Housing has become an issue throughout the world, both in emerging and developed countries. The affordability of housing is decreasing globally; however, the governance system can be harnessed as a tool to help to turn the situation around, the benefit being that it is in the hands of the local or national administration. The analysis of state of the art data, together with qualitative research based on the knowledge and experiences of experts, have been used to examine the case of Prague. The aim is to prove a direct link between the approvals processes for buildings and the governance system, including the decisions made by different levels of public administration in last two decades. The hypothesis, based on early outcomes, shows a strong relationship between governance systems (including administrative divisions) and the length and complexity of the building approvals process. The results of these analyses are the main outcomes of the article, while designing changes will be the subject of subsequent research. The article should help with the debate and open up the topic, which is, in our globalized and increasingly complex world, an issue for a growing number of societies. The question of balanced, inclusive and sustainable growth will be part of the research agenda.

1. Housing affordability, flexibility and planning

Housing affordability has become an issue throughout the world, especially in countries with high and strong economic growth. The affordability of housing is defined by the Organization for Economic Co-operation and Development (OECD) as follows: “The median of the ratio of housing cost over income gives an indication of the financial pressure that households face due to housing costs”. Another common measure for housing affordability used by the OECD is the housing cost overburden rate, which measures the proportion of households or population that spend more than 40% of their disposable income on housing costs. This is also in line with Eurostat methodology. (OECD, 2018).

In the European Union (EU) in 2016, 11.1% of the population of the 28 member states lived in households that spent 40% or more of their equalized disposable income on housing (Eurostat, 2018). This number varies significantly from country to country; in the Czech Republic, for instance, the number was 9.5 % in 2016, while in Germany it was 15.8 % (Eurostat, 2018).

In the Czech Republic, there is no definition for affordable housing, thus the EU definition is used. While the definition of affordable housing may vary throughout the EU countries, there is “an alarming concern: a large share of the European population, especially low- and lower-income households, cannot
access adequate housing” (Colini, 2016). The groups affected the most are young people, the elderly, and tenants residing in private accommodations, as their flexibility and freedom of choice is limited.

This paper attempts to describe and find linkages between these issues and planning and building processes. The OECD notes that: “in a little more than a third of European countries, total housing costs for households servicing a mortgage are relatively higher than those of tenants renting on the private market. This concerns mainly Central and Eastern European countries where rental markets have been traditionally small, ownership is the dominant tenure type and housing quality is often low” (OECD, 2018). In the Czech Republic, and especially in Prague, the housing stock is relatively old and the share of owner occupied housing is relatively high, at approximately 40%. This has created a relatively conservative and small housing market, which has been, over the last few decades, fully dependent on private development. The share of rental apartments in Prague was approximately 30% in 2011, which can be considered low (Czech Statistical Office, 2011). Prague has a growing population with a growing demand for better standards for apartments. The need for new housing construction is clear, both in brownfields (i.e., through the transformation of former brownfield areas to residential uses) and in new greenfield developments.

How is this situation limited by existing planning processes and all of the administration required during the planning process? Housing affordability in this paper focuses on the process, and is limited to the planning and approval processes. It does not include research on the influence of the local market, fiscal policy, tax policy and externalities caused by the global market. The aim is to analyse specific approval processes for buildings in relation to the governance system, the administrative divisions, and decisions made by public administrations at different levels in Prague in the last two decades.

2. The planning and approvals process

The planning system in the Czech Republic can be described as hierarchical, rigid, and, thanks to a highly fragmented administrative system, very inefficient (this is further evidenced by the Czech Republic’s World Bank ranking). For instance, the Building Code mandates a two-step approval process, and although this process is time-delineated, the time limits are merely a formality and are generally not kept. During the lengthy, two-step process of approval, the decisions of more than 40 authorities are required and the onus is on the investor to request them. The inclusion of new directives of the EU in the last few years (e.g. for Environmental Impact Assessments), has added a layer to an already very complex and difficult process.

In addition, many of the projects in Prague require changes of the Land Use Plan before the start of the approval process. The Land Use Plan defines zones, and in transformational areas, the maximum capacity of a new development is set. Changes to the Land Use Plan take at least two years and undergo a very complicated process. The process is a burden on the city administration, both to the City Assembly as a self-governing body and to the department responsible for urban planning, which holds delegated state power. In addition, the Department for Environmental Protection, another public authority which has state-delegated power, has been increasingly requiring Strategic Environmental Assessments for projects.

