

31 March | 2019

HOUSE PRICES IN THE CZECH REPUBLIC VS. INFLATION

WILL THEY EVER STOP GROWING?

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The fact that housing prices were No.1 factor in growth of overall price level in the previous years makes the question...

...of what to expect from real estate prices in the future one of paramount importance.

No large declines are to be expected, but, except of Prague, we should see small declines nonetheless.

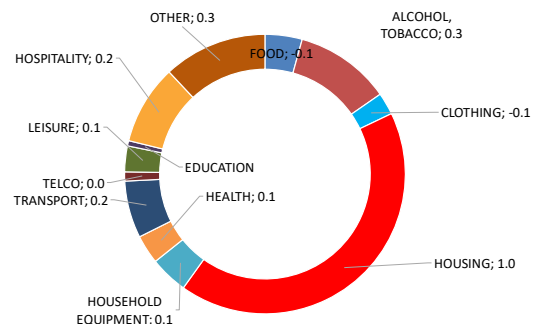
House history repeats itself. Or does it? Well, at least partially it must be true. Czech house prices are in the spotlight, just like this time some 10 years ago. People everywhere are discussing real estate. Newspapers are warning about how only selected individuals with richer parents are forthwith going to be able to own their own places ↗ whereas large portions of population will be forced to rent forever. After all – the fact that the real estate cycle definitely advanced is seen in that 12 Lofts, a residential development project close to where I live that'd been completely dark for years after completion sometime 2010, now has some light in there...

Last year's municipal elections brought the housing affordability back into the view of politicians previously (i.e., before general and presidential elections) preoccupied by apparently more important issues of rising butter prices and non-existent refugees... Just like the dilapidated infrastructure ↗ wasn't much of a worry of politicians until a footbridge collapsed in Prague ↗, the rising prices of housing didn't register until CNB stepped on the brakes ↗. In the run-up to the October 2018 municipal elections, politicians suddenly took notice. Naturally, it was somebody else's fault but they, obviously, knew what to do about sky-high prices now that they noticed. In reality, the presentation of solutions was a bonfire of bizarreness: Czech Pirate Party, whose member

is now the mayor of Prague, said in the election campaign "Airbnb" is to blame and that "more houses need to be built" ↗. I kid you not. TOP'09 proposed that Prague could guarantee mortgages of some people ↗. Semelova, as befits the Communist, proposed the expropriation of unused apartments... ↗ And, quite recently, Pirate party proposed to use the data from PRE meters (Prague electricity company) to identify so called 'investment flats' in Prague, i.e. unoccupied flats held purely for appreciation purposes ↗. The idea being to impose much higher tax on these flats once they are identified.

Not only politicians began paying attention. As hinted above, central bankers did too. But it wasn't because of the inflation (where housing prices are reflected via so-called imputed rents, i.e. theoretical costs to owners of living in their flats) – the fact that housing segment contributed over 50% to the inflation in 2018 was actually to CNB's liking as it enabled central bank to justify the tightening of the policy in 2H17 and in 2018. See, without housing the inflation would've been 1% last year (instead of 2.1%) and CNB would have had much harder time convincing anyone that tighter policy was indeed needed. Real estate prices, via imputed rents (which have weight of 10% in the CPI) and via actual rents (weight 3.4%), pushed, together with housing energy prices (weight 9%), inflation up and thus enabled CNB to tighten and look justified in so doing.

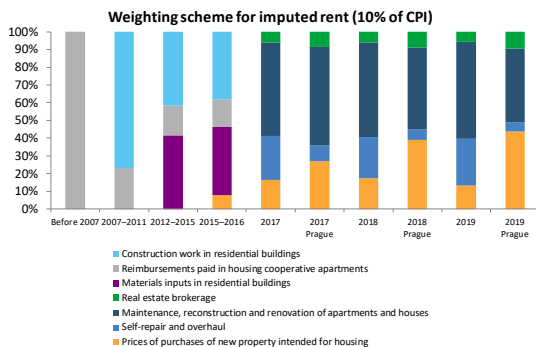
Contribution (in pp) of the respective COICOP categories to the cumulative rise (by 2 %) of Czech inflation between December 2017 and December 2018



SOURCE: [WWW.CZSO.CZ](http://www.czso.cz) ↗

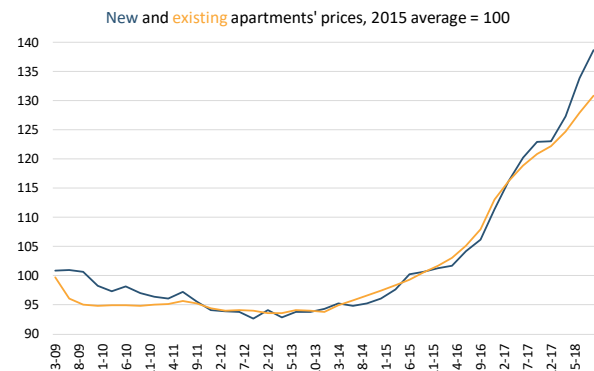
31 March | 2019

Imputed rents are computed according to the scheme below.

