HOUSING PRODUCTION CHALLENGES IN ROSTOV OBLAST

Moscow – Rostov-on-Don

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The study of housing production challenging in the Rostov Oblast has been conducted in response to the request from the Office of the Plenipotentiary Representative of the RF President in the Southern Federal Okrug (SFO) and the Rostov Oblast Administration.

The objective of this study has been the preparation of a specific action plan for better supply of affordable housing to the population and stabilization of the price situation in primary housing markets in the Southern Federal Okrug. Evaluation of the desirable amount of housing production, structure of housing and housing prices in the Rostov Oblast as a whole and in the selected pilot cities, such as Rostov-on-the Don, Azov, Taganrog, Shakhty and the Aksai rural raion has been conducted under this study. The Report presents results of the comparative analysis of the desired amount of housing production with real existing indicators, provides analysis of housing cost structure and defines critical factors having an impact on high construction costs and housing prices. Based on the results of the study conducted, recommendations have been worked out and an action plan for better supply of affordable housing to the population and stabilization of the price situation has been prepared.

The Report with the outcomes of the study is a result of joint work of the World Bank experts and the Institute of Urban Economy. Activities under the study were started by the team led by Mr. Jan W. Brzeski (Senior Housing and Urban Specialist) and were completed by the team led by Mr. Andrei R. Markov (Senior Advisor, Coordinator for the World Bank Programs in the Southern Federal Okrug).
Desirable construction and ways to increase it

**PREFACE**

Housing markets in the Rostov Oblast experience demand-supply imbalances in new and existing housing, although the situation varies by cities and towns. The galloping prices and slowdown in production, particularly in Rostov-on-Don, jeopardize the regional strategic goals of affordable and livable housing for its population. The high prices threaten to erode much of the recent improvements in broad housing affordability brought about by the rising incomes and easier access to mortgage financing. The low production volumes threaten to impede continued economic restructuring and growth due to the low residential mobility and insufficient adjustment in housing quality.

This study has been inspired by the World Bank Background Paper at the national level that has dealt with the issues of impediments to increased housing production in the country as a whole. That work found that the Russian housing policy debate and formulation has been strongly influenced by the past focus on housing producers and thus heavily dominated by the construction industry’s “paradigm” with its statistical emphasis on floor area per person and on direct (hard) construction self-costs. This Soviet-era housing policy paradigm has been gradually “eroding” since the onset of the transition process, the Background Paper recommended that the Government consider a more decisive “paradigm shift” towards “mainstream housing policy approach” used in mature market economies, especially in the European OECD countries. It allows for a more comprehensive approach to strategic targeting of housing production, to understanding of critical supply impediments, and to formulating regional-level policy measures for increasing new residential construction.

This housing supply study is a report to the Government of Rostov Oblast and to the Office of Presidential Envoy in the Southern Federal Okrug (SFO) aiming to contribute to development of the socio-economic strategy of the SFO in general, and with particular objective of providing background materials and recommendations for housing strategy of the Rostov Oblast in the area of targeting housing production and stimulating market-based supply mechanisms. Policy recommendations are based on empirical study of the region and its five selected cities, as well as on the Bank’s knowledge of the Russian housing policy challenges. The main three strategic questions addressed by this study are: (i) how much housing production is desirable in the Oblast; (ii) what are the reason for insufficient production levels; and (iii) what should be done at regional and local levels to increase housing production till the year 2010.

**INTRODUCTION**

“I believe that continuing at the current rate of housebuilding is not a realistic option, unless we are prepared to accept increasing problems of homelessness, declining affordability and social division, decline in standards of public service delivery and increasing costs of doing business in the UK – holding back our economic success. My Review sets out a series of policy recommendations to address the lack of supply and responsiveness of housing in the UK.


These startling conclusions regarding housing supply problems in the United Kingdom send stark signals to market reformers in transition countries at all levels of government. Here is one of the model countries with mature market economy and efficient land and housing markets, which has
concluded that the market delivered housing supply outcome is not sufficient to meet the broader societal goals of eliminating homelessness, reducing overcrowding, broadening affordability, limiting social segregation, and improving public services. Free interaction between demand and supply produced market outcome with insufficient volume and excessive prices as seen by policy makers. The lessons learned for the housing policy makers in transition countries are that the development of efficient housing markets is necessary but not sufficient condition for attaining broader strategic societal goals. The “insufficient supply” produced by efficient market mechanisms is not “market failure”, but failure of housing policies in enabling, facilitating, stimulating and assisting the market and its participants, so that that they can properly respond to the intended (dis)incentives seeking politically desirable market outcomes. These comments made in the national Background Paper are also valid for the Rostov Oblast Government and its municipalities, but within their scope of policy competencies, which are quite substantial on the housing supply side.2

**REVIEW OF THE HOUSING PRODUCTION SECTOR IN ROSTOV OBLAST**

Rostov Oblast was established on September 13, 1937 as a result of Azov-Chernomorsk Krai’s division. Rostov oblast is located in southern Russia, borders on Voronezh and Volgograd Oblasts, Krasnodar and Stavropol Krais. Republic of Kalmykia and Ukraine (see Figure 1). One of the biggest Europe’s rivers – Don, flows along the oblast which has Ztimlyansk water reservoir. River Don’s main tributary streams, the rivers Seversky Donetz and Manych, are navigable. The nature is fairly favorable for population to live and to develop recreation zone and agriculture.

*Figure 1. Location of Rostov Oblast*
Rostov Oblast does not have many large industrial enterprises. Its economic base consists of fuel-and-power and machinery sectors, and few developed mineral resources. A significant part of revenues are generated by transportation (cargo) flows and agriculture. The area of about 100,000 km² (0.6 percent of the Russian Federation’s territory) is populated by 4.4 million inhabitants (3 percent of the country’s population).

Figure 2. Population density of Rostov Oblast as of January 1, 2005

The city of Rostov-on Don was selected to host an Office of the Presidential Envoy to the Southern Federal Okrug (SFO), which enhanced region’s development attraction. The city has been chosen for several foreign and domestic commercial real estate developments: Metro Cash&Carry, IKEA (under construction), Philip Morris, and Russia’s major trade chains SportMaster, M.Video, Ramstor, O’key,
Starik Khottabych. The federal Ministry of Economic Development and Trade has classified the Rostov Oblast in the group of regions that have an average rate of socio-economic development prospects for the years 2006-2008. This is supported by the expected industrial and retail growth, improved fiscal capacity, increased personal incomes and decline of poverty.

In private talks, some leading Moscow developers operating in Russia’s regions consider Rostov-on-Don to be one of the promising potential markets. In that regard, Rostov Oblast has been among the leading regions for several consecutive years and holds the second place in the SFO. Every year, construction of over one million m$^2$ of residential floor area is completed there, with the volume of investments ranging 7.5 – 9.0 billion RUR. The growth in housing production at 7% annually, which is 1.76 million m$^2$, is expected to be achieved in 2010. As mentioned earlier the reliance on floor area parameters of housing policy dates back to the previous economic system. Production target expressed in number of square meters of floor area is not fully informative in a diversified market system, because this raw measure tells little about the value of what is produced (except construction cost), nor how different housing market segments are being served. Information about household structure and dwelling composition on new production would enhance understanding of what is happening and likely to happen to housing production. Housing producers were traditionally individual investors, typically building for themselves, but in 2003 private developers completed more dwelling units and became the dominating producer category.

The region’s growth in housing production is supported by an active development of construction materials’ industry. This industry is, in its turn, based on the region’s affluent raw materials, covers eighteen sub-industries and manufactures, and over two hundred enterprises. Output increase was made both at the effective and newly constructed plants, among them under the Program for locally developed and sustained employment as part of Rostov Oblast’s coal industry restructuring. The range of building materials produced in Rostov Oblast is wide enough, including: concrete products, bricks, tiles, asbestos board, parquet, polymeric pipes, pipe fitting, stoneware tile etc. Investments in building materials industry amount to more than 650 million RUR annually.\(^3\)

**Municipalities and Raions Covered by the Study**

**City of Rostov-on-Don**

Rostov-on-Don is the largest city in southern Russia with the present housing production growth of 6-8% per annum driven by relatively high incomes and investment activity. The city’s housing delivery sector is highly concentrated with a handful of major construction/development companies accounting for the bulk of housing production.\(^4\) New market entrants in Rostov, as well as in other cities in the Oblast, find it difficult to establish themselves, since they are unlikely to get access to attractive land, where higher profits are typically made. Local governments, who award access to building land, are usually apprehensive of new untested entrants, but often give them just a little so that they can “prove their worth” including capacity to finance development activity. If they clear this “hurdle” they are less restricted to work the local market alongside the old established companies.

