem in full its short-term loans, the company could still do so via rich operating cash flows and with revenues that are quadruple short-term dues (which gives a large cushion even if real estate prices fall).

In the longer run, LSR Group is underleveraged and the company's debt ratios look very safe and comfortable.

The developer is also exposed to public finance. In particular, it has three bonds in circulation totaling around \$400 mln.

In order to finance its growth, LSR Group will need to double its net debt by end 2008, we estimate. The group has already secured funds through a R200 mln bond (maturing in 2013 with a coupon of 13.7%) and two EU export financing loans of around EUR190 mln (\$260 mln, interest at 4.5% and maturity in five to 10 years). Positively, LSR Group's debt portfolio will be rebalanced with a higher weight of long-term debt.

**Outstanding bonds**

Issuer	Issue date	Redemption	Principal amount, R mln	Currency	Interest rate	Interest payment period
OJSC LSR Group	2008	2013	5,000	Rubles	13.25%	Six months
LLC LSR-Invest	2007	2011	3,000	Rubles	8.35%	Six months
LLC LSR-Invest	2006	2009	2,000	Rubles	10.70%	Six months

Source: Troika estimates

LSR Group's business model provides for the majority of construction financing to come from the company's own funds and pre-sales, with a small share of debt. In the next five years, we will see the amount of residual maturity decreasing in contrast to growing cash sales and construction budgets.



## Company overview

LSR Group is the second largest publicly traded real estate development industry player, with a full chain of business divisions, ranging from development and construction to aggregates and building materials production and construction (transportation) services. The developer is the largest manufacturer of ceramic bricks and aerated concrete in Russia.

The company's development wing focuses primarily on mass-market residential development, but has a certain portion of prime residential and commercial projects, as well as suburban residential developments.

Originally based in St Petersburg and Leningrad Region, LSR Group is expanding operations into large Russian cities and the Baltic states, continually building up its land bank and production capacities. LSR Group has reported an increase in its development portfolio throughout 2007 to 8.2 mln m<sup>2</sup> of unsold sellable area (NSA); the group's extensive track record in executing sizeable development projects enables it to finance most of its residential development growth through pre-sales. This adds steady cash flows from non-development operations and gives the company a clear competitive advantage on the tight financial market, in our view.

The company's fully vertically integrated business model entails all the main stages of the development process, from construction materials production to construction and sales. LSR Group has fully tapped into volume and margin expansion across the industry thanks to its vertically integrated but still self-sufficient businesses, which on average source around 90% of their revenues externally. The developer has strong in-house capacity in screening and securing land plots to continuously fuel its future pipeline. Its self sufficiency in pre-fabricated panel manufacturing in St Petersburg and Leningrad Region provides the company with visible control over execution and inflationary risks, while keeping defensive market positions. The group is now extrapolating this business model into the regions to uphold its expansion.

Founded in 1992, LSR Group initially focused on producing reinforced concrete via acquisition. In 1994, the group entered the elite development market by acquiring a leading contractor. The next purchase moved LSR Group closer to local development leaders. Over 1997-2000, the group consolidated a number of building material manufacturers. It diversified into mass-market residential development, having acquired two St Petersburg-based concrete panel manufacturers in 2001 and 2004. Also in 2004, the company consolidated three brick production subsidiaries to become the largest manufacturer of ceramic brick in Russia's northern capital. LSR Group has gained a presence on Moscow's real estate market via two projects since 2001. Consolidating a leading building materials manufacturer and developer in Ekaterinburg in 1H08 flagged the start of the group's prudent regional expansion. The production facilities spread out across St Petersburg, Moscow, Ukraine and the Baltic states make LSR Group a major FSU-level player on the building materials market.

## IPO, STOCK PERFORMANCE AND SHAREHOLDER STRUCTURE

LSR Group conducted an IPO in November 2007, at which it placed nearly 11.4% of its post-IPO common stock, raising total proceeds of \$772 mln (80% of the issue was attributable to the primary offer) for a market cap of \$6.8 bln. Since its debut, the stock has lost 90%, caught by market weakness and negative sentiment toward real estate stocks. Andrey Molchanov, the group's key shareholder and founder, owns 72.9% of the company, while another 13.9% is owned by founding managers: CEO Igor Levit, and the powerful heads of development Evgeny Yatsyshin and construction and building materials Georgiy Vedernikov. The remaining 11.36% is in free float.

## BUSINESS MODEL

LSR Group's fully integrated business vertical allows the company to tap volume growth and margin expansion across the entire chain of construction and development due to a socio-economic boom and multibillion dollar infrastructure investments in Russia's Northwest, the company's traditional region of presence. Owning both the supply and sales channels across the construction business chain results in cost-competitiveness and inter-defensiveness, ensuring strong market positions. The company's expansion is to come through the regional replication of its business model.

**Capacity breakdown and trends**

	2007	2008E	2009E	2010E	2011E
<b>Building materials</b>					
Cement, '000 tonnes	–	–	–	–	1,850
Reinforced concrete, '000 m <sup>3</sup>	622	622	622	622	622
Ready mix concrete, '000 m <sup>3</sup>	2,301	2,301	2,301	2,301	2,301
Bricks, mln	295	295	295	295	360
Aerated concrete, '000 m <sup>3</sup>	655	865	1,070	1,158	1,508
<b>Aggregates</b>					
Sand, '000 m <sup>3</sup>	15,000	15,000	15,000	15,200	15,200
Crushed granite, '000 m <sup>3</sup>	5,000	10,000	10,000	16,000	16,000
<b>Construction, '000 m<sup>2</sup></b>	<b>370</b>	<b>415</b>	<b>440</b>	<b>590</b>	<b>750</b>
<b>Construction services, units</b>					
Tower cranes	193	293	393	483	483
BM transportation	248	248	248	248	248

Source: Company, Troika estimates

LSR Group is organized as a chain of integrated but separate business units, including building materials and aggregates production, construction services (transport and cranes) and construction and a balanced development portfolio. The group's inter-segment turnover accounts for around 18% of the total, which is a good demand hedge for upstream units but leaves every business unit largely independent and separate in its market operations. LSR Group's strategy is to own all the supply chains in the construction and development cycle, from sand to transport; however, no transfer pricing is used.

The developer's production facilities, based in St Petersburg, Moscow, Ukraine and the Baltic states, make it a major country-level producer of building materials. And the company aims to dominate the local market in each business area, both through efficiently inter-leveraging the larger business units across the chain to boost the smaller ones, and by consolidating competitors when reasonable. In 1H08, LSR Group overtook the local market leaders in building materials production and development in Ekaterinburg. Thus, having formed a strong launch-base, LSR Group can now replicate its business model in Ekaterinburg to become a local market leader. We believe that Ekaterinburg is a test drive for the group's major yet prudent regional expansionist strategy as it only enters the markets where it can become the local leader.

**Inter-segment revenues**

	2007A	2008E	2009E	2010E	2011E
Development	4%	–	–	–	–
Commercial real estate	11%	10%	9%	8%	7%
Building materials	6%	6%	6%	6%	6%
Aggregates	18%	18%	18%	18%	18%
Construction	23%	28%	33%	38%	43%
Construction services	33%	38%	38%	38%	38%
Other entities	0%	–	–	–	–
<b>Average</b>	<b>11%</b>	<b>16%</b>	<b>17%</b>	<b>19%</b>	<b>19%</b>

Source: Company, Troika estimates

The leading position of each production unit in the Northwest added to the fact that LSR Group controls a significant portion of local raw material sources (sand, stone and clay), which allows the company's units to enjoy strong inter-defensive positions in Russia's Northwest. This comes via cost efficiency, guaranteed supplies and the ability to hedge demand. Transportation costs, regularly high for heavy-weight construction materials, just increase the protective barriers around LSR Group's markets. For example, the company retains the rich margins otherwise lost to transportation costs thanks to strategically located dams for sea-sand.

By 2010, LSR Group plans to invest around \$500 mln in a modern cement production facility with capacity of 1.85 mln tpy. Cement, which is the main component used in the company's building materials and construction businesses, has so far been the only component missing from in-house production. As a synergetic effect, LSR Group can assure return on investment through initial in-house demand, while in the second stage, the cement production unit could build its own market presence, again thanks to leveraging the existing sales channels of the group's other business units.

Excluding the cement facility, the developer and manufacturer plans to invest another \$0.7 bln by 2010 in modernizing and improving its production capacities across the chain. In particular, LSR Group envisages doubling its prefab panel construction facilities by 2011 to meet the rapidly growing in-house demand from the mass market residential development unit.

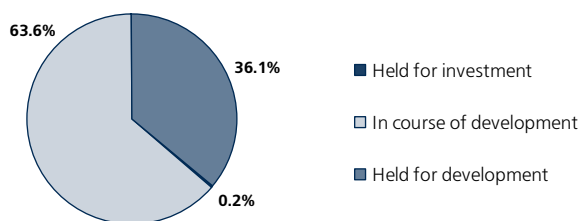
LSR Group is continually securing land at an aggressive pace to constantly feel its development pipeline. That said, control over execution and costs ensures the market competitiveness of its development wing. The company has a growing focus on mass-market residential development, where it can fully exploit its cost competitiveness. LSR Group is also balancing its portfolio with

lucrative commercial projects and elite residential and suburban development in and around St Petersburg. In contrast with Moscow, the metropolitan area of St Petersburg provides the developer with a much longer horizon of greenfield projects. Given the company's sufficient financial flows thanks to residence pre-sales and rich EBITDA generated by non-development wing, and the ability to execute high-end projects through its elite development wing, LSR Group is ideally positioned to capitalize on the high growth potential in the Northwest.

### PROPERTY PORTFOLIO

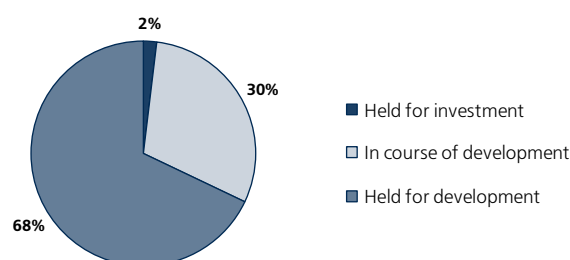
LSR Group currently has 12.5 mln m<sup>2</sup> of projects in different stage of completion in its portfolio. The majority of the portfolio's value is concentrated in future projects. Our calculations show that 98% of the value comprises projects currently in the course of development (36.0% of the portfolio's NAV) and held for future development (63.6%).

**Distribution of projects by stage, m<sup>2</sup>**



Source: Company

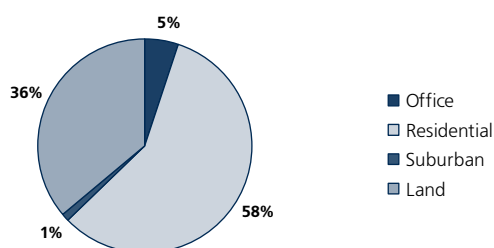
**Distribution of projects by stage, \$ mln**



Source: Troika estimates

With regard to office buildings, 95% of projects that the group is involved in are in the course of development or held for future development. Almost all residential property is at the construction stage. The group is most exposed to the residential property segment (both suburban residential communities and apartment buildings) and office premises.

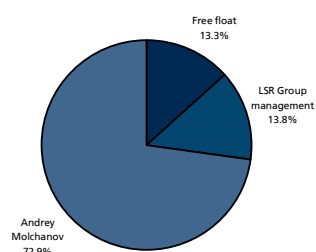
### Projects distribution by real estate segment



Source: Company

LSR Group's geographical focus is St Petersburg and Leningrad Region, with a comparatively small share in Moscow and Ekaterinburg. From this point of view, we believe that entering new regions can be a good way to diversify the portfolio.

