

REAL ESTATE FINANCING

FUNDING OF LEGAL ENTITIES AND REAL ESTATE

In 2016, there was a record year-on-year increase in investments in the Czech Republic, which indicates a continuous investor interest in assets in the Czech Republic, as well as the appetite of banks to finance these purchases.

The market is characterized by high liquidity and low interest rates.

Development, especially in Prague, is negatively affected by discussions about the metropolitan plan and confusion surrounding Prague building regulations.

BANK FINANCING

2016 in the Czech real estate market was characterized by the continuation of the year-on-year increase in the volume of investment transactions in all market segments (offices, logistics, retail) . In comparison with 2015, the volume of investment transactions increased by more than 20%, to approximately 3.5 billion EUR. The average transaction size was 56 billion EUR, which is 10 million EUR more than the ten-year average.

The dynamic activity in the domestic market is supported by the appetite of financing banks. The stimulants are low interest rates and excess liquidity, both of which lead to high competition among banks, which ultimately benefits the clients.

Credit financing is relatively easily available for quality projects and experienced players. Investment transactions supported by verifiable cash flow are preferred by banks over development financing.

The banks have learned to work with the regulation requirements, (i.e. Criterion Basel III), which requires banks to maintain the necessary level of risk-weighted assets compared to the amount and quality of credit

exposure. The more conservative the financing structure is (i.e. lower LTC or LTV) and the higher the quality of the asset (strong and stable cash flow), the lower the consumption of regulatory capital, and of course, the lower the margins are for clients.

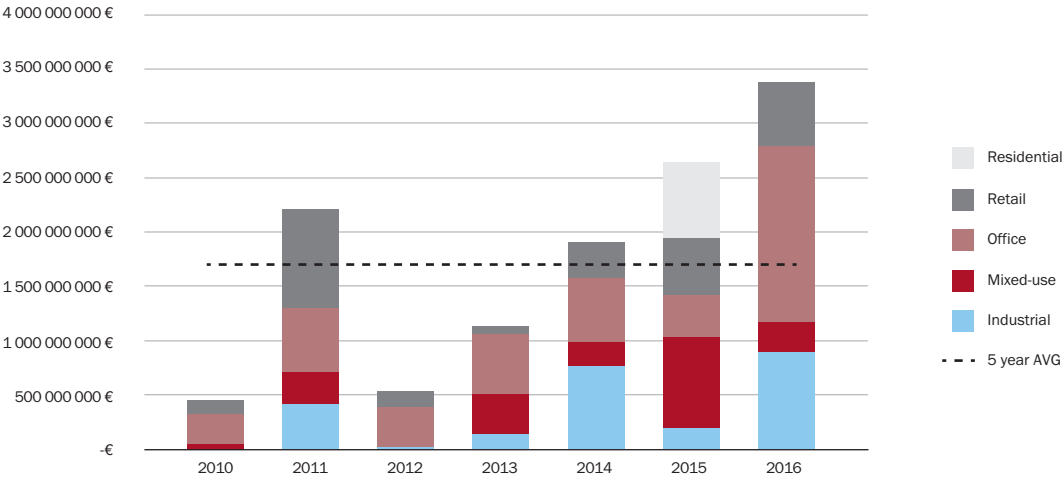
It can be stated that the loan conditions of banks operating in the Czech market are not very different from each other. The financing of speculative transactions continues to be very limited. Land for building is also mostly bought by developers from their own resources, without the use of credit. One of the main reasons for this is the fact that both speculative development and the purchase of land on credit lead to a large consumption of regulatory capital, which banks operating in the real estate market must logically save.

For the financing of development, banks require a 25–35 % drawdown of the loan from the borrower's own resources (i.e. 65–5 % loan to cost – LTC). The amount of the (pre)lease varies according to individual segments: in logistics 70–90 % is generally required, for retail space it is 50–70 %, and for offices it is at least 50–60 %. The higher the pre-lease, the lower the percentage of equity that the bank is willing to accept.



GRAPH The volume of investment transactions in the Czech Republic in the period 2010–2016, listed in millions of EUR.

Source: Knight Frank



¹ You can find more detailed information in the "Investment market" chapter on 96.

However, it is not often that banks provide more than 80% LTC even in a fully pre-leased project.

For development, banks also require the sponsors to guarantee their obligation to fund cost overruns (i.e. Cost Overrun Guarantee), as well as the smooth completion of the project (i.e. Completion Guarantee). The guarantee is valid until the project is approved and real cash flow comes in, supported by long-term leases with quality tenants, or purchase contracts in the area of residential development.

For financing investment transactions, the required loan to value (LTV) often ranges between 55–70 %. The banks' willingness to accept a higher LTV is very limited and quite exceptional in the market. Again, the reason for this is the consumption of regulatory capital. Compared to previous years, we can increasingly see a "healthier" conservative LTV of around 50%, which is due to excess liquidity in the market.

In terms of financing structure, it is interesting to look at amortization schedules (the time over which the loan is redeemable) and the „tenor“ (length) of bank financing. The amortization schedule is essential to the investor's economy: the longer the amortization schedule is, the more he can use free cash flow, to pay investors, for example, who had temporarily "entrusted" him with their resources for consideration.

In common practice, there are reasonable compromises made between the investor's requirements and the bank's possibilities: the steady amortization schedule for new real estate is between 20–25 years (offices and retail), and up to 15 years for older real estate. For logistics, the installment plan is generally shorter than for offices and retail; it is normally between 15–20 years, depending, of course, on the nature of the lease agreements (length/quality of tenant).

For the majority of investment funding, the bank provides funding for the client with a five-year tenor. It is expected that the loan will be repaid at the end of the five-year period, according to the current situation of the project, length of leases, the monetary price in the market, etc. The long-term goal of investors is to gain a ten-year

commitment from banks (the effort to fix the current low interest rates). However, banks very rarely take this step; the general conditions are long-term (ten-year and more) lease agreements with financially strong tenants.

For the financing of investment transactions, banks put a strong emphasis on the quality and transparency of the independent valuation, and technical, legal and tax clearance of the property before the purchase (Due diligence).

For the sustainability of the quality of the investment, professional asset and property management is also crucial.

The financing structure corresponds with the margins, which are currently in the range of 2.00–3.50 % for CZK development financing, and 2.20–3.70 % for EUR development financing. The margins, also including liquidity surcharges (costs for obtaining resources), differ in individual banks.