The City does not have an updated land-use Master Plan, but is expected to adopt one by the year’s end,\(^5\) and regulation on land-use and development of Rostov-on-Don is also only in drafting stage. The lack of adopted land-use plans and regulations makes relationship between developers and municipality highly discretionary, inefficient and prone to moral hazard.\(^6\) It makes it also difficult to issue infrastructure connection specifications and charges as they typically require such land development parameters as floor-to-area ratio, building uses and volumes. The lack of comprehensive approach to land allocation decisions and construction permits and approvals leads to individual
projects’ obtaining necessary load demands that leave adjacent areas deprived of development prospects, due to depletion of any reserve infrastructure capacities. Thus, construction of one building may lead to a standstill of the entire zones development because of infrastructure deficiencies. The most challenging problems for more housing production, besides adequate land-use planning, is the shortage of building lots (sites) that are serviced by public infrastructure, as well as the related problems of utility connection specifications and the necessity of relocating inhabitants from dilapidated centrally located buildings to clear construction sites.

City of Taganrog
The City of Taganrog is a port located on the North-Eastern coast of the Taganrog bay of the Azov Sea, a railway station, 70 km West of Rostov-on-Don. The city’s area is over 80 km², its population counts over 281,000. The city has a fairly well developed transportation infrastructure: railways, motorways, sea- and air routs. The railway two-track network runs in two directions: westwards, across Ukraine and eastwards, thus providing connection to Russia’s other regions. Sea shipping and connection to Mediterranean countries is provided by the Taganrog’s sea port. Located close to the river Don’s estuary, Taganrog has a good access to the Volga-Don demarcated river transportation network. Along with rapid development of small sized businesses, specifically in services, the city’s traditional manufacturers continue to operate in metallurgy, harvesting machinery, boiler equipment, paint, electronic and construction industries. The key impediment to growth of housing production, as seen by city authorities, is the shortage of proper land servicing with necessary infrastructure and utilities. It is believed that the critical factor is to attract private investments into this sector. The City has an investment program for infrastructure modernization for the years 2006-2009 adopted by the City Duma and effective December 1, 2005.

City of Shakhty
The City of Shakhty is located in Western part of Rostov Oblast, North of Rostov-on-Don at the South-Eastern slopes of the Donetzk range of hills, at the crossroad of two federal highways Kharkov-Moscow and Moscow-Baku. The Northern Caucus Railway runs through the town. The city’s area is 158 km² with the population of 254,700. The City’s landscape represents a bit hilly non-forest plain, slightly sloping down from the North to the South, and covered with hollows (ravines) and stream valleys. Economic base of the city has been changing, since the decline of importance of coal mining, towards construction, light industry, food processing, mechanical and machine engineering. The City is boasting the availability of some 1,000 hectares of land to host expansion of these sectors.

City of Azov
The City of Azov is located in South-Western part of the Rostov Oblast, at the estuary of the Don river, on its left bank, 42 km West of the City of Rostov-on-Don. It has an area of 67.5 km² and population of 82,000. The economic base of the city is mechanical engineering and machine building (seven enterprises) and food processing (six enterprises). Due to advantageous location Azov is having a developing international sea port provided with all necessary infrastructure, processing approximately one million tons of cargos that arrive both sea and river.

Raion of Aksai
Aksai Raion is rural district with an area of 1,168.9 km² and population of 88,000. The Raion has an advantageous location because of its proximity to the City of Rostov-on-Don, which enables its inhabitants to commute to work. Farmlands occupy 78% of Aksai Raion’s territory. The Raion consists of one town administration and eleven settlement administrations that cover 48 localities. The Raion has 36 industrial entities, of which 24 belong to construction sector.
Housing Market Imbalance

Housing market imbalances in Russia have been exacerbating since the market rebound in the early 2000s. During the period 2000 to 2004 apartment prices in Russia grew by about 240%, while construction volume grew by about 130% and inflation accumulated to 78%. During the same period the average per capita money income grew by 280% and real disposable income by 57%, firming up the demand growth that was further strengthened by improving access to mortgage financing. Housing production costs kept pace with price growth at 240%, which helps explain why the gross profit (price-cost) margin remained at the high level of 115%. Since the end of 2005 the price growth accelerated to an annual rate of 70%, and median apartment prices have recently “punctured” the price threshold of 3,000 USD/m². Rents on the free market for apartments – mostly in Moscow and St. Petersburg - have not kept pace, suggesting a growing investment element in the market behavior.

These dramatic price developments in the country have been driven by strengthened incomes, growing investment “appetite”, and more affordable access to mortgage credit, which has grown by 25% in the first quarter of 2006. Although many absentee purchasers keep apartments vacant for purely speculative purposes, many put their apartments on the rental market, which results in the “softening” of rents. The phenomenal price rises have been “demand pulled”, as well as “supply/cost pushed” in various areas of cost categories. Significant cost increases have occurred in construction materials, especially in cement, and in labor costs due to shortages exacerbated by difficulties in employing foreign workers. There are strong hints of oligopolistic market control, which allows developers to charge higher prices by restricting supply growth while keeping – through collusion with some local officials – the competition of smaller companies from entering their local markets. In fact the supply growth has been generally slower than the demand growth, which has produced highly publicized increases in prices and thus gross profit (price-cost) margins. The trend has sharpened during the recent months, especially in Moscow with phenomenal price increases during the first quarter of 2006 fuelled, in part, by 25% growth in mortgage loans.

Not much is known about the current market situation and trends in the Rostov Oblast, but the general qualitative feeling is that demand has been outstripping the supply in most of the Oblast cities, with particular emphasis on Rostov-on-Don, which is a special market in the Oblast. The causes of the high-price low-volume market outcome typically mentioned both at the federal and regional level include: (i) municipal “rationing” of land to selected developers; (ii) rampant speculation by private land-owners; (iii) construction sector with limited competition and low productivity; (iv) protracted discretionary urban planning and construction permitting; (v) difficult and slow conversion of agricultural land into urban residential use; (vi) social housing “givebacks” and resettlement of residents requested by municipalities from developers; (vii) oligopolistic structures yielding local market control in collusion with municipal officials; (viii) unscrupulous developers cheating captive “participatory” buyers; (ix) speculative housing demand by absentee investors; (x) generally deficient regulatory framework; and (x) incomplete implementation of existing laws and regulations. In general, supply constraining factors are perpetrated by the problems of weak legal and regulatory framework, negative fiscal incentives, high transaction costs and poor implementation at the municipal level.

Objectives and Methodology
The aim of this study is to contribute to development of the socio-economic strategy of the SFO in general, with particular objective of providing background knowledge and recommendations for housing strategy of the Rostov Oblast in the area of targeting housing production and stimulating market-based supply mechanisms. Policy recommendations are based on empirical study of the region and its five selected cities, as well as on the Bank’s knowledge of the Russian housing policy challenges. The main three strategic questions addressed by this study are: (i) how much housing production is desirable in the Oblast; (ii) what are the reason for insufficient production levels; and (iii) what should be done at regional and local levels to increase housing production till the year 2010.

In answering the first question regarding desirable volume of housing production in Rostov Oblast, this study has applied the strategic targeting model based on the mainstream policy paradigm used in mature market economies, especially the European OECD countries. The housing policy paradigm used in these countries puts the focus on the housing consumer (the household), not on the housing producer: it allows the policy debate and formulation to concentrate on the number of households whose housing needs are to be met through supply of proper dwellings, and much less on the more aggregate concept of production volumes of residential floor area and average per person. Policy approach based on housing needs, as expressed through matching of household and dwelling characteristics, also permits benchmarking to international standards allowing for meaningful comparisons, especially with European countries. This approach, with necessary modifications, has been used to estimate strategic supply targets and the resultant level of desirable housing production for the Rostov Oblast. It supplements the conventional strategic targeting of housing supply projections in Russia, which has traditionally relied on a relatively inward (hermetic) approach focused on construction process and weakly reflecting the over-arching societal goals of increasing housing product diversity, accommodating the trend towards smaller households, and facilitating higher labor and residential mobility.

In answering the second question regarding the reasons for insufficient housing production, if this is found to be the case, this study applies another mainstream policy paradigm from the mature market economies, which focuses cost components of the final price of new housing paid by the housing consumers (households). This includes not just the direct (hard) construction costs – typically still reported officially in continuation of the Soviet era statistics – but also costs for access to adequately planned and serviced land, costs for providing infrastructure, indirect (soft) costs for project preparation and design, cost of financing the construction, and profit margin realized by developer/investors upon selling of the dwelling unit. Such an empirical „cost-price structure“ of what the households eventually pay for allows for specific monitoring of cost components, comparison across the country and internationally, as well as helps to identify critical factors behind excessive housing production costs and/or prices. An empirical diagnostic of the cost-price structure has been adopted in this study to enhance the understanding of supply impediments and help formulate recommendations for more effective policy responses at regional and local levels.