## Ownership structure



## LSR Group IFRS financials, \$ mln

	2006	2007	2008E	2009E	2010E	2011E	2012E
<b>INCOME STATEMENT</b>							
<b>Revenues</b>	<b>777</b>	<b>1,403</b>	<b>2,025</b>	<b>2,588</b>	<b>3,334</b>	<b>4,433</b>	<b>3,788</b>
COGS	(507)	(934)	(1,316)	(1,667)	(2,057)	(2,953)	(2,784)
Gross income	269	469	709	921	1,277	1,480	1,004
Gross margin	34.6%	33.4%	35.0%	35.6%	38.3%	33.4%	26.5%
SG&A	(175)	(219)	(240)	(306)	(369)	(441)	(417)
<b>EBITDA</b>	<b>93</b>	<b>309</b>	<b>547</b>	<b>712</b>	<b>1,018</b>	<b>1,271</b>	<b>809</b>
<b>Adjusted EBITDA</b>	<b>93</b>	<b>309</b>	<b>547</b>	<b>712</b>	<b>1,018</b>	<b>1,271</b>	<b>809</b>
EBITDA margin	12.0%	22.0%	27.0%	27.5%	30.5%	28.7%	21.4%
DD&A	(1)	(3)	(4)	(5)	(6)	(12)	(12)
EBIT	92	248	469	615	908	1,039	587
Interest income	(32)	(74)	(138)	(202)	(206)	(171)	(107)
Forex gain	—	—	—	—	—	—	—
Other gains	—	—	—	—	—	—	—
Pre-tax income	65	489	331	413	702	867	480
Income tax	(24)	(130)	(83)	(103)	(175)	(217)	(115)
Minority interest	(4)	(12)	—	—	—	—	—
Exceptionals	—	—	—	—	—	—	—
<b>Net income</b>	<b>36</b>	<b>348</b>	<b>248</b>	<b>310</b>	<b>526</b>	<b>651</b>	<b>365</b>
<b>Adjusted net income</b>	<b>36</b>	<b>348</b>	<b>248</b>	<b>310</b>	<b>526</b>	<b>651</b>	<b>365</b>
Net margin	4.7%	24.8%	12.3%	12.0%	15.8%	14.7%	9.6%
<b>EPS, \$</b>	<b>0.09</b>	<b>0.74</b>	<b>0.53</b>	<b>0.66</b>	<b>1.12</b>	<b>1.39</b>	<b>0.78</b>
<b>Adjusted EPS, \$</b>	<b>0.09</b>	<b>0.74</b>	<b>0.53</b>	<b>0.66</b>	<b>1.12</b>	<b>1.39</b>	<b>0.78</b>
<b>BALANCE SHEET</b>							
<b>Assets</b>							
Cash and equivalents	61	355	75	27	53	140	44
Receivables	173	257	410	259	333	443	379
Inventories	621	1,344	1,636	2,298	2,892	2,413	2,331
Other current assets	103	131	180	269	244	229	187
Total current assets	958	2,087	2,300	2,853	3,523	3,225	2,941
Total non-current assets	513	1,814	2,504	3,402	3,708	3,671	3,839
Total assets	1,471	3,901	4,804	6,255	7,231	6,897	6,780
<b>Liabilities</b>							
Short-term borrowings	216	418	510	501	490	177	162
Payables	124	169	254	267	340	435	465
Other current liabilities	569	375	388	1,017	1,082	670	1,013
Total current liabilities	909	963	1,152	1,785	1,913	1,282	1,639
Long-term borrowings	302	507	949	1,554	1,935	1,606	823
Other non-current liabilities	66	680	704	607	549	523	468
Total non-current liabilities	367	1,187	1,653	2,162	2,484	2,129	1,291
Total liabilities	1,276	2,150	2,805	3,947	4,396	3,411	2,930
Minority interest	16	19	19	19	19	19	19
Equity	179	1,732	1,980	2,289	2,816	3,466	3,831
Total liabilities and equity	1,471	3,901	4,804	6,255	7,231	6,897	6,780
<b>Net debt/(cash)</b>	<b>456</b>	<b>571</b>	<b>1,384</b>	<b>2,029</b>	<b>2,372</b>	<b>1,644</b>	<b>941</b>
<b>CASH FLOW STATEMENT</b>							
<b>Net income</b>	<b>36</b>	<b>348</b>	<b>248</b>	<b>310</b>	<b>526</b>	<b>651</b>	<b>365</b>
Minority interest	(4)	(12)	—	—	—	—	—
DD&A	(1)	(3)	(4)	(5)	(6)	(12)	(12)
Working capital change	37	(1,114)	(399)	387	(984)	(3,098)	5,045
Other assets change	(88)	597	18	(453)	409	3,124	(4,554)
<b>Operating cash flow</b>	<b>21</b>	<b>(336)</b>	<b>(55)</b>	<b>341</b>	<b>61</b>	<b>909</b>	<b>1,078</b>
Maintenance capex	(69)	(192)	(582)	(714)	(189)	(36)	(26)
Expansionary capex	(8)	(28)	(143)	(282)	(227)	(159)	(364)
Other investments	(145)	(24)	(15)	(14)	(18)	(27)	16
<b>Investing cash flow</b>	<b>(222)</b>	<b>(244)</b>	<b>(741)</b>	<b>(1,009)</b>	<b>(434)</b>	<b>(222)</b>	<b>(374)</b>
Change in debt	245	343	534	596	370	(642)	(799)
Dividends paid	—	—	—	—	—	—	—
Share issues/(purchases)	8	569	—	—	—	—	—
Other	(21)	(49)	24	24	30	42	(1)
Financing cash flow	233	862	558	620	400	(600)	(800)
Forex effects	3	12	—	—	—	—	—
<b>Net change in cash</b>	<b>34</b>	<b>294</b>	<b>(237)</b>	<b>(48)</b>	<b>27</b>	<b>86</b>	<b>(96)</b>
<b>RATIOS</b>							
P/E	17.0	2.0	2.7	2.2	1.3	1.0	1.9
EV/EBITDA	12.6	4.1	3.8	3.8	3.0	1.8	2.0
P/BV	3.4	0.4	0.3	0.3	0.2	0.2	0.2
ROE	20.2%	20.1%	12.5%	13.5%	18.7%	18.8%	9.5%
ROIC	2.3%	11.0%	4.2%	3.6%	7.1%	9.9%	5.9%
Dividend per share, \$	0	0	0	0	0	0	0
Dividend yield	—	—	—	—	—	—	—
P/S	0.9	0.5	0.3	0.3	0.2	0.2	0.2
P/CF	30.1	neg	neg	2.0	11.2	0.7	0.6
Revenue growth	—	81%	44%	28%	29%	33%	-15%
EBITDA growth	—	231%	77%	30%	43%	25%	-36%
EPS growth	—	773%	-29%	25%	70%	24%	-44%

Source: Company, Troika Dialog estimates

Common	OPIN RU
Recommendation	BUY
Mid price	\$80.00
Target price	(from \$357) \$130
Upside	63%
Free float	38%

Market cap	\$1,222 mln
Enterprise value	\$463 mln
ADT, 100 days	\$0.1 mln

Prices as of October 9, 2008

### Key data

	2006	2007	2008E	2009E
<b>Financials (IFRS), \$ mln</b>				
Revenues	86	165	374	631
EBITDA	11	24	92	216
EBIT	10	22	90	213
Net income	58	87	132	124
EPS, \$	1.38	3.34	2.67	8.12
<b>Profitability</b>				
EBITDA margin	12%	14%	25%	34%
EBIT margin	11%	13%	24%	34%
Net margin	16%	28%	11%	20%
<b>Price ratios</b>				
P/S	14.3	7.4	3.3	1.9
EV/EBITDA	61.3	5.4	5.0	2.0
P/E	58.2	24.0	29.9	9.9
P/CF	17.5	neg	neg	7.9
<b>Growth</b>				
Revenues	–	92%	127%	69%
EBITDA	–	123%	292%	134%
EPS	–	143%	-20%	204%

### Price performance, %

	1 mo	3 mo	6 mo	YTD
Common	-58.3	-75.7	-63.6	-74.2
Relative to RTS	-34.2	-37.2	-8.0	-30.0

### Price performance, \$



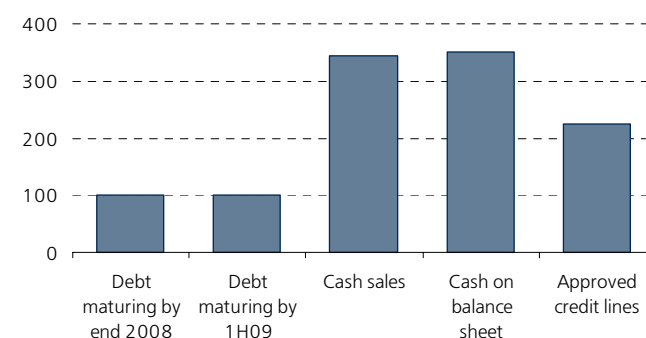
Source: Bloomberg, Troika

## Open Investments Land Bank as the Safety Belt

We reinitiate coverage of Open Investments with a target price of \$130 per share and a BUY recommendation. Rapidly emerging as one of the main land players in Moscow Region, the company enjoys local lobbying power and defensive positions. The developer's asset value may partially benefit from decreased supply in the market. We believe that the longer-term expectation of stock recovery creates an interesting risk/reward opportunity on the back of current market weakness together with the low credit risk of an equity-financed developer.

- The developer can downplay most of its financing needs thanks to the fact that its current suburban development projects are at the self-financing stage on the back of pre-sales.
- The large and fully funded land bank provides good potential for future pipeline development and the benefits of land price appreciation.
- The integration of a branded Canadian pre-fabricated timber-frame house producer will increase Open Investments' cost and execution competitiveness, which is supportive for its longer-term policy of expanding into mass-market suburban development.
- The company's few but lucrative commercial real estate development projects in the center of Moscow will start generating solid rental revenues in 18 months. While occupancy is assured by high interest of anchor tenants, the rental rates may appreciate further given the increasing backlog in general supply of new commercial space.
- Open Investments has low leverage (net cash as of June 30 of \$61 mln), and prudent financial management largely mitigates the developer's potential insolvency risks, which are rising rapidly in the sector in general.
- However, in light of the weak markets, we remain cautious regarding heightened overpricing and downturn risks. We have applied a 450 bps higher risk-free rate and equity-risk premiums in our scenario-based SOTP DCF valuation, and have strongly considered the downward-looking comparable stocks, thus arriving at a 12-month target price of \$130 per share.

### Cash reserves and short-term debt breakdown



Source: Troika estimates

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## Investment summary

We reinitiate coverage of Open Investments with a 12-month target price of \$130 per share. In light of the increasing bankruptcy risks in the sector, we view the group's steady growth, diversified financing sources and prudent financial policy as a major mitigating factor for credit risks and as a cornerstone for its value in the medium term. We believe that the company can survive the generally hard times and deliver upside to investors. On a 12-month horizon, we indicate modest upside for the stock, taking into account the medium-term uncertainties over financing costs and the downward trends on the global real estate market, with falling comparable multiples (EV/EBITDA and P/NAV). We use higher discount rates to address the increasing risk-free rate and equity-risk premiums. Through a scenario-based SOTP approach, we address the higher execution risks for the company's remote projects, and use three pricing scenarios.

### TRIGGERS

- During 1H08, Open Investments' margins were artificially depressed by the consolidation of low-margin company Canada's Viceroy Homes. Results for the full year should improve as Viceroy Homes' figures will be consolidated with the larger base of annual figures. The company may also experience margin expansion thanks to shifting its production to Russia.
- Open Investments is likely to shift its financial policy toward raising more debt. The improvement in capital structure would effectively increase the return on equity, given that the company maintains the right balance in light of tight debt markets.
- The developer has seen its market cap drop below its NAV for the first time since its IPO. However, the company was always prized for its drive and ability to expand continually over its reported horizon. As market sentiment improves, Open Investments may regain its usual significant premium to NAV.

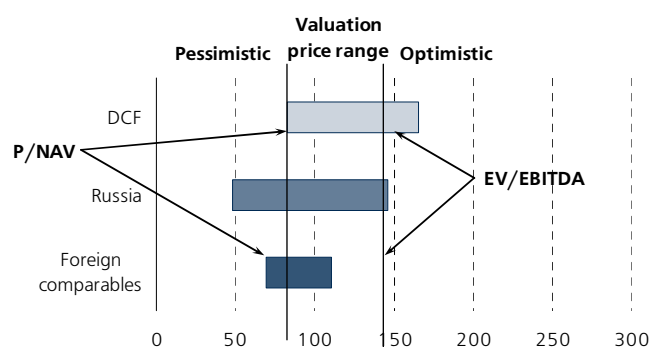
### RISKS

- The company may over-invest in its aggressive greenfield projects.
- The exit date from the projects can be quite long due to low liquidity on the suburban residential market stemming from entrance barriers because of high prices.
- Open Investments' plans to introduce cheaper housing construction technology based on the imports of its newly acquired Canadian plant seem to conflict with the middle and upper-scale price niche.
- While outsourcing suburban construction gives Open Investments significant flexibility in fixed costs, the developer is exposed to galloping increase in construction prices and has little control over execution.
- The large land bank that the company controls is exposed to legislative risks due to uncertain procedures for developing land in Russia, i.e. the government may decide to reclaim unused land.
- As a big player in the land market, Open Investments is exposed to oligopoly risks. In particular, considerable correction in land prices is possible in case one of the large market players decides to dispose of its assets.
- We believe that residential real estate in Russia is highly overpriced, which increases the chances of price correction.

## Valuation

We view an SOTP DCF valuation as the most objective tool to appraise fundamental value. In order to obtain a consensus of income and comparison approaches, we reconcile the results from a multi-scenario DCF with ranges calculated from P/NAV and EV/EBITDA multiples analysis of Russian and foreign peers. In order to arrive at our range, we use the overlap intervals of both multiples with DCF figures. Considering the company's low financing risks, we set our target price at \$130 per share.

### Implied valuation range, \$ per share



Source: Bloomberg, Troika estimates

We stress the fact that Open Investments' equity value is based on growing though more remote cash, which sets the company above most of its peers. We also note that it has rich cash resources, which significantly lowers the execution risks and costs of financial distress.

Open Investments trades at premiums to its peers on EV/EBITDA rather than under P/NAV, while the majority of its peers trade at a deeper discount to their NAVs. However, EV/EBITDA implies a lower valuation range for the company than our SOTP DCF, which is due to lower operating cash flows compared with those of PIK Group and LSR Group, given that the main vector to Open Investments' multiple is due to the inferiority of its EBITDA (in case of Russian peers, we have excluded any gains from property revaluation, which thus decreases many EBITDA forecasts for 2008). Open Investments' premium to its peers on EV/EBITDA is a function of its valuation being based on assets rather than cash flows.

Considering the company's low financing risks, which translate into below-average execution risks, we set our 12-month target price at \$130 per share, which is within the range of \$83-166 per share that our scenario-based valuation returns, where our lower end lies in between the figures implied by Russian and Western EV/EBITDA comparables, and the top end corresponds to the maximum value of EV/EBITDA multiple analysis.

### SOTP valuation, \$ mln

<b>Portfolio valuation</b>	
Held for investment	155
In course of development	1,364
Held for development	(34)
Land value at cost	1,300
<b>Total portfolio</b>	<b>2,785</b>
PV of corporate overheads	(692)
Debt implied tax shield	0
EV	2,093
Net debt	(61)
Minority interest	
<b>Fair equity value</b>	<b>2,154</b>
Number of shares, mln	15
Fair equity value, \$ per share	141
Current price, \$ per share	100
<b>Upside</b>	<b>41%</b>

Source: Troika estimates

Given the complexity of Open Investments' businesses, we have used a SOTP DCF in order to arrive at independent values of separable segments. In addition, this enables us to account for various risks that projects face depending on their level of completion by adjusting discount rates.

We have directly calculated the cash flows from the company's announced developments, applying the base-equity cost but attaching different risk premiums to Property Held as Investment (PHI),

Property in the Course of Development (PCD) and remote projects classified as Properties Held for Development (PHD). As the base for our calculation, we have used project-specific data from the appraiser's report wherever available, such as the gross and net retail areas, the percent and date of completion and costs incurred. We then made our own assumptions on remaining development costs and cost inflation.

We have based our calculations on the real data provided in the company's portfolio report, such as completion dates and prices, which leads to y-o-y jumps in figures and margins. We believe that the Open Investments will, in fact, report smoother figures.

We have discounted the free cash flows through equity cost of financing and then added back the tax shield implied by the company's debt. We have used different risk premiums depending on the status of the development projects that returned costs of equity equal to 15% for PHI, 17% for PCD and 22% for PHD.

#### Real estate price growth by scenario, y-o-y

	2007	2008E	2009E	2010E	2011E	2012E
Pessimistic	20%	-20%	-30%	10%	7%	6%
Base case	13%	0%	0%	8%	7%	6%
Optimistic	20%	15%	15%	15%	7%	6%

Source: Troika estimates

- To address real estate pricing risks, we have used three possible price-behavior scenarios.
- The pessimistic scenario assumes a strong price correction in 2008-09, following the aggressive price growth in 1H08, triggered by the increase in the cost of financing in the commercial sector and the lower mortgage availability in the residential sector.
- In our pessimistic scenario, we assume that Open Investments will freeze all of its non-viable projects (those with negative margins) and realize higher value.
- In our base case, prices grow at a rate slightly below ruble PPI inflation, as real estate in Russia largely serves as an inflationary hedge (except 2008-09, when we assumed a flat price scenario).
- As base prices, we have used the company's disclosures on 1H08 prices. Otherwise, we have used our estimations.
- We have assumed that in the longer term, development costs will grow slightly ahead of prices, as we believe that prices are already high, while inflationary pressures in Russia remain strong.

