

*RESEARCH &
KNOWLEDGE MANAGEMENT*



KAZAKHSTAN'S REAL ESTATE MARKET

5 OCTOBER 2016

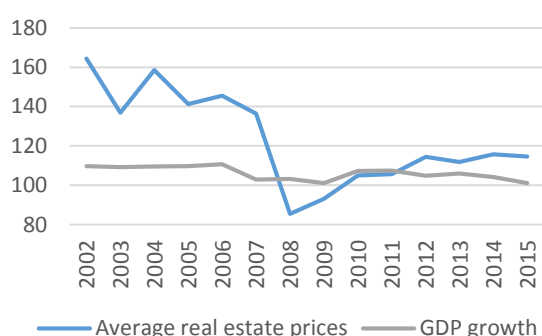
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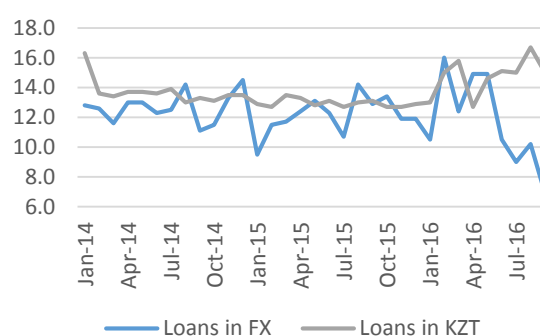
1. Key highlights

- Between 2010 and 1H15, the real estate market was gradually recovering after the global financial crisis, facilitated by improved economic situation in the country, stabilization of the labor market as well as a gradual increase in household income. However, devaluation of the tenge in August 2015 has impacted economic recovery and destabilized the real estate market due to dollarization of property prices and declining purchasing power of the population.

Kazakhstan's GDP growth vs real estate prices growth (2002-2015), %



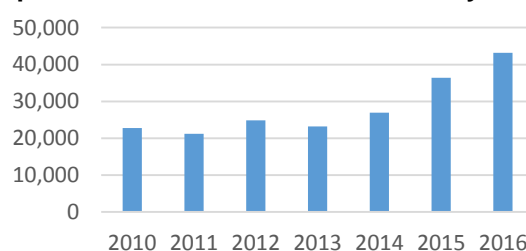
Average interest rates for mortgages and long-term loans (January 2014-September 2016), %



Source: National Bank, Committee on Statistics of the Ministry of National Economy, Samruk-Kazyna

- The government is committed to resolving current issues on the real estate market with massive programs, which aim to provide affordable housing, including rental, refinancing foreign currency mortgages and stimulating construction of infrastructure for individual housing construction.

Number of apartments commissioned in January-July (2010-2016)



Source: Committee on Statistics of the Ministry of National Economy, Samruk-Kazyna

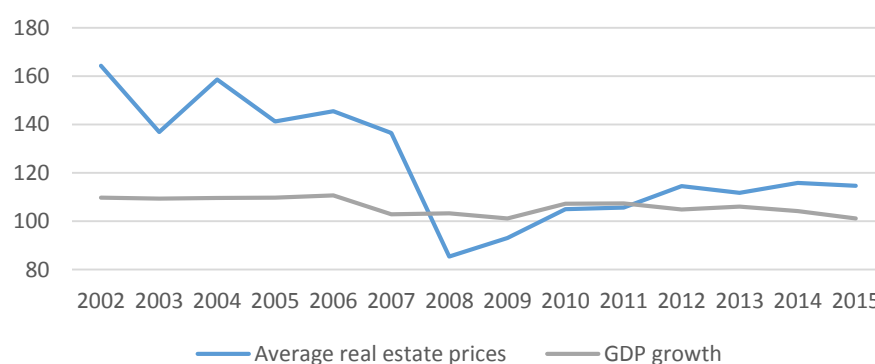
- Foreign currency mortgage holders are exposed to the same risks faced during the financial crisis of 2008-2009. In 1H16, outstanding mortgage loans in foreign currency amounted to KZT380bln, decreasing by 7.9% since the beginning of the year. Approximately 80% of loans in foreign currency are non-performing, around 50% is considered to be written off balance sheets.

2. Introduction

Real estate is an essential investment tool that provides returns in the form of rent and asset value growth. In many countries, real estate makes up the largest component of household wealth, this is especially relevant for economies with underdeveloped capital markets. In this light, mortgage markets are a key part of the monetary transmission mechanism.

However, property value can be volatile and the market itself is very susceptible to boom-and-bust cycles. Considering the social and economic importance of the real estate market, its risks pose a serious threat to the health of the economy. Collapse of the real estate market was one of the main causes of the recent global financial crisis. IMF research shows that of the nearly 50 systemic banking crises in recent decades, more than two-thirds were preceded by boom-bust patterns on the real estate market.

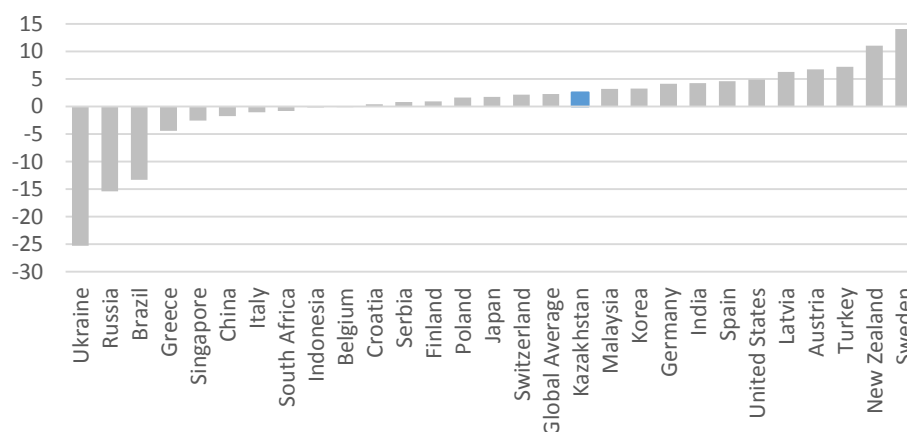
Kazakhstan's GDP growth vs real estate prices growth (2002-2015), %



Source: Committee on Statistics of the Ministry of National Economy, Samruk-Kazyna

Real estate prices and construction investment declined in many countries immediately after the global financial crisis. Since then, there has been a rebound due to financial easing and economic recovery in many developed countries. Property prices have been growing over the past three years as a result of unprecedented monetary stimulus, which supported real estate investment worldwide. Residential property prices increased the most in advanced economies in 2015. Real estate prices rose in most developing economies as well, in particular by around 4% in India and Mexico and by as much as 7% in Turkey.