Despite increasing competition, the margins in investment financing did not decrease in comparison with 2015. On the contrary, they were stabilized, and we can even expect a slight increase in the forthcoming period of 2017–2018. The margins are currently in the range of 1.70–2.50 % in CZK; and in the case of financing in EUR, the margins are approximately 0.20–0.30 % higher.

The specific conditions for investment financing always depend on the nature of the project, the client's history, the LTC/LTV amount, the parameters of lease contracts and cash flow stability. In this case it is also true that the lower the LTV, the lower the final margin may be.

The professionalism and previous experience of the developer/investor, quality of repayment source, legal enforceability and the intrinsic value of collateral, continue to play a significant role in structuring financing. In addition to credit funds, developers and investors try to get funding in the form of bond issues - both corporate and project. In comparison with the volume of credit, however, it is a negligible percentage.

"Banks have exaggerated collateral requirements, exclusivity requirements for one bank, limitations of business activities and interference with the functioning of a loan company."

Jiří Pácal, Central Europe Holding

ARTN SURVEY 2016

This extensive sector survey, which the Association for Real Estate Market Development conducted among real estate professionals early in 2016, also concerned the

financing of real estate. Answers to the posed questions often brought a very inspiring result, which can be compared with previous years.

IS THE OFFER OF FINANCING FROM BANKS TO CLIENTS FLEXIBLE/SATISFACTORY ENOUGH?

It is positive that the vast majority of respondents (94%) consider the offer of financing from banks to be satisfactory and flexible enough. Compared to years 2014 and 2015, there was a shift from 53% to the current 94 %. Respondents reported a significant surplus of free capital and low interest rates in the market as a reason for this positive trend. Both factors lead to competition and make debt financing significantly more affordable for everyone.

IS CONSULTING EXPECTED OF BANKS (PROPOSAL OF THE STRUCTURE, TAXATION, LEGAL ASPECTS), OR ARE PURELY FINANCIAL SERVICES PREFERRED?

The latest survey confirms that customers increasingly expect banks to provide financial services combined with consulting. This is a continuing trend, when in addition to traditional products (loans), banks provide a certain extent of consulting, although the majority of this activity is free of charge. This often includes the design of the structure (equity/loan), the length of the repayment schedule, etc. The aim of the cooperation between the bank and the client is to provide a loan under conditions that are satisfactory to the client, making sure that the loan is also acceptable for the bank in terms of risk. Currently 82% of respondents expect consulting from their bank.

HAVE CLIENTS COME ACROSS ANY BARRIERS/CONSTRAINTS FROM THE BANK IN NEGOTIATING THE LOAN FOR THE INTENDED PROJECT/INVESTMENT?

There is a growing percentage of respondents who stated that there are some limitations on the part of banks, but they do not consider them important or restricting to their activity (currently 56%). Most frequently reported limitations include the amount of equity and pre-leases or pre-sales, or the length of the repayment plan. A positive factor is the fact that 13% of respondents say they have never come across restrictions from banks. On the other hand, about a third of clients consider bank restrictions to be significant: they often refer to the lengthiness of the approval process, exaggerated collateral claims and the unwillingness to undertake an "unknown" risk. One of the reservations concerning financing barriers indicates that banks do not sufficiently understand older and restored real estate.

DO YOU EXPECT THE LOOSENING OF FINANCING CONDITIONS IN 2017-18, OR RATHER THEIR CONSOLIDATION?

Compared to 2016, when the vast majority of experts stated that there would be a loosening of conditions, this year 47% of respondents stated that they are not expecting changes in financing parameters. The same percentage of respondents predicts a tightening of financing conditions, and only a small portion (6%) of respondents is hoping for a loosening of conditions. The acquired spectrum of qualified opinions demonstrates how developed our market is. It is gratifying that the majority of respondents are aware of the fact that further loosening of financing conditions is not realistic.

2016 confirmed that the real estate market in the Czech Republic is healthy, dynamic and sufficiently transparent to investors. Assets in the Czech Republic and the yields achieved here continue to be interesting for investors. We will see how much Brexit or the outcome of the US presidential election will affect the parameters of international transactions. I personally expect a gradual tight-

ening of financing conditions, both in terms of structure (LTC/LTV) and with regard to the gradual increase in margins, especially in long-term financing.

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ČSOB



Aupark, Hradec Králové | HB Reavis Group



Blox, Praha | bpd partners a.s.

FEI, Brno | CTP Invest, spol. s r.o.

SMART byty, Nové Butovice | Trígema a.s.



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ALTERNATIVE REAL ESTATE FINANCING

Roughly three quarters of respondents to the ARTN survey consider the current offer of bank loans for financing real estate to be satisfactory. However, the quality of the client and his rating, capital adequacy and the quality of the project as such are still very important. Moreover, according to our estimates, financing conditions will be gradually tightened and interest rates will sooner or later begin to increase, mainly due to rising resource prices.

Regulatory requirements have and will have the greatest impact on the behavior of banks in the foreseeable future (Basel III, which entered into force on January 1, 2015, and other specific restrictions for the real estate sector, including the latest CNB requirements). On the other hand, the Czech economy is in good shape, banks are sufficiently capitalized (including foreign parent banks), and the volume of adjustments continues to decrease. This allows them to allocate a part of the capital to risky assets. However, we still cannot avoid discussing the structure of financial resources in the economy.

The aim should be to reduce debt and increase the share of capital in the overall balance, which has a positive impact on the stability and security of the market. Real estate is no exception, and people have long been calling for a greater allocation of pension fund and insurance company capital to real estate in this context. Respondents to past ARTN surveys also repeatedly expressed the clear opinion that these resources should be involved in investment activities in the Czech Republic in a larger extent.

However, so far nothing major has happened in this direction. This is due to the still valid requirements for guaranteeing non-negative evaluation of savings in transformed pension funds, whose portfolios currently represent the vast majority of fund assets (about 95% at the end of 2016). There is therefore currently no way to make the managers of these portfolios invest in more profitable but also riskier and less liquid alternative assets, which include real estate. Only a statutory regulation of parameters would help.

New subscriber funds that enable a more dynamic investment strategy have almost 5% of assets worth 18 billion crowns. Due to this volume, we will not find a single real estate investment among them. The share of real estate in the investment portfolios of local pension funds is near zero (0.5 % at the end of 2016), while the standard level is considered to be 5% to 10 %.¹

More favorable legislation prevails among Czech insurance companies. However, this does not correspond with the approach of their portfolio managers.² The only insurance company that recently developed notable activity in the real estate market was Kooperativa.

