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END IN SIGHT? ON THE (UN)SUSTAINABILITY OF PROPERTY DEVELOPMENT IN THE BUDAPEST REGION

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ABSTRACT. Sustainable development is defined in environmental, social and economic terms. In the post-socialist countries the sustainability of urban property developments has experienced various destinies amid changing institutional circumstances. Since the regime changes of 1990 the tendency of the land use and real estate economy in Hungary has been an extreme variant of neoliberal, opportunistic and large-scale developments together with project planning. As a result of this, urban regeneration in metropolitan Budapest is almost exclusively based on private investment, with the possible exception of 'mega-projects' where government has an interest in securing the provision of infrastructure. In this contribution, first the proposition of flexible and context dependent government intervention in the property development is outlined. After that a description of urban regeneration and other property development in the Budapest region is provided. A brief review of comparable post-socialist cities is also provided. The paper concludes with an evaluation of sustainability and a critical comment on the state of affairs in this context.

KEYWORDS: Budapest region; Hungary; Property development; Sustainability; Urban regeneration

1. INTRODUCTION

While eventually it is for the history to judge, the period 2002-2010 in Hungary ('the lost eight years') is already commonly criticised for missed opportunities as well as backwards development in economic and social terms. As *The Economist* (8 April, 2010) puts it: "The Socialists have been in power for eight years, during which the economy has done badly, poverty has soared, corruption has flourished and the dire situation of the country's Roma minority has worsened." (This was a few days before the parliamentary election that resulted in a landslide victory for the opposition.) A lion's share of the mistakes made occurred in the Budapest conglomerate. The main question is how a relatively well functioning planning system has given way to a system where practically no coordinated public planning efforts are on the agenda and the market actors can determine the structure of the city region by themselves. Because of the legacy of the communist times the problems are magnified, as compared with a similar situation in western countries where the neoliberal/project planning regime is strong. The problems are in one way or another related to widely covered insider deals involving local government property sales, many of which have led to corruption scandals (e.g. Csanádi et al., 2010). (The most extreme example is the Mayor of Budapest District VII, who at the time of writing is in prison!).

Apart from the mismanagement mentioned above, the current economic and social difficulties as well as the lopsided physical development of the Budapest region are a result of various other factors indirectly related to property development such as the fragmentation of the public administration (i.e. the two-tier public administration system in post-communist Budapest), the current financial crisis, the structural adjustments needed for EU-accession at the turn of the millennium, and obviously, the breakdown of the state-led industries in the early 1990s. To cite a metaphor used by one of the experts interviewed for this study (hereafter: informants), the present rule is 'the Law of the Wolf'. However, it is anticipated that the new government will bring changes to this situation, although being faced with many ungrateful tasks handed by 'the lost eight years'.

Generally speaking, in the old Eastern Bloc countries the ultra-liberal economic ideology adapted after the transition first led to minimum role for planning at the beginning of the nineties. Then during the end 90s some post-modern planning was introduced (following the western model). However, much of the socialist culture is still around too, which is why the public sector lacks commitment to participate. On the other hand, the developer can apply for a change in plan later as they are not interested in involving the public. It is unlikely that the local authority turns such a proposal down, which more often than not has to do with lobbying practices and even corruption. This is by no means a new practice, considering the communist era lobbying of the central government (Raagmaa, 2009).

Thus, we can say that after the institutional context in many parts of Eastern Europe changed from complete planning to weakest possible planning, currently some planning is on the agenda but people tend to distrust the authorities (cf. Ruoppila, 2007). This kind of situation can be compared with circumstances elsewhere where neoliberalism has had widespread impact on the planning system. In particular, the well-documented London and UK experience (since year 1979) is worth noting in this respect (see Hamnett, 2003). While the intention of this contribution certainly is not to promote government intervention above the market mechanism, it can be argued that a purposefully implemented sustainable development also needs an element of planning, in the form of either indirect measures (i.e. incentives) or direct interventions by the government (see Julegina et al., 2009). Moreover, in the context of urban housing developments, Støa (2009) asserts that, while it is true that we are yet unable to grasp the full extent of the meaning of sustainability, this is by no means an excuse to refrain from using it as an analytical framework; we must, however, actively try to define and then iteratively revise our understandings of this concept, she argues. Social sustainability is a particularly elusive concept (e.g. Csanádi et al., 2010; Bitušikova and Luther, 2010).

In this study tentative and largely qualitative evidence is presented in the form of a case study. A rhetorical approach based on literature and a small number of expert interviews is applied as methodology following Kauko (2003). The argument put forward is that, for urban development to be sustainable an element of smart, context dependent public planning is required, but that this is not the case for either Greenfield or Brownfield areas of Metropolitan Budapest. The thesis of the study is presented in fig. 1. The various elements of fig. 1 are subsequently picked up in the text as follows. Section 2 sets up the theoretical foundations on which the evaluation of sustainability in the Budapest region is based (i.e. the left-hand side in fig. 1). Section 3 then presents the empirical part of the study, where several aspects are illustrated using descriptive data and expert interviews (i.e. the right-hand side). Finally, section 4 concludes the study.