Real house price growth by country, YoY % change (1Q16)



Source: IMF Global Housing Index, Samruk-Kazyna

However, overall real estate asset prices are still below pre-crisis levels. Moreover, the speed of recovery varies between countries. There are still many countries, including Brazil, China and Russia, where house prices have fallen over the past year. Property prices are generally very sensitive to macroeconomic conditions. Future changes in the global economy associated with the Fed's tightening monetary policy and China's economy slowing down, may drastically change the global real estate market due to increased volatility and possible outflow of foreign capital from emerging markets.

Evidence shows that the stability and effectiveness of the real estate market is an essential prerequisite for sustainable growth and socio-economic development. Achieving this goal requires a thorough analysis of the market's current state, major obstacles and prospects. Key specific attributes of the real estate market are:

- **Durability**
- **Diversity.** This makes pricing difficult, increases search costs, creates information asymmetry, and greatly restricts substitutability.
- **Time costs.** Because of the supply/demand imbalances, real estate market is more susceptible to price bubbles.
- **Both an investment good and a consumption good.** This is especially relevant to Kazakhstan, since real estate is often considered as an investment tool given limited alternatives: deposits have lower returns and capital market is underdeveloped.
- **Maturity.** Unlike other investment instruments that have a maturity date, real estate investment does not normally mature.
- **Requires management.**
- **Inefficient Markets.** Information asymmetry exists among participants in the market, besides, real estate market usually has lower liquidity and high transaction costs. Another disadvantage is the relatively small number of market participants.
- **Cyclical nature.** The cycles in the real estate market development do not coincide in time with the cycles in other industries.

Demand for real estate is affected by multiple economic and demographic factors:

- Migration
- Increased life expectancy
- Employment rates and wages
- Interest rates
- Availability of mortgages
- Levels of confidence in the economy and housing market

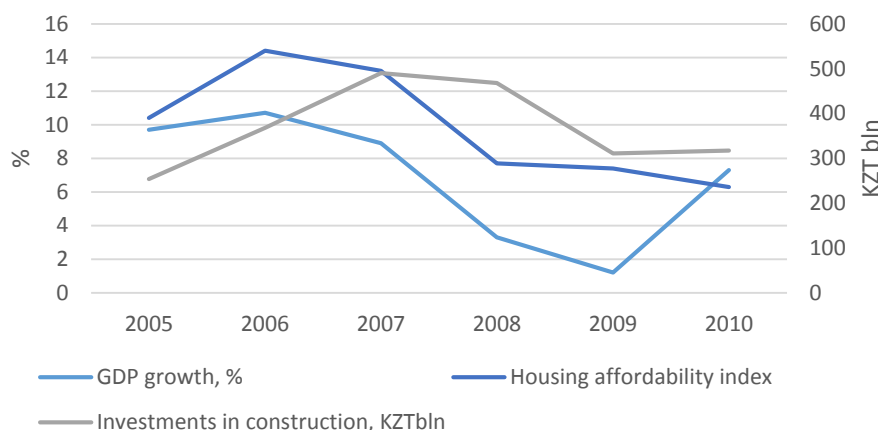
3. Development of the real estate market in Kazakhstan

Before the crisis, Kazakhstan's real estate market grew rapidly, due to high rates of economic growth and income per capita, relative availability of mortgage lending and the lack of alternatives for investment. Consequently, real estate prices denominated in USD grew by 148% for new housing and 272% for secondary between 2005 and 2007, while growth in Almaty, Kazakhstan's largest city, reached 318% for secondary and 354% for new housing.

However, intensive growth of the market over 2002-2007 was characterized by uneven development and imbalances in several segments. The legislation and institutional base had several shortcomings, asset valuation and risk assessment were poor, while dollarization was extremely high and the market

heavily depended on government support. These problems were exposed during the global financial crisis and the following recession in the Kazakh economy.

Affordability of real estate, investments in construction and GDP growth in Kazakhstan (2005-2010)



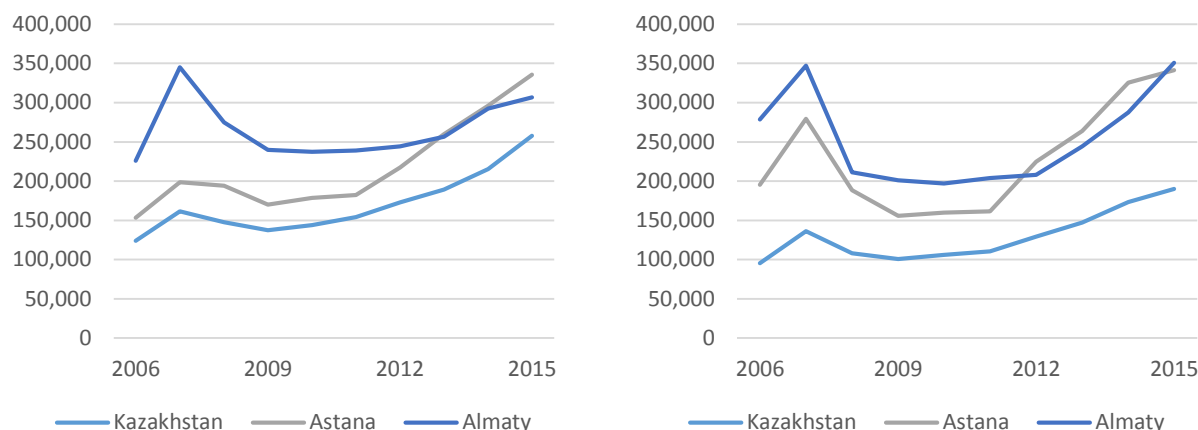
Source: Committee on Statistics of the Ministry of National Economy, Samruk-Kazyna

After the crisis, Kazakhstan's real estate market experienced a sharp decline in property prices (-37% for new housing and -46% for secondary housing over 2009 and 2010), despite maintaining GDP growth. Even with lower prices, affordability of real estate fell to its lowest level since 2003. In addition, many mortgage holders became insolvent due to reduced income and the drop in value of their property. Some of mortgage holders were exposed to currency risks due to devaluation. Consequently, the share of NPL in the cumulative portfolio of commercial banks rose from 4.4% in 2009 to 30.6% in December of 2010. At the same time, investments in construction in 2009 fell by 41% and commissioning of new housing decreased by 7%. These issues forced the government to intervene with several sets of measures, aimed at stimulating construction, stabilizing real estate market and banking sector.

Between 2010 and 1H15, the real estate market was slowly recovering after the global financial crisis. Sector recovery was facilitated by the improved economic situation in the country, stabilization of the labor market as well as a gradual increase in household income. Prices for new housing reached pre-crisis levels by 2012 in Astana and Kazakhstan in general, however, prices in Almaty stabilized on a lower level. Prices for existing housing took much did not recover as fast, reflecting a general shift in preference towards newly commissioned apartments. However, prices on the secondary market surpassed pre-crisis levels in Astana by 2014 and Almaty by 2015.