REAL ESTATE INVESTMENT FUNDS

The capital of private investors can be used similarly through investment funds. At the end of 2016, the CNB registered a total of 85 investment funds in the category of real estate or mixed investors in real estate as well. The capital allocated in them is estimated to be worth tens of billions of crowns. This number includes both qualified investor funds (QIF) and unit trusts aimed at small investors (consumers).

In terms of capital variability, 68 funds are open-end and 17 are closed-end. Some of them, however, are entities whose portfolio consists of corporate securities of companies involved in real estate, they are therefore not investing in specific real estate (directly or through single purpose vehicles – SPV). Off-shore private equity funds founded abroad are not included.

36 of them have registered in the Prague Stock Exchange, of which more than a half (20) have registered in 2016–17. Since 2015, legislation allows QIFs to continue to pay 50 income tax provided that they are traded on a regulated market. Even under other circumstances, funds may benefit from this reduced tax rate, for example, if they don't hold real estate directly but through a SPV, or if they take the form of an open-end unit trust. An amendment to the Act effective from June 1, added the form of a closed-end unit trust.

Despite unfavorable tax treatments from 2015, which were to especially affect real estate QIFs by increasing the income tax rate from 5% to 19%, capital in the market has not diminished. During the same year, new domestic funds began to operate, and this trend still continues today. This confirmed our prediction, which applies to coming periods as well, that funds aimed at private investors will increase.

Some of them are established by strong companies that provide their name, know-how and seed money, which is starting capital or assets. These include Edulios (CIMEX), Central Group, NOVA Real Estate and NOVA Hotels (Arca Capital), RSJ Real Estate, and more. Other funds are created for the purpose of gaining capital gradually, such as Brno-based IMPERA Invest and DRFG AIF Real Estate (the latter is an off-shore fund based in Liechtenstein), or two

¹ For comparison: according to the Annual Survey of Large Pension Funds and Public Pension Reserve Funds by the OECD for 2015 (a more recent one was not available when this text was written), the share of real estate investments in individual funds from OECD countries is up to 25%, whereas the addressed pension funds have an average of 14% to 15% of the portfolio in alternative assets (of which real estate may represent one third by estimation). In previous years, investments in alternative assets continued to grow.

² Insurance companies have 0.86% of assets placed in real estate, a total of 3.8 billion crowns, with an average yield of 2.7% at the end of 2015 (more recent data was not available when this text was written). In the vast majority of cases, these are their own operating headquarters. Nevertheless, there was a slight year-on-year decline in investment and income.

real estate funds of Komerční banka as products distributed among its private banking clients. They promise their investors an annual return of around 5–6%.

The Catholic Investment Fund became a specific entity, extending its reach with a real estate sub-fund in 2017. This does not only include investments in conventional real estate sectors such as office and retail centers, the plans include assets that are typical for church property, such as farmland or forests. Given the volume of funds that the Church receives from the state in the context of separation which will be invested somehow, this fund may gradually become one of the major players in the market.

Open-end real estate unit trusts with a public offer aimed at consumers have played a marginal role in our country until recently - unlike in Western Europe. However, this no longer applies to the ČS Real Estate Fund with a current capacity of 14 billion crowns, which is currently probably the largest Czech real estate fund. In the past year it has significantly increased its investment appetite and realized four large transactions in Prague and Bratislava, with the trophy City Tower in Pankrác worth 4.4 billion crowns literally towering over them all. The ZFP fund worth four billion, which invested in assets in Ostrava and Budapest last year, is also worth mentioning.

company Czech Property Investments, a.s. for more than 15 billion crowns, or secured project bonds CPI Alfa, CPI BYTY and CPI Retail Portfolio.

Last year no new Czech issues were acquired, but in March 2016 the program CPI BYTY was extended by 10 years and the aggregate volume increased from the initial 3.8 billion crowns to 17 billion crowns. In Slovakia, the group issued bonds in the total amount of 80 million EUR, with 50 million EUR issued in February 2016 with a yield of 5% per annum. The entire group's current liabilities for the issued bonds are about 12 billion crowns.

In addition to issuing new securities, CPI is also actively working with older bonds with the primary aim of reducing the interest burden or canceling issues, the majority of which it holds on its balance sheet. In early 2016, after an agreement with the holders, it modified the conditions of the issue of denominated bonds issued in 2012, primarily pushing the revenue from a variable income of 6.5% to a fixed income of 5.1% and changed them from secured to unsecured.

In March 2016, the CPI prematurely repaid other bonds from 2012 in the amount of 58 EUR, and it chose the same procedure three quarters of a year later with one

TABLE Largest open-end real estate unit trusts on the Czech market.

Source: ARTN

NAME OF FUND	MANAGER	ESTABLISHED	FUND CAPITAL IN THE 1ST QUARTER OF 2017 (IN BILLION CZK)	PRODUCTIVITY OVER THE LAST 3 YEARS (% P.A.)
ČS nemovitostní fond	REICO České spořitelny	2007	14	3,0
ZFP realitní fond	ZFP Investments	2013	4,1	5,2
Conseq Realitní	Conseq Funds	2008	0,84	2,7
REALITA	WMS	2009	0,83	4,5

SECURITIES

The issue of securities may be another source of alternative financing. After the inglorious end of Orco Property Group and ECM in the stock exchange, corporate and project bonds began to be pursued in the country - bonds that are usually issued in cooperation with the bank, which also places them on the market. They can be traded both on the stock exchange and outside the stock exchange. They don't generate capital as such, but they usefully complement the financing structure of the company or specific project in the form of subordinated debt. The primary target groups they are offered to are private investors or private banking clients, but institutions that are allowed to buy riskier securities are also showing interest.

Due to the surplus of capital on the market, the number of issuers in recent years began to visibly increase, and the volume of various programs and issues outside the CPI (see below) reached an amount of about 13 billion crowns, including those already repaid. Together with the CPI it is roughly 50 billion crowns. This doesn't mean that securities were actually sold for this amount of money, it is rather the sum of the maximum levels of issues. We estimate that about 40% of the mentioned amount found its place, which amounts to 20 billion crowns.

Bond financing in the country is most used by Czech Property Investments, a.s. (CPI). Since 2005 it prepared programs worth approximately 37 billion crowns, while the clear majority emerged during the last five years. This includes the issue of corporate bonds of the parent

of the first issues of 2007 in the amount of 2.5 billion crowns. In May and August 2016, it also newly introduced three issues from 2012 worth a total of 3 billion crowns to the regulated market of the Prague Stock Exchange.