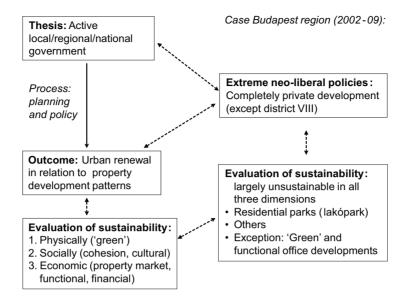


Figure 1. Evaluation of sustainability in this study: ideally and in the case-study

2. PLANNING, SUSTAINABLE DEVELOPMENT AND REAL ESTATE

2.1. The sustainability of planning systems

The advent of sustainable development in the 90s meant that strategic planning came back with the EU Initiative after a nearly 20 years' absence (Heurkens, 2009). In fact, since the early 1990s sustainability has become the overarching goal of urban planning in global terms – first the essentially environmental dimension, but later the broader definition that embrace social and economic dimensions on top of the environmental ones (Bramley and Power, 2009). Furthermore, operational models have been designed for various specific urban sustainability issues pertaining to real estate (see e.g. Turskis et al., 2006 on urban compactness evaluation).

A conjoint survey of new house builders in the UK by Leishman and Warren (2005) indicated that house price, location and size does not always need to be considered valid criteria for *sustainable urban form*. For some market segments - or socioeconomic and demographic groups - other property specific features matter most, such as the layout and features of the room. These authors furthermore found that the private house-building industry respond to this existing demand poorly in contemporary times. Leishman and Warren point out that this is to some extent the fault of planning, which is supply driven everywhere. In other words, the planners outline standard categories without much connection to the nuanced preferences. (This is, in fact, one of the key problems also for the CEE context of real estate sustainability, as will be shown further below).

On the other hand, it can be argued that, if only profit, and not use value or the interest of the wider community, is considered, any property development project will be unsustainable in the long run. Rachel Fisher (2010), who is active within the *Sustainable Cities Programme* in the UK, argues that sustainable development needs planning to target interventions at the most appropriate scale. She underscores that no one-size-fits-all policies or regulations are appropriate here.

2.2. The 'property friendliness' of planning systems and land use regulations

From the point of view of real estate, planning institutions contribute to defining the boundaries of property market activity. According to Tiesdell and Allmendinger (2005), four kinds of planning tools can be noted in relation to different market characteristics: market shaping, regulation, stimulation and capacity building. They argue that empirical research on state-market relations determines the optimal 'package' of tools, and that market shaping is particularly important here. In other words, to provide authoritative information as a basis for action. This can be backed up by empiry: for example, in the Netherlands the planning system is rigid but it provides reliable information, whereas in the UK the planning system is flexible, but does not provide reliable information. In a more positive planning system, such as the one in the Netherlands, where building land traditionally (i.e. until the 1990s) has been supplied publicly, and the system of Master Plan is showing all uses, the housing supply is not as constrained as in the British case of 'development control', where permission must be applied for all changes in use, as Cheshire (2005) rightly notes.

According to Adams and colleagues (2005), in general, the interrelations between state and property market have changed from a 'marketstate dichotomy' to a 'market-state dialectic', where governance enhances the capacity of government, in the face of increasing conflicts, complexity and change. These authors argue that, as 'participation' replaces 'intervention', to take away either state or market is shallow and only leads to partial analysis (p. 241). They purport an interdisciplinary understanding of state-market processes in land and property, given that the state can learn from the market and *vice versa*. Adams and colleagues argue that the state should learn that the property markets are always disaggregated and dynamic. These authors also argue that the market actors in turn can learn about 'three arenas of the state': (1) accepting that sustainable development is the 'Ends' for market and state actors alike, whereas 'Means' such as increased densities may be contested and evaluated in the face of governance and cooperation; (2) acknowledging that the state can change the market for better or for worse, and that it should be accepted that the state may have different goals than the market actors; (3) getting acquainted with the four mentioned types of planning tools the state has at its disposal: to shape, stimulate, regulate or build capacity.

2.3. Urban regeneration – a planning or property practice?

Urban regeneration comprises a variety of economic, social and environmental goals, and is carried out depending on the particular roles of the state and local government, the private sector, as well as the community itself (Couch and Fraser, 2003; see also Ribeiro, 2008; Mitkus and Sostak, 2009). This is a task that traditional urban planning alone was not capable of handling. In Europe the earliest urban regeneration experiences are from UK, following the first urban policy initiatives laid down by the labour government in the late 1960 in response to the poor industrial competitiveness and dysfunctional social structures of British cities. Couch and Fraser (2003) point out that the extent to which urban regeneration is embedded in the mainstream planning system varies across countries: for example, in the Netherlands and Belgium urban regeneration is treated as an extension of the planning system, whereas in the UK planning and urban regeneration are altogether different matters. While an urban regeneration area can be a vibrant market, the property market outcome of urban regeneration is an under-researched topic, which is why this market segment is less appealing for investors, compared to other kinds of property and non-property based investment vehicles (cf. Cameron and Doling, 1994; Jones and Watkins, 1996; Rosenburg and Watkins, 1999; Adair et al., 2005).