Devaluation of tenge by 20% in February 2014 stalled the real estate market for several months, however, the effect was not lasting, since the number of deals and prices continued to grow throughout 2014 and 1H15. At the same time, the government started implementing its first affordable housing program, which offered cheap housing primarily to socially vulnerable groups of people. The scope of the program was quite limited, hence it did not affect market prices and affordability of real estate.

Real estate prices in Kazakhstan, Astana and Almaty (2006-2015), KZT per sqm

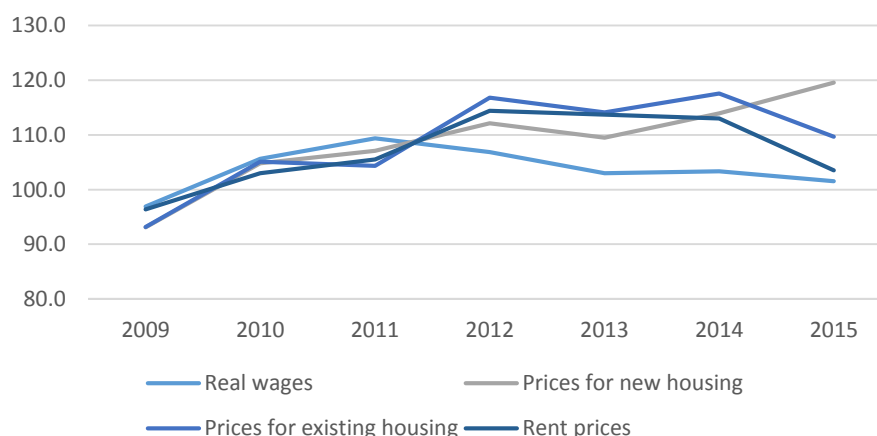


Source: Committee on Statistics of the Ministry of National Economy, Samruk-Kazyna

Dynamics of the main indicators suggests that the overall affordability of real estate was declining ever since 2011. Real wage growth was outpaced by an increase in rent, prices for new and existing housing. Even in 2015, when the economy started slowing down and real wages grew by only 1.5%, prices for both new and existing housing increased by 19.5% and 9.6% respectively. This is explained by the devaluation of tenge in August 2015, since many real estate market participants, especially construction companies, denominated real estate prices in foreign currency. Consequently, affordability of new housing became even lower.

The situation on the real estate market in early 2015 was quite negative. Slowdown of the economy caused by external and internal imbalances limited income growth, while real estate prices, especially for new housing, continued to grow. Large-scale commissioning of new housing, partially stimulated by government programs, especially in larger cities, Almaty and Astana, did not decrease prices and increase affordability.

Prices for housing and rent vs real wage growth, %



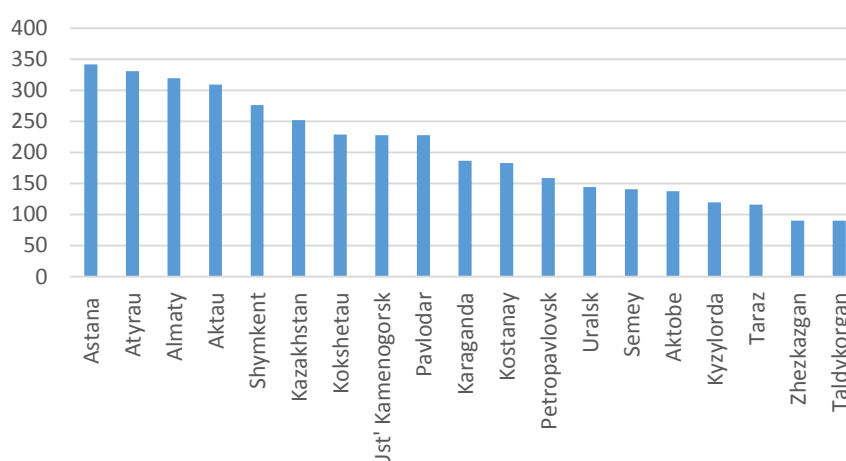
Source: Committee on Statistics of the Ministry of National Economy, Samruk-Kazyna

4. Current state of the real estate market

Since the devaluation of tenge, Kazakhstan's real estate market started to stagnate. The main reason for such decline in activity is high volatility of the national currency, which caused a spike in inflation and adversely affected the purchasing power of the population. At the same time, many homeowners and construction companies refused to adequately decrease dollar-denominated real estate prices. With the decrease in purchasing power, the demand shifted towards smaller economy-class apartments, while business and luxury segments started to deteriorate.

To address this issue, in November 2015, the government forced all market participants to denominate their prices in tenge. This measure had limited effect on the real estate market, consequently, property prices continued to grow but at a slower pace. As of August 2016, the average cost per square meter in new residential apartment buildings amounted to KZT252.2k in Kazakhstan, KZT319.4k in Almaty and KZT341.7k in Astana. The cost of housing on the secondary market was KZT191.4k in Kazakhstan, KZT331.1k in Almaty and KZT326.1k in Astana. Year-on-year average prices in Kazakhstan grew by 9.6% for new housing and 7.8% for existing housing. Compared to December 2010, the prices grew by 67.3% and 79.3% respectively.

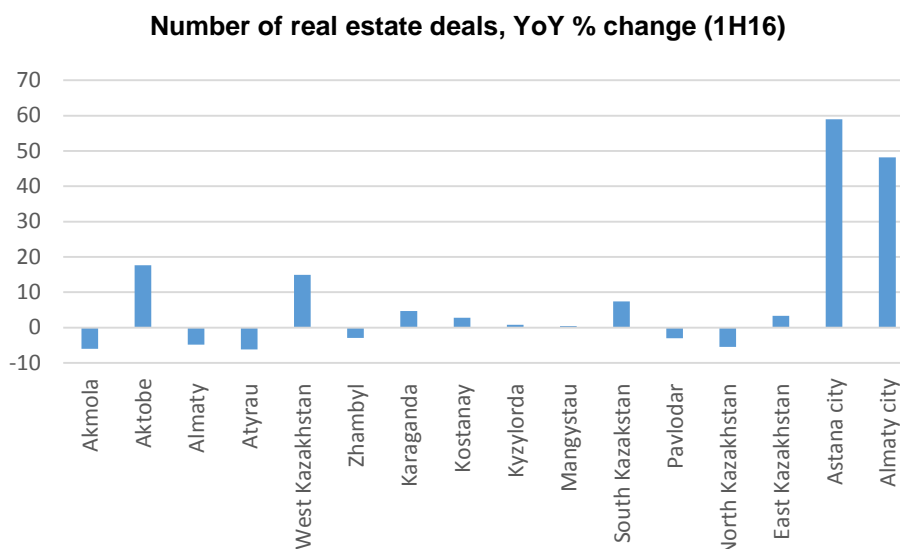
Prices of new housing in Kazakhstan, KZT thousand (August 2016), KZT ths



Source: Committee on Statistics of the Ministry of National Economy, Samruk-Kazyna

Rental fees on average in Kazakhstan amounted to KZT1,277 per sqm, KZT2,387 in Astana and KZT2,281 in Almaty. Since rental fees are denominated in tenge, they experienced a decline in line with decreased demand and purchasing power. Over 1H16, YoY growth was 1.3% in Kazakhstan, -12.6% in Astana and -2.8% in Almaty.