Another major Central European player, HB Reavis Group, acquired more than 100 million EUR since November 2013 in capital markets in Poland and Slovakia. In March 2016, it also planned to test the Czech market with unsecured bonds (or bonds only secured with a holding guarantee) in a volume of 1 billion crowns. Due to the great interest, the issue was only completed in May in the amount of 1.25 billion crowns with a maturity in 2021 and current variable income of approximately 4.86% per annum. More than 71% of the volume was subscribed by institutional investors, and the remaining part by private banking clients.

Central Group, one of the largest Czech residential developers, already subscribed two bond issues in 2012. They were issued with a maturity of 3 and 4 years, totaling 409 million crowns with an interest of 16% and 18% respectively. They were both repaid.

At the same time, SATPO also tried out financing through securities, issuing 3.5-year project bonds in 2013 intended for the construction of the residence Sacre Coeur II. in Hřebenky-Prague, worth 160 million crowns and with a fixed income of 10%. In February 2017, it followed them up with corporate bonds with a maturity of 5 years, in an estimated volume of 315 million crowns with an interest rate of 7% per annum.

Another interesting and large issue in 2013 were secured project bonds Diamond Point worth 1.1 billion crowns, with a maturity of 10 years and a fixed income of 4%. In terms of older issues, it is worth mentioning corporate bonds of Passerinvest Group from May 2014 in the amount of 550 million crowns, with a maturity of 3.5 years and a fixed interest of 5.25% per annum; the company used the revenue from these bonds to co-finance a buyback of his earlier development assets in the Prague BB Center. On the last day of March 2017, Passerinvest Finance issued corporate bonds worth another 1.5 billion crowns (with the possibility of an increase to 2.25 billion) with secured liability by Passerinvest Group, with a maturity of 6 years and a fixed interest rate of 5.25%.

For several years, bonds have also been issued by a company called Realitní Fond Praha - the first five-year issue of 2014 worth 100 million crowns bears an interest of 6%, and the second three-year bond worth another 100 million crowns is valued at 5% per annum. During 2015, the CNB approved the bond program Conseq Real Estate Fund as a regulator, with a maximum value of outstanding debt of 2 billion crowns with a duration of 10 years, but we have no information about its real use. In the same year, the program by Bydlení in Vinohrady worth 900 million crowns with a duration of 25 years was approved, in which a public offer of the first issue worth 25 million crowns with a maturity of 3 years and an income of 5% per annum was underway at the time of the Trend Report 2017 closing date.

From last year's issues of Prague's provenance, it is also worth mentioning six-year corporate bonds of developer GES Real in the volume of 400 million crowns with an annual income of 5%, or project bonds FINEP Barrandov Západ in the amount of 201 million crowns, with a maturity of four years and an interest of 3.75%. These are to be used for the construction of four new phases of the project Kaskády Barrandov. Cyprus-based GRAMEXO chose certificates (which behave like bonds) for its issue in the amount of 1.395 billion crowns, with a maturity of 5 years and an income of about 5.8% per annum to finance the Rustonka project.

Activity is also increasing beyond the capital. Since 2009, the Brno-based real estate concern e-Finance issues corporate bonds, which is now offering several three-year e-Finance Property issues as part of a program with a volume of 1 billion crowns and an income of 5%. For four years it has also been preparing project bonds through its subsidiary eFi Palace within a 25-year bond program with a limit of 600 million crowns. These are currently issued as two-year bonds with a fixed interest rate of 4.5%.

Five-year bonds of Brno-based company Brooc Global Investment from December 2016, which are worth 300 million crowns with a fixed income of 7% and intended for investments in holiday properties on the island of Tenerife, seem like an interesting offer. In the same month, there was also the addition of a new corporate issue by Moravské stavební - INVEST worth 320 million crowns, for 5 years and with an approximate fixed income of 6%. Most recently, in February 2017 Brno-based IMPERA issued corporate bonds worth 200 million crowns (with the possibility of increasing to 300 million) with a maturity of 3 years and a fixed income of 3.1%.

The activities of small issuers from different regions are also gradually accelerating, confirming the increasing attractiveness and awareness of this form of financing. Some issues are bought by predetermined investors, and for others the subscription takes a bit longer. For example, in 2012 the Pardubice cooperative R.E.I.T. Group, which also operates as a real estate fund, issued a bond issue worth 50 million crowns, but by the end of 2016 it placed less than 30% of it on the market. However, due to the above-average volume, we wouldn't call this a failure as such. The group of companies "Činžovní domy Praha" (Apartment Houses Prague) realized several project issues, is the revenues of which it is using to finance the reconstruction of residential buildings. The attached table shows selected examples of small corporate and project issues from recent years.

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KAAP Media



TABULKA Selected small bond issues.

Source: ARTN

ISSUER	DATE OF ISSUE	VOLUME (MILLION CZK)	MATURITY (YEARS)	YIELD (% P. A.)	SUBSCRIPTION	PURPOSE
PRAGUE						
INPARK	2015	30	3	8,23	in progress	corporate
Římská 1222/33 (Činžovní domy Praha group)	2016	20	5	6	in progress	reconstruction of building Elišky Krásnohorské 4, Praha 1
Premiot Group	2016	8,5	3	8,5	in progress	corporate
Prago Investment	2016	22	2	5,7	in progress	reconstruction of hotel Hnědý vrch in Pec pod Sněžkou
Prago Investment	2016	5	3	8,1	in progress	
Činžovní domy Praha	2016	20	2	8	in progress	reconstruction of building Korunovační 11, Praha 7
Činžovní domy Praha	2016	50,225	2	6,5	in progress	
Činžovní domy Praha	2016	5	2	8	subscribed	
CEE Real Estate	2016	25	5	6	n/a	corporate
2M Invest	2017	10	2	7	in progress	corporate
OUTSIDE OF PRAGUE						
R.E.I.T. Group Pardubice	2012	50	20	9	in progress (30 %)	corporate
Market Balance Frýdek-Místek	2015	5	3	9	subscribed	construction of medical building in Frýdek-Místek
Tycoon Enterprise Liberec	n/a	n/a	2	7	in progress	corporate
BeskydBenk Frýdek-Místek	2016	17,5	5	11	subscribed	corporate

In last year's Trend Report in the "Valuation" chapter we summarized the valuation process in the Czech environment, commented on some aspects of this service quite critically, and commented on the valuation standards and the omnipresent pressure on appraisers. This time we will focus on a more detailed description of activities that accompany the valuation process, and the main parameters that are affecting the value of real estate itself.