Additionally, after an annex was made to the Building Code last year, there is also a new authority, which is empowered to issue decisions of the respective authority in planning. This body assesses and renders a decision on the coherence of the project with the Land Use Plan or with other planning documents. The building offices of the 22 districts of Prague (Figure 1) have become only administrators in the planning decision and building permission process, because any discussion regarding the quality of the project is reduced to the decisions of individual authorities. Before the annex to the Building Code, this competency was with the building offices.

There are two critical components of planning which help to ensure the quality of the development of the urban fabric and urban environment: the normative part, which includes regulations, and the conceptual part, which includes future visions and aspirations (OECD, 2017). Planning and governance cannot be reduced only to the delivery of positive decisions upon which approvals are delivered. We have to take into account that the adoption of the plan is the right of municipal level. There must be time to effectively debate and discuss the proposal with the community. What we see today in Prague is a very vague
process, not limited by time, which includes expensive obstructions after decisions are made due to a lack of effective debate during the early stages of project development. According to the research and analyses of Next Finance, the time needed for approval of a residential project in Prague has grown from an average of 3 years in 2007 to 7 years in 2017 (source: Next Finance, 2017). There are more effective planning and building regulations in many countries throughout Europe, which provide both good quality plans and enough time for debate (OECD, 2017). The OECD also argues that there is a direct link between tight land use restrictions and the increasing prices of new development (OECD, 2017).

Figure 1. Administrative divisions of Prague (57 Boroughs organised into 22 Districts). Source: IPR Praha, 2018

3. Methodology and data collection
The analysis is based on available databases, which provide information about building decisions regarding residential projects. Basic data quantifying the number of approved dwellings is provided by the Czech Statistical Office. The Czech Statistical Office obtains reports from building offices concerning building permits under legal force and the number of units, ranking them in different categories. Another source of data, the website “Cenova mapa” or “Price map”, offers data which surveys the administrative steps in terms of building permissions (Cenova mapa, 2018). The main sources of this data are the notice boards of building authorities in each of Prague’s 22 districts and in the Prague Central Administration.

This range of data supplied to the Prague Institute of Planning and Development (IPR) was briefly analysed. The analysis found that time delays between the first step, planning permission, and the second step, building permission, may, in fact, be several years. Each year, IPR publishes a detailed analysis of residential development, referred to as the “Analysis of Actual Residential Development Projects in the Prague Area”. The database for these regular analyses has been logging data on housing projects since 2011, and was last published in 2017 (IPR, 2017).

However, the key goal of these analyses is not the surveying or monitoring of particular levels of planning decisions and construction permissions, but rather reporting and quantifying the number of residential projects being put on the annual housing market. This means that the IPR analysis prioritises information on the quantity of projects, as well as detecting the exact dates of housing market placement and construction finalization. However, the diverse methods and purposes of the analysis mentioned above do not offer exact answers to the question of what causes the complications and errors in the planning process, and what creates obstacles in the submission procedures.
On the base of surveys, it is clear that the processing of approvals for residential buildings may be inordinately long. Analyses of legislation were also provided to gain better insight into the processes linked to the planning and building approval processes.

The cause of delays and obstructions in planning and construction permissions can vary significantly. Surveying the existing databases in order to detect reasons for the delays has been an issue and is the subject of necessary research. It was proposed that an additional questionnaire be created to complement the analyses. The questionnaire would address a specific target group, namely investors. The aim of the inquiry was to obtain essential information regarding real obstacles that emerge while the private sector interfaces with building inspection authorities during the construction permit process. Unfortunately, a limited number of completed questionnaires were received.

However, from the analyses of the legislation and questionnaires that were received, the following obstacles were identified:

- Obstacles concerning the national legislation, for instance, the Building Code and other legislative documents. For instance, the current legislation allows different parties to dispute submitted construction plans, which can lead to delays or even derail projects completely.
- Administrative obstacles including the state administration’s disregard for given time limits for evaluating submissions, outrageous requirements for amendments to incomplete submissions, and the interventions of additional authorities (for instance, authorities managing cultural heritage protection, environmental protection etc.)
- Political obstacles, including the requirements of investors for changes and amendments to the land use plan, negotiations with local political authorities, delays that arise as a direct consequence of requested alterations to the project, not corresponding to the legislative background.
- Political obstacles at the local level, including difficulties with the adaptation of housing projects to the demands of local political representatives. Also, the fulfilment of requirements for one project does not ensure that future difficulties will be avoided, due to the separation of state delegated power from the power of elected representatives.