Economic downturn and the devaluation have lowered the growth rate of the number of real estate deals on the market in Kazakhstan's regions, however the number of deals in Astana, Almaty, Aktobe and West Kazakhstan region has significantly increased. This may indirectly indicate that the real estate market in major cities is still overheated and subject to speculation. Some parts of the population have significant cash reserves and deposits in foreign currency, which may be used for investment into real estate. However, with the recent decline in rental fees, returns on investment in real estate is significantly lower compared to other alternatives. Average annual ROI (rent divided by cost of new real estate) is about 6% for Kazakhstan in general, 8.4% for Astana and 8.6% for Almaty, while interest rate for deposits in tenge is 13% to 14%.

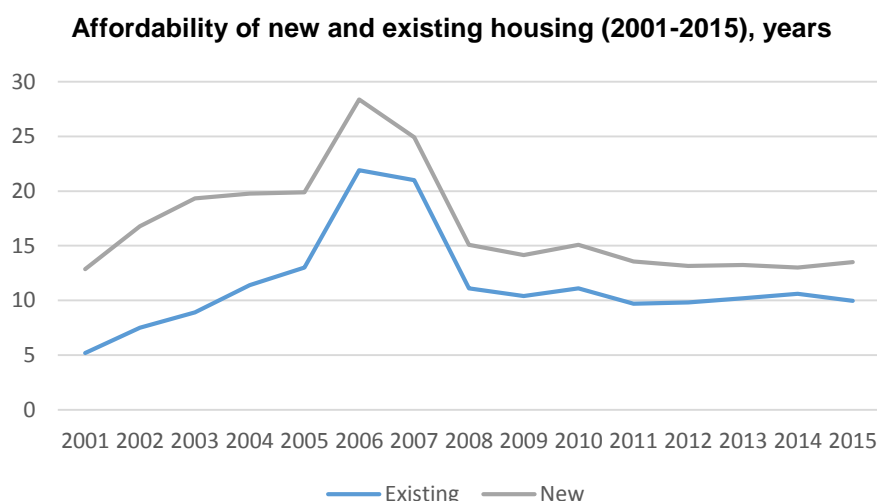


Source: Committee on Statistics of the Ministry of National Economy, Samruk-Kazyna

4.1 Affordability

Housing affordability index is often used to reflect the relationship between income and housing prices, showing how much time it takes for an average household to save up for an average apartment. It is measured by dividing the price of a 54 sq. m. apartment by the average savings of a family of 3 (average income per capita – average spending per capita).

Before the 2008-2009 crisis, real estate market in Kazakhstan was significantly overheated, thus housing affordability index was extremely high, showing that it would take an average family 21.9 years to save up for an existing home or 28.4 years to buy a new one. Since 2011, this index stabilized at around 13 years for new real estate, but the affordability of existing housing deteriorated from 9.7 to 10.6 years. The government is committed to resolving this issue by providing affordable housing at below average prices, but the effectiveness of the programs remains to be seen.



Source: Committee on Statistics of the Ministry of National Economy, Samruk-Kazyna

Given the high stratification of income in Kazakhstan, the real affordability of housing might be a lot lower for socially vulnerable groups of people. Surveys show, that up to 56% of the population believe that the affordable housing program has no or little effectiveness. Such high rates are explained by low

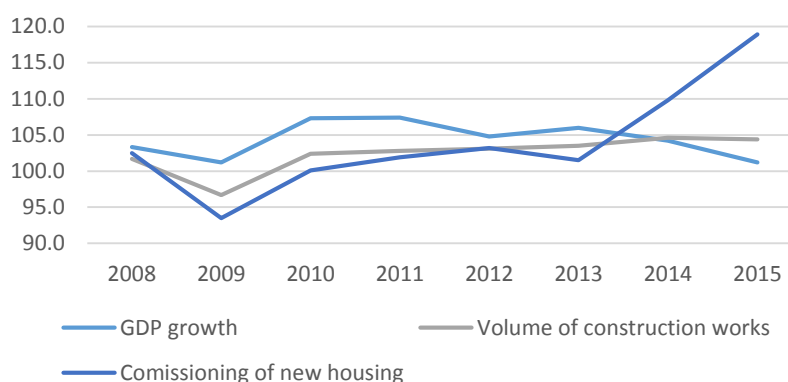
income and low accessibility for 46% of respondents. Commissioning of new housing by the government may resolve these issues, but it would require accurate targeting to provide only for at-risk families and individuals. At the same time, resolution of the affordability program would require other measures, such as subsidizing mortgage interest rates and providing rental housing.

On the other hand, government policy may be dumping prices, providing downward pressure on the already stagnating market. This may divert some investors and contractors, as well as crowd out private initiative, which will ultimately decrease market effectiveness.

4.2 Supply and demand

Ever since the 2008-2009 financial crisis, growth rate of volume of construction works and commissioning of new housing was outpaced by GDP growth. In 2014 and 2015, this trend reversed despite unfavorable economic conditions, volume of construction grew by 4.4% in 2015, while commissioning of new housing grew by 18.9%, reaching its highest level since 2006.

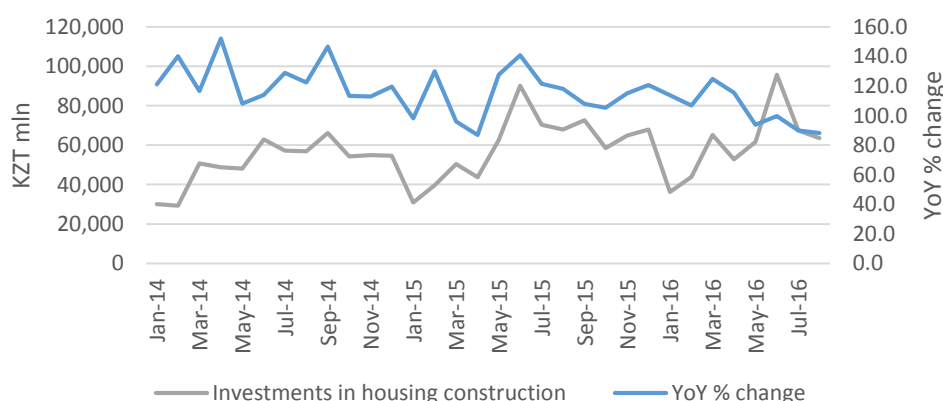
Volume of construction works, commissioning of new housing and GDP growth (2008-2015), %



Source: Committee on Statistics of the Ministry of National Economy, Samruk-Kazyna

Investments in housing construction continues to grow, but at a slower pace, in line with the economic downturn. In January-August 2016, private investments amount for almost 90% of all investments, while both foreign and government investments decreased compared to the same period last year. This can be explained by new financing mechanisms, where the government does not directly invest in construction, but provides guarantees and subsidies to developers.