In answering the third question regarding ways of increasing housing production in the Rostov Oblast this study uses the empirical findings on the first two questions in addition to the World Bank’s knowledge base on Russian housing policy reforms and challenges. Recommendations are presented on what should be considered by the regional government in terms of providing additional stimulus to the housing production markets, beyond the current activities and efforts towards this goal.

The housing „paradigm shift“, and the application of the mainstream approaches to supply targeting and cost-price structure, constitute difficult challenges in Russia and in the Rostov Oblast, both
institutionally – traditions are hard to change, and technically – data support remains weak and incomplete. The Methodological Annex discusses these issues and suggests further work in this area.

**HOW MUCH HOUSING NEEDS TO BE BUILT?**

The Federal Targeted Program “Housing” has adopted the strategic housing production target of doubling the current annual production by the year 2010 as expressed in the traditional form of residential floor area, rather than in numbers of new dwellings (households). It is reasonable that the doubling up target is valid also for the country’s mainstream oblasts such as the Rostov one. This target rests on four main considerations: (i) those entitled to housing in various waiting lists should receive housing; (ii) housing production rates of the early 1990s should be achieved again; (iii) average housing floor area per person should be growing by 1 m² per year; and (iv) the housing production target should support the goal of doubling GDP of the country by 2010. As mentioned earlier, the production target expressed in residential floor area (m²) is not fully informative in market economic context, because this raw measure tells little about the value of what is produced, nor how different housing market segments are being served. Consequently, this study has taken an expanded view of estimating the target by applying an affordability-based housing-needs targeting approach, typically used in European OECD countries. The findings can be used to enhance the Rostov Oblast’s housing strategy, and especially its part dealing with housing production targeting.

The application of the mainstream European approach is still difficult in Russia, including the Rostov Oblast, because information and data support of housing policy have been differently structured for many years, so there is a need for substantial overhaul and modification of this system before it becomes fully supportive of the new approach. Nevertheless, rough estimates were possible and produced strong enough conclusions to demonstrate to the policy makers the needed enhancement of strategic targeting in the Oblast and its cities.

Housing production target estimates have been based on both the available data and on the findings of special population survey. They have produced a number of important conclusions, which are presented below:

- **In the optimistic scenario** housing production target in Rostov Oblast for **2006-2010** is **240,000 dwellings** with 46.4 million m² floor area. This total is composed of: (i) 92,400 dwellings (4.7 M m²) to eliminate overcrowding, (ii) 73,800 dwellings (4.2 M m²) to eliminate “khushchevki”, (iii) 41,900 dwellings (2.2 M m²) to eliminate current waiting lists. This can be also divided into target for market-delivered housing production of ownership and rental housing of total 124,600 dwellings (24.1 M m²), and for social rental housing of total 120,400 dwellings (14.8 M m²). For the pessimistic scenario, the market-delivered housing production need is estimated at 82,300 dwellings (16.0 M m²), and for social rental housing at 162,700 dwellings (31.5 M m²).

- For the City of **Rostov-on-Don** the optimistic scenario indicates housing production target for 2006-2010 at **125,600 dwellings**, for **Taganrog 23,040**, for **Azov 7,700**, for **Shakhty 13,500**, and for **Aksai Raion 5,000 dwellings**.

- Housing production targets can also be split between market-based housing, for those who can afford to buy and rent, and publicly-owned social housing, for those who cannot afford. The **market-based** targets for the **optimistic scenario** are for **Rostov-on-Don 79,500 dwellings**, **Taganrog 13,600**, **Azov 5,000**, **Shahty 8,100**, and **Aksai Raion 2,900 dwellings**.
And for the pessimistic scenario: Rostov-on-Don 59,600, Taganrog 10,200, Azov 3,900, Shakhty 6,000, and Aksai Raion 2,200.  

The target estimates for the publicly-owned social rental housing for the optimistic scenario are: Rostov-on-Don 58,500 dwellings, Taganrog 9,900, Azov 3,000, Shahty 5,900, and Aksai Raion 2,100. And for the pessimistic scenario: Rostov-on-Don 78,400, Taganrog 13,300, Azov 4,100, Shakhty 8,000, and Aksai Raion 2,800.

One of the most important factors influencing the alternative target estimates is the household size, which is probably around 2.8 persons presently, but good reliable statistics are not available. Depending on how individuals form households the number of dwelling units, one per household, will be different, even though the number of people stays the same. Household formation rate changes with age, social norms, life style and with affordability. Social norms and life style has been signaling continuous reduction in household size, as people chose to have fewer children and live in separate dwellings — one dwelling per household. All the more frequent divorces produce more households and smaller average household size, and hence the need for more dwellings. As population ages, the average household size becomes smaller. Improving affordability makes it possible for more people to “undouble” from larger household units with young people living on the own at earlier stage of their life cycle, and older people staying in their own separate apartments. In most of the post-war history in Europe the trend towards decreasing average household size produced very strong demand for more housing, even though population growth was, and continues to be, very modest. There is little reason to believe that Russia and Rostov Oblast will substantially counter this long-term trend, especially given the good performance and prospects for household incomes. The powerful influence of the average household size on strategic targeting of housing production, is an important argument for shifting the estimating approach in Russia from area-based to dwelling-based. Number of dwellings grows with household formation trends, while population size may remain the same, or even decrease as forecasted in Russia. The size of the pie depends on the way it is cut.

While declining average household size is „driving“ much of the need for housing construction, other factors exert a strong pressure as well. Residential overcrowding in many dwelling units is thought to be substantial with cases of more than one household occupying one dwelling and/or residential floor space being too small. Households in the overcrowding category need to change their dwellings and thus contribute to net growth in needed floor space, which requires new production. Poor quality and technical condition of the existing housing stock constitutes another strong force for housing production as dilapidating housing will need to be eventually demolished and replaced. The whole generation of multi-family buildings from the Khrushtchev era is the case in point. Old dilapidated low-rise buildings in central areas of large cities are another example. Migration into urban areas provides yet another powerful force behind the need for new housing; however, in the case of Rostov Oblast this factor is not considered a strong force. And the amount of young people entering the housing market for the first time is not that strong, due to weak demographic trends in the Oblast as well as in the country as a whole. Homelessness is not a strong factor either, but the housing waiting lists are relatively large, swelled by various categories of qualified households – the remnant of the generous social housing policy.

**IS ENOUGH BEING PRODUCED?**

The above desirable target estimates indicate a considerable “production gap”, i.e. show that the current production rate is highly insufficient and it is very unlikely that even the modest official target of doubling up of floor area annual production, set for 2010, will be reached. If one looks at the number of dwellings produced, rather than floor area, there is a need for producing about 50,000
dwellings per annum for the period 2006-2010, while in 2004 only 12,600 dwellings were built, and in 2005 only 15,500. Consequently, the new production increase needs to triple as measured in dwelling numbers, and increase almost 7 times as measured in floor area (9.5 million m²), although the floor area estimate is misleading outcome, as it assumes very large average new apartment size.

The 50,000 dwellings per annum will most likely be mostly small dwellings given the shrinking household size and difficult affordability issues, and thus at an average dwelling at 60 m², the overall annual floor area to be produced is reduced to 3 million m². This shows the importance of relying on household-dwelling targeting methodology, rather than on the one based on square meters and persons.

Similar results have been obtained for the other cities. In Rostov-on-Don the desirable target for annual production is some 28,000 dwellings against the current production of 7,700, which makes it at below 30% of target. In Taganrog the annual target should be 4,700 dwellings, but only 600 were produced in 2004. In Azov the annual target should be 1,600 dwellings, but only 170 were produced in 2005. In Shakhty the annual target should be 2,800 dwellings, but only 5 were produced in 2005. In Aksai Raion the annual target should be 1,000, but only 400 were produced in 2005.

Given the expected increase in construction as foreseen by the Oblast and city administrations, the desirable targets will be far from reached by 2010, not even the modest official doubling-up of floor area. The question arises what can be done to increase housing production much more than the present level. In order to do this a solid information and analysis of the current cost-price structure and dynamics is necessary.

WHY IS SO LITTLE BEING PRODUCED?