SOURCE: WWW.CZSO.CZ

The weight of the new house prices in the computation of the imputed rents sub-index increased for 2018, especially in Prague (from 27% to 39%), change which magnified the contribution of rising housing prices to the overall inflation (there was another increase again in January 2019, to 44%). Just the rising prices of new houses contributed about 0.33 pp to the 2018 inflation: and that is before other components of imputed rents (rising prices of materials, rising prices of real estate intermediation, rising cost of construction services) are factored in.

But every coin has two side. And so CNB became concerned that the housing prices, while sort of welcome on the one hand, can cause problems elsewhere. Enter financial stability. CNB began to worry that the lending for housing which really picked up in 2015 (with number of mortgages seldom falling below 8000 / month since then ↗) might eventually come back to haunt the banks since the concomitant of the mortgage boom was rising house prices, and thus rising indebtedness of the households. See, house prices really rose massively in last three years, as seen in the picture below.



Concerned with the financial stability implications of house prices and recognizing that just the repo hikes may not do, CNB issued new recommendations to banks in June 2018 ↗ (effective October 1, 2018), imposing limits on debt-service-to-income and debt-to-income of borrowers that banks were expected to comply with going forward. CNB has also been seeking to have the powers to regulate mortgages (and lending in general) promulgated in the law as that would enable it to order (as opposed to just “recommend” as it can now) who banks can lend to and how much. Politicians so far haven’t been very cooperative in this respect, as none of them wants to be seen as “restricting the affordability” of the housing.

So, with house prices being this important to the inflation and having been the enabler of the 2018 tightening, the most important question for 2019 is this: what will happen to the real estate prices this year?

Let us get the **statistical effect from the picture**. As said above, there was another increase in the weight of new houses (especially in Prague) in the imputed rents sub-index. What used to have 8% weight as recently as in 2016 now has weight of 44%. Also, the weight of the imputed rents in the overall CPI went up, though only slightly so. Altogether, these statistical effects amounted to about 0.1 pp effect on the overall inflation in January.

Let us now look at the **supply side**. One of the contributing factors to the rise of housing prices was said to be the insufficient construction activity, hampered by the hostile regulatory

31 March | 2019

environment in which it takes years from the paperwork to the completion. This is true: World Bank Doing Business Survey that, inter alia, measures how easy it is to build a warehouse ranks Czech Republic at 156th place (of 190 countries), behind Philippines, Mauritania, Cameroon, Myanmar or Mozambique. And, mind you, this is a warehouse, not a residential project ... which would probably push Czech Republic even lower in the ranking. So, it indeed is very cumbersome to get permits here, and it has been like this for some time, though not always: Czech Republic ranked 127th in 2015, 130th in 2016, 127th in 2017 but 65th in 2011 or 68th in 2012. The number of days needed or number of procedures required doubled between 2012 and 2018.

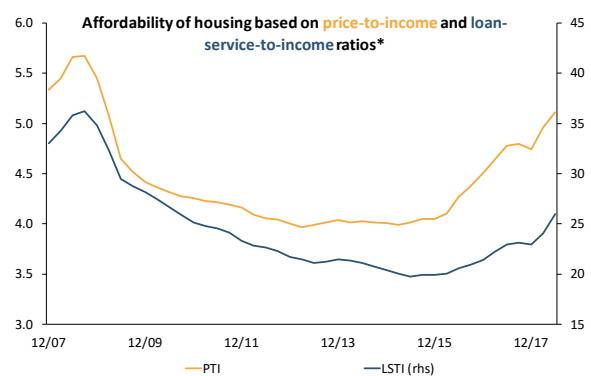
The change for better isn't in the offing: new law on zoning and building (Building act) is slated for 2021, coming into force in 2023 [↗](#). And it is not unreasonable to expect that if there is a deviation from this timetable, it will be in the unfavorable direction. And then, even if the new law turns out to be much more flexible, it will not show up in the actual housing stock before the 2025, and possibly only later.

Some additional housing supply may in the meantime come from return of some flats from the Airbnb platform onto the market – but this will be a small effect at best and then only in big cities. First, only about 10-12 ths. Prague units are listed on the platform, and only portion of those numbers are units which are entirely empty (the rest are shared between the owner who lives there and the guests). Prague has more than 600 ths. flats in total [↗](#) (it was 587 ths. as per 2011 census, now it is certainly well over 600 ths.). Whatever can come from regulation of Airbnb (which is not going to be strict anyway and it looks like it is going to be merely a fee per night) will have minuscule effect on the total supply. If one wanted to increase the supply via other ways than construction, one should look at about 45 ths. unoccupied flats that Prague, according to 2011 census, had at that time.

Bottom line is that supply side of the equation will certainly not change for better anytime soon. And thus the prices will be determined primarily by the demand.