Investments in housing construction, KZT mln vs. YoY% change (2014-August 2016)



Source: Committee on Statistics of the Ministry of National Economy, Samruk-Kazyna

Most investments were made in Almaty, Astana and Almaty region; their share amounted to almost 60%. Bank lending to the construction sector increased by 3.2% over January-August 2016. Consequently, increased investments continue to drive the supply, over the 1H16, commissioning of new housing increased by 17% compared to 1H15, reaching 4.9 mln sq. m. Astana continues to hold its leading position (1.1 mln sq. m.), while Almaty is second (803.5k sq. m.). Other regions that experienced the largest growth were Almaty, South Kazakhstan, Mangistau and Atyrau regions.

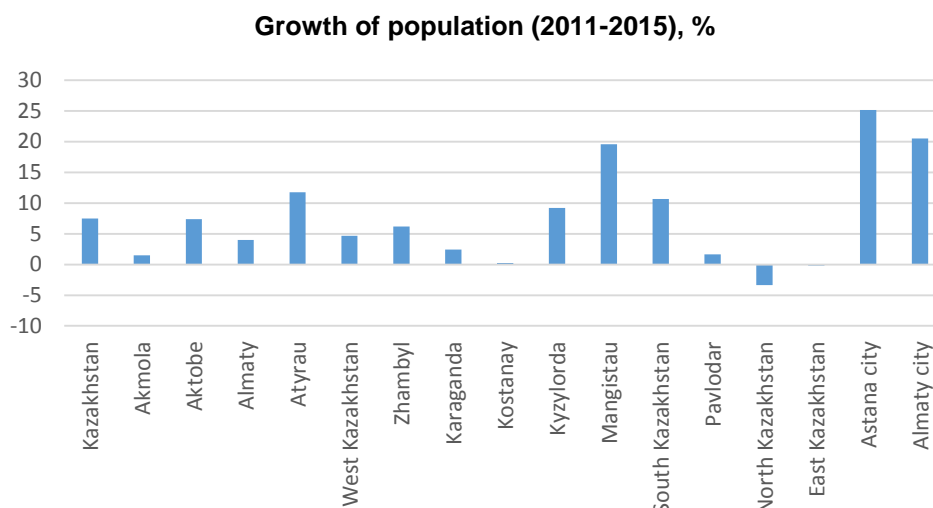
Geographical distribution of new housing commissioning (1H16)

	Total area commissioned, thousand sq. m.	YoY growth, %	Share of total, %
Kazakhstan	4,995.7	116.9%	100%
Astana city	1,134.3	120.5%	22.7%
Almaty city	803.5	104.9%	16.1%
Almaty	724.9	110.5%	14.5%
Mangistau	400.9	146.8%	8%
South Kazakhstan	277.5	155%	5.6%
Atyrau	238	101.5%	4.8%
Akmola	230.6	168.9%	4.6%
Kyzylorda	221.8	109.7%	4.4%
Aktobe	204.3	112.2%	4.1%
Karaganda	151	92.8%	3%
Zhambyl	141.9	119.7%	2.8%
East Kazakhstan	136.9	106.7%	2.7%
West Kazakhstan	111.1	112.4%	2.2%
Kostanay	107.4	90.6%	2.2%
Pavlodar	73.2	166.1%	1.5%
North Kazakhstan	38.4	121.8%	0.8%

Source: Committee on Statistics of the Ministry of National Economy, Samruk-Kazyna

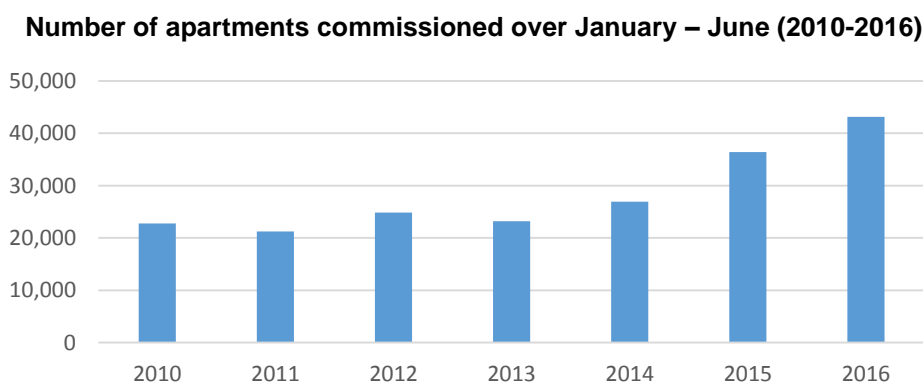
This dynamics is in line with the general demographic trend. Over the last 5 years, population of Astana and Almaty grew by 25.2% and 20.5% accordingly, compared to the average growth in Kazakhstan of 7.5%. Consequently, regions such as North Kazakhstan and East Kazakhstan saw their population decline, while Akmola, Kostanay and Pavlodar regions experienced very little growth.

Medium-term migration and demographic trends are likely to continue, thus larger cities and Mangistau region are likely to see further increase in demand for housing. Moreover, active urbanization increases demand for commercial real estate and office space.



Source: Committee on Statistics of the Ministry of National Economy, Samruk-Kazyna

There are some signs of oversupply on the housing market at the current price level, especially in luxury segments of the market, but the construction companies are unwilling to significantly decrease prices in line with the devaluation of tenge. Developers are currently experiencing difficulties with the sales of commercial housing, since their prices were tied to the exchange rate. It seems that due to the dollarization, the real estate market still cannot find equilibrium despite high supply and growing demand.



Source: Committee on Statistics of the Ministry of National Economy, Samruk-Kazyna

In the medium-term, demand for housing in larger cities, namely Astana, will remain high, especially in light of the upcoming EXPO-2017. Still, developers in the luxury segment of the real estate market would continue to face troubles until the macroeconomic environment and income levels start improving again.