Since the market is the main producer of housing the question can be rephrased: why is the market not producing more? The high prices and thus visibly high profit margins should attract more developers who would provide more housing till profits become normal. High prices can be driven by high demand, but also by high production costs and if this is the case, fewer households will be able to buy even though they need more housing. In order to understand the supply cost in housing production there is a need for reliable data on various cost components in order to see which ones contribute to high costs and thus should be addressed by policy measures. And besides the costs, there are high profit margins which may be the result of high demand, but also of strong market control by few developers, who can restrict new supply can charge high prices – such few dominating producers are called “oligopolists”. In summary, there is a need to examine empirically the cost-price structure of the housing production process in the Rostov Oblast.

Traditional approach to understanding and reporting of housing production costs and prices in Russia by Rosstat, has been to focus on direct (hard) construction self-costs and their structure. Difference between self-costs and market prices is ascribed to developer’s profits and related to these costs, rather than to prices. Such a methodology overstates developer profits, diverting attention from other cost components and what can be done to reduce them. The mainstream European approach to reporting and analyzing the cost-price structure, which is recommended in this study, decomposes the market price into the following cost components: (i) cost of access to adequately planned and serviced land; (ii) infrastructure connection charges; (iii) direct (hard) construction costs; (iv) indirect (soft) construction costs; (v) construction financing costs; (vi) developer’s gross profit margin. The self-construction capital costs reported by Rosstat, are only one of the cost components that should be reported and analyzed. It also shows that developer’s profits are treated separately as a percentage of the final price rather than as a percentage of the construction self-costs, which tends to make the profit share smaller.
In order to measure the mainstream cost-price structure in Russia and in Rostov Oblast, one has to convert the financial accounting data used by developers and/or ask them to provide their “management accounting” figures is accordance with the requested reporting structure. The desirable reporting structure looks as follows:

(i) **land access costs**—land lease, purchase of land lease or ownership rights, including taxes, legal support, etc. These costs also include “burdening” or investment contracts requiring free transfer of a share of built units to the municipality or requiring resettlement of residents from houses to be demolished.54

(ii) **infrastructure connection costs**—off site infrastructure and payments to connect to engineering networks;

(iii) **direct(hard) construction costs**—preparing the construction site, below grade works, heating framework for the building, finishing works, internal engineering networks, roads and improvements;

(iv) **indirect (soft) costs**—pre-design and design costs, construction permits, developers’ expenditures and expenditures for the technical developers’ supervision;

(v) **construction financing costs**—loan interest, loan fees. Additionally, one consultant included the cost of investors’ shared participation;55

(vi) **developer’s gross profit margin**—this is the difference between the project self-cost and the project revenue, which is total revenues from market sales of produced units.56

The recent World Bank Background Paper,57 has studied the housing production cost-price structure in various regions and cities in the country, using the mainstream approach and two methodologies for analyzing the results. One approach used financial accounting data, by looking into “developers’ books”, and the other used management accounting as described by developers, by looking into the “developers’ eyes”. This was done to cross check the preferred financial accounting approach and found that the results were sufficiently similar for conclusive findings. Since the mainstream approach looks at the final price confronted by the household, who should be in the center of housing policy focus, it was concluded in that study, and in reference to 10 projects (out of the total 84) selected in the Southern Federal Okrug,58 that about 60% of the purchase price goes to non-construction factors such as land, infrastructure, indirect costs, construction finance and gross profits. Land acquisition costs constituted on average 18%, composed of 8.4% for land payments and 9.6% for burdening. Infrastructure connection charges/contributions were 5.5%, construction (hard) costs 40.5%, indirect costs 6.5%, construction financing 2%, while gross profit margin was 27.4%.

It is important to note significant variability of cost shares across different categories, as this indicates uncertainty and risk faced by developers who are contemplating market entry. Since land and infrastructure are strongly inter-related in Russia one can lump them together for simplicity reasons and find that they constitute 23.5% or almost ¼ of the purchase price paid by households. This item has shown quite substantial variation between 10.2% and 32.6%. Construction (hard) costs have varied between 22.7% and 52.6% also reflecting big differences in share, but when the extreme case was excluded the range would narrow to 33.4% - 52.6%. Indirect (soft) costs have shown variation between 3.6% and 11.7%, while construction financing was inexistent in more than half of the projects, thus ranging between 0% - 7.5%. Gross profit margins have varied between 7.6% and 53.9% reflecting even more variability. The conclusion of that study was that there is high variation reflecting partly the risk, and partly the need to categorize projects into classes of similar market characteristics (popular-price, mid-price, high-price) and by different construction materials (brick, panel, monolith). The drawback of that study was that none of the cities in the SFO were from the Rostov Oblast.
The empirical investigations done for this study in the selected five cities/raions of the Rostov Oblast did not bring sufficiently reliable results. The survey of developers was conducted by officials of the Rostov Oblast’s Ministry of Construction and Housing and Utility Sector. The response by developers was basically none, as they viewed their cost-price structures as “trade secrets”, most likely related to taxation implications, which underscores the need to bring transparency to this area by recognizing the various “burdening” costs carried by developers as deductible for taxation purposes, which is not the case at present. Second attempt to reach developers by independent coordinator, was more successful in opening a dialogue with them, but without formal filling out of a questionnaire. Although the results of such an “anecdotal” approach are not highly reliable, they confirm the conclusions of the recent national study described above, in reference to the Southern Federal Okrug. The figure below refers mostly to anecdotal evidence in Rostov-on-Don.

In order to simplify the picture some of the costs components can be lumped together. Land access costs are composed of burdening and land acquisition and sum up to the share of 10.7% (18% for the SFO sample). Infrastructure connection charges are 6.2% (5.5% for the SFO sample). Direct (hard) construction costs are 46.6% (40.5% for the SFO sample). Indirect (soft) costs 6.5% (same as for the SFO sample). Gross profit margin is composed of developer’s profit and realtor’s profit and sum up to 31% (27.4% for the SFO sample). It is noteworthy that construction financing is not even mentioned in the anecdotal approach reflecting the insignificant role played by bank-based financing reflecting the dominance of the pre-financing by captive buyers. For the SFO it was set as 2%, but the approach there was to ask developers to estimate the cost of buyer pre-financing.

The fact that 55-60 percent of the final market price goes to factors not related to direct (hard) construction costs, is indicative of the problem of non-construction costs being too high. In international comparison to advanced transition countries such as Poland and Hungary, the non-construction costs take up about 35% in popular-market segment and about 45% in the mid-price segment, so that most of the buyers’ money goes for what the get to use (i.e. hard construction). Not surprisingly, due to strong competition and more level playing field, the gross profit margins in those countries are about 10% in popular-market segment, and about 15% in the mid-price segment as compared to about 30% in the SFO and in the Rostov Oblast. Access to land and infrastructure in Poland and Hungary takes up less then 15% in popular-market segment and about 17% in the mid-price segment, while the average for the SFO is 23.5%, although “anecdotally” it is quite low at 11%.
in the Rostov Oblast. Construction financing constitutes about 5% of the price in Poland and Hungary for popular-market and mid-price segments, while it is on average only 2% in the SFO and anecdotally at 0% in the Rostov Oblast. Although not fully comparable, these comparisons convey a message of higher non-construction costs confronted by the buyers in the Rostov Oblast, which can be traced to weak competition and level playing field resulting in market control and higher profit margins.

**Land and Infrastructure**

In most cities, land and infrastructure costs are driven by extensive “burdening.” Land acquisition costs include not only the costs of land lease or purchase, but also the costs of “burdening”, which refers to either the free transfer of some newly built units (give-backs) to the municipality (under an “investment contract”) and/or to requiring developers to resettle residents from buildings to be demolished. Municipalities explain burdening by the need to provide apartments to socially vulnerable population groups, who spend many years on waiting lists for social housing. Although the logic is clear, given that municipalities lack strong alternative revenue sources for this, the practice leads likely to unnecessarily high unit prices, making them unaffordable to households in need of housing, who would otherwise be able to afford the units. It also undermines urban land market development by reinforcing municipal price setting (i.e., through burdening) instead of market pricing.

Cities where land costs are low are often those where profits are high suggesting that savings on land access costs translate into higher profits rather than lower prices, if “oligopolistic” developers exercise sufficiently strong market control. Without competitive land markets, developers use “informal” methods to gain access to highly valuable locations, which translates into increased profits. Large construction companies with roots in the Soviet era and with strong ties to municipal officials often benefit from informal land acquisition processes. Municipal officials, in turn, rely on them to provide new units for households on the waiting lists and to resettle affected households. Municipalities are often more concerned about how many units will be provided to them and how many households will be resettled, rather than what price the municipality will get for the land, which reflects the current system’s misdirected incentives. Municipalities do not recognize the opportunity cost of allowing these developers to make higher profits (by providing them with below-market land-access cost) instead of restricting price growth for new units through encouraging more competition. In other words, helping developers to reduce land access costs, is not accompanied by competitive pressure on a level playing field, so the net result is that municipal intentions to lower housing production costs are captured into higher profit margins by the few developers.