#### Cost inflation in development, y-o-y

	2007	2008E	2009E	2010E	2011E	2012E
<b>Moscow</b>						
Panel	30%	8%	8%	8%	8%	8%
Monolith	30%	10%	10%	10%	10%	10%
Monolith economy	30%	10%	10%	10%	10%	10%
Parking	30%	10%	10%	10%	10%	10%
<b>Regions</b>						
Panel	30%	10%	10%	10%	8%	8%
Monolith	30%	12%	12%	12%	10%	10%
Monolith economy	30%	12%	12%	12%	10%	10%
Parking	30%	12%	12%	12%	10%	10%

Source: Troika estimates

- Our DCF model yields an EV of \$2,093 mln under our base case.
- Adding our expectations of 1H08 net cash of \$61 mln, our estimates return a fair equity value of \$2,154 mln, or \$141 per share.
- Our forecasts assume that Open Investments will complete all of the space as announced, but we make no judgments on the future use of the rest of the land bank. As revenues and EBITDA have no single trend due to the aforementioned, we do not make any EBITDA growth assumptions.
- We also see the company remaining free cash flow negative until 2009 under our base case.
- We have forecast cash flows up to 2020 in order to include the most remote projects.
- We have made no assumptions on the future use of Open Investments' large land bank and have simply added the cost of the land to our DCF valuation, to be on the fair side.
- Finally, we have allocated the portion of discounted negative cash flows from SG&A costs in order to account for corporate overheads.



- A noticeable difference in our valuation of the company's portfolio from that of the official appraisers is that we account for income tax, which is more accurate from an equity holder's point of view.

#### Sensitivity analysis of target price under base case, \$ per share

		Discount rate						
		-6%	-4%	-2%	0.0%	2%	4%	6%
Terminal growth rate	4.5%	174	161	150	141	133	126	121
	4.0%	174	161	150	141	133	126	121
	3.5%	175	162	150	141	133	126	121
	3.0%	175	162	150	141	133	126	121
	2.5%	175	162	150	141	133	126	121
	2.0%	175	162	151	141	133	126	121
	1.5%	175	162	151	141	133	126	121

Source: Troika estimates

#### Sensitivity analysis of target price to asset pricing scenarios, \$ per share

		Discount rate				
		-4%	-2%	0%	2%	4%
Pessimistic		91	87	83	81	78
Base		162	150	141	133	126
Optimistic		224	206	191	178	167

Source: Troika estimates

Compared with other developers, Open Investments' fair equity value is less sensitive to real estate price fluctuations due to the residual value of its land bank. However, the value of the land may vary depending on real estate prices in general.

The aforementioned confirms our grounds for applying higher discount rates in addition to addressing the increasing risk-free rate and equity-risk premiums.

#### Discount rate calculation

Russian risk-free rate	7.4%
Standard equity-risk premium	7.0%
Base cost of equity	14.4%
Liquidity-risk premium	0.5%
Other risk premium	0.0%
Financial-risk premium	0.0%
<b>Cost of equity for PHI</b>	<b>14.9%</b>
Completion-risk premium	1.0%
Medium-term financing risks	0.0%
Cyclicality-risk premium	1.0%
<b>Cost of equity for PCD</b>	<b>16.9%</b>
Execution-risk premium	3.0%
Long-term financing-risk premium	3.0%
<b>Cost of equity for PHI</b>	<b>21.9%</b>

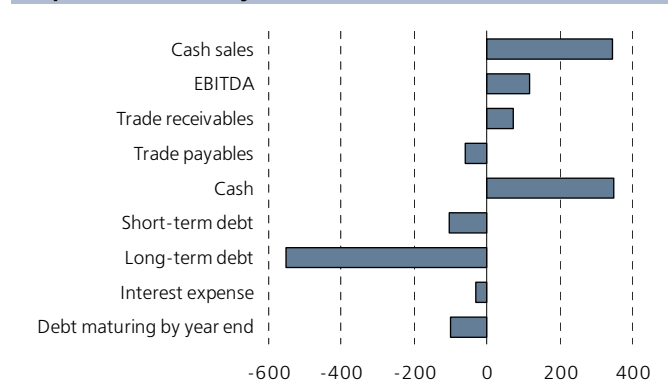
Source: Troika estimates

#### FINANCIAL ANALYSIS

To our best understanding, Open Investments is in a very strong position against defaults or insolvency in the near term thanks to its low short-term maturities and prudent financial policy. All of a sudden, the company's value-destructive, equity-based growth has become a safe haven.

Open Investments has historically been equity financed, and had a positive net cash position and just over \$100 mln in short-term debt as of 1H08. By this time, the company had fully paid for its recent major land acquisition, which is reflected in the increase on the capital advances line on its balance sheet. As per our estimates, Open Investments had around \$460 mln in gross debt, \$350 mln in cash and around \$240 mln in an unused credit line.

#### Corporate debt analysis, \$ mln



Source: Troika estimates

Open Investments will extend any investments into its future suburban development (the Zavidovo project), while current projects are self financing thanks to pre-sales. However, as the developer invests the cash on its balance sheet into completing its two major commercial projects, it will see its net debt reaching \$300 mln by year end. Draining the cash resources in the current fragile market environment is a somewhat risky but necessary proposition, as completing commercial space on time would mean an additional \$150 mln in annual rental revenues starting in 2010.

By end 2008, Open Investments is due to refinance its \$100 mln low-interest loan from ING. We believe that the company has a good chance of revolving the loan, perhaps at a higher rate. By end 2009, the developer will have to refinance another \$75 mln. Given its rich cash resources, Open Investments' debt financing risks are negligible.

In the longer term, we would only welcome the increased leverage that helps improve the developer's capital structure.

### COMPANY OVERVIEW

Established in September 2002 by Interros, which aimed to consolidate its real estate operations, Open Investments became the first publicly traded developer in Russia (a fact that largely contributed to its brand awareness with investors). With few hands busy in a few large commercial estate projects in central Moscow, the developer quickly found its niche in upscale suburban development around the capital. Pavlovo-1, the company's pilot project, was a tremendous success, allowing Open Investments to enjoy extra margins on high-end sales, and it built a strong brand in this niche. With an aim to spread its success over a mass market, the company tripled its land bank in 1H08 and consolidated a Canadian prefab country-home manufacturer.

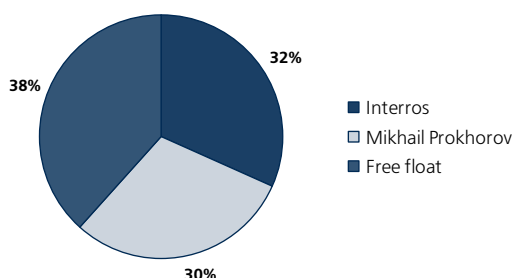
Open Investments has strong in-house capacity in securing and rezoning large land plots for future development. As a suburban developer of future social significance (implementation of affordable housing construction technology vowed by the state), the company has built up a strong lobby at local municipalities, which may help it with rezoning agricultural land, as well as provide it with visible savings on building the utilities and infrastructure up to its future communities. Going further, keeping the pace of construction needed to sustain the steps announced in the state reform requires quick and reliable techniques for housing construction, something that Open Investments can now provide in Moscow Region.

### IPO, STOCK PERFORMANCE AND SHAREHOLDER STRUCTURE

On the top of just \$69 mln in IPO proceeds (almost 38.5% of its post-IPO market cap of just \$178 mln), Open Investments has added another \$2,378 mln via five additional share issues. The frequent equity issues, a quick way for deep-pocketed majority shareholders to inject the funds necessary for growth, championed Open investments in minority stake dilution. Since the IPO, the stock has risen 111%.

As the result of the asset separation between Vladimir Potanin and Mikhail Prokhorov, who until recently jointly controlled Open Investments through Motherlane Properties, Potanin (Interros) controlled 31.6% of shares and Prokhorov (Onexim Group) had 30.0% as of July 2008. The rest of the shares are in free float, distributed among the minority shareholders.

#### Shareholder structure



Source: Troika estimates

### BUSINESS MODEL

Open Investments is a full-cycle real estate developer, implementing all the key steps along the development value chain: acquiring suitable land plots; obtaining the necessary permits; fashioning the concept and design; monitoring construction work; and carrying out sales and marketing or

letting completed premises to end users. Projects differ in size, timeline and concept, but the business processes applied are similar to the general market practice. In addition to extensive experience in completing, selling and letting projects, the management recently proved proficient at expanding the company's land bank, with exceptionally located land plots being acquired along the Moscow – St Petersburg highway.

In our view, Open Investments is well positioned in projects, but it also has competitive advantages. High entry barriers, which include legislative and administrative burdens, significant capex requirements and the scarcity of suitable locations, limit new market entrants, favoring existing, already reputable players. Open Investments' scale of operations, expertise and well-established relationships with local authorities give it an edge over other players. In our view, this lowers the likelihood of potential project delays and increases the opportunities to sourcing new ventures.

Open Investments has largely specialized in upscale gated cottage community development, with a residual focus on business centers and a few hotel premises. Its business could be considered a land play, as the company is quite successful in driving up the price of the land thanks to its oligopolistic positions on the Moscow Region land market (few developers own almost all useful land bank in the Region). Enthused by the initial success, albeit on low volumes, Open Investments has almost tripled its land bank with a target of massive suburban developments along the St Petersburg highway between Moscow and Tver.

Open Investment's residential suburban developments are located within driving distance from Moscow, an area that provides the highest demand for suburban development, in our view. The typical suburban development entails purchasing and re-zoning the land (to residential), building up the social infrastructure and utilities, putting up a fence and then selling (pre-selling) the land or development contracts. Open Investments also retains control of site management, a reasonable add-on given the long selling cycle for gated communities.

The company outsources the construction of the monolith houses to third party subcontractors, which take up to two years to build a house. Thanks to its ability to pre-sell, Open Investments starts generating cash after it has built the infrastructure. However, this takes a long time and large investments, given that it is almost non-existent in the areas that Open Investments is developing. As the initial pilot project had set a high price bar for the properties, moving them into the upscale development category, this very much determined the company's business model – high margin, low volume.

At the same time, Open Investments is making aggressive moves toward price segmentation of its suburban portfolio, as the company sees its mass market projects as a substitute for city apartments. During 1H08, the developer consolidated Viceroy Homes, a Canadian prefab timber-frame house manufacturer. The in-house technology, now being moved into Russia, close to cheap domestic lumber that would allow the company to deliver the prefab houses within six months of the order at much lower costs, will significantly ease the mass market entry for Open Investments.

However, we are pessimistic on the company's attempt to charge double and triple comparable western prices, implying that the development will be frozen to high-margin, ad-hoc buys. The secondary housing buyers (who purchase country houses as a second home) may consider overseas alternatives, while the demand for primary housing could be detracted by individual developments or shifted back to city apartments.

Few in number but high in value, Open Investments' office space projects are well-positioned in the upscale segment due to prime locations. As the company stays alert of increasing competition, it is attracting solid anchor tenants (such as Alfa Bank) under long-term lease contracts.

#### **PROPERTY PORTFOLIO**

The company's 16-project portfolio includes nine residential and seven commercial properties, with most of the value being locked in the former via the development of the Pavlovo-1, Pavlovo-2, Pestovo, Martemianovo and Lukino communities. In commercial real estate, Open Investments' development of scalable projects includes the Sakharov Business Plaza, Raikin retail and entertainment center, Pavlovo Podvorie and OpIn Plaza, and the company profitably lets the Meyerhold office center, itself adjacent to Novotel.

The attractiveness of Open Investments' portfolio is to a large extent based on its sufficient and well-located land bank in both the residential and commercial segments. This year, the company has tripled its presence on the land market, buying around 12 ha along Lenigradskoye Highway. Locations near Lenigradskoye Highway, which connects Moscow and St Petersburg, should benefit from the expected development of a new parallel highway between the cities, and we think that the company is likely to announce new projects in this area in the medium term.

In the residential segment, Open Investments focuses on full-service cottage communities, consisting of single-family country houses and, in some recently initiated developments, townhouses and apartments. What differentiates Open Investments' cottage communities from its competition is their finely tuned infrastructure, which usually includes not only basic utilities, but also a security service, access to public park areas, shopping centers, playgrounds, healthcare and childcare facilities, as well as restaurants.

#### Residential portfolio

	Total area, m <sup>2</sup>
Pavlovo-1	113,905
Pavlovo-2	144,805
Pestovo	154,377
Martemianovo (phase 1)	18,836

Source: Troika estimates

The company's portfolio of commercial real estate projects consists of Class A office premises. Attractive locations in central Moscow and easy access to transportation systems make up the company's key advantages in this segment. Unlike the residential properties, most of which are developed for sale, commercial developments are usually leased out, providing relatively solid and predictable cash flow.

#### Commercial portfolio

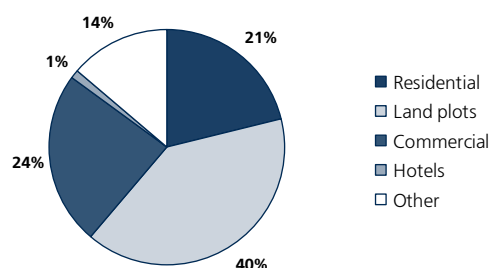
	Total area, m <sup>2</sup>
Domnikov BC	132,000
Raikin MFC	75,000
Meyerhold BC	11,250
Opin Plaza	90,780
Pavlovo Podvorye	43,000
Pavlovo School	40,000
Novotel*	8,000

\* estimated

Source: Troika estimates

The current structure of the company's portfolio implies tapping two rapidly growing market segments. Open Investments has continued to aggressively acquire land plots, especially those suitable for residential development.

#### Portfolio structure by value



Source: Troika estimates

However, there is a risk related to converting land plots for new projects due to the fact that procedure depends highly on if and when the authorities remain neutral toward developers' profit limitation on highly speculative land markets. Otherwise, Open Investments may get caught in between the choice of working under conditions of lower profit fixed by the government or disposing of some of the land bank.