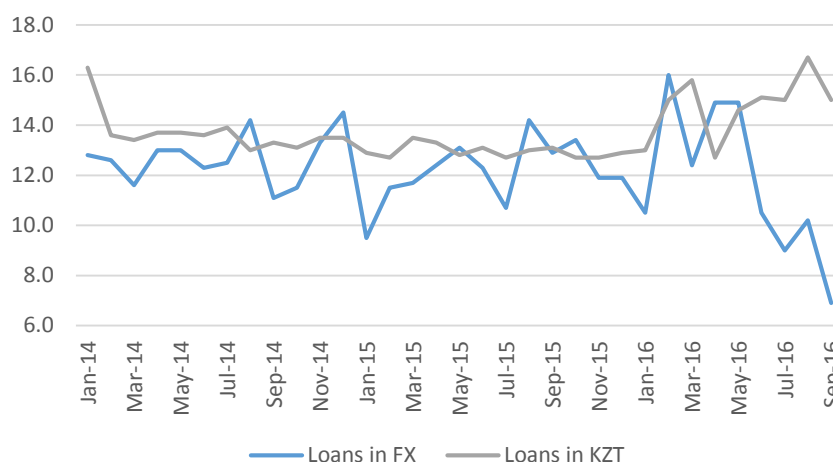
4.3 Mortgage availability

Current real estate prices post a challenge to affordability and home ownership. In this regard, mortgages become the only affordable option to acquire real estate for the majority of the population. Nevertheless, overall economic slowdown and liquidity crisis in the banking sector in 2015 limited growth of the mortgage market, while interest rates remain very high. As of 2015, mortgages constituted only 6.7% of the total loan portfolio, much less than business or consumer loans, which are considered less risky and more profitable. Earlier this year, the mortgage market started to deteriorate further, as

Kazakhstan's real estate market

almost all banks stopped lending due to lack of liquidity in national currency, while the level of NPL's started to rise.

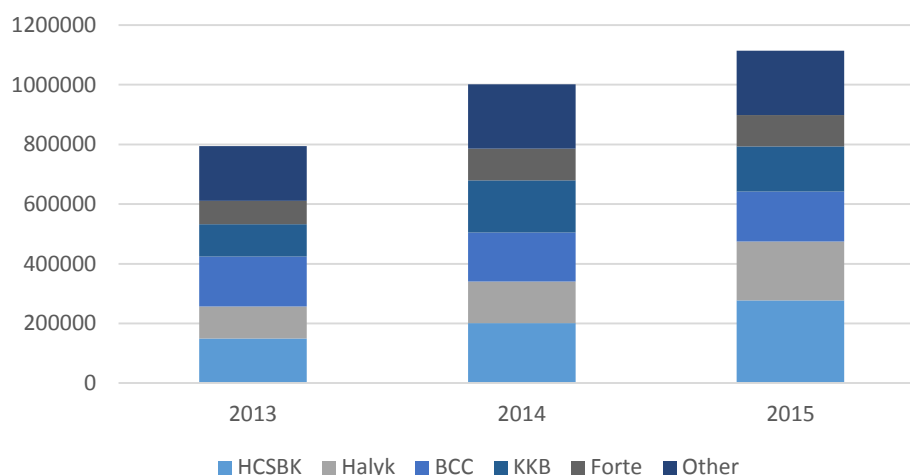
Average interest rates for mortgages and long-term loans (January 2014-September 2016), %



Source: National Bank, Samruk-Kazyna

Interest rates for mortgages in tenge are quite high, despite government subsidies. Mortgage market is becoming increasingly concentrated with five largest lenders constituting more than 80% of the total mortgage portfolio. Largest mortgage lender is state-operated JSC Housing Construction Savings Bank of Kazakhstan (HCSBK), which is a subsidiary of the Baiterek National Management Holding. Other large lenders include Halyk Bank, Bank CenterCredit (BCC), KazKommertsBank (KKB) and Forte Bank.

Distribution of the aggregate mortgage portfolio



Source: National Bank, Samruk-Kazyna

Over the last 3 years, HCSBK increased its mortgage portfolio by more than 30% annually, but recently this trend started to change. Over 1H16 the bank issued 6738 loans totaling KZT34.9bln, compared to 11,571 loans worth KZT76.6bln in 1H15. Nevertheless, demand for housing remains extremely high since the number of depositors in HCSBK increased by 64% to 709 thousand people, compared to 400 thousand in 2014. Additionally, about 400 thousand people are queued to receive housing from the government housing stock. Another 1.2 mln people have claims to free land for individual housing

construction. These numbers are rising every month and reflect the huge demand for housing from individuals who cannot afford housing at market rates.

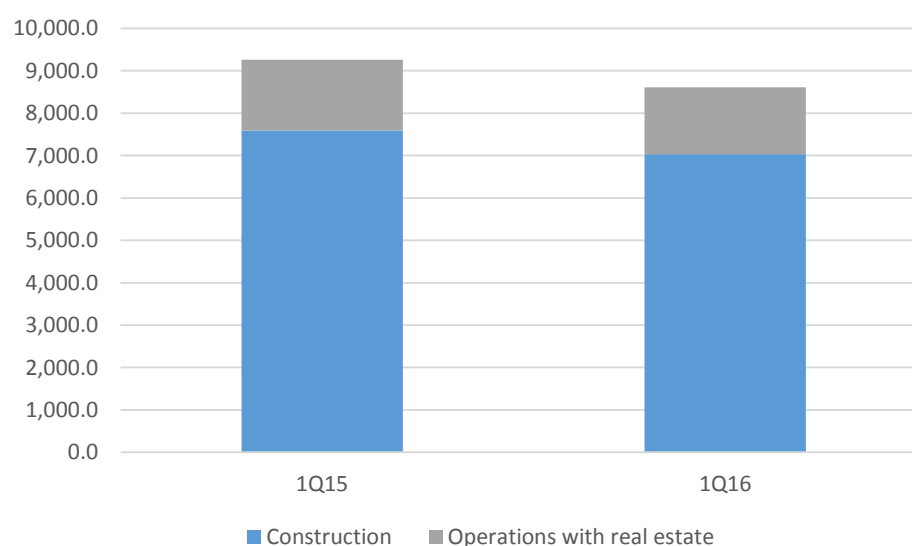
Foreign currency mortgage holders are exposed to the same risks faced during the financial crisis of 2008-2009. In 1H16, outstanding mortgage loans in foreign currency amounted to KZT380bln, decreasing by 7.9% since the beginning of the year. Approximately 80% of loans in foreign currency are non-performing, around 50% is considered to be written off balance sheets

To address this issue, National Bank implemented a mortgage refinancing program, which aims to relieve pressure off the banking sector and the population. The program aims at refinancing more than 20,000 foreign currency loans, including more than 5,000 loans of the socially vulnerable layers of the population. The National Bank will carry out a KZT130bln additional capitalization of the Fund of problem loans, which in turn will deposit funds in commercial banks for 20 years with 2.99% annual interest rate. These funds will be used by the banks to refinance troubled mortgages. As of 1 September 2016, banks approved 17,845 applications for a total amount of KZT106bln.