As a result the costs of land access are highly discretionary and thus variable and without relation to the value of land and thus profit potential. Despite the Land Code requirement for competitive tenders for land divestiture, the overwhelming majority of building lots are divested on non-competitive basis in the Rostov Oblast. There are still cases where the cost of land access granted by public officials is not even recorded in municipal books. On the other hand, the lack of competing developers in small local markets makes it often impossible to solicit alternative tenders. It is believed that only Rostov-on-Don has sufficient capacity to have competing bids submitted to tender. Also, preparation of land lots for tender, in terms of adequate land-use decisions and documentation, requires also considerable up-front costs, without knowing if there will be enough competitive bids.

The lack of adequate land-use planning is a serious impediment to land access. Developers would benefit greatly, if they knew in advance what parameters of land-use they can plan for a contemplated
site. Since most of the cities lack up-dated land-use plans, pertinent decisions are made through negotiations with urban planners and utility providers regarding particular site (spot zoning). This compromises a more comprehensive view of development of a given area, with single development often “preempting” other developments in the same area by exhausting the remaining infrastructure capacity etc. The result is often that new investment areas are opened on peripheries, while well serviced and located sites in more central locations are “stuck” with dilapidated housing and obsolete industrial facilities lacking sufficient regulatory incentives for land “recycling”. Very little “brownfields” redevelopment is taking place, as it requires comprehensive land-use plans and programs, which are missing.

Infrastructure connection specifications and charges are one of the more difficult and highly diversified procedures, with high degree of discretion and thus moral hazard. Much still depends on the type of personalized contacts developers have with various utility companies, whether municipal, oblast or state owned. There is a widespread lack of standardized specifications and charges, and costs for this can range from $37 per m² to over $100 per m². This “information gap” makes it difficult for developers to do cost planning and thus business planning and bank-based construction financing, which raises uncertainty and risk perception and through this translates into higher profit margins to compensate for the risk taking. If municipalities knew and understood the actual cost-price structure they could price the access to land and infrastructure connection charges in the way of promoting competition and thus affordability.

**Direct (Hard) Construction Costs**

Direct (hard) construction costs are considered as the most stable showing the least variation, since official construction manuals, based on market evidence, provide standardized costs used by the contractors. This argument is also used by builders to claim that there is little room for further improvement in this area, although anecdotal evidence suggests there should be scope for efficiency gains from better and deeper specialization in building trades, in more competition in the building materials industry, in better project management that minimizes idle time and shortens the construction cycle, the potential visible through low productivity in this sector as compared internationally. Building contractors agree, however, that further efficiency gains require up-front investments in new innovative construction methods and building materials technologies.

**Indirect (Soft) Construction Costs**

There is an opinion that indirect (soft) construction costs, which consist of design and project preparatory work are fairly standardized, since virtually all projects are serviced in this respect by a Rostov-on-Don company specializing in the multi-family buildings. The company uses standardized fees for its work, which is indicative of standardized projects with little product diversity. On the other hand the costs include also construction permits and approvals, which can vary substantially given that the developer has to obtain often more than 100 “signatures”. Often, the developer pays “expediting” payments to help speed up the process, and these informal payments may be classified under various categories.

The highly bureaucratic and protracted system of permits and approvals generates high costs, which are difficult to measure directly. Although the approval and permitting fees are not particularly high, it is the time lost for this process that is carried by developers in terms of project duration and related high overhead costs, as well as high risk premiums on developer profits stemming from uncertainty
regarding final decisions about what can be built on the site. In addition to this, the process acts as an administrative barrier to many small new developers entering the market, since they simply cannot cope financially and logistically with such a complex and protracted process.

**Construction Financing**

Limited access to formal construction financing discourages new developers from entering the market and limits expansion of activities by existing developers. This “financing gap” hampers competition among developers, since many potential developers cannot proceed without access to construction financing. This exacerbates the oligopolistic limitations to development of many smaller local markets, as only the largest developers have the financial and other resources necessary to build. Additionally, without reliable access to construction finance, existing developers cannot readily expand production in response to supply signals from the market. Reasons for the lack of construction financing range from the general lack of long-term finance to banks lacking sufficient land collateral. Few developers own land plots outright; instead they have access to the land for a period of up to three years with the right of construction. Land leases for 49 years are concluded only upon completion of construction. Another explanation for the limited access to construction lending is that many medium and large banks in Russia are engaged in real estate development themselves (or are members of developer consortiums), which carry out their own housing production projects and allocate the money for lending to “their own” projects, while all other unconnected borrowers are “sidelined”.

Construction financing relies heavily on “pre-financing” by captive buyers, who agree to provide own funds to developer and thus get a price rebate in return. This way the buyers trade some business risk for lower purchase price, and developers get the necessary financing at a cost of price rebate. There are various opinions about who benefits from this financing technique, but it is quite possible that the “cheap” money from participating buyers leverages developers own money in the sense that it is cheaper than equity – even after price discounts. If this is the case the profit margins are higher than reported in the study.

**Gross Profit Margins**

The customary way of measuring profits in residential development in Russia is to take median market price and compare to the statistically reported construction self-costs. Such a simplistic approach creates and impression of highly excessive developer profits with little regard to time factor, the risk and uncertainty faced by developers, and to the other costs contributing to the overall cost borne by developers. It has been typical to report such profit margins at over 100%, which has drawn policy debate attention to such topics as monopolistic markets, speculation and corruption. The empirical studies of the cost-price structure reveal however, that profit margins in the Rostov Oblast are likely be around 30% with higher margins for high-price market segment and lower margins for popular-market and mid-price segments. Actually, there have been cases of quite small profits in the popular-market segment, which is indicative of the risks taken by developers (poor project performance), of excessive burdening of this market segment (insensitivity to land value), of cross-subsidization from high profit projects by large developers, of more competition in this segment. On the other hand, the lack of land value sensitivity in allocating land to developers creates high-profit opportunities to those who “obtain” the highly valuable sites. Nevertheless, profit margins remain about doubly higher than in advanced transition countries of Poland and Hungary. This is partly reflecting the less competitive and more oligopolistic relations in the Rostov Oblast, but also the
higher uncertainty and risk associated with administrative barriers and obstacles in Russia, which necessitates higher risk premiums on required profits.

**HOW TO STIMULATE MORE HOUSING PRODUCTION?**

This section discusses the key findings and recommendations. This study focuses on the supply-side measures that can be considered in addition to the existing numerous initiatives undertaken by federal, regional and local governments. The Federal Target Program “Housing” already forsees many measures and initiatives with regional and local governments responsible for such activities as: (i) regulatory and legal framework ensuring implementation of federal laws; (ii) development and implementation of regional programs; and (iii) development and implementation of municipal initiatives. The most general recommendation for the Rostov Oblast is to implement the federal housing reform components as quickly as possible and oversee the municipalities in doing the same. The federal reform framework in this area is viewed by the World Bank as well developed, but what is missing is the implementation regulations issued at regional and local levels. Consequently, some of the recommendations may be already under consideration and even implementation, so they should be treated as reinforcement of the reform directions by the Oblast and municipalities/raions. The recommendations are focused only on those measures that can be undertaken by the Oblast and municipalities/raions, while the important measures at the federal level are included in the Background Paper for the federal government. The sequence of the recommendations should not be viewed as the priority listing, although the general framework recommendations should be treated as the necessary underpinning of more specific recommendations. However, the most critical problems that need to be addressed are clearly those related to: (i) the shortage of adequately planned and sufficiently serviced land plots; (ii) the protracted permits and approval procedures; and (iii) the lack of level playing field for new market entrants. Many other problems stem from these basic issues, so addressing them should help with solving the others.

The Russian and Rostov Oblast housing policy debate and formulation have been strongly influenced by the past focus on producer side and thus heavily dominated by the construction industry’s “paradigm” with its emphasis on floor area per person, and on direct (hard) construction self-costs. This Soviet-era housing policy paradigm has been gradually eroding since the onset of transition process, but it is recommended that the Oblast Government consider a more decisive “paradigm shift” towards “mainstream housing policy approach” used in the mature market economies, especially in the European OECD countries. This should entail a stronger focus on a sovereign consumer (the household) making a housing choice regarding: (i) possession of independent and affordable dwelling unit matching household needs, rather than statistical floor space per person, (ii) payment of market price comprised of various components, rather than just construction (hard) “self-costs”. This study recommends generally that they be addressed through the use of expanded European OECD mainstream approach to: (i) strategic targeting of housing supply, and (ii) cost-price structure of housing production.