As a result of the review of available data, the housing shortage, caused by the lack of housing permits, appeared in 2016 and 2017 and continued to increase in 2018. Looking at construction between January and August of 2018, only 1,600 new dwellings started construction; of these, 800 were part of the same housing project. In 2016, only 1,700 dwellings were constructed, and in 2017, only 2,500 dwellings in new residential buildings were developed (see Figure 2). As a result of limited supply, the availability of housing stock has decreased continuously and dramatically, and the housing market has not had the ability to react in a pragmatic and flexible way to market demand.

![Figure 2. Number of available apartments in Prague. Source: IPR Praha, 2017](image-url)
Consequently, and unexpectedly, the Prague region is caught between two opposing trends. High demand for housing, stimulated by positive economic growth, low interest rates for mortgages, and other demographic drivers are on one side, while the insufficient supply of new apartments lies on the other. Meanwhile, between 2015 and 2018, the offer of new housing “irrationally” decreased to the levels of 2010–2011, which was seen as a period of crisis. The number of housing units that Prague needs to build each year in order to react to demand continues to grow.

The increased need for housing units is a result of the following: the need for the renewal of housing stock, maintaining the city’s ability to absorb new residents who migrate to Prague for education or job opportunities, increasing living standards, and other demographic factors (such as the steady increase in single-occupancy households, increases in life expectancy, etc.) IPR has calculated that 8,000–10,000 new dwellings should be added to the Prague housing market each year to keep up with demand. If this recommendation is compared with the situation on-the-ground, the result is a shortfall of 20,000 units between 2014 and 2018.

An additional consideration is that the tendency towards suburban exodus strengthens alongside the increase of single-family housing options outside of Prague’s administrative borders, in the Central-Bohemian Region. The uncontrolled suburbanisation happening outside of Prague administrative borders in the Central-Bohemian Region has become the answer to the housing shortage within the administrative borders of Prague. For instance, in 2017, the number of single-family homes in the Central-Bohemian Region increased by 5,000. This tendency relates to the rapidly growing housing and rental costs (prices) in Prague (in the last 3 years, prices of new apartments have grown by approximately 40 to 50%). Single-family housing outside of Prague’s administrative borders, despite the longer commute that this may include, has unfortunately become the only option for some of the people who would otherwise be residents of the city itself.

4. Conclusion and proposal for change

The situation in Prague, as described above, is caused by several factors. Some of them cannot be easily avoided or influenced, such as globalization, financial markets, property as a good investment, the open market, and movement within EU. Others can, to a certain extent, be influenced by governance at different levels. These measures can include financial tools and governance, such as administrative division, the tax system, legislation and incentives from the public sector. From them organization of City administration is in hand of the Municipality and Prague City Hall. The evidence of the processes is also very weak, as mentioned above, and is provided largely by the state statistics, while a more in-depth analysis of city statistics is missing. From this perspective, it is necessary to shorten the lengthy process of building permission in the Czech Republic, specifically in Prague. Prague is a capital city, recognized by the law as one municipality, but as the capital it also holds a stronger position. Prague has the right to propose changes to legislation or to initiate new legislation in the Czech Parliament. The City of Prague is represented in the planning decision process by the Prague Institute of Planning, an organisation which supports the city’s decisions with expertise in architecture, urban design and planning and is responsible for the processing of plans, including land use plans and analytical data for planning in Prague.

The first suggestion, which is one of the results, is to have city-based statistics collected from the 22 districts, with more information about each step of the approval process. To provide this type of thorough analysis, the city can utilise the capabilities of IPR for proposing the most appropriate tool for data collection. The second suggestion is related to the possibility of the City of Prague itself organizing the administration of the Building Offices and the organizational structure of City Hall. There are various possible scenarios, from having one Building Office, fully centralized, providing and controlling all aspects of the process relating to planning and building permission, to a scheme where the existing Building Offices will fall under the Central Office but only planning permissions for developments of a certain size and scale would be centrally controlled and issued.

The other suggestion is to think about the administrative divisions of the city, which is something that the City of Prague can actually change itself. If we speak of administrative divisions, it does not
necessarily mean that the Boroughs must be also changed. The current division concentrates big municipalities and administrative divisions in the centre, and these have a high burden of administrative work. The aim of the research outcomes is to come up with several possible scenarios and proposals to present to local representatives for changes to the administrative divisions in the field of building and planning.

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