4.4 Foreign investments in construction and real estate

Kazakhstan's real estate market is moderately penetrated by foreign companies. Foreign investment stock in construction and real estate amounted to USD9.3bln in 1Q15. Naturally, the recession and consequent stagnation of the real estate market decreased its attractiveness for foreign investors. Investment stock decreased by 7% YoY to USD8.6bln in 1Q16. The decline was marginally larger than the overall decline in foreign investment into Kazakhstan. Consequently, investment stock in construction and real estate constitutes only 4.3% of total foreign investment in the country.

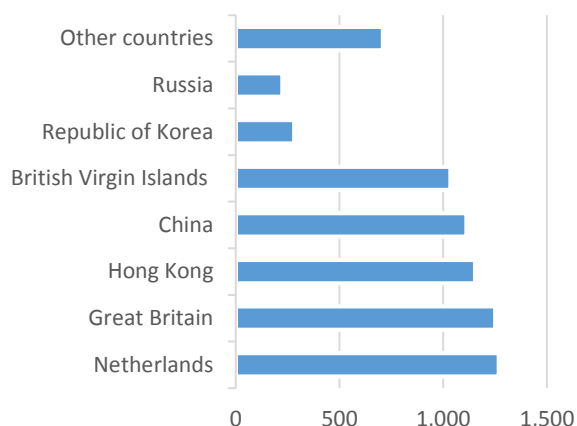
Foreign investment into construction and operations with real estate, USD mln (1Q15 vs 1Q16)



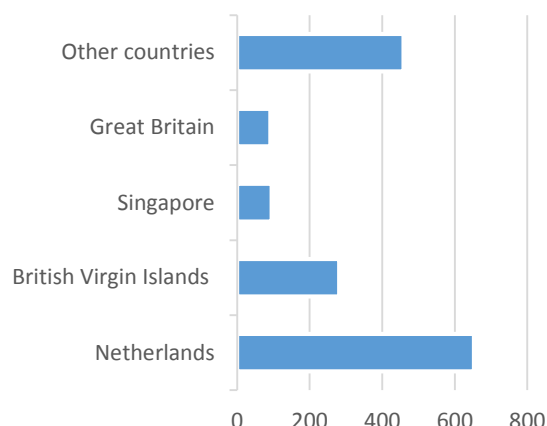
Source: National Bank, Samruk-Kazyna

Kazakhstan's market keeps being oriented towards internal funding, while the share of foreign investors remains at a low level. Despite the low number of deals with foreign capital, the geography of foreign investors includes countries such as Netherlands (18% in construction, 41% in real estate), Great Britain (18% in construction, 6% in real estate) and British Virgin Islands (15% in investments, 18% in real estate). China and Hong Kong are big players in construction (16% each).

Foreign investment in construction by country (1Q16), USD mln



Foreign investment into operations with real estate by country (1Q16), USD mln



Source: National Bank, Samruk-Kazyna

The current stabilization of macroeconomic indicators might have a positive impact on the investment market. Foreign investment in construction might grow in the next year with massive projects being implemented in preparation to EXPO-2017. Additionally, recent developments in the global economy might suggest that interest rates in developed markets might remain low for a longer time than expected, driving foreign investment into emerging markets, including Kazakhstan. This will largely depend on the overall macroeconomic environment.

4.5 Government measures

Given the importance of the real estate market to the overall health of the economy, current situation requires other government measures, aimed at satisfying public demand. This is why Kazakhstan's Nurlı Zhol program highlights housing construction as one of the priorities. Total government investments in construction under this program in 2016 is KZT442.5bln, including KZT423.9bln from the National Fund. Additionally, for 2017 the government allocated:

- KZT57.4bln will be directed on construction of engineering and communications infrastructure for housing, including individual housing construction.
- KZT10bln will be used to finance guarantee mechanism for shared home ownership.
- KZT54.3bln will be allocated for other priorities, including subsidizing interest rates on borrowed funds in Kazakhstan Mortgage Company (KMC) and Baiterek-Development, as well as construction of subsidized rental housing.
- So far, over 2015 and 1H16, the government provided housing to 22,6 thousand families.
- Additionally, the government plans to construct more than 33,000 apartments in 2017 only, including 9,923 rental, 12,904 affordable and 10,600 commercial apartments.

Over 2016-2017, Kazakhstan Mortgage Company (KMC) plans to build 13 rental residential complexes for socially vulnerable groups, with the total area of 136,000 sq. m. These projects will be constructed in eight cities: Astana, Almaty, Aktobe, Petropavlovsk, Ust-Kamenogorsk, Kostanai, Kokshetau, Karaganda.

Additionally, within the Nurlı Zhol program, Samruk-Kazyna Real Estate Fund (REF) is planning to co-finance construction of over 800,000 sq. m. of commercial housing, including 490,000 sq. m. by the end of 2016. This initiative is different from other support mechanisms for developers, since:

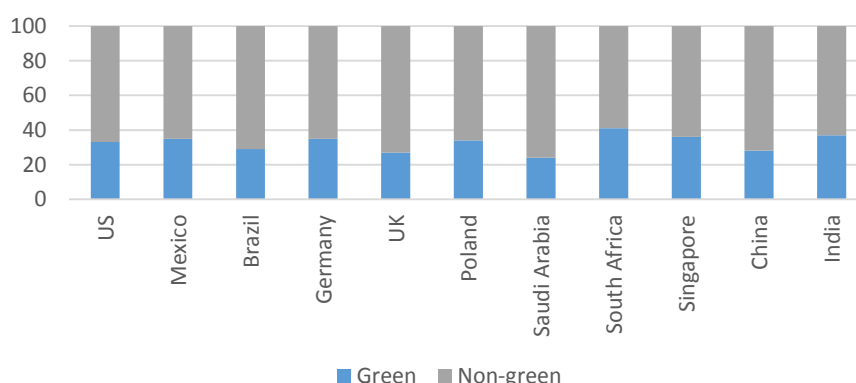
- REF's funding is limited to 80%.
- The developer is given the right to sell apartments on the open market for only 24 months.
- Unsold housing will be returned to REF's pool at a discount of 20%.