**General Framework Recommendations**

1. The mainstream approach has been applied empirically in this Background Paper to estimate strategic supply targets and the resultant level of desirable housing production. This supplements the conventional strategic targeting of housing supply in the Rostov Oblast, which has traditionally relied on a relatively inward (hermetic) approach that focuses on construction process that weakly reflects the over-arching socio-economic regional goals of increasing housing product diversity,
accommodating the trend towards smaller households, and facilitating higher labor and residential mobility.

2. **The first key finding** of the study is that the present official housing production target focused on aggregating floor area per person risks underestimating the strategic target as expressed in the number of dwellings. While the official policy target talks about doubling the 2010 production volume by total floor area per annum, the use of the mainstream supply targeting approach indicates a tripling of housing production by the number of dwelling units per annum. In other words, the size of the pie (new production) depends on the way it needs to be cut (household needs). This targeting discrepancy brought by different approaches results in profound consequences on strategic housing targeting, even though both approaches are inter-related.

3. Since Russia, and thus Rostov Oblast, are expected to continue moving toward the European housing policy paradigm, it is recommended that the Oblast adopt the mainstream policy information support more in line with European OECD market economies, where the housing need is expressed in terms of dwelling units, by selected housing characteristics, and over a medium-term forecasting period. This does not mean the abandonment of the traditional measures of floor area per person, it only shifts the prime focus to dwellings per households. As long as the federal level does not use his approach, the Oblast will need to treat this as a supplement and not replacement of the federally practiced information support and statistics in the housing area. Additional statistics gathering, analysis and reporting is recommended in four areas: (i) dwelling units per households, rather than floor area per individual; (ii) cost-price structure in addition to construction self-cost; (iii) annualized net profit rates rather than gross profit margins; and (iv) variability of cost-price components over time, location and market segments - as indicators of investment risk, rather than aggregates and averages.

4. The present housing market imbalances with insufficient production and excessive costs/prices have induced intense policy debate and responses, which appear to be based on an incomplete and distorted picture with relatively little factual and analytic foundations as to the nature and main reasons of the problem. The second key finding of this study is that the popular perception of excessive developer profits of over 100% gross profit margins, is exaggerated as the actual profit margins are in the range of 20-40%. This misperception has diverted much of the policy attention from other causes of the market imbalances and has lead to myopic attempts at punishing developers and investors, which may backfire. On the other hand, if policy measures will be aimed at reducing selected cost categories, without assuring sufficient competition and level playing field, this will allow oligopolistic developers to use cost reductions to increase their profits. This requires commensurate efforts on assuring competitive pressures, not just cost reductions.

5. This study recommends adoption of expanded and modified monitoring of the cost-price structure and dynamics of the residential development sector, as well as modified tax accounting rules allowing developers to include all the costs incurred by them in the development process. For the medium term this study recommends further strengthening and capacity building of local governments, so that they can substantially improve and speed up their land-use planning, as well as finance public investments in social and technical infrastructure - through more autonomous revenue sources not dependent on the implicit “taxation” of housing production and its participants (developers, buyers). This would streamline housing production system more in line with the well tested model of mature housing market economies providing level and transparent playing field and fostering cost-cutting competition in the sector.
6. The cost-price structure empirical studies undertaken recently for this and other World Bank studies, and using the recommended paradigm, have found that the present housing purchaser pays less than half of the price for non-construction cost components, mainly for land access, developer’s gross profit, indirect costs and construction financing. In other words the households are also paying for municipal social and technical infrastructure,\textsuperscript{72} for protracted permit and approval process, for high risks and uncertainties faced by developers, and for oligopolistic market control in some local markets. Typically, the purchaser is offered a “lower price” for agreeing to provide and assume considerable risks of “pre-financing” provided to the developer, who should instead obtain construction financing from a bank. Although the share of construction self-costs is about half of the price paid, they are the single largest cost item in the cost-price structure, so that their reduction can have significant effect on total housing production costs.

**Specific Recommendations**

**Recommendation 1:** Expand statistical reporting on dwellings and households.

In order to introduce the recommended mainstream household-dwelling policy paradigm, as well as help “demystify” the sector in Russia, there is a need to support it with sufficient information, which requires expansion of statistical reporting on various aspects of housing production by dwelling types, standards, location and tenure, as well as on various characteristics of households including labor and residential mobility. The expansion of statistical reporting should include distribution of vacant dwelling units, characteristics of inhabitants, and prices of newly built dwellings, as well as household income distribution (including “grey” income), household size and migration patterns and projections. Fuller statistics are also needed about municipal housing waiting lists – their structure and dynamics. The expanded statistical reporting will require precise definitions and possibility for cross-tabulations and sufficient periodicity. While this is essentially the federal level concern, the Rostov Oblast should consider making proposals on adjusting the list of statistical indicators at Rosstat, as well as the way these would be gathered and calculated. The Oblast should consider establishing a single data base on the regional housing market, which would be accessible to all stakeholders of the sector including researchers. The data base should include not only summary indicators (static, dynamic), but also transactions material (from Rosregistratsya\textsuperscript{73} that can be analyzed and compiled in variety of ways according to needs.

**Recommendation 2:** Expand sector performance statistics on cost-price structure in housing.

Sector performance statistics and benchmarking should be developed by relying on standard cost-price reporting form based on financial accounting used by developers, so that no additional cost will be incurred, since only the existing data will be compiled into these forms. This information should supplement the sector information traditionally gathered by Rosstat. Categorization of projects should be developed to avoid ambiguity and allow comparison of projects of similar cost-price character and thus in terms of quality-location-density, rather than by construction materials, by location, or by price classes.\textsuperscript{74} Comparisons will make it possible for developers to benchmark their projects, for the public sector to identify outstanding projects (both ways) that the market analysts and tax authorities,\textsuperscript{75} will treat with due diligence for discovering market anomalies or non-market factors. Objective data on housing production cost will enable municipalities/raions to calculate “burdens” imposed on developers in such a way as not to discourage more housing production. At the Oblast level the reliable information on the cost-price structure should facilitate development of effective policies on expansion and modernization of utility networks including tariffs for utility.
connections, as well as counteracting negative factors such as local deficiency of construction materials.

**Recommendation 3: Expand policy monitoring of housing production sector.**

Policy monitoring should pay particular attention to the interaction between the shares of construction costs, land/infrastructure costs and profit margins, especially in the broad popular market, where buyers should be paying mostly for good quality construction. The target of high share of direct (hard) construction costs should be accompanied by low profit margins and low share of land/infrastructure costs. Discovery of cost-price variances across similar projects will indicate high risks and uncertainties and provide a signal to the government to respond with adequate measures and preclude undesirable development. Target volume of new construction needed should be estimated in an “dis-aggregated” fashion for each target household group. Whenever possible, updated forecasts should be employed to take into account changing projections of regional economic situation, population’s income growth, changes in the housing market and mortgage lending market. Monitoring is needed on annually demolished ‘krushevki’, substandard dwellings, which in this study have been estimated to make up 1 percent of the entire housing stock in the Rostov Oblast.

**Recommendation 4: Implement federal laws at the regional and local levels**

Federal legislative framework calls for drafting, adoption of numerous regional and local laws and regulations. The Rostov Oblast should review the state of progress in this respect and undertake actions to fulfill this duty without further delay. Municipalities should adopt (or amend) local regulation on planning documentation, tendering procedures and infrastructure provision through funding by the federal subprogram. The Oblast should adopt a regional urban development (planning) law that spells out the federal Urban Development Code’s regulations regarding exclusion of plots from state and municipal asset inventory (registry) in order to divest them through competitive tenders, land delimitation of development lots, provision of local governments with urban planning documentation. The Oblast should provide methodological, financial and organizational assistance to local governments for implementation of this regional urban development law.

**Recommendation 5: Undertake regulatory audit of the permit and approval system.**

There is a need to speed up identification of discretionary bottlenecks, which should be eliminated through amendment of regulations and organizational streamlining in municipalities. Since there are sometimes over 200 approvals and permits required, smaller and medium developers cannot handle such protracted time costs. The idea of one window and time limitations for answering – already accepted widely - should be strongly supported and more effectively implemented taking into account the adverse experience in some cities. Another idea already discussed in Russia is that of extending range of construction works exempt from construction permitting, as well as introducing notification procedure on works rather than awaiting administrative decision, or abolishing double licensing of construction companies retaining only professional personal licensing. These initiatives should be strongly supported and implemented, perhaps through creation of multi-agency “debureaucratization” task force for the sector. The additional advantage of the shortening of the permit and approval procedures is that the “expediting payments” by developers to utility and city officials, will not be needed as is presently the case.