Open Investments IFRS financials, \$ mln							
	2006	2007	2008E	2009E	2010E	2011E	2012E
<b>INCOME STATEMENT</b>							
<b>Revenues</b>	<b>86</b>	<b>165</b>	<b>374</b>	<b>631</b>	<b>917</b>	<b>946</b>	<b>1,100</b>
COGS	(52)	(103)	(233)	(350)	(488)	(411)	(442)
Gross income	34	62	141	281	429	535	657
Gross margin	39.7%	37.6%	37.8%	44.5%	46.8%	56.5%	59.8%
SG&A	(19)	(37)	(58)	(75)	(92)	(95)	(105)
<b>EBITDA</b>	<b>11</b>	<b>24</b>	<b>92</b>	<b>216</b>	<b>348</b>	<b>451</b>	<b>563</b>
<b>Adjusted EBITDA</b>	<b>11</b>	<b>24</b>	<b>92</b>	<b>216</b>	<b>348</b>	<b>451</b>	<b>563</b>
EBITDA margin	12.3%	14.3%	24.6%	34.2%	38.0%	47.7%	51.2%
DD&A	(1)	(2)	(2)	(2)	(2)	(2)	(2)
EBIT	10	22	90	213	346	449	561
Interest income	3	17	(34)	(48)	(30)	(17)	(15)
Forex gain	15	16	–	–	–	–	–
Other gains	0	3	–	–	–	–	–
Pre-tax income	71	96	176	165	316	432	545
Income tax	(13)	(9)	(44)	(41)	(79)	(108)	(131)
Minority interest	0	–	–	–	–	–	–
Exceptionals	–	–	–	–	–	–	–
<b>Net income</b>	<b>58</b>	<b>87</b>	<b>132</b>	<b>124</b>	<b>237</b>	<b>324</b>	<b>414</b>
<b>Adjusted net income</b>	<b>13</b>	<b>45</b>	<b>41</b>	<b>124</b>	<b>237</b>	<b>324</b>	<b>414</b>
Net margin	15.7%	27.5%	10.9%	19.7%	25.8%	34.2%	37.7%
<b>EPS, \$</b>	<b>1.38</b>	<b>3.34</b>	<b>2.67</b>	<b>8.12</b>	<b>15.49</b>	<b>21.19</b>	<b>27.12</b>
<b>Adjusted EPS, \$</b>	<b>1.38</b>	<b>3.34</b>	<b>2.67</b>	<b>8.12</b>	<b>15.49</b>	<b>21.19</b>	<b>27.12</b>
<b>BALANCE SHEET</b>							
<b>Assets</b>							
Cash and equivalents	313	427	132	161	338	870	1,290
Receivables	15	40	104	182	241	247	279
Inventories	35	483	1,463	1,355	1,142	837	410
Other current assets	36	42	89	142	203	193	218
Total current assets	399	992	1,788	1,841	1,923	2,146	2,196
Total non-current assets	1,256	2,506	3,043	3,177	3,380	3,383	3,506
Total assets	1,655	3,498	4,831	5,018	5,303	5,529	5,702
<b>Liabilities</b>							
Short-term borrowings	155	104	109	109	109	109	109
Payables	12	37	84	127	177	149	160
Other current liabilities	59	131	165	166	344	272	7
Total current liabilities	225	273	358	402	629	529	276
Long-term borrowings	46	92	356	356	156	156	156
Other non-current liabilities	123	364	558	577	599	601	613
Total non-current liabilities	168	456	914	933	755	757	768
Total liabilities	394	728	1,272	1,335	1,384	1,286	1,045
Minority interest	–	–	17	17	17	17	17
Equity	1,262	2,770	3,558	3,682	3,919	4,243	4,657
Total liabilities and equity	1,655	3,498	4,831	5,018	5,303	5,529	5,702
<b>Net debt/(cash)</b>	<b>(113)</b>	<b>(231)</b>	<b>332</b>	<b>303</b>	<b>(73)</b>	<b>(605)</b>	<b>(1,025)</b>
<b>CASH FLOW STATEMENT</b>							
<b>Net income</b>	<b>58</b>	<b>87</b>	<b>132</b>	<b>124</b>	<b>237</b>	<b>324</b>	<b>414</b>
Minority interest	0	–	–	–	–	–	–
DD&A	(1)	(2)	(2)	(2)	(2)	(2)	(2)
Working capital change	30	(54)	(1,067)	8	130	313	389
Other assets change	5	(8)	224	13	149	(48)	(142)
<b>Operating cash flow</b>	<b>45</b>	<b>(44)</b>	<b>(822)</b>	<b>156</b>	<b>526</b>	<b>600</b>	<b>673</b>
Maintenance capex	(434)	(688)	(152)	(15)	(13)	(14)	(14)
Expansionary capex	–	(100)	(88)	(10)	–	–	–
Other investments	(134)	28	(235)	(112)	(136)	(54)	(239)
<b>Investing cash flow</b>	<b>(668)</b>	<b>(747)</b>	<b>(397)</b>	<b>(127)</b>	<b>(149)</b>	<b>(68)</b>	<b>(253)</b>
Change in debt	(82)	(6)	268	–	(200)	–	–
Dividends paid	–	–	–	–	–	–	–
Share issues/(purchases)	961	912	656	–	–	–	–
Other	–	–	–	–	–	–	–
Financing cash flow	880	906	925	–	(200)	–	–
Forex effects	1	(1)	–	–	–	–	–
<b>Net change in cash</b>	<b>258</b>	<b>114</b>	<b>(295)</b>	<b>29</b>	<b>177</b>	<b>532</b>	<b>420</b>
<b>RATIOS</b>							
P/E	58.2	24.0	29.9	9.9	5.2	3.8	2.9
EV/EBITDA	61.3	5.4	5.0	2.0	0.2	neg	neg
P/BV	0.6	0.4	0.3	0.3	0.3	0.3	0.3
ROE	1.1%	1.6%	1.1%	3.4%	6.0%	7.6%	8.9%
ROIC	1.1%	2.1%	0.4%	2.1%	5.1%	6.9%	8.2%
Dividend per share, \$	0	0	0	0	0	0	0
Dividend yield	–	–	–	–	–	–	–
P/S	14.3	7.4	3.3	1.9	1.3	1.3	1.1
P/CF	17.5	neg	neg	7.9	2.3	2.0	1.8
Revenue growth	–	92%	127%	69%	45%	3%	16%
EBITDA growth	–	123%	292%	134%	62%	30%	25%
EPS growth	–	143%	-20%	204%	91%	37%	28%

Source: Company, Troika estimates

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GDR	HALS LI
Recommendation	HOLD
Last price	\$0.75
Target price	\$0.90
Upside	20%
Free float	18%

Market cap	\$168 mln
Enterprise value	\$1,532 mln
ADT, 100 days	\$0.3 mln

Prices as of October 10, 2008

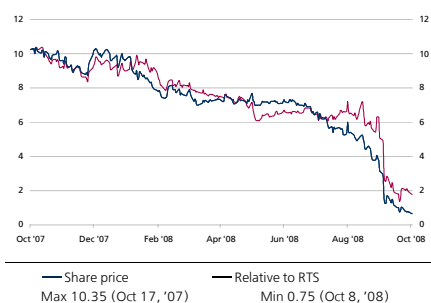
## Key data

	2006	2007	2008E	2009E
<b>Financials (IFRS), \$ mln</b>				
Revenues	283	452	327	296
EBITDA	90	64	74	114
EBIT	83	49	72	113
Net income	56	35	(48)	(87)
EPS, \$	0.10	(0.09)	(0.22)	(0.39)
<b>Profitability</b>				
EBITDA margin	32%	14%	23%	39%
EBIT margin	29%	11%	22%	38%
Net margin	6%	-5%	-15%	-29%
<b>Price ratios</b>				
P/S	0.6	0.4	0.5	0.6
EV/EBITDA	3.2	17.4	20.8	22.2
P/E	7.6	neg	neg	neg
P/CF	2.9	neg	3.1	neg
<b>Growth</b>				
Revenues	–	60%	-28%	-9%
EBITDA	–	-30%	16%	55%
EPS	–	n/m	n/m	n/m

## Price performance, %

	1 mo	3 mo	6 mo	YTD
GDR	-80.8	-88.6	-89.8	-92.3
Relative to RTS	-69.6	-70.6	-74.2	-79.1

## Price performance, \$



Source: Bloomberg, Troika

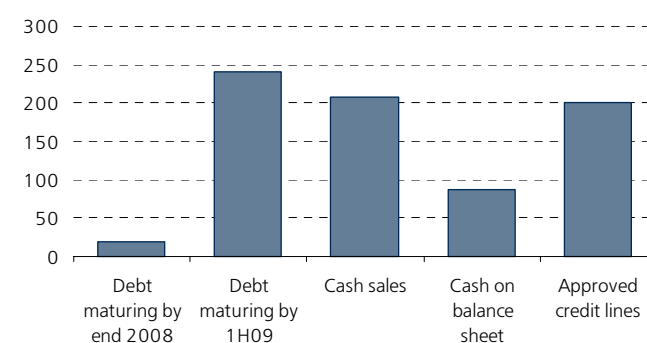
# Sistema-Hals

## Acceleration Can Burn

We are initiating coverage of Sistema-Hals with a target price of \$0.90 per GDR and HOLD recommendation. Rather than as a property company, Sistema-Hals emerges as a limited purpose niche-play developer. With its main cash flows still years ahead and undermined by current high interest payments, the company now trades at an 93% discount to its NAV, which we believe merely reflects the increased risks in light of the recent events.

- The recent appointment of a professional CEO and the targeted creation of a professional management vertical and horizontal (to include project managers to focus on specific development projects) will increase the perception of corporate transparency.
- The acquisition of its main subcontractor in 1H08 will allow Sistema-Hals to control many of the long-term execution risks that pure-play developers in Russia face.
- A revised financial strategy and standardized project portfolio, combined with increased execution efficiency and the disposal of small but highly demanded sites, will make it easier to secure funds needed for development.
- A lucrative property portfolio, thanks to predominantly Moscow-located development sites in high-demand areas, provides a good balance of shorter-term elite residential projects and longer-term commercial projects.
- However, we remain alert to financing and dilution risks in light of the liquidity crisis and a generally high debt load. We have added 400 bps to our standard risk-free rate and equity-risk premium and a 400 bps company-specific risk premium in our scenario-based SOTP DCF valuation, and have taken strong consideration of downward-looking comparable stocks, thus arriving at a 12-month target price of \$0.90 per GDR.

## Cash reserves and short-term debt breakdown



Source: Troika estimates

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## Initiating coverage

We initiate coverage of Sistema Hals with a target price of \$0.90 per GDR and a HOLD recommendation on the stock. In light of the rising insolvency risks in the sector, we remain cautious on the developer's rapidly increasing debt, which effectively intensifies the dilution risks for minority shareholders while undermining the company's ability to deliver the full upside embedded in its project portfolio. However, we like the course that it has taken toward becoming a better-structured and professionally managed corporation with greater transparency and tighter execution control. Sistema-Hals is overleveraged, but the immediate-term insolvency risks have been mitigated, we believe, as the developer has already refinanced the largest part of its debt maturing by end 2008. On a 12-month horizon, we see small upside of \$0.90 per GDR for the stock, taking into account the medium-term uncertainties over financing costs, the downward trends on the global real estate market and falling comparable multiples (EV/EBITDA and P/NAV). We apply a higher risk-free rate and equity-risk premium to account for this and use a scenario-based SOTP approach that incorporates three pricing scenarios to address the higher execution risks for the company's remote projects.

### TRIGGERS

- The company's portfolio is mainly concentrated in the Moscow area, which we currently believe to be more defensive and liquid in light of the likely correction in real estate prices.
- Sistema-Hals' stock was one of the worst hit by the recent sell-offs and now trades at deep discounts. If investors receive more visibility as to how short-term debt maturities are going to be covered by cash sales, then the stock could improve substantially from its current extreme lows.
- Having refinanced most of its short-term maturities, we believe that by successfully passing through end 2008, the company may boost sentiment, thereby buoying its share price.

### RISKS

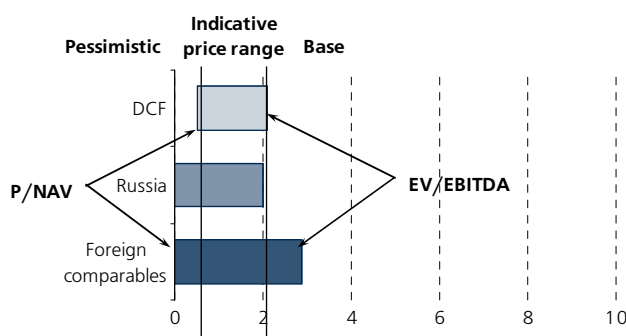
- We estimate that VTB should now hold over 80% of Sistema-Hals shares (70% is Sistema's stake and 10% are the treasury shares) as a pledge against \$500 mln plus \$200 mln in long-term loans given to the company. At the stock's highs, the initial collateral (25 mln GDRs pledged by Sistema plus 13.4 mln treasure shares) covered only \$400 mln of the debt, while the full 80% stake of Sistema-Hals can now barely cover \$130 mln. To our best understanding, VTB has not monetized the collateral, which suggests that Sistema might have provided additional guarantees, or the shareholders of Sistema-Hals have to watch out for adverse capital restructuring.
- The developer's heavy project pipeline requires strong financial injections, which is a challenging task considering that it is overleveraged. Sistema-Hals will have to secure other sources of financing by selling off non-core assets in the face of the declining availability of credit.
- Another drawback in the company's performance is its focus on the Moscow area, which increases its reliance on a single market.
- Commercial and residential property values (currently at a high) may decline on forced selling and rising refinancing rates despite stagnating incomes. The company's assets are mainly unfinished commercial spaces, which we believe will drive the price correction. The first wave of selling may be sparked by developers trying to offload unfinished and non-profile projects; the second, months later, will be triggered by banks trying to sell collateralized properties.



## Valuation

We view an SOTP DCF valuation as the most objective tool to appraise fundamental value. In order to obtain a consensus of income and comparison approaches, we reconcile the results from a multi-scenario DCF with ranges calculated from P/NAV and EV/EBITDA multiples analysis of Russian and foreign peers. In order to arrive at our range, we use the overlap intervals of both multiples with DCF figures. Considering the company's financing risks, we set our target price at \$0.90 per GDR.

### Implied valuation range, \$ per GDR



Source: Bloomberg, Troika estimates

We stress the fact that Sistema-Hals' equity value is based on promised future cash flows, which sets the value of the company at a discount to its peer average. We also note that the developer's high leverage significantly increases the dilution and execution risks, and that 2008E EBITDA may vary widely depending on property monetized.

Sistema-Hals trades at a premium to its peers on EV/EBITDA due to its large amount of outstanding debt, while on P/NAV the company trades at a deep discount. True to fact, a comparison on EV/EBITDA implies a negative valuation range for the company due to its modest EBITDA figure and high net debt, thereby complicating the application of this multiple. We obtain a wide pricing range from our SOTP DCF valuation due to the developer's high sensitivity to the cost of equity and fluctuations in asset prices, as the company's primary cash flows do not come in for several years. The top end of the range is implied by a P/NAV comparison, which needs to be discounted due to dilution and execution risks: at the current market cap of \$168 mln and P/debt of 0.15, restructuring 50% of the debt will dilute existing shareholders to one fourth of their current holdings, decreasing their portion of the company's project portfolio accordingly.

Adding to the mix the general market uncertainty, we set our target price at \$0.90 per GDR, where our ranges correspond to values implied by P/NAV.