5. Green construction

Like many other emerging economies, Kazakhstan is becoming increasingly interested in green construction. Green building (also known as green construction or sustainable building) refers to using processes that are environmentally responsible and resource-efficient throughout a building's life cycle: from siting to design, construction, operation, maintenance, renovation to demolition. Although new technologies are constantly being developed to complement current practices, the common objective of green buildings is to reduce the overall impact of the built projects on human health and the natural environment by:

- Efficiently using energy, water, and other resources
- Protecting occupant health and improving employee productivity
- Reducing waste, pollution and environmental degradation

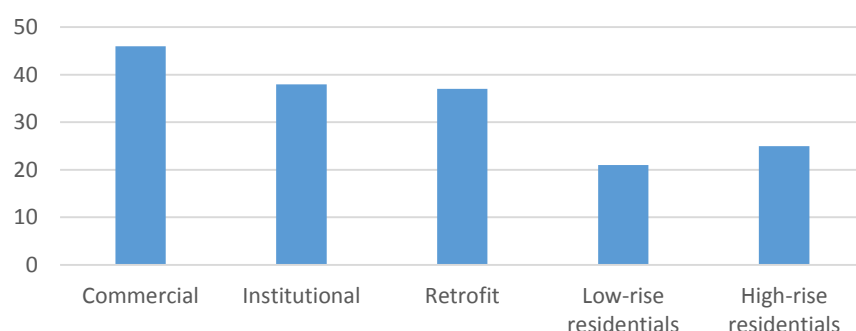
Share of green buildings in construction, % of respondents



Source: McGraw-Hill Construction, Samruk-Kazyna

Green construction has been gaining popularity globally over the last 40 years, construction of efficient and energy-saving buildings has become a real trend. Global green building continues to double every three years, driven by emerging economies like Brazil, India, Saudi Arabia and South Africa.

Priority sectors for green growth, % of respondents

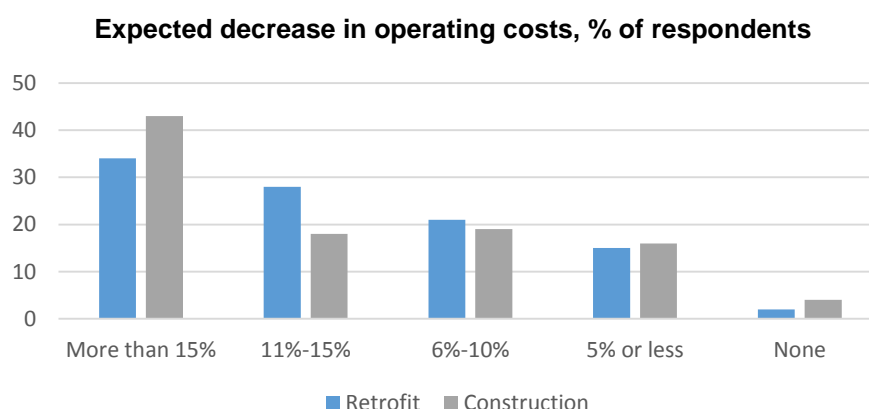


Source: McGraw-Hill Construction, Samruk-Kazyna

As a result of the increased interest in green building concepts and practices, a number of organizations have developed standards, codes and rating systems. Green building rating systems such as BREEAM

(United Kingdom), LEED (United States and Canada), DGNB (Germany) help consumers determine a structure's level of environmental performance. LEED and Energy Star certified buildings achieve significantly higher rents, sale prices and occupancy rates as well as lower capitalization rates potentially reflecting lower investment risk.

McGraw-Hill Construction study found that green buildings offer significant operational cost savings compared with traditional buildings. Respondents of the survey expect an average of 14% savings in operational costs over five-year for new green buildings and 13% savings in operational costs for green retrofit and renovation projects. Building owners also report that green buildings-whether new or renovated-command a 7% increase in asset value over traditional buildings.



Source: McGraw-Hill Construction, Samruk-Kazyna

Pro's and con's of green construction:

Pro's	Con's
Lower operating costs (e.g., energy costs, total lifecycle costs) - most green buildings cost a premium of <2%, but yield 10 times as much over the entire life of the building	Higher perceived first costs - new appliances and modern technologies tend to cost more money
Higher value at point of sale	Lack of political support/incentives – green growth is a relatively new trend which needs more public attention
Healthier environment for the people	Lack of market demand
Higher rental rates	Lack of public awareness
Higher occupancy rates	Lack of trained/educated green building professionals
Environmental benefits	Access to capital

Source: Samruk-Kazyna

Despite such significant economic, social and environmental benefits, green construction in Kazakhstan is very underdeveloped. Kazakhstan Council for green building (KazGBC) was established in 2013 to support green construction. Kazakhstan's first planned green projects are Greenville cottage houses and the new educational building of Kazakh-British Technical University in Almaty, as well as Talan Towers and Green Quarter in Astana. There are other buildings, which are planned to be renovated to receive a green status. Moreover, in preparation to the EXPO-2017, Kazakh government plans to

develop numerous alternative energy, green construction and other environmentally friendly projects, which will promote this segment.

The largest green construction project in Kazakhstan is Green Quarter, which is developed by Samruk-Kazyna Development and BI group, the largest construction company in Kazakhstan. The concept of this residential complex was developed by Aedas, British architectural firm, which today represents one of the largest architectural firms in Europe. Total cost of the project is about KZT44bln. Currently, Green Quarter is the only Leadership in Energy and Environmental Design (LEED) certified project of its kind in the CIS. LEED is one of the most popular green building certification programs, that includes a set of rating systems for the design, construction, operation, and maintenance of green buildings, homes, and neighborhoods that aims to help building owners and operators be environmentally responsible and use resources efficiently.

Another green project in Astana is the Talan Towers complex, which combines commercial area, office space, residential area and a hotel. Its total space is about 120k square meters, while cost of construction amounted to USD350mln.

6. Conclusion

Kazakhstan experienced a sharp decline of the real estate market due to adverse external conditions. Devaluation of the national currency, along with a decrease in real wages and purchasing power affected the demand side, while slight overinvestment and high exposure to currency risks shocked the supply. While the bust of the real estate market was not as dramatic as during the last crisis, its consequences might be long lasting.

Kazakhstan's real estate market suffers from several structural weaknesses that might slow down the recovery process:

- Stagnating economic growth
- Low credit and mortgage availability
- Institutional weaknesses
- Low affordability of housing
- Market failures due to poor evaluation of risks
- Remaining dollarization despite the change in the exchange rate regime

The government is trying to resolve some of those issues through various programs by providing affordable housing, refinancing foreign currency mortgages and stimulating construction of infrastructure. However, these efforts might not be sufficient to reduce the negative economic and social consequences of the current situation. Real estate market will continue to stagnate in the short-term perspective.

However, there are several promising market segments, namely the green construction, which might be profitable for market players. Green construction is a long-standing global trend that has economic, social and environmental benefits for contractors, as well as for proprietors. Unfortunately, this segment of the real estate market is currently severely under developed, but the upcoming EXPO-2017 might increase the popularity of green construction.

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