**Recommendation 6: Accelerate implementation of urban planning and land-use zoning reforms.**
The current chaotic process of “spot zoning” lacks comprehensive vision of sustainable development and creates moral hazard of too many discretionary decisions that need to be taken by municipalities. Uncertainty about what eventually can be built on land imposes higher risks on developers and translates into higher profits required to compensate this risk taking. Land use ordinances should be issued based on urban general plans and stipulate types of permitted uses and development parameters (storeys, floor-to-area ratio, density range, etc). This information will also provide definite requirements for utility infrastructure improvements and construction for particular urban area. To facilitate this process there is a need for preparation of specified urban planning documentation including consequences of failing to provide this. The Urban Development Code specifies transitional regulations for this process and these should be rigorously enforced. Capacity building in this area is strongly urged, since urban planners typically have little understanding of market trends and housing development economics (cost-price structure).

**Recommendation 7: Promote a “virtuous circle” of municipal incentives on land access.**
Municipalities need to have proper incentives and capacities to complete urban planning (legal zoning) and invest in infrastructure, rather than continue with the existing “vicious circle” of “discretionary leveraging” of municipal land ownership to extract social and technical infrastructure from developers, which prevents development of land markets and perpetuates discretionary land allocation. By providing adequately planned and serviced land to the market, and by assuring there is level playing field and competition, municipalities should see the prices drop and help improve housing affordability on their territories. A large number of small municipalities fall short of technical capacity in the area of land divestiture and the Oblast should consider producing methodological guidelines for local self-governments on how to organize competitive procurement of construction-purpose land plots. In order to reduce the uncertainty about what can be built and to provide more “level playing field” for smaller developers, the Oblast should also consider development of model investment agreements for municipalities, so that developers can make more reliable assessment of division of responsibilities for various costs and risks.

**Recommendation 8: Implement cost-recovery utility connection charges.**
Connection charges need to be made transparent to create competitive environment for developers, while assuring cost recovery for utility companies. The charges should be based on tariff schedules approved for several years in advance and should be calculated according to objective parameters as building size, function, location and existing burdening by municipality. The tariffs should be “informed” by the economics of housing production so that they do not increase development costs beyond the affordability levels. Municipalities need to be assisted in realizing their infrastructure investment programs by shrewd allocation of regional funds, and eventually by giving them stronger possibilities in own revenue mobilization. The process should be compatible with implementation of Federal Law # 210-FZ. The law should make utility charges reasonably transparent and thus attract possible interest by private sector investors to the local infrastructure sector.

**Recommendation 9: Open housing production market to international competition.**
Lack of competitive pressure is a major critical factor responsible for lower quality and little product differentiation, and higher prices and profits. Given the weak competition, there is little incentive to undertake innovative projects with new technologies, diversified design, type and scale of construction. It is recommended that the Rostov Oblast consider opening the market to foreign developers, construction companies and foreign labor, and within the present limitations set at the federal level. However, the Oblast should recognize the need to
unbundle development (investment) and general contracting (construction) functions, so that local construction companies can compete for the business. The experience in Poland and other transition countries shows beneficial impact of international competition on quality, costs and prices. It is recognized that the entry needs to be gradual and requires establishment of enabling factors conducive of foreign investors in this sector.

**Recommendation 10: Expand the housing policy research agenda.**
Housing policy debate and formulation should be informed by a richer policy research. This study is an example of empirical research that has produced policy relevant findings. It is recommended that a more proactive research agenda be discussed and adopted and should include examples like: (i) residential mobility through chain of moves (filtering) within the housing stock; (ii) cost-benefit analysis of demolish vs. renovate strategies in the existing housing stock; (iii) interaction between urban expansion and sustainable development; (iv) interaction between mortgage lending and housing production; (v) household formation during life-cycle; (vi) household size and socio-economic developments; (vii) rental activities in existing housing stock; and (viii) household structure and formation as related to changing housing needs and demand. It is also recommended that more housing policy research be undertaken by universities and that more international exchanges take place in this area.

**Recommendation 11: Promote pro-active land management by municipalities.**
Municipalities have been using residential land mostly as an asset used to leverage social housing, resettlement and infrastructure contributions from developers. Less, if any, attention was directed towards using land as a strategic asset for achieving land and housing market policy goals of stabilizing anticipated market imbalances like the current one. Provision of adequately planned (legally zoned) and serviced (with infrastructure) urban land should be responsive to housing demand as evidenced by market price signals in specific areas of larger cities. Urban planners should consider setting aside “land reserve” zones, with pre-planned land that can promptly be serviced and released to the market in response to future demand growth. Such a pro-active land management would help stabilize land prices by making land available for development at the right time. It is recommended that the Government consider comprehensive training of urban planners and city officials in preparing housing and land management strategies as a chain of concerted actions comprising planning, land subdivision, provision of roads and infrastructure, land privatization and development control. Much of new supply of land, especially in the longer perspective, will need to come from conversion of agricultural land to urban uses. This process will intensify as the country’s strategic housing priorities emphasize new low-rise construction in peripheral areas, which has already started. Conversion of agricultural land is reputedly very difficult and cumbersome in many places, which calls for specific measures for making this process more streamlined, less protracted and less expensive.
ENDNOTES