REAL ESTATE LOANS

Applying for a loan to purchase real estate is familiar to readers of Trend Report, even though they most often come into contact with this process with their (end) clients. This could include financing the purchase of an apartment or house for personal use, or a classic business model associated with office or retail real estate. The real estate valuation stage, in which the financing bank wants to know its value, is an integral part of this process. In extreme cases of defaults on the loan, the asset is seized by the bank, which then tries to sell the real estate on the open market and thereby redeem the loan.

What can we expect from an appraiser in the process of real estate valuation? When valuating an apartment or house, the appraiser will most likely resort to the method of comparison. His aim is to find realized sales (and offer ads) of similar units from recent times. Based on a comparison of the same, better or worse aspects of the real estate and the realized prices of the compared objects, he estimates the market value of the subject of valuation. Finding a sufficient quantity and quality of compared real estate is therefore crucial to this task.

The residential product that is easiest for appraisers to grasp is an apartment or house in large cities, where there are frequent sales (market presence and market transactions). The unit has a standard size and shape and is easily accessible, as well as devoid of special treatments and equipment. Another important aspect is that the real estate has no restrictions, unusual burdens or other liabilities.

The more the subject of the valuation (or compared real estate) differs from the specified parameters, the more the appraiser will have to approximate and subjectively assess individual parameters. Therefore, while a classic 2+kk (2 rooms+kitchen corner) in Černý Most in Prague will be a relatively easy matter for an appraiser and the reported market value will be demonstrable based on strong evidence, a 180 m² atypical studio apartment with air conditioning, an aquarium and an underground garage on the outskirts of the regional city will be much more difficult to compare. It should also be noted that appraisers are much more conservative than owners.

When valuing real estate for the purpose of a loan (real estate loan collateral), we often talk about the market value and collateral value. While the market value has its own clear definition in all valuation standards, the collateral value is a broadly used term and it indicates how much the bank itself values the property.

In an ideal world these two values should be the same, but in the real world this is rarely the case. The bank often expects that in the case of the realization of collateral, it will be necessary to quickly sell the real estate, and the "...proper marketing and sufficiently long sales times..." condition is not always fulfilled. Therefore, from this perspective the collateral value is always slightly lower than the market value.

COMMERCIAL REAL ESTATE

When it comes to business commercial real estate that generates income (this can also be an investment apartment), the appraiser usually uses an investment method. Here he chooses between a direct capitalization method and a discounted cash flow technique.

Both of these methods bring an economic benefit of holding the property and a yield or discount rate. The outputs of the investment valuation method are affected by many factors. A simplified list for standard commercial real estate valued by the capitalization method would look like this:

- Current rent - currently collected from the real estate on the valuation date.
- Market rent - the total rent for which the property could be leased on the market on the valuation date.
- Property operating expenses - analysis of costs that are rechargeable to the tenant, and costs paid by the owner.
- Costs for investment in the real estate - CAPEX.
- The duration of lease agreements, the length of the vacancy of empty spaces and the associated course of the entire cash flow asset.
- The capitalization rate (rate of return) applied to individual revenue streams.

When estimating key valuation inputs, such as market rent or rate of return, appraisers find themselves in the same situation as in the case of a residential product. Finding suitable evidence of comparable projects is most important.

The estimated rent per m² of commercial space should be supported by a sufficiently strong overview of completed lease transactions, as well as the rate of return. Here the appraiser faces the problem of an insufficient amount of reliable and verifiable data and their distorted interpretations. In this respect, the Czech Republic still has a long way to go.

REVENUES

In valuation, the position of commercial real estate is slightly more difficult than that of residential real estate. This is mainly due to the used investment method, which reflects a greater number of variable inputs, but it must also compensate for the lower number of transactions and related details for comparison. For the appraiser it is often very difficult to "decrypt" completed transactions so that he can use them in his valuations.

The lay (and sometimes also professional) public may be confused by data on yields (yield rates) reported in the media or at real estate conferences. This is usually information such as "...office building XY was sold for a 6% yield", without further comment. There are several types of yields, which are a guide for both investors and appraisers. The basic ones include:

- Initial yield (day one yield) – the ratio of the income from the real estate (rent minus unaccountable expenses) on the date of valuation to the price of the real estate.

We can also mention net and gross yield, where the net yield takes into account the total costs of the transaction, while the gross yield only reflects the price of the real estate (excluding acquisition costs). The net yield will therefore always be lower than the gross yield. Therefore, the fact whether the transaction is a "share deal", when a real estate company is sold, or "asset deal", which is a property transfer, plays an important role.

We believe that the media generally reports the gross initial yield in its reports on the investment market. However, an appraiser should be familiar with the comprehensive yield profile of the transaction in order to make a meaningful conclusion and use it as a project for comparison.

For further illustration, we show how sensitive the value of the property income is 100 (hypothetical) units when changing the rent by +/-10 units and the yield rate by +/- 50 basis points. The sensitivity of the asset value in response to these inputs is clear...

TABULKA Sensitivity analysis.

Zdroj: Karel Klečka

	Yield rate								
	4,0 %	4,5 %	5,0 %	5,5 %	6,0 %	6,5 %	7,0 %	7,5 %	8,0 %
Rent 70	1 750	1 556	1 400	1 273	1 167	1 077	1 000	933	875
80	2 000	1 778	1 600	1 455	1 333	1 231	1 143	1 067	1 000
90	2 250	2 000	1 800	1 636	1 500	1 385	1 286	1 200	1 125
100	2 500	2 222	2 000	1 818	1 667	1 538	1 429	1 333	1 250
110	2 750	2 444	2 200	2 000	1 833	1 692	1 571	1 467	1 375
120	3 000	2 667	2 400	2 182	2 000	1 846	1 714	1 600	1 500
130	3 250	2 889	2 600	2 364	2 167	2 000	1 857	1 733	1 625

- Equivalent yield (average yield) – approximately represents the average yield of an investment over its lifetime, or the period between the date of valuation and the real estate's achievement of market economic potential. Example: if an investor owns real estate that is leased for 10 hypothetical units, and it has the potential to increase its rental income to 15 units over several years after the expiry of the valid lease contracts, the equivalent yield will be higher than the initial yield. The number of basis points between the initial and equivalent yield will depend on how quickly the real estate goes from 10 to 15 units.
- Reversionary yield (yield from full market rent) – the ratio between the market (stabilized) rent (this may naturally differ from the current rent) to the value of the real estate.