### SCENARIO-BASED SOTP DCF

#### SOTP valuation, \$ mln

Held for investment	142
In course of development	347
Held for development	276
PV of terminal value	0
<b>Total portfolio</b>	<b>765</b>
PV of corporate overheads	(328)
Debt implied tax shield	306
EV	744
Net debt	(1,275)
Minority interest	(27)
Fair equity value	<b>(558)</b>
Number of shares, mln	224
Fair equity value, \$ per share	-2.49
Market price, \$ per share	0.80
<b>Upside</b>	<b>-411.1%</b>

Source: Troika estimates

Given the complexity of Sistema-Hals' businesses, we use the SOTP DCF valuation approach in order to arrive at independent values of separable segments. In addition, this enables us to account for various risks that projects face depending on their level of completion by adjusting discount rates.

We directly calculate the cash flows from around 108 of the company's announced developments, applying the base-equity cost but attaching different risk premiums to Properties Held as Investment (PHI), Properties in the Course of Development (PCD) and remote projects classified as Properties Held for Development (PHD). As the base for our calculation, we use project-specific data from the appraiser's report wherever available, such as the gross and net retail areas, the percent and date of completion and costs incurred. We then make our own assumptions on remaining development costs and cost inflation.

We base our calculations on the real data provided in the company's portfolio report, such as completion dates and prices, which leads to jumps in figures and margins y-o-y. We believe that Sistema-Hals will, in fact, report different figures as the developer may monetize some of its unfinished projects

We discount the free cash flows through equity cost of financing and then add back the tax shield implied by the company's debt. We use different risk premiums depending on the status of the development projects, which returns costs of equity equal to 18.4% for PHI, 20.4% for PCD and 25.4% for PHD.

#### Real estate price growth by scenarios, y-o-y change

	2007	2008E	2009E	2010E	2011E	2012E
Pessimistic	20%	-20%	-30%	8%	7%	6%
Base	13%	0%	0%	8%	7%	6%
Optimistic	20%	20%	15%	10%	7%	6%

Source: Troika estimates

- To address the pricing risks, we use three possible price-behavior scenarios.
- The pessimistic scenario simulates our vision of a strong price correction in 2008-09, following the previous aggressive price growth in 1H08 and triggered by the increase in cost of financing in the commercial sector and the lower mortgage availability in the residential sector.
- In our pessimistic scenario, we assume that Sistema-Hals will freeze all of its unviable projects (projects with negative margins) and realize higher value.
- In our base case, prices grow at a rate slightly below ruble PPI inflation, as real estate in Russia largely serves as an inflationary hedge (except in 2008-09 where we assumed flat price scenario).
- Base prices and rental rates, we use 2008 prices (where available) as estimated by Cushman & Wakefield in its appraisal report. Otherwise, we use our own estimates.
- We assume that in the longer term, development costs will grow slightly ahead of prices, as we believe that prices are already high, while inflationary pressures in Russia remain strong.

#### Cost inflation in development, y-o-y

	2007	2008E	2009E	2010E	2011E	2012E
<b>Moscow</b>						
Panel	30%	8%	8%	8%	8%	8%
Monolith	30%	10%	10%	10%	10%	10%
Monolith economy	30%	10%	10%	10%	10%	10%
Parking	30%	10%	10%	10%	10%	10%
<b>Regions</b>						
Panel	30%	10%	10%	10%	8%	8%
Monolith	30%	12%	12%	12%	10%	10%
Monolith economy	30%	12%	12%	12%	10%	10%
Parking	30%	12%	12%	12%	10%	10%

Source: Troika estimates

- Our SOTP DCF model yields an EV of \$744 mln under our base case.
- Taking into account 1H08 net debt of \$1,275 mln, our estimate returns a negative fair equity value of \$558 mln, or negative \$2.50 per GDR.
- Our forecasts assume that Sistema-Hals will complete all of the spaces that it is developing; however, we reserve the view that the developer may monetize many of its non-core projects to raise funds. As revenues and EBITDA have no single trend due to the aforementioned, we do not make any EBITDA growth assumptions.
- For the sake of valuation, we assume that the company will monetize its rental space one year following the completion, or as indicated in the latest appraisal report, although it may as well choose to hold the assets for rental revenues.
- We also see the company remaining free cash flow negative until 2010 under our base case.

- We forecast cash flows up to 2020 in order to include the most remote projects.
- We make no assumptions on the terminal value of Sistema-Hals' development business, as the company has no plans to further feed its project pipeline.
- Finally, we allocate the portion of discounted negative cash flows from SG&A costs in order to account for corporate overheads.
- A noticeable difference in our valuation of the company's portfolio from that of the official appraisers is that we account for income tax, which is more accurate from an equity holder's point of view.

#### Sensitivity of base scenario, \$ per GDR

		Discount rate variation						
		-6.0%	-4.0%	-2.0%	0.0%	2.0%	4.0%	6.0%
Terminal growth rate	4.5%	-0.20	-1.07	-1.83	-2.49	-3.07	-3.58	-4.04
	4.0%	-0.20	-1.07	-1.83	-2.49	-3.07	-3.58	-4.04
	3.5%	-0.20	-1.07	-1.83	-2.49	-3.07	-3.58	-4.04
	3.0%	-0.20	-1.07	-1.83	-2.49	-3.07	-3.58	-4.04
	2.5%	-0.20	-1.07	-1.83	-2.49	-3.07	-3.58	-4.04
	2.0%	-0.20	-1.07	-1.83	-2.49	-3.07	-3.58	-4.04
	1.5%	-0.20	-1.07	-1.83	-2.49	-3.07	-3.58	-4.04

Source: Troika estimates

#### Sensitivity of asset pricing scenarios, \$ per GDR

		Discount rate variation				
		-2%	-1%	0%	1%	2%
Pessimistic		-10.45	-10.47	-10.49	-10.50	-10.51
<b>Base</b>		-1.83	-2.17	<b>-2.49</b>	-2.79	-3.07
Optimistic		6.04	5.41	4.81	4.24	3.71

Source: Troika estimates

Sistema-Hals' fair equity value is quite sensitive to price fluctuations, making the value of the company riskier in light of the current high-cost and high-price environment.

This, in conjunction with the financing risks, confirms our grounds for applying higher discount rates in addition to addressing the increasing risk-free rate and equity-risk premiums.

#### Discount rate calculation

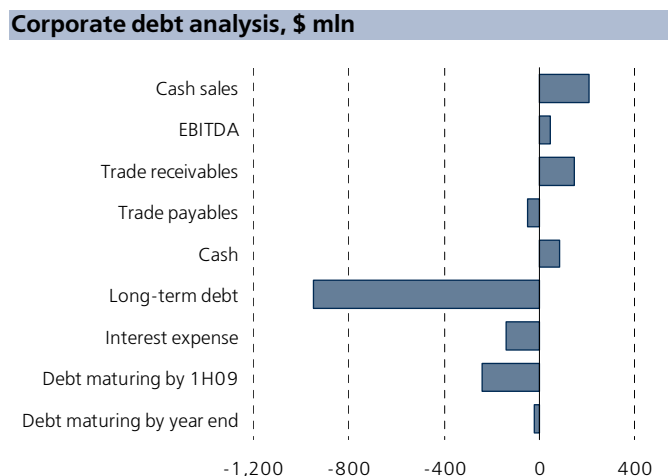
Risk-free rate	7.4%
Standard equity premium	7.0%
Base cost of equity	14.4%
Liquidity-risk premium	3.5%
Other-risk premium	0.5%
Financial risks	0%
<b>Cost of equity for PHI</b>	<b>18.4%</b>
Completion risks	1.0%
Mid-term financing risks	0.0%
Cyclicality-risk premium	1.0%
<b>Cost of equity for PCD</b>	<b>20.4%</b>
Execution risk	3.0%
Long-term financing risks	3.0%
<b>Cost of equity for PHI</b>	<b>25.4%</b>

Source: Troika estimates

#### FINANCIAL ANALYSIS

We are concerned with the developer's rapidly rising debt burden, which, in light of weak markets, increases the costs of financial distress for Sistema-Hals. As we lack sound guidance from the company on its financial policy to support its aggressive capex plans, we are afraid that it may rely too heavily on its parent's ability and commitment to conduct a bailout in the event of insolvency (over 20% of the developer's debt is already owned by related parties).

In 1H08, Sistema Hals' debt climbed more than 50% to \$1.3 bln. The modest cash flows from regular operations leave it with no other option but to monetize part of its non-core property (of which there is plenty), or borrow more in order to service debt. However, the sale of unfinished projects may become increasingly difficult in the near term because the market sees more forced sellers and fewer cash buyers.



Source: Troika estimates

Around 70% (\$700 mln) of Sistema-Hals' long-term debt belongs to a single lender, VTB. We view this as potential treat to the developer should credit conditions suddenly change for either the borrower or the lender.

We believe that the company has only \$15 mln left to refinance by year end (out of \$103 mln of short-term maturities as of end 2007), which compares poorly with the roughly \$240 mln to be refinanced by June 30, 2009, though. Given that the company is overleveraged and that the debt markets are tight, the risk premiums that Sistema may have to offer potentially could move the cost of new debt over the cost of equity.

All else being equal, the developer would need to commit around \$2.5 bln to its ambitious capex plans to launch all the commercial space that it currently has under development, and the bulk of the financing would have to be borrowed. We believe that this would lead it into a bigger trap along the road to value destruction. We would rather see the developer take very balanced steps in further investments, while monetizing any non-core assets in order to decrease interest payments.

#### COMPANY OVERVIEW

Sistema-Hals was established in 1994, when Sistema decided to spin its real estate assets off into a separate subsidiary. Since its foundation, the developer has successfully completed more than 30 projects with a total area of around 300,000 m<sup>2</sup>.

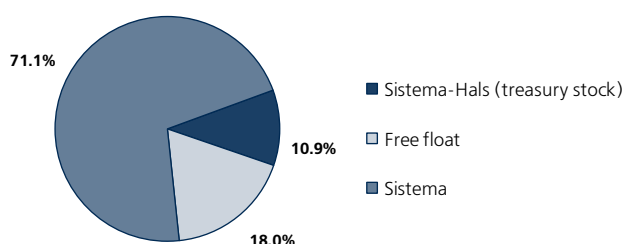
We believe that 1H08 was remarkable as a new positive start for the company. Following the appointment of a professional CEO, Sistema-Hals announced plans to build a professional management vertical and horizontal. In due course, it plans to create a professional project management team in which each project manager will be responsible for three or four development projects. Also in 1H08, Sistema-Hals acquired its main subcontractor, having retained the owners at the top management. This vertical integration was aimed to increase control over costs and execution, rather than to capture any additional margin. The company still subcontracts via third-party developers in order to achieve its aggressive development plans.

The appointment of a professional CEO is likely to mean a new positive start in building a transparent corporate structure with a professional management vertical and horizontal.

#### IPO, STOCK PERFORMANCE AND SHAREHOLDER STRUCTURE

Sistema-Hals went public in May 2006 and was listed on the LSE, where the company placed around 18.0% of its post-IPO common stock and raised a total of \$396 mln. Sistema owns 71.1% of Sistema-Hals. Shortly after the IPO, the share price was badly suppressed by negative sentiment after \$100 mln in stock compensation to the management was announced. Since the IPO, the stock has lost more than 93%.

### Ownership structure



Source: Company

We estimate that VTB should now hold over 80% of Sistema-Hals's shares (70% is Sistema's stake and 10% are the treasury shares) as a pledge against \$500 mln plus \$200 mln in long-term loans given to Sistema-Hals. At the stock's highs, the initial collateral (25 mln GDRs pledged by Sistema plus 13.4 mln treasure shares) covered only \$400 mln of the debt, while the full 80% stake of Sistema-Hals can now barely cover \$130 mln. To our best understanding, VTB has not monetized the collateral, which suggests that Sistema might have provided additional guarantees, or the shareholders of Sistema-Hals have to watch out for adverse capital restructuring.

### BUSINESS MODEL

Sistema-Hals still seems to be in a state of transition, looking for an optimal business model and finalizing its future strategy. The company's strength and value-added lies in the redevelopment of promising commercial real estate in lucrative spots in Moscow, as well as one large project in St Petersburg. That said, Sistema-Hals is a niche play with few potential threats from competition. It is not building up a future pipeline, which may entail transformation into a property manager soon after 2011.

The company was created as a manager for Sistema's real estate assets and so far lacks a self-sustaining business model and independent strategy, and the asset division between parent company and subsidiary has often been unclear. Sistema-Hals has done some real estate development, project and construction management, asset management and facility management, mainly for the parent holding. The MGTS local offices make up the bulk of assets under Sistema-Hals' management.

Since the start of 2008, the company has been undergoing a major strategic restructuring with an aim to become a full-scale independent player on the market. As a principal stage, this involves a clear division of ownership in MGTS' offices and the standardization of the company's portfolio through the divestiture of non-core projects.

Sistema-Hals remains a high-cost and high-price niche play, but is rather well defended due to the low availability of development sites that could directly compete with its projects. Since 1H08, it has executed part of its construction orders in-house and outsourced the rest to catch up with its aggressive completion targets.

While the developer has a few upscale residential projects in Moscow, its main focus remains the redevelopment of numerous MGTS offices in promising parts of Moscow into Class B office space. We believe that it might overstretch itself trying to complete all the commercial space by 2011 with overall required investment of around \$2.5 bln. Part of the financing could be raised through the sale of non-core but lucrative small projects, which make up the bulk of Sistema-Hals' property portfolio.

Sistema-Hals intends to retain the bulk of its commercial space upon completion, and has not announced any plans to invest in a future pipeline. Under this scenario, in few years it will transform into a property management company and in due course waste its value as a developer.

Looking at Russian real estate, we think that there is still huge potential that Sistema-Hals could use from its primary segment of focus, namely upscale residential and commercial projects. A benefit to the company is its solid track record of completed projects that the market knows about. Thus, a considerably large investment program of \$2.5 bln through 2010 is justified by the developer's growth strategy.

## PROPERTY PORTFOLIO

Sistema-Hals has an extensive and diversified portfolio that includes 103 projects in premium segments located in Moscow and nine other cities throughout Russia and Ukraine.

The current structure of its portfolio is subject to strategic changes that the company plans to implement by 2012. Currently, the portfolio includes a significant portion of what we consider non-core projects, mainly consisting of MGTS retail outlets. These properties constitute mostly old commercial real estate stock that needs renovation and are owned jointly with the parent company, which allows Sistema-Hals to undertake the renovation of this stock and keep some MGTS offices to sell to third parties.

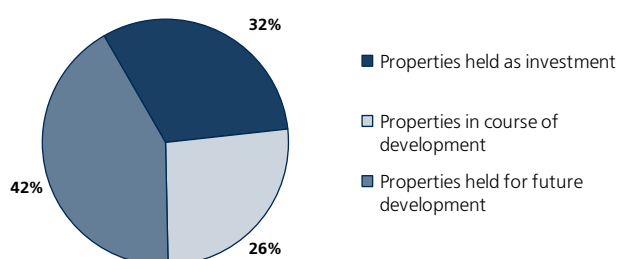
We believe that the portfolio's transformation will create a number of benefits for the developer. Namely, the company will reduce the share of non-core projects in the portfolio to one fourth of the current number, replacing them with prime office and retail projects. This could help it build a positive image in the commercial real estate sector as an independent developer instead of as Sistema's subsidiary working on old stock. The company will also have a chance to turn a decent profit by cashing out from small projects instead of trying to maintain them. Current market practice shows that selling average-sized Class B office premises in Moscow can be supported by almost unlimited demand regardless of their location.