2 It is the municipalities who control access to land, its adequate planning (land use zoning) and provision of land-servicing infrastructure.
3 Currently, twenty investment projects related to construction sector enterprises are being implemented.
4 VANT Concern (over 50% of construction market), Edinstvo Concern, OJSC SPF Don-Spark, OJSC Ruslan Company, RotYag Company, CJSC SU-5, CJSC Don-KPD, LLC Kristina Company, LLC Basis, LLC Sila-San, LLC Start, Sigma Ltd, CJSC KKPD, and CJSC KSM -14.
5 Being prepared by the Institute for Urbanistic Studies (Saint Petersburg) in partnership with the Agency for Investment Development (AID).
6 The scale of housing production in the City makes it impossible to control everything through individual (spot-zoning) land-use and construction permit decisions.
7 Major companies: OJSC «TAGMET» (walling materials, construction bricks), OJSC «23 metal-working plant» (residential modular units), CJSC «Brick-making plant» (construction bricks), and OJSC «Stroidetal» (walling materials).
8 In 2000 the average apartment price was 8,678 RUR/m$^2$ and rose to 20,810 RUR/m$^2$.
9 In 2000 housing production was 30.3 million $m^2$ or 370,000 dwellings, and in 2004 it was 41.0 and 480,000 respectively. Growth rate measured by dwellings was 130% and measured by floor area 135%.
10 In 2000 the average per capita money income was 2,290 RUR/month, and in 2004 it was 6,337. Mortgage loans have grown from 56,000 in 2004 to 123,000 in 2005 and estimated 344,000 in 2006. In Sberbank the volume has grown from 9 times since 2002 – from 8 billion RUR to 72 billion, and mortgages are now over 15% of household lending portfolio.
11 In 2000 the average production cost of residential apartment was 4,039 RUR/m$^2$, and in 2004 it was 9,763.
12 A difference between market price and production cost as a percentage of production cost. In 2000 the price was 8,678 RUR/m$^2$ and the cost was 4,039 RUR/m$^2$, and in 2004 respective figures were 20,810 and 9,763.
13 Reaching a monthly growth rate of 9.5% in April 2006.
14 Current monthly rents for studio apartments in Moscow are at 550 USD, for 1-bedroom apartments at 670 USD, and for 2-bedroom apartments at 800 USD. Investment character of the Moscow market is often invoked in policy debate and branded as „speculation“. Almost 50% of buyers are absentee investors from other parts of the country, who often hold off their dwellings from the market. Some 40% of purchasers in the Moscow region admit they buy for investment.
15 Accounting to a recent survey, some 50% of Russians would like to invest in real estate.
16 Mortgage rates have declined from almost 20% in 2002 to around 14% in 2006 with prospects for further reductions.
17 Cement prices rose 80% in a year, but Anti-Monopoly Agency (FAS) lost the court case against the dominant supplier. Cement is crucial for the in-situ monolithic structures, which dominate multi-family construction in Russia.
18 The well publicized cases of arrests of foreign workers are making it difficult for developers to access this labor pool, and force them to informal contracts and payments.
19 Ministry of Regional Development and SME organization complain that smaller developers produce only 24% of construction volume, and are actively “prevented” from competing with large companies with “cozy” local contacts.
20 Growth in costs have not been as high as prices, thus widening the price-cost gap, i.e. gross profit margins, which typically compare market prices and construction self-costs.
21 Most of the growth is taking place in high price markets of Moscow City, Moscow Oblast and St. Petersburg.
22 Duma Vice Speaker points to uncompetitive land allocations in many municipalities. The Antimonopoly Agency reports only 8% of public land allocated by open auctions. Vice Prime Minister recognizes corruption of municipal officials, but also wants to prevent private land owners from speculative withholding of construction land. Ministry of Economic Development and Trade is looking for ways to reduce shortages of construction land.
23 Many private land owners keep land idle even though it is zoned and (partly) serviced. In other cases land speculators grab land in and around planned public investments, in order to resell it to the public at hefty profit.
24 Numerous municipalities controlling the access to land have restricted the market entry by new competitors. Number of complaints on new construction has been increasing. Minister of Regional Development recognizes the problems of corruption, monopolies, administrative barriers that keep smaller builders from entering the market.
25 Minister of Regional Development says that developers have to deal with 50 agencies on planning permissions, construction related approvals, and occupancy permits. In Moscow one needs some 220 “signatures”. Only 15% local governments have land-use zoning plans.
26 This is an expensive, highly discretionary and protracted rezoning process.
27 Quoted figures vary between 80,000 – 100,000 cheated “participatory” buyers (dolshtchiki): 15,000 in Moscow, 20,000 in Moscow Oblast, 12,000 in St. Petersburg, and the rest elsewhere.
Major gaps: (i) lack of regulations on delimiting public land; (ii) deficient law on “participatory” buyers; (iii) property rights registration; (iv) property tax; (v) capital gains tax; (vi) land privatization; (vii) land-use rezoning procedures; (viii) ineffective regulations on urban planning and permit and approval construction procedures. Out of 70 regulations to be issued on the 2004 legislative package, only 15 have been adopted so far. It recognizes that in the market economy it is the household unit, composed of individuals, that comes to the market and “demands” the right product in term of a dwelling unit. Russian housing policy debate is strongly influenced by references to European countries – primarily those in the European Union, both „old“ and „new“ member states. See Institute of Urban Economics (2005): «Desirable Housing Production Volumes, Prices and Composition for Russia» section 2.1; and Institute of Urban Economics (2005): «Analysis of the Current Methodology Used in Russia to Project and Debate on the Issue of Desirable Housing Construction Volume, Pricing and Composition». For example the current market emphasis on producing large apartments is servicing specific demand group, which can afford large expensive apartments, leaving the solution of affordable housing to the secondary market with small flats. These problems are discussed in the Methodological Annex. Survey by RAM Research Center, December 2003 – January 2004 as part of the project: «Evaluation of Scale and Dynamics in Changes of Effective Housing Demand and Scale of Housing Production in Russia», for the Bank of Foreign Trade OJSC (Vneshtorgbank). The optimistic scenario refers mainly to optimistic expected growth in household incomes, based on GDP forecasts of the Ministry of Economic Development and Trade. This is not equivalent of total housing demands, since secondary (resale) market is not included in the target estimation. When one dwelling is occupied by more then one household. Small technologically flawed apartments in multi-family buildings of large-panel technology built during the Khrushtchev era of the Soviet Union. The pessimistic scenario refers mainly to pessimistic expected growth in household incomes, based on GDP forecasts of the Ministry of Economic Development and Trade. The higher production of social housing for pessimistic scenario stems from the lower affordability of market priced housing, which necessitates more provision of more affordable non-market social rental housing. In floor area (million m²) these are: Rostov-on-Don 14.4, Taganrog 3.0, Azov 0.9, Shakhty 1.5, Aksai Raion 1.0. In floor area (million m²) these are: Rostov-on-Don 8.4, Taganrog 1.7, Azov 0.6, Shakhty 0.9, Aksai Raion 0.6. In floor area (million m²) these are: Rostov-on-Don 6.3, Taganrog 1.3, Azov 0.5, Shakhty 0.7, Aksai Raion 0.4. In floor area (million m²) these are: Rostov-on-Don 6.2, Taganrog 1.3, Azov 0.4, Shakhty 0.7, Aksai Raion 0.4. In floor area (million m²) these are: Rostov-on-Don 8.3, Taganrog 1.7, Azov 0.5, Shakhty 0.9, Aksai Raion 0.6. Based on results of the Rostov Oblast micro-census in 1994. Growing number of households through smaller household size can also be reflected through growing floor area per person, as assumed in the official Russian target, but it an artificial indirect and thus less reliable approach. If not moving to a new dwelling, someone who vacates a dwelling for them might move to a newly built one. These are estimates, since no officials statistics give precise number of dwellings produced. Given these figures the average dwelling size would be 193 m², which is unrealistic, given the big needs for social rental housing. In 2004 production is estimated to be at 7,100 dwellings. Rather than monopolist who is a single producer. Often these are old wooden dilapidated houses – like in Kazan program, or bad quality “Chrushtchovki” multi-family buildings built during the Chrushtchov Era of the Soviet Union. Based on the premise, that the cost of “pre-financing” provided by participatory buyers can be expressed as the purchase price rebate they obtain from developers. Which does not include these apartments that were provided by developers as give-backs to municipalities. “Increasing the Supply of Affordable Housing in the Russian Federation”, World Bank, 2006. These were projects in Anapa, Krasnodar, Stavropol and Gelendgik. The survey materials were accompanied with a letter on toughening measures against developers who understate their taxable profits. Developers in effect have to pay the costs of apartment givebacks/contribution, resettlement and infrastructure contributions out of their profits. Since developers’ offer lower purchase price in exchange for pre-financing the cost of such “construction financing” can be estimated as a cost to developer. High value land indicates that developers can pay higher price for the land thanks to high market price that can be charged for housing product on this land/location. If payment for land access is not sensitive to land value, developers of valuable land are able to make excessive profits. Low land value projects will suffer very low profits is such a system.
For detailed analysis of the construction industry’s productivity see pertinent chapter in “Unlocking Economic Growth in Russia” by McKinsey Global Institute, Moscow 1999. Many diagnostic observations are still valid today.

Including long “idle” periods for completing all the necessary permits and approvals.

These include: (i) construction financing; (ii) Land Code amendments; (iii) improved leasehold system; (iv) enhanced social housing assistance to municipalities; (v) productivity in construction industry and building materials; (vi) tax accounting regulations; and (vii) property taxation reform.

In the sense that each dwelling has to have sufficient floor area, so that more dwellings require more floor area.

For example by making comparisons to floor area consumption and housing affordability.

Which compare only the overall construction self-cost to selling prices. Net profit rates include all the costs and take an annualized return rate to be compared with other market investment alternatives.

Ministry of Economic Development and Trade considers that “constraining” developer profitability will only lead to increased costs. The only way to go is to increase competition on the supply side, where the crucial issue is land allocation and access, with high risks of price fixing between local authorities and “insider” developers

The infrastructure gap has been growing over the past years, and the recent decision of the Constitutional Court to allow privatization of social housing allocated after March 1, 2005 means continued drainage of social housing stock.

Instead of paying straight land price or lease, the developer is made to pay to municipality for apartment give-backs, for resettlement of residents, and for infrastructure improvements. Municipalities do not have other means to finance these objectives, so they resort to “leveraging” their land assets.

Russian State Registration Agency.

Construction materials: monolith, panel, brick and wood; location: peri-urban greenfield, intra-urban brownfield, and urban-core in-fill development locations; price category: first, business and economy price classes

Specifically Tax Inspectorate 46 dealing with construction industry.

Sub-program on Plots Provision with Utility Infrastructure for Housing Construction under the 2002-2010 year Federal Targeted Program “Housing”.

This is in line with the current strong insistence of the Presidential Administration on intensification of the “debureaucratization” of the permits and approval procedures.

Methodological guidelines for design of Land Use and Development Rules have already been developed by the Federal Agency of Construction and Housing and Utility Sector and can be found on the Agency’s website.

In a competitive land market, the land access share of the cost-price structure, increases for higher priced better-located housing, so that competing developers pay more for land which produces higher prices. The well-connected developers who get access to higher valuable land convert low cost of land access to higher profits.

Good practice in this respect is evolving in Moscow Oblast, where “land developers” specialize in enhancing large tracts of land by subdividing, rezoning and servicing and then selling building lots to numerous smaller “building developers”, who thus skip the risks of rezoning and servicing.

Federal law # 210-FZ On Principles of Utilities Tariff Regulation, was adopted on December 30, 2004 with effectiveness in 2006.

These measures were strongly recommended in the UN ECE Housing Country Profile on Russian Federation, New York - Geneva 2004.