These basic yield rates can be easily used to determine the yield profile of an investment and to get a picture of its advantageousness and character. For example, if the initial yield is lower than the equivalent yield, we can assume that the real estate is under-rented, and the rent will grow after renegotiating the rent and re-occupying or additionally occupying the premises. In the opposite case, when real estate is over-rented, we can expect a decline in yields from rent after the expiry of the current contracts.

ESTIMATES AND SPECULATION

A good appraiser should be able to comprehensively analyze and understand the valuated real estate. He should be able to evaluate its technical condition and assess potential investment costs in the near future, as well as their impact on its market (or other) value.

He should understand ownership and legal relations and be able to orient himself in the Cadastre of Real Estate, in order to recognize burdens or restrictions affecting the value of the real estate. An appraiser should move safely in any commercial area and estimate the future economic potential of the property as such.

The person valuing the real estate should also understand the market and the given real estate segment. He should be able to properly fit the analyzed and "read" real estate into the current market situation and apply the correct external market inputs. Finally, an appraiser should be able to present his findings well (in writing or orally), explain the inputs used depending on the selected method and defend his outputs. Comprehensibly, clearly and always approaching the contracting entity as his client.

KAREL KLEČKA

Patria investiční společnost

FINANCING RESIDENTIAL REAL ESTATE

According to the Czech Ministry for Regional Development, the highest number of clients in history applied for a mortgage loan in 2016 – nearly 112,000.

Mortgages were granted in the highest volume ever – a total of 218.20 billion CZK.

Nevertheless, the year-on-year growth was still about 6 billion CZK lower than in 2015, reaching 34 billion CZK (18.4 %).

These record numbers were mostly due to the very favorable economic situation and the persistently low interest rates.

People bought a significant amount of real estate for investment, especially in Prague.

Interest rates reached their absolute bottom during November and December 2016, where they were around 1.77% according to Hypoindex. The average rate for 2016 totaled 1.89%, which is almost 0.2 percentage points less than in the previous year. The development of average interest rates was also affected by a set of recommendations by the CNB (Czech National Bank) regarding a reduction in the mortgage loan amount to the price of the property (LTV) from 100 % to 95 %.

The noticeable year-on-year increase in the volume of mortgage loans was caused by two factors. Due to the rising prices of residential real estate, the average mortgage loan amount increased by 8.3%, to the final 1,957,000 CZK. The second factor was the overall expansion of the development projects in large cities, which brought 12.3% more applicants for mortgage loans to the banks.

In Prague, the share of new apartment purchases for investment increased further last year. While about a quarter of apartments were purchased for investment in 2015, in 2016 it was about 30%.

All types of residential real estate experienced steady growth last year. This was also confirmed by the index of real estate prices in Hypoteční banka (HB INDEX). The prices of apartments and plots rewrote their initial values from 2010 last year. The prices of family houses grew at a slower rate than those of apartments. Apart-

ments had a year-on-year increase of 11 percentage points, family houses had a 4.7 percentage point increase, and plots, the most stable segment with the lowest maintenance cost, had an increase of 10.7 percentage points.

Therefore, the year-on-year growth of the prices of all types of residential real estate significantly exceeded the inflation last year. Especially owners of apartments in tower blocks in large cities had a reason to rejoice. Last year, the interest in "family housing" began to increase - apartments with a 3+1 or 3+kk layout (three-bedroom + kitchen, two rooms + one room with kitchen corner). However, the apartment market continued to be dominated by apartments in older brick houses with a 2+1/2+kk layout (two-bedroom+kitchen/one bedroom+one room with kitchen corner).

FACTORS AFFECTING THE MARKET

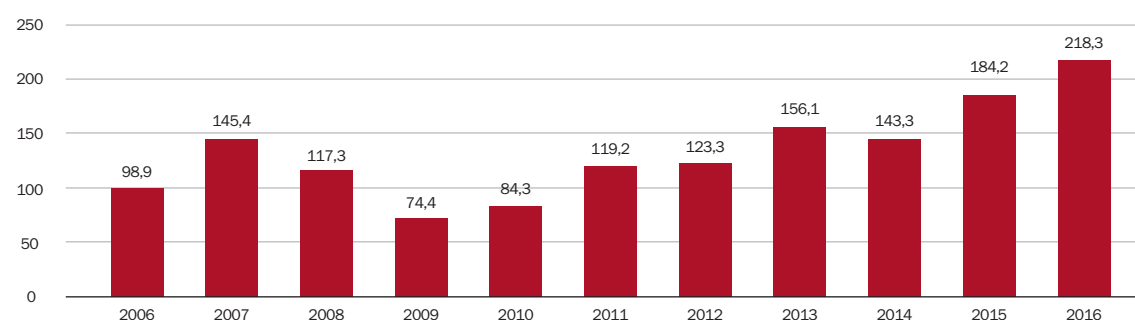
Macroeconomic environment

In 2016, the Czech economy experienced a 2.4% increase in GDP, which is lower than in 2015, when the growth was above 4% throughout the year. However, it is higher than the growth in the Eurozone, which amounted to 1.6%. The koruna/euro exchange rate remained stable at 27 CZK/EUR under the influence of CNB interventions, and the basic repo rate remained at 0.05%. Bank loans granted to businesses and households grew at a comparable rate to about 7 %.¹



GRAPH Development of the volume of granted mortgages in the period 2006–2016 in billions of CZK.

Source: Czech Ministry for Regional Development (MMR)



¹ There is a detailed comparison in the "Macroeconomic development and real estate prices" chapter on page 18.

The very end of 2016 brought some surprises. Although inflation was generally expected at the end of the year, achieving the inflation target was only expected in early 2017. The state budget was also a surprise, with a surplus of 62 billion CZK. There was not even the seasonal rise in unemployment at the end of the year.

The inflation jump, which caused an extraordinary and above all unforeseen increase in food prices, was followed by an increase in restaurant prices, where the introduction of EET (electronic record of sales) served as an alibi. Companies are reporting a shortage of workers of all skill levels – the labor market is overheated. This is evidenced by the latest survey among industrial companies: a higher percentage of companies than that in 2007–2008 is reporting a lack of suitable labor force as a barrier to their growth.