Generalizing the long-term portfolio approach, we think that Sistema-Hals has chosen effective benchmarks for selecting projects to develop and maintain. The company plans to focus on properties larger than 30,000 m<sup>2</sup> with unleveraged IRR greater than 20%. These two indicators mean that it plans to look only at projects with high enough development margins, avoiding relatively low-margin construction projects. With that, the size focus of the projects evidences that in addition to the existing stock, Sistema-Hals will need to maintain a sufficient land bank to locate such projects, which implies high land costs.

Overall, we think that a new strategic focus on the portfolio will in the long run prove an effective solution and positively impact the portfolio's total value.

Sistema-Hals had almost doubled the size of its portfolio by mid-2007, bringing the total number of projects to 103. There are currently 33 projects in the course of development, 46 properties held for future development and 24 held for investment. The first two groups are currently the biggest in terms of associated market value, while projects held for future development account for almost half of the portfolio in terms of GBA.

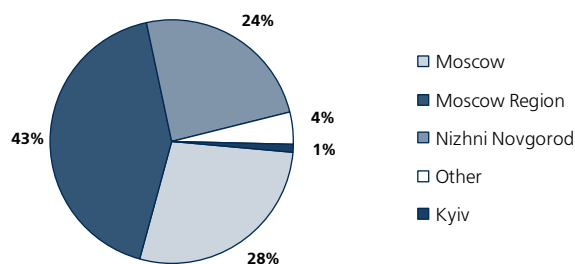
### Portfolio structure by investment stage



Source: Cushman & Wakefield, Troika estimates

Sistema-Hals' portfolio is heavily weighted towards Moscow (28%) and Moscow Region (43%). However, following the addition of a project with 2.4 mln m<sup>2</sup> of GBA in Nizhni Novgorod, the total portfolio by area has suddenly become mostly regional.

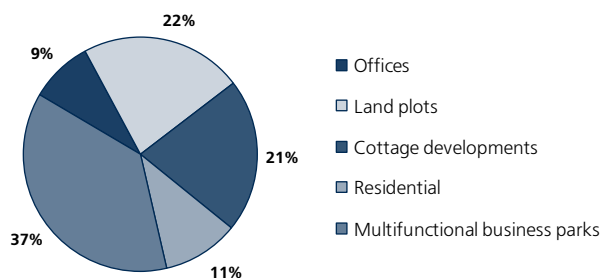
### Portfolio structure by geography



Source: Cushman & Wakefield, Troika estimates

Commercial real estate currently dominates the portfolio structure with 46% attributed to office premises and multifunctional business parks. Residential projects account for one fifth of the portfolio with almost equal distribution between apartment houses and cottage developments. We want to point out that the company has a considerably large land bank of 21 ha, or 22% of the land portfolio.

### Portfolio structure by property type



Source: Cushman & Wakefield, Troika estimates

Sistema-Hals IFRS financials, \$ mln							
	2006	2007	2008E	2009E	2010E	2011E	2012E
<b>INCOME STATEMENT</b>							
<b>Revenues</b>	<b>283</b>	<b>452</b>	<b>327</b>	<b>296</b>	<b>797</b>	<b>2,768</b>	<b>3,159</b>
COGS	(158)	(237)	(195)	(165)	(377)	(1,057)	(1,170)
Gross income	125	215	131	131	420	1,711	1,990
Gross margin	44.2%	47.5%	40.2%	44.2%	52.7%	61.8%	63.0%
SG&A	(42)	(167)	(66)	(75)	(88)	(123)	(134)
<b>EBITDA</b>	<b>90</b>	<b>64</b>	<b>74</b>	<b>114</b>	<b>341</b>	<b>1,598</b>	<b>1,867</b>
<b>Adjusted EBITDA</b>	<b>90</b>	<b>64</b>	<b>74</b>	<b>114</b>	<b>341</b>	<b>1,598</b>	<b>1,867</b>
EBITDA margin	31.9%	14.1%	22.6%	38.6%	42.7%	57.7%	59.1%
DD&A	(7)	(15)	(2)	(2)	(2)	(2)	(2)
EBIT	83	49	72	113	339	1,596	1,865
Interest income	(3)	1	(137)	(229)	(328)	(352)	(333)
Forex gain	(2)	17	—	—	—	—	—
Other gains	2	(2)	—	—	—	—	—
Pre-tax income	78	67	(64)	(116)	11	1,244	1,532
Income tax	(16)	(16)	16	29	(3)	(311)	(368)
Minority interest	(8)	(14)	—	—	—	—	—
Exceptionals	—	—	—	—	—	—	—
<b>Net income</b>	<b>56</b>	<b>35</b>	<b>(48)</b>	<b>(87)</b>	<b>8</b>	<b>933</b>	<b>1,164</b>
<b>Adjusted net income</b>	<b>16</b>	<b>(21)</b>	<b>(48)</b>	<b>(87)</b>	<b>8</b>	<b>933</b>	<b>1,164</b>
Net margin	5.7%	(4.6%)	(14.8%)	(29.5%)	1.1%	33.7%	36.8%
<b>EPS, \$</b>	<b>0.10</b>	<b>(0.09)</b>	<b>(0.22)</b>	<b>(0.39)</b>	<b>0.04</b>	<b>4.16</b>	<b>5.19</b>
<b>Adjusted EPS, \$</b>	<b>0.10</b>	<b>(0.09)</b>	<b>(0.22)</b>	<b>(0.39)</b>	<b>0.04</b>	<b>4.16</b>	<b>5.19</b>
<b>BALANCE SHEET</b>							
<b>Assets</b>							
Cash and equivalents	262	45	122	125	173	788	1,660
Receivables	74	272	212	197	437	1,378	1,565
Inventories	436	986	1,011	1,344	1,347	953	1,190
Other current assets	10	33	31	29	52	127	139
Total current assets	781	1,337	1,377	1,695	2,009	3,246	4,554
Total non-current assets	121	418	880	1,418	2,239	2,081	2,192
Total assets	902	1,755	2,256	3,113	4,248	5,326	6,745
<b>Liabilities</b>							
Short-term borrowings	363	103	203	403	403	403	403
Payables	33	58	48	41	93	260	437
Other current liabilities	31	79	110	132	172	212	262
Total current liabilities	427	241	361	576	668	875	1,102
Long-term borrowings	15	875	1,275	2,075	3,075	2,875	2,875
Other non-current liabilities	47	64	93	22	57	195	223
Total non-current liabilities	62	939	1,367	2,097	3,132	3,070	3,097
Total liabilities	490	1,179	1,729	2,672	3,800	3,944	4,200
Minority interest	19	27	27	27	27	27	27
Equity	412	576	528	440	449	1,382	2,546
Total liabilities and equity	902	1,755	2,256	3,113	4,248	5,326	6,745
<b>Net debt/(cash)</b>	<b>116</b>	<b>932</b>	<b>1,355</b>	<b>2,353</b>	<b>3,305</b>	<b>2,490</b>	<b>1,618</b>
<b>CASH FLOW STATEMENT</b>							
<b>Net income</b>	<b>56</b>	<b>35</b>	<b>(48)</b>	<b>(87)</b>	<b>8</b>	<b>933</b>	<b>1,164</b>
Minority interest	(8)	(14)	—	—	—	—	—
DD&A	(7)	(15)	(2)	(2)	(2)	(2)	(2)
Working capital change	33	(208)	34	(307)	(113)	(745)	(412)
Other assets change	27	52	61	(56)	127	345	255
<b>Operating cash flow</b>	<b>41</b>	<b>(161)</b>	<b>54</b>	<b>(442)</b>	<b>33</b>	<b>543</b>	<b>1,019</b>
Maintenance capex	(3)	(9)	(8)	(8)	(9)	(10)	(10)
Expansionary capex	(145)	(713)	(542)	(555)	(832)	158	(122)
Other investments	(104)	116	36	9	(144)	124	(15)
<b>Investing cash flow</b>	<b>(253)</b>	<b>(606)</b>	<b>(514)</b>	<b>(555)</b>	<b>(985)</b>	<b>272</b>	<b>(147)</b>
Change in debt	70	557	537	1,000	1,000	(200)	—
Dividends paid	(4)	(5)	—	—	—	—	—
Share issues/(purchases)	392	(3)	—	—	—	—	—
Other	—	—	—	—	—	—	—
Financing cash flow	458	550	537	1,000	1,000	(200)	—
Forex effects	5	1	—	—	—	—	—
<b>Net change in cash</b>	<b>252</b>	<b>(217)</b>	<b>77</b>	<b>3</b>	<b>48</b>	<b>615</b>	<b>872</b>
<b>RATIOS</b>							
P/E	7.6	neg	neg	neg	20.1	0.2	0.1
EV/EBITDA	3.2	17.4	20.8	22.2	10.2	1.7	1.0
P/BV	0.3	0.3	0.3	0.4	0.4	0.1	0.1
ROE	3.9%	neg	neg	neg	1.9%	67.5%	45.7%
ROIC	1.7%	neg	neg	neg	neg	14.3%	15.6%
Dividend per share, \$	0	0	0	0	0	0	0
Dividend yield	—	—	—	—	—	—	—
P/S	0.6	0.4	0.5	0.6	0.2	0.1	0.1
P/CF	2.9	neg	3.1	neg	5.2	0.3	0.2
Revenue growth	—	60%	-28%	-9%	169%	247%	14%
EBITDA growth	—	-30%	16%	55%	198%	369%	17%
EPS growth	—	n/m	n/m	n/m	n/m	11,021%	25%

Source: Company, Troika estimates



Common	RTMC RU
Recommendation	HOLD
Mid price	\$0.63
Target price	\$0.95
Upside	52%
Free float	29%

Market cap	\$88 mln
Enterprise value	\$511 mln
ADT, 100 days	< \$0.1 mln

Prices as of October 9, 2008

### Key data

	2006	2007	2008E	2009E
<b>Financials (IFRS), \$ mln</b>				
Revenues	16	59	76	96
EBITDA	5	31	42	57
EBIT	5	31	40	55
Net income	126	115	123	69
EPS, \$	0.07	0.11	(0.09)	(0.22)
<b>Profitability</b>				
EBITDA margin	31%	53%	55%	59%
EBIT margin	30%	52%	53%	57%
Net margin	62%	27%	-17%	-32%
<b>Price ratios</b>				
P/S	5.5	1.5	1.2	0.9
EV/EBITDA	61.1	12.3	12.3	15.5
P/E	8.9	5.6	neg	neg
P/CF	1.9	neg	neg	neg
<b>Growth</b>				
Revenues	–	269%	29%	27%
EBITDA	–	522%	34%	36%
EPS	–	61%	n/m	n/m

### Price performance, %

	1 mo	3 mo	6 mo	YTD
Common	-30.9	-66.5	-72.1	-78.8
Relative to RTS	9.1	-13.3	-29.6	-42.6

### Price performance, \$



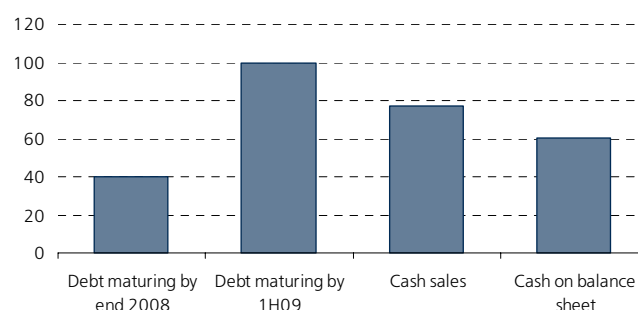
Source: Bloomberg, Troika Dialog

## RTM Cashing Out

**We are reinitiating coverage of RTM with a target price of \$0.95 per share. On the back of a solid operating performance, the developer's long-term growth is ensured by regional diversification, though it is undermined by tightening financial markets and high leverage in the medium term. The company is now trading with an 85% discount to its NAV, and considering the dilution risks, we believe that the current market weakness creates a meager risk/reward position in the longer term.**

- The bearish real estate market and increased perception of risk have caused a major correction in RTM's stock, though the developer's operating performance was unaffected.
- About three quarters of RTM's projects portfolio is already income generating, which gives it a real NAV. However, the company has significant short-term funding risks.
- At today's EV, RTM is valued just at \$2,000/m<sup>2</sup> of completed retail space, and we believe that monetizing these assets and distributing the cash to shareholders returns the highest value to them.
- The emergence of a new, deep-pocketed shareholder at RTM may bring the developer more funding, which, however, will increase the risk of dilution of existing shareholders.
- A simple business model and prudent expansion strategy, custom-made for anchor tenants, largely mitigates the underperformance risks of RTM's new projects. The company has a well-diversified regional portfolio, which positions itself along strong macroeconomic growth in Russia, while requiring lower entry costs than in Moscow.
- While demand for quality retail space remains lofty, translating into high occupancy rates, we are afraid that regional properties will be the first to feel the downward pressure of the slowdown.
- Staying alert to financing and dilution risks in light of the liquidity crisis and RTM's generally high debt load, we have added 400 bps to our standard risk-free rate and equity premium and 350 bps to the company-specific premium in our scenario-based SOTP DCF valuation. As a reflection of high challenges and uncertainties, we derive a wide valuation range of \$0.50-0.97 per share. We have a HOLD recommendation on the stock and a 12-month target price of \$0.95 per share.

### Cash reserves and short-term debt breakdown



Source: Troika Dialog estimates

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## Target price revision

We reinstate coverage of RTM with a 12-month target price of \$0.95 per share and a HOLD recommendation. In light of the increasing insolvency risks in the sector, we remain cautious on the developer's high debt load, which effectively increases the dilution risks for shareholders and undermines their ability to realize the full upside embedded in the project portfolio. However, we like the RTM's simple and well-tested business model, which combines strong operating performance and expansion capacity, subject to sufficient funding. RTM is overleveraged and has significant STD refinancing risks. On a 12-month horizon, we assign the stock a wide valuation range of \$0.50-0.97 per share, which takes into account the medium-term uncertainties over financing costs and the downward trends on the global real estate market. We use higher discount rates to address the increasing risk-free rate and equity-risk premiums. Through a scenario-based SOTP approach, we consider the higher execution risks for the company's remote projects, and use three pricing scenarios.