And from that vantage point it does not look like big decline in prices is to be expected. Instead, **stabilization of prices, at best a downward correction of no more than 10%, should be expected.**

First, mortgage rates are much higher now: the average mortgage rates at the beginning of 2017 were about 1.8%, nowadays they are 3%. Although mortgage rates seem to have levelled off and although, considering that ECB is certainly not going to hike this year and that CNB is very likely to take long pause, they are unlikely to rise further, the fact that they are much higher than before means, together with the higher house prices, worse overall housing affordability. Although the affordability was, in middle of 2018 (last data available) still not as bad as was the case in 2007-8, considering that the picture below does not take into account further rise of both mortgage rates and house prices in the 2nd half of last year, it is safe to assume that the affordability was not far away from pre-crisis levels. Finally, although it will not be reflected in these measures, the CNB's restrictions from last Fall will affect the affordability negatively. **All of these factors thus point in the direction of somewhat lower future real estate prices.**

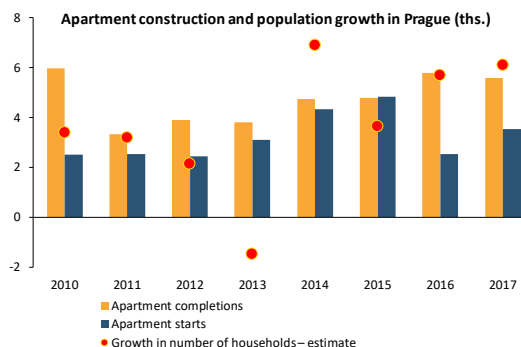


NOTE: PTI and LSTI are obtained as the ratio of, respectively, the price of and monthly instalment on a 68 m² apartment to the moving average of the annual and monthly wage. A loan with an LTV of 77% and a repayment period of 20 years was considered for the LSTI calculation.

And so does, secondly, the domestic economic situation. See, previously, there was a perfect storm for higher real estate prices: wage growth in last three years was almost 25%; consumer confidence shot to all-time high; mortgage rates were, as mentioned, low. These three factors, by

the way, explain why real estate prices are not massively overvalued (I'd say about 10-15% in Prague, less elsewhere) and are another factor why double-digit decline is not to be expected. But, back to the domestic economic situation. The optimism is slowly fading, as seen in recent retreat of consumer confidence ↗ from the previous highs. Also, wage growth, though still high, is now primarily driven by public sector ↗. Weakening economic growth in Germany will soon be felt here (after all, Czech industry already slowed ↗), fiscal reality is finally dawning on the government ↗ and will not allow anywhere close to wage growth in the public sector we've seen in last years, one that pushed the private sector wage growth up as well. **Domestic economic situation will be much less conducive to growth of house prices than before.**

Finally, one needs to look at **the underlying demand for housing**. In 2017 (last data available, see below), in all regions but Prague, the number of apartments completed and – which is more important for the future – number of apartment started, was higher than the estimated rise in the number of households. In Prague, not only was the net rise of households higher than number of apartments completed in 2017, but the number of apartment starts has been below the net growth of households for almost all years since 2010. This means that, unless there is a substantial slowdown in net migration to Prague, the gap between the demand for housing and the supply will in our capital only open wider in the coming years (taking into account the lags in the system, i.e. time it takes to go from apartment start to apartment completion). And this is all valid before even taking into account the need to replenish the housing stock (depreciation).

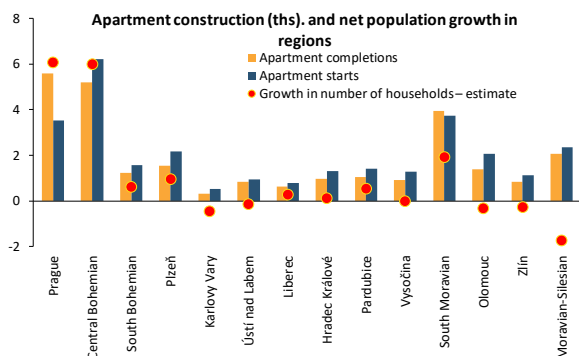


SOURCE: CNB

Such a slowdown in net migration is unlikely: Prague is a magnet for a lot of people from Košice to Aš, and also, increasingly, for people from all over Europe, let alone those viewing it as a promising destination to store the money in its real estate. Outside of the Prague, though, the population growth vs. growth of housing stock disbalance will be small to non-existent.

Thus, the following conclusions can be made

- Prague (and to some extent Central Bohemia that is adjacent to Prague) will remain one-of-a-kind region in the Czech Republic and will continue to see growth in real estate prices, albeit one slower than in last three years (single digit annually);
- Other regions will see stagnation to decline of up to 10% in total.
- Over time, I expect the relative decline in net internal migration to Prague and relative increase of net migration to other regions: higher Prague real estate prices will discourage movement to Prague. That will, however, be easily made up for migration from elsewhere in Europe.
- Inflation wise, next two years should see first (2H19) zero and then slightly negative impact from Czech house prices. Considering their substantial effect on Czech inflation in last years, this will be a downward force on CPI. This reinforces the view that CNB is done hiking in this cycle.



31 March | 2019

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