Industrial contracts from abroad are increasing at a double-digit pace, and last year wages have also increased at the fastest pace in five years. People are therefore trying to prevent the devaluation of their savings by purchasing real estate. However, even real estate prices are rising

rapidly. In order to slow the dynamics of housing loans, the central bank is introducing new regulatory measures.

Interest rate development

One of the key factors affecting the market efficiency is the low cost of money in the interbank market, and the associated historically lowest interest rates offered by banks on mortgage loans.

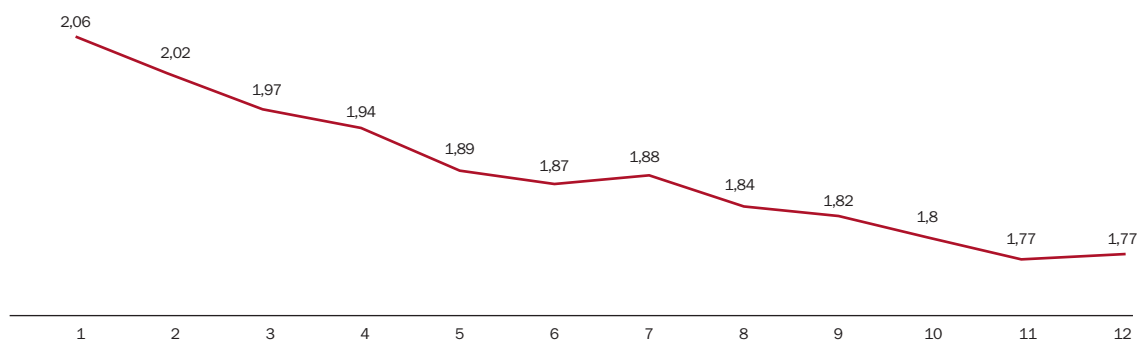
In 2016, interest rates reached a new low, particularly in November and December, when they fell to a historic low of 1.77%. With the exception of July, when the drop in interest rates stopped for a moment, the interest rates declined continuously since January.

It is possible, however, that the effect of the new Consumer Credit Act was reflected in the development of interest rates in December, which increased certain costs for the banks. Still, compared to August 2008, when interest rates were at their highest of the last ten years (5.82%), this was a decrease of 4.05 percentage points.

Last year's development of the interbank rate PRIBOR at all maturities is also noteworthy. This rate had minimal

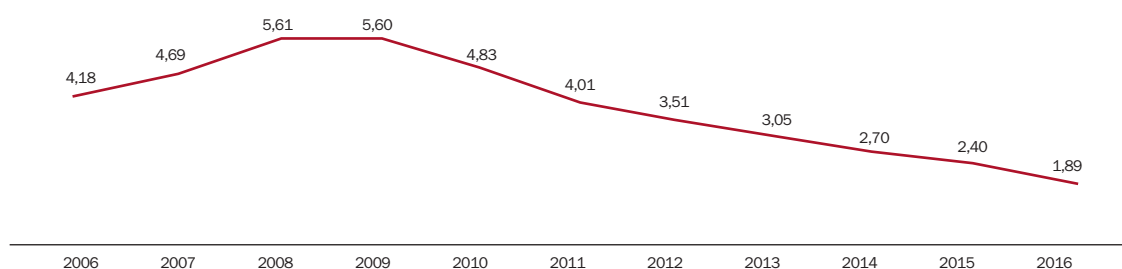
GRAPH Development of interest rates on mortgage loans in 2016 in %.

Source: Hypoindex



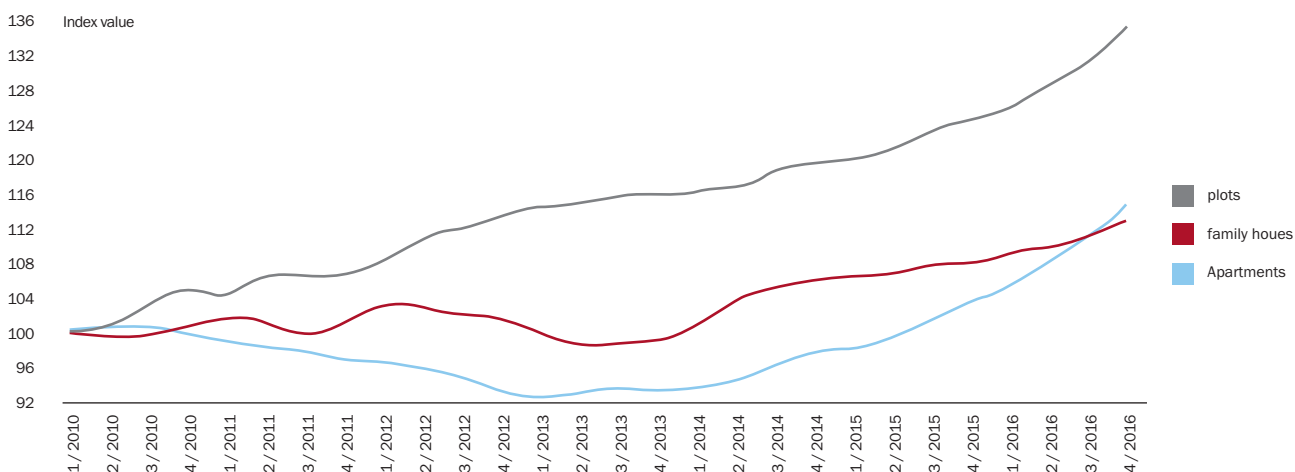
GRAPH Illustration of the development of average interest rates in the period 2006–2016 in %.

Source: Hypoindex



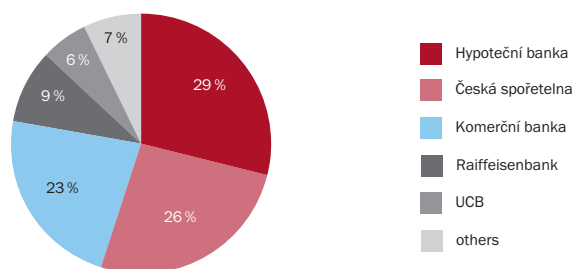
GRAPH Index of real estate price development. (HB INDEX)

Source: HB Index




GRAPH Market shares of individual banks in terms of volume in %.

Source: Czech Ministry for Regional Development (MMR)



"The range of different mortgage lending options, along with building savings loans or other financing options, give citizens extensive opportunities to fund their building plans. The CNB's interventions in the limitation of mortgage financing together with the provision on consumer financing (possibility of mortgage repayment, thorough examination of applications), are not necessary, in my opinion. All banks practically implement these measures in the long term, resulting in a practically negligible amount of non-performing housing loans."