## TRIGGERS

- We expect stronger demand for RTM shares along with the emergence of a deep-pocketed strategic investor (a Siberian Cement shareholder affiliate). The fact that the Siberian Cement shareholder took over the executive position at RTM supports our view that the former's shareholders are going to eventually win the majority stake in the latter, most probably via purchases at the upcoming rights issue in September 2008.
- A strategic investor at RTM would mean more cash to accelerate the value-added completion of the developer's projects and stronger lobby for its interests in general.
- RTM still seems to be feeling the pain of a shareholder dispute, which we believe to be another factor depressing the stock. Again, the emergence of a new strategic investor could gradually improve the situation.
- Following global correction the stock is trading at a deep discount to its NAV. As the current high perception of risk makes it more volatile, we believe that the stock has room for growth from its very low position, should risk perception improve.

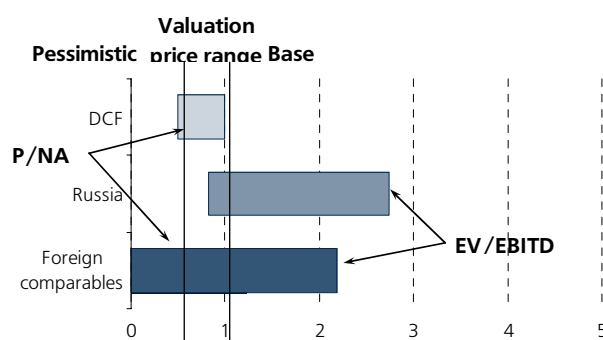
## RISKS

- Considering the tightening debt markets, we remain cautious about the increased insolvency risks for the company, which remains highly leveraged.
- As RTM's 2008E EBITDA can barely cover its interest expense, the company has little room for refinancing its short term debt at significantly higher interest rates. As of January 1, RTM reported around \$80 mln in short term maturities, around half of which the company still has to refinance by year end, we believe.
- The rights issue expected to commence in October, which will increase supply of a regularly illiquid stock to an open public, could trigger a technical correction if the rights are to be offered at a further discount to market. Purchases from a new strategic investor may offer some support, in our view.
- As of November 2007, RTM shareholders had some 75% of the company's shares pledged at banks. Given that those banks by now have their representatives on RTM's BoD, we believe that roughly half of this stake still remains with the banks. In light of weak stock prices, we point to the risk that those shares may hit the market following a margin call and further reduce the stock price.
- As RTM is highly leveraged, the appearance of a deep-pocketed investor could lead to further equity injections, which then generally increases the risk of dilution for minority shareholders, as the stock is trading at its very lows.
- Commercial and residential property values (currently at a high) may decline amid forced selling, rising refinancing rates and stagnating incomes.

## Valuation

We view SOTP DCF as the most objective tool for fair value appraisal. With that in order to obtain a consensus of income and comparison approaches to valuation, we reconcile results from multi-scenario DCF with ranges calculated from P/NAV and EV/EBITDA multiples' analysis of Russian and foreign peers. In order to arrive at our valuation range we've used the overlap intervals of both multiples with DCF figures. Considering high financing risks, we set our target price at \$0.95 per share.

### Implied valuation range, \$ per share



Source: Bloomberg, Troika estimates

On the strong side, we stress that the larger part of RTM's fundamental value is based on real cash flows rather than on promises, which sets the company above most of its peers. We also note that RTM's large discount to its NAV may not be justified if we take into account that three quarters of its NAV is contributed from income-generating, liquid rental facilities. However, we keep in mind that the company's high leverage imposes higher dilution and insolvency risks.

Comparing with peers on EV/EBITDA implies significantly lower value ranges for RTM than those derived from DCF and P/NAV, which is especially true with Russian comparables. This discount can be explained by the fact that we have excluded any gains from property revaluation, thus decreasing RTM's 2008 EBITDA forecast. Also, Russian comparables are strongly influenced by PIK Group's EBITDA, which is large due to its massive property sales. Because of RTM's high net debt figure, the difference increases when we deduct the net debt to arrive to the implied capitalization.

RTM is trading at significant discounts to its western comparables on EV/EBITDA, which is a function of both the falling operating margins of western peers and higher EM multiples (excluding Russia).

The top of the range comes from P/NAV comparison, which needs to be discounted for dilution risks.

Considering the above, we set our 12-month target price at \$0.95 per share. As a reflection of high challenges and uncertainties, we derive a wide valuation range of \$0.50-0.97 per share, where our lower end lies in between the ranges implied by Russian EV/EBITDA comparables, and the top end corresponds to the fundamental value implied by our SOTP DCF valuation under our base scenario, at a discount to the value implied by a P/NAV comparison.

### SCENARIO-BASED SOTP DCF

#### SOTP valuation, \$ mln

Held for investment	503
In course of development	(58)
Held for development	0
Terminal value	115
<b>Total portfolio</b>	<b>561</b>
PV of corporate overheads	(115)
Debt implied tax shield	0
<b>EV</b>	<b>445</b>
Net debt	(300)
Minority interest	
Fair equity value	<b>145</b>
Number of shares mln	140
Fair equity value, \$ per share	1.04
Market price, \$ per share	0.91
<b>Upside</b>	<b>14.0%</b>

Source: Troika estimates

We use a SOTP DCF valuation to arrive at independent values for separable segments. In addition, this enables us to account for various risks that projects face, depending on their level of completion, by adjusting discount rates.

We directly calculate the cash flows from around 56 of the company's announced developments, applying the base-equity cost but attaching different risk premiums to Properties Held for Investment (PHI), Properties in the Course of Development (PCD) and remote projects classified as Properties Held for Development (PHD). As the base for our calculation, we use project-specific data from the appraiser's report wherever available, such as the gross and net retail areas, the percent and date of completion and costs incurred. We then make our own assumptions on remaining development costs and cost inflation.

We discount the free cash flows via the equity cost of financing and then add back the tax shield implied by the company's debt. We use different risk premiums depending on the status of the development projects that returned costs of equity equal to 17.4% for PHI, 18.4% for PCD and 23.4% for PHD.

#### Real estate rent rates growth scenarios, y-o-y change

	2007A	2008E	2009E	2010E	2011E	2012E
Pessimistic	20%	0%	0%	8%	7%	7%
Base	13%	13%	11%	8%	7%	7%
Optimistic	20%	20%	20%	20%	7%	7%

Source: Troika estimates

- The pessimistic scenario simulates our vision of a strong price correction in 2008-09, following the previous aggressive price growth in 1H08 and triggered by the increase in cost of financing in the commercial sector and the lower mortgage availability in the residential sector.
- However, we believe that rental rates will show limited downside, and that the price correction in commercial real estate, which is a function of rental and cap rates, will be due to increasing cap rates.
- In our pessimistic scenario, we assume that RTM would freeze all of its non-viable projects (those with negative margins) and realize higher value.
- In our base case, rent rates grow at a rate slightly below ruble PPI inflation, as real estate in Russia largely serves as an inflationary hedge (except 2008-09 where we assumed flat price scenario).
- We use 2008 prices as estimated by Colliers International in its appraisal report as base prices and rental rates. Otherwise, we use our own estimates.
- We assume that in the longer term, development costs will grow slightly ahead of prices, as we believe that prices are already high, while inflationary pressures in Russia remain strong.

#### Cost inflation in development, y-o-y

	2007A	2008E	2009E	2010E	2011E	2012E
<b>Moscow</b>						
Panel	30%	8%	8%	8%	8%	8%
Monolith	30%	10%	10%	10%	10%	10%
Monolith economy	30%	10%	10%	10%	10%	10%
Parking	30%	10%	10%	10%	10%	10%
<b>Regions</b>						
Panel	30%	10%	10%	10%	8%	8%
Monolith	30%	12%	12%	12%	10%	10%
Monolith economy	30%	12%	12%	12%	10%	10%
Parking	30%	12%	12%	12%	10%	10%

Source: Company, Troika estimates

- Our DCF model yields an EV of \$445 bln under our base case.
- Adding our expectations of 1H08 net debt of \$300 mln, our estimate returns a fundamental value of \$145 mln, or \$1.00 per share.
- Our forecasts assume that RTM will complete all of the space that it has announced. As revenues and EBITDA have no single trend due to the aforementioned, we do not make any EBITDA growth assumptions.
- We also see the company remaining free cash flow negative until 2010 under our base case.
- We forecast cash flow through 2020 to include the most remote projects. To account for the terminal value added by RTM's recurring development business, we assume post-forecast cash flow generated by the annual completion of 0.25 mln m<sup>2</sup> of net retail space at a price of \$5,000 m<sup>2</sup> and a 30% gross margin.

- For the sake of valuation we assume that the company will monetize its rental space by 2020, or as indicated in the latest appraisal report. However, RTM may choose to hold assets for rental revenues.
- Finally, we allocate the portion of discounted negative cash flows from SG&A costs in order to account for corporate overheads.
- A noticeable difference in our valuation of the company's portfolio from that of the official appraisers is that we account for income tax, which is more accurate from an equity holder's point of view.

#### Sensitivity of our base case, \$ per share

		Discount rate						
		-6%	-4%	-2%	0.0%	2%	4%	6%
Terminal growth rate	4.5%	4.00	2.82	1.86	1.08	0.44	-0.09	(0.53)
	4.0%	3.96	2.79	1.84	1.07	0.43	-0.10	(0.54)
	3.5%	3.92	2.76	1.82	1.05	0.42	-0.10	(0.54)
	3.0%	3.88	2.73	1.80	1.04	0.41	-0.11	(0.55)
	2.5%	3.84	2.70	1.78	1.02	0.40	-0.12	(0.55)
	2.0%	3.81	2.67	1.76	1.01	0.39	-0.12	(0.56)
	1.5%	3.77	2.65	1.74	1.00	0.38	-0.13	(0.56)

Source: Troika estimates

#### Sensitivity of asset pricing scenarios, \$ per share

		Discount rate				
		-4%	-2%	0%	1%	2%
Pessimistic		0.33	(0.35)	(0.89)	(1.12)	(1.32)
<b>Base</b>		2.73	1.80	1.04	0.71	0.41
Optimistic		4.43	3.32	2.41	2.01	1.64

Source: Troika estimates

As most of its cash flows are based on real rental revenues, RTM's fundamental equity value has limited exposure to real estate price fluctuations under the aforementioned assumptions. However, the developer's equity value still remains sensitive to changes in the costs of equity, as holding all the commercial space for rental revenues, in accordance with the developer's business model, still pushes back cash flows in the future.

In addition to the base cost of equity, which we apply to our entire peer group, we apply a 350 bps risk premium to address the near-term financing and dilution risks.

#### Discount rate calculation

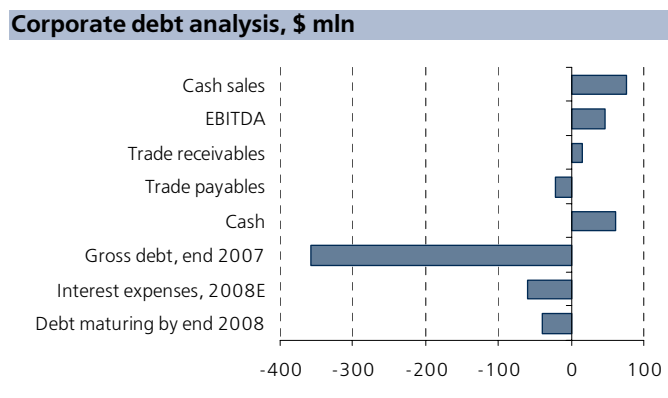
Risk-free rate	7.4%
Standard equity premium	7.0%
Base cost of equity	14.4%
Liquidity-risk premium	1.0%
Other risk premium	2.0%
Financial risks	0%
<b>Cost of equity for PHI</b>	<b>17.4%</b>
Completion risks	1.0%
Mid-term financing risks	0.0%
Cyclicality risk premium	0.0%
<b>Cost of equity for PCD</b>	<b>18.4%</b>
Execution risk	3.0%
Long-term financing risks	3.0%
<b>Cost of equity for PHI</b>	<b>23.4%</b>

Source: Troika estimates

#### FINANCIAL ANALYSIS

In light of the liquidity crisis, we have become increasingly concerned over RTM's ability to carry over and service its debt. The developer's debt standing, which was out of the safety zone even during good market conditions, is now very fragile. At a 2008E EBITDA of below \$50 mln, the company must service around \$130 mln in short-term maturities and some \$55 mln in interest expenses, we estimate. RTM's operating cash flows are inferior to interest payments, meaning it has either to regularly sell assets or borrow more in order to avoid defaulting on its monthly/quarterly interest payments. This makes the developer very vulnerable to any changes in rental rates or loss of occupancy rates.

We lack any breakdown on the company's debt to make more accurate calculations; however, given that we are already in the last quarter, we expect RTM to have redeemed or refinanced over 60% of its short-term dues by now. Thus, we estimate the developer's year-end dues, including interest, at around \$55 mln.



Source: Troika estimates

We believe that RTM has been in negotiations to realize some of its smaller assets since the beginning of the summer, and the upcoming rights issue may bring roughly \$65 mln in proceeds by end October. In addition, bridge financing may be provided on an ad-hoc basis by the new strategic investor.

In order to meet its capital investment program, RTM would need to increase its net debt. The company carries high credit risks and needs to decrease its leverage, the sooner the better, we believe.

That said, RTM could potentially redeem all its debt under stronger market conditions. The developer has around 75% of its retail projects operating and fully let, proceeds from the sale of which could possibly cover the existing debt and the capex requirements for the next two years.

#### COMPANY OVERVIEW

RTM was incorporated in 2005 by Georgy Trefilov and Eduard Vyrypaev, the beneficiaries of Marta Holding and Vremya Group, respectively, to consolidate their real estate businesses. It received a quick start thanks to the transfer of Grossmart's operational retail space (Marta Holding's asset) to RTM, while the Vremya Group contributed a full-scale development wing with strong regional exposure.

Formerly a chain of small and average-size department stores, today RTM develops large retail and mixed-use projects. It performs the entire development cycle from concept designing to property management. The company has a long history of collaboration and supervising their subcontractors. Through its in-house capacity for screening and securing land plots, RTM is continually filling its future pipeline.

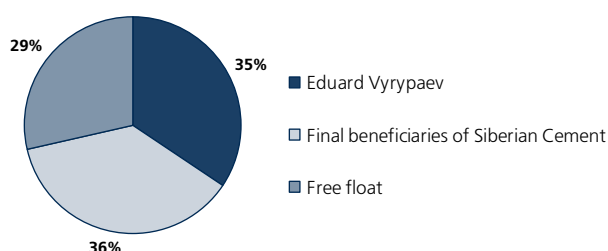
Going forward, RTM plans to retain its focus on developing retail and entertainment centers in high-growth regional centers. The company remains the only pure play retail space developer with full-scale regional diversification. It has a few lucrative regional mixed-use development projects, which we believe could add significant value given the company's reputation in the development of entertainment centers. However, funding remains the main bottleneck for overleveraged RTM. We believe that the recently announced emergence of a new deep-pocketed strategic investor (structures affiliated with Siberian Cement shareholders) could mean more opportunities to secure necessary funding. In addition, RTM could monetize all or part of its retail space under operation, which would then boost its future projects and allow it to reach its full value as a professional developer.