Pavel Berger, MONETA Money Bank

"The offer of residential real estate financing for citizens can be considered satisfactory today; it will, however, be complicated by the CNB's restrictive measures in terms of financing 100% of the estimated price. With this regulation, the CNB will not prevent the financing of the real estate price from credit sources; on the contrary, clients will use more risky ways of financing with a significantly higher price – the interest rate."

Jan Kruntorád, Gepard Finance

movement throughout the year, only by 0.01 percentage points, whereas at the end of 2016 PRIBOR rates were identical to the rates it began with. The only exception was a six-month rate, which decreased by a negligible 0.01 percentage points.

However, not all banks in the Czech market report their results to the official statistics of the Czech Ministry for Regional Development. There are many smaller banks in the mortgage market – particularly mBank, Air Bank, Equa bank or Expobank, which do not share their results with the Ministry for Regional Development. According to expert estimates, the total volume of loans provided by these entities may reach an approximate market share of 6%.

Average mortgage, installment amount, payback period

Based on a set of recommendations from CNB, mortgage loans with 100 % LTV (loan-to-value) disappeared from the market. They were replaced by a new maximum of 95%. Nevertheless, applicants for mortgage loans still preferred loans with an LTV ranging between 80% and 85%. In April 2017², 90% LTV should become the new maximum.

Loans with lower LTV, specifically 70%, still hold a large share.

In 2016, the average mortgage loan amount reached 1.96 million CZK, which represents a year-on-year growth of 8.3% and a new historic record. Due to the continuing low interest rates, the maturity of the loan remained unchanged, which is on average about 23 years.

Based on available information from Hypoteční banka, 69% of newly granted mortgage loans were used to purchase real estate, more than 25% were used for construction and the remaining 6% consists of other forms of use (reconstruction, settlement of ownership, refinancing).

The typical client is a man aged 36 years with secondary education, married with one child and an average income of 32,000 CZK. However, the number of singles and women who are single applicants is rising. Most mortgage loans, specifically 64%, were used to purchase a family house.

Share of building societies

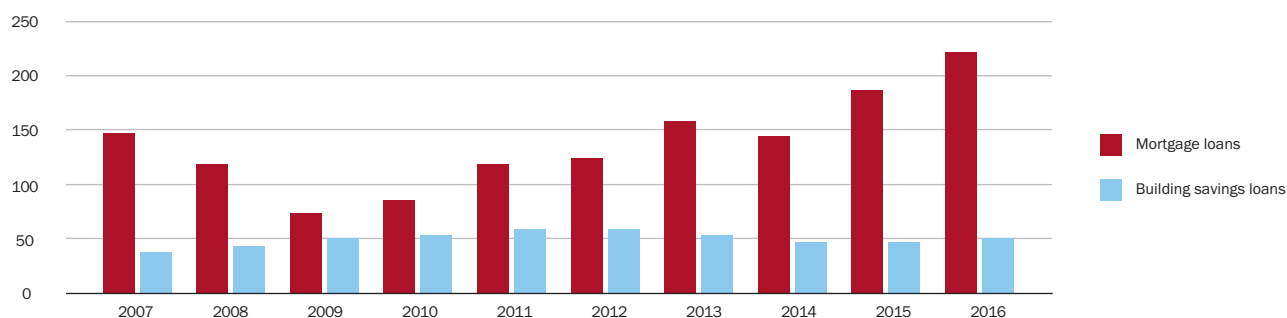
Over the past year, building societies provided loans worth 50.6 billion CZK, which was an increase of three percent compared with the previous year. The interest in concluding contracts for building savings also increased last year by three percent; building societies concluded roughly 474,000 contracts. In newly signed contracts, however, the target amount decreased by 8% to the final 350,000 CZK.

ESTIMATE OF FUTURE DEVELOPMENT

What will 2017 be like in terms of mortgages? We expect the favorable interest rates to continue in the coming year, which are currently starting at 2.09 %. Due to the increasing price of resources on the interbank market, it is only a matter of time before they slightly


GRAPH Ratio of building savings loans to mortgage loans.

Source: Hypoindex



² From April 1, the LTV limit will be reduced to 90%, and the proportion of mortgages in the range of 80–90% LTV will be reduced to 15% of the overall production. More details can be found in the "Macroeconomic development" chapter.

³ March 2017

increase. However, there should be no radical fluctuations, we expect a moderate increase throughout the year.

The increase in prices of apartments and plots may slightly slow down the mortgage market. Another factor that will affect the market is the new ceiling of 90% LTV for mortgage loans, which will become effective in April this year based on a set of recommendations from the CNB. This will be partly reflected in the interest rates. It will also affect a significant portion of existing production in the market, i.e. loans that are in the range of 80% to 90% LTV.

Moreover, according to expert estimates, the current production of mortgages in the market that are in the range of 80–90% LTV is roughly double that of the recommended amount. This will complicate the path of many clients to purchasing real estate, and the whole mortgage market will slow down because of the described changes.

It is important to mention, however, that the demand for real estate, especially apartments, is not yet saturated due to a certain delay in development. In comparison with 2015, last year at least 500 apartments were missing in the market. We can assume that developers will want to increase their sales again this year, and many of them will try to do so in the first quarter, when older CNB recommendations for a maximum LTV of 95% from October 2016 will apply, which did not particularly move the market.

In the development of residential real estate prices, we can expect the positive trends to continue this year,

as well as another slight increase in price levels, which will be supported by the overall economic situation.

For the next six months we can expect a very moderate price growth in all segments, a stable demand for new buildings (mostly Prague, Brno), a corresponding supply of new buildings in Prague, an increase in prices of new buildings, stable interest in standard family houses in a price range between 2–5 million CZK, cheaper houses suitable for reconstruction, or plots. The interest of domestic and foreign investors in purchasing real estate in Prague for investment will continue. According to estimates, the share of such apartments sold in Prague jumped up to 30%.

However, the koruna exchange rate could change along with the real estate market. It is possible that in the second half of this year the CNB will terminate interventions to weaken the koruna against the euro, which would affect the evolution of prices of certain construction materials, while increasing the prices of Czech real estate to foreign investors.

According to the development of the HB INDEX, the development of real estate prices will continue to stabilize or moderately increase. The price of apartments and plots may be slightly lower than they were last year. On the other side, family houses could sustain their growth.

JAN SADIL

Hypoteční banka