#### IPO, STOCK PERFORMANCE AND SHAREHOLDER STRUCTURE

RTM completed an IPO in May 2007, placing 28.6% of its post-offer common shares for \$2.30 apiece and raising \$92 mln to bring its market cap to \$322 mln. The company garnered some \$88 mln in net proceeds. Since the IPO, the stock has lost more than 67%, in line with the general decline in Russian developers.

RTM is planning a rights issue for 87.8 mln shares that will account for roughly 38.3% of the increased charter capital. The price for the rights issue is expected to come at a discount to its market price.

At present, RTM's key beneficiary is Vyrypaev, whose current stake in the company is 71.4%. He doubled his stake by buying shares from Marta Holding (which until then was the second largest shareholder) in 1Q08. The remaining 28.6% of shares are in free float, distributed among institutional investors and other minority shareholders. According to the company's recent announcement, shareholders of Siberian Cement may have purchased a 35.7% stake in RTM from its majority shareholder.

**RTM shareholder structure**

Source: Company

As of November 2007, RTM shareholders had about 19% of the company's shares pledged at Kit Finance and over 55% at UralSib Bank (in total a majority shareholder's stake in RTM), allegedly under repo agreement. UralSib Bank now has two directors on RTM's board and Kit Finance has one. We believe that the new strategic investor has bought up to a 40% stake in RTM out of those shares pledged at banks. We have no information that any of the banks have monetized the shares thus far. Under the most likely scenario, Siberian Cement affiliates will be the buyer's of RTM shares, which still remain with the aforementioned banks.

**BUSINESS MODEL**

RTM is a pure play developer and site manager with a good balance of regional property in its portfolio. The company's primary focus is developing retail and entertainment centers in the central locations of large Russian cities. The fact that RTM has emerged from the regions perhaps makes it the best positioned to capture the higher growth of regional markets. The developer also faces lower entry barriers due to higher availability and lower cost of land in regional centers. The strategy to develop the space under its anchors largely ensures return on RTM's investments.

Compared with its vertically integrated peers, RTM today foregoes increasing construction margins and feels higher inflationary pressure and supply risks. The tradeoff is that excluding rental spaces, the developer's fixed costs are limited to adjustable administrative overheads, and thanks to the fact that most of its projects are already cash flow positive, the company reserves the option of freezing its growth and surviving in the medium term, should the Russian real estate market turn bearish as the western markets have.

RTM's strategy to develop and retain is gradually increasing its momentum and brand visibility in the market, which we believe supports the developer's leverage over its anchors. On the flip side, such a strategy entails very long (eight to nine years) cash-back periods, and it is a scarcity of cash that is holding RTM back from adding value through further developments.

Over the next several years, RTM plans to continue sourcing new projects in the pure retail property segment, including shopping and entertainment centers. In our view, its portfolio growth should be underpinned by the regional expansion of its key tenants, such as Real (METRO Group), Media Markt, Billa (REWE Group), Tekhnosila, Banana Mama and others. RTM normally sets up new developments in conjunction with those retailers that suggest new cities to tap into, help with property design specification and pre-lease floor spaces at early development stages.

Besides shopping centers, RTM's recently announced strategy envisages shifting toward more sophisticated, capital-intensive projects, including integrated residential schemes with conceptualized anchor shopping malls and mixed-use developments (including hotels, offices and leisure areas). In our view, tapping into new niches should help RTM leverage its extensive experience in commercial real estate and regional expertise, increasing its business flexibility and strengthening its competitive edge in the medium to long term. On the other hand, navigating through new, sophisticated niches entails higher execution risk and will stretch managerial resources.

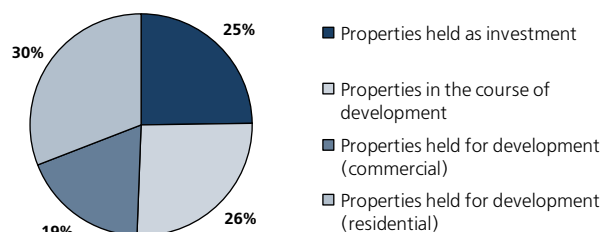
Another important consideration is financing, as the capital requirements of new concept developments (some \$250 mln per mixed-use project and up to \$2 bln per integrated residential complex) seems excessive for the overleveraged company. That said, we expect RTM's foray into both types of new projects to be done in conjunction with other major developers and/or co-investors that will bring the necessary expertise and financing to the table.



## PROPERTY PORTFOLIO

RTM's existing development portfolio includes 56 projects with around 558,600 m<sup>2</sup> of gross area (376,200 m<sup>2</sup> of net selling area), located in the regions and Moscow area. Of these, 47 projects comprise investment property and nine projects are in various development stages.

### Portfolio breakdown by project status



Source: Troika estimates

The portfolio is focused on retail and entertainment property, and includes multifunctional shopping malls and standalone stores. Retail premises comprise 69.4% of the total existing portfolio valuation. The share of retail property in the company's portfolio has relatively decreased with the introduction of a residential project in Bryansk. However, taking into account RTM's retail focus, we believe that the company is a pure play in the retail segment, which we view as one of the most promising on Russia's real estate market. Moreover, we view RTM as an alternative way to play the buoyant Russian retail market, and, in particular, its non-food segment, which we expect to outpace food retail in the coming years, and which remains underrepresented on the stock market.

In addition to retail property – which we expect to remain RTM's key exposure in the medium term – the company has relatively low, albeit increasing, exposure to residential housing. In particular, as part of its project held for development in Bryansk, RTM plans to build 250,000 m<sup>2</sup> of residential property in addition to a shopping mall with rentable area of 36,000 m<sup>2</sup>. In our opinion, in projects such as this, residential and commercial properties should be viewed as complementary, as the attractiveness of residential housing benefits from adjacent shopping facilities, while the latter potentially takes advantage of higher consumer traffic stemming from nearby homes. With that in mind, we view RTM's exposure to residential housing as synergetic to its core segment, and we expect it to make the company's business model more flexible and value accretive in the medium to long term.

However, we note that tapping into non-core market segments where RTM lacks expertise should entail higher execution risks, including that of delays.

RTM generally retains ownership of completed retail space for further rental and management, although we do not rule out large property sales in the coming years to fund new projects. Assuming no asset sales, during 2008-09, development project completions should increase RTM's rentable floor space by around 2.5 times.

As of 1H08, the market value of the portfolio was an estimated \$983.4 mln, according to an independent valuation by Colliers International, a 24% increase from a similar valuation on December 31, 2007.

We view regional diversification as one of the key advantages of RTM's portfolio. In our view, the fundamentals of the retail real estate market remain solid, even in the increasingly competitive Moscow and St Petersburg areas, as evidenced by vacancy rates as low as 3-5% and per capita figures lagging behind foreign comparables. Meanwhile, most Russian regions face even more severe undersupply, exhibited by far lower property stock per capita. However, this is the key growth direction for most retail majors, which seek to tap a broader consumer base and capitalize on regional consumers' growing affluence, suggesting that demand for quality retail property in the regions is set to rise in the coming years. RTM's regional presence implies strong potential for appreciation of its income-generating properties and superior opportunities for sourcing new projects, in our view.

Nonetheless, as regions increasingly attract the attention of developers like IKEA, RTM is likely to face increasing competition in the medium to longer term, making it more difficult to secure attractive locations and potentially placing pressure on margins. At the same time, we expect the developer's strong relationships with its key tenants and flexibility stemming from its relatively small size to underpin its competitive position. At present, regional projects, including those in Krasnoyarsk, Samara, Tula, Lipetsk, Kursk, Bryansk and other cities, account for more than half of the company's existing retail floor space, and contribute 52% to our total existing portfolio valuation. Going forward, we expect most of RTM's new projects to be in the regions, including cities where the company already operates and those to which it will be new.



**RTM IFRS financials, \$ mln**

	2006	2007	2008E	2009E	2010E	2011E	2012E
<b>INCOME STATEMENT</b>							
<b>Revenues</b>	<b>16</b>	<b>59</b>	<b>76</b>	<b>96</b>	<b>136</b>	<b>158</b>	<b>169</b>
COGS	(5)	(10)	(13)	(18)	(27)	(29)	(31)
Gross income	11	48	62	78	109	129	138
Gross margin	68.0%	82.5%	82.3%	81.2%	80.1%	81.7%	81.8%
SG&A	(8)	(16)	(17)	(17)	(19)	(21)	(21)
<b>EBITDA</b>	<b>5</b>	<b>31</b>	<b>42</b>	<b>57</b>	<b>84</b>	<b>102</b>	<b>110</b>
<b>Adjusted EBITDA</b>	<b>5</b>	<b>31</b>	<b>42</b>	<b>57</b>	<b>84</b>	<b>102</b>	<b>110</b>
EBITDA margin	31.4%	53.0%	54.9%	58.9%	61.6%	64.3%	65.0%
DD&A	(0)	(0)	(1)	(2)	(4)	(4)	(4)
EBIT	5	31	40	55	80	98	106
Interest income	(9)	(31)	(55)	(94)	(105)	(93)	(89)
Forex gain	4	10	–	–	–	–	–
Other gains	(1)	1	–	–	–	–	–
Pre-tax income	152	142	163	92	(19)	118	120
Income tax	(25)	(31)	(46)	(30)	(4)	(40)	(40)
Minority interest	(2)	(0)	–	–	–	–	–
Exceptionals	–	–	–	–	–	–	–
<b>Net income</b>	<b>126</b>	<b>115</b>	<b>123</b>	<b>69</b>	<b>(14)</b>	<b>89</b>	<b>91</b>
<b>Adjusted net income</b>	<b>10</b>	<b>16</b>	<b>(13)</b>	<b>(31)</b>	<b>(19)</b>	<b>3</b>	<b>13</b>
Net margin	61.7%	26.8%	(16.7%)	(31.8%)	(13.8%)	1.8%	7.5%
<b>EPS, \$</b>	<b>0.0700</b>	<b>0.1124</b>	<b>(0.0906)</b>	<b>(0.2180)</b>	<b>(0.1342)</b>	<b>0.0199</b>	<b>0.0902</b>
<b>Adjusted EPS, \$</b>	<b>0.0700</b>	<b>0.1124</b>	<b>(0.0906)</b>	<b>(0.2180)</b>	<b>(0.1342)</b>	<b>0.0199</b>	<b>0.0902</b>
<b>BALANCE SHEET</b>							
<b>Assets</b>							
Cash and equivalents	2	44	37	27	14	17	30
Receivables	11	12	16	20	29	33	36
Inventories	1	1	11	11	11	11	11
Other current assets	30	26	44	141	27	30	32
Total current assets	43	83	97	188	70	81	98
Total non-current assets	455	773	1,135	1,604	1,577	1,690	1,793
Total assets	498	856	1,232	1,792	1,646	1,770	1,891
<b>Liabilities</b>							
Short-term borrowings	91	128	48	98	98	98	98
Payables	51	16	20	26	36	42	45
Other current liabilities	5	5	6	8	11	12	13
Total current liabilities	148	148	73	131	145	152	156
Long-term borrowings	154	230	450	850	700	700	700
Other non-current liabilities	54	94	138	171	175	204	229
Total non-current liabilities	208	324	588	1,021	875	904	930
Total liabilities	356	472	661	1,152	1,020	1,056	1,085
Minority interest	3	–	–	–	–	–	–
Equity	142	384	571	640	626	714	806
Total liabilities and equity	498	856	1,232	1,792	1,646	1,770	1,891
<b>Net debt/(cash)</b>	<b>216</b>	<b>293</b>	<b>423</b>	<b>789</b>	<b>769</b>	<b>764</b>	<b>750</b>
<b>CASH FLOW STATEMENT</b>							
<b>Net income</b>	<b>126</b>	<b>115</b>	<b>123</b>	<b>69</b>	<b>(14)</b>	<b>89</b>	<b>91</b>
Minority interest	(2)	(0)	–	–	–	–	–
DD&A	(0)	(0)	(1)	(2)	(4)	(4)	(4)
Working capital change	39	55	(0)	11	32	16	22
Other assets change	12	(4)	51	40	19	35	29
<b>Operating cash flow</b>	<b>46</b>	<b>(10)</b>	<b>(30)</b>	<b>(118)</b>	<b>112</b>	<b>9</b>	<b>18</b>
Maintenance capex	(1)	0	(11)	(2)	(4)	(4)	(4)
Expansionary capex	(14)	(33)	(69)	–	–	–	–
Other investments	(98)	(56)	(100)	(340)	28	(2)	(1)
<b>Investing cash flow</b>	<b>(113)</b>	<b>(88)</b>	<b>(181)</b>	<b>(341)</b>	<b>25</b>	<b>(6)</b>	<b>(5)</b>
Change in debt	69	51	140	450	(150)	–	–
Dividends paid	–	–	–	–	–	–	–
Share issues/(purchases)	0	86	64	–	–	–	–
Other	–	–	–	–	–	–	–
Financing cash flow	69	137	204	450	(150)	–	–
Forex effects	0	2	–	–	–	–	–
<b>Net change in cash</b>	<b>2</b>	<b>42</b>	<b>(7)</b>	<b>(10)</b>	<b>(13)</b>	<b>3</b>	<b>13</b>
<b>RATIOS</b>							
P/E	8.9	5.6	neg	neg	neg	31.4	6.9
EV/EBITDA	61.1	12.3	12.3	15.5	10.2	8.4	7.6
P/BV	0.6	0.2	0.2	0.1	0.1	0.1	0.1
ROE	6.9%	4.1%	neg	neg	neg	0.4%	1.6%
ROIC	0.5%	neg	neg	neg	neg	neg	neg
Dividend per share, \$	0	0	0	0	0	0	0
Dividend yield	–	–	–	–	–	–	–
P/S	5.5	1.5	1.2	0.9	0.6	0.6	0.5
P/CF	1.9	neg	neg	neg	0.8	9.3	4.9
Revenue growth	–	269%	29%	27%	42%	16%	7%
EBITDA growth	–	522%	34%	36%	48%	22%	8%
EPS growth	–	61%	n/m	n/m	n/m	n/m	354%

Source: Company, Troika Dialog estimates

## **Disclosure appendix**

### **IMPORTANT US REGULATORY DISCLOSURES**

An affiliate of Troika Dialog USA makes a market in the securities of Open Investments, PIK Group, Sistema-Hals and RTM.

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The following analyst(s) hereby certify that the views expressed in this research report accurately reflect such research analyst's personal views about the subject securities and issuers and that no part of his or her compensation was, is, or will be directly or indirectly related to the specific recommendations or views contained in the research report: Tigran Hovhannisyan, Semyon Fomin.

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