Here a specific question concerns the impact of constructing affordable housing on property values. This issue has attracted a lot of attention, as the results regarding the direction of the estimated impact (i.e. positive or negative) tie to the issue of how the social sustainability of neighbourhood restructuring and consolidation of the urban environment is to be assessed. The literature here is somewhat sceptic, however. Tiesdell (2004) for instance finds that design strategies alone (at any spatial level) are insufficient to create 'mixed-communities' that also would be socially satisfactory (cf. Nguyen, 2005; Monk et al., 2005).

2.4. Conclusions from the literature

The general trajectory is that during the last ca. fifteen years, government intervention in urban property development and land use in general - while remaining relatively conservative in some cases - has undoubtedly become more flexible. At a first glance, this is nothing but a healthy development, given the various globalisation and governance arenas which cannot be controlled by 'traditional' planning. However, the reality is different than the idealism of those actors who are confident of being able to keep locations viable. On top of normal concerns of development feasibility, in the present situation of downturns and crises, the relatively new sustainability criteria have put further requirements for a successfully run planning system. The discussion above shows that sustainability of planning in relation to property development and urban regeneration is remarkably different in different parts of the world. The remainder of the paper investigates how the Hungarian and Metropolitan Budapest circumstances correspond to the described general property and planning processes, and how sustainable these circumstances are perceived to be in the light of the evaluation criteria set up in Figure 1 and this section.

3. THE CASE OF BUDAPEST – PROPERTY DEVELOPMENT 'GONE MAD'

3.1. Background

Budapest not only is the capital of Hungary but also the political, cultural, economic, commercial and transport centre of the country. Its population of approximately 1.7 Million inhabitants comprises 17% of the total Hungarian population – the corresponding figures for the whole agglomeration are 2.5 Million and 25%. In what follows next, a number of institutional and economic key issues - and to a lesser extent social and environmental issues concerning the recent development of this city (and city region) are picked up and related to the conceptual arguments of the previous section. Towards the end of this description some actual examples of development projects are given, some of which are completed whereas others are under way (or not even really taken off vet).

With regard to public planning and policy issues in Budapest, there are a number of pessimistic and even sinister considerations (cf. Csanádi et al., 2010). Firstly, party politics cause tensions within the district council, and between district councils. In general there are policy conflicts between adjacent districts on one hand and between district and city district authorities on the other hand. One of the informants noted that this problem with conflicts between municipalities applies outside Budapest too and that this mostly can be considered as a consequence of the law of year 1990 – later established institutions (the act of 1997; the ordinance of 1998) were more or less just cosmetics in this respect. Moreover, these problems were not only about party politics, but more about the lack of experience in the early 1990s, according to him. He nevertheless suggests that the 1997 act was "an important turning point of the transformation process" as it plausibly constituted "the first considerable legislative reaction of urban planning to the serious changes of the early 90s." He also asserts, however, that Hungary should have needed this act much earlier.

In Budapest attracting subsidies and the absence of social rehabilitation are crucial issues (Földi, 2006). This is a manifestation of the broader picture of urban restructuring in post-communist countries. In Central and Eastern Europe (CEE) the policymakers adapted neoliberal policies to circumstances where old social equality considerations were substituted, rather discontinuously, for typically western urban management and development jargon such as 'image creating for city marketing' and championing of public private partnership (PPP), although, in the latter case with only limited success in Hungary. A lot depends on how local regimes can be coordinated to strengthen the policy making environment in facilitating a change towards the better.

3.2. Urban development processes

Lots of conflicts and inefficiencies impede the development of Budapest (Locsmándi et al., 2000). According to Barta and colleagues (2006) during 1990-2005 uncoordinated, irrational and unconsidered urban development activities took place in Budapest, such as inefficient and incomprehensive conservation of architecture, debatable 'science and technology parks', and projects of 'cultural use', which resulted in losses and missed opportunities. Perhaps the most controversial of such activities, the *Budapest urban development concept* (*BUDC*) was approved in year 2003. This comprises a fifteen year development strategy. Related to BUDC, the *Podmaniczky* programme is a mid-term action programme that among others includes rehabilitation of Brownfield land. It 'focuses on strengthening community transport and knowledge-city functions, environmental-friendly thinking and sustainable urban development' (Barta et al., 2006, p. 67-68).

As was made clear at the outset, this is an extraordinarily clear example of the situation in which the market steers almost all property development. Since the regime change of 1990 the tendency of the land use and real estate economic system in Hungary - with Budapest as economic powerhouse - has been an extreme variant of neo-liberal, opportunistic and large-scale developments together with project planning, where typically the plan follows the physical changes with a lag. The projects are mostly on Brownfield lands at the outskirts of the cities, although a certain share of them caters for the city-core and inner city as well as for suburban and out-of-town locations (cf. Csanádi et al., 2010). While there are several flagship projects, an area known as *Info Park*, the high-tech industrial and office park on the former would-be EXPO site in district XI (in Figure 2, in Lágymányos by the river Danube) is worth mention here. Apart from the Hungarian hi-tech companies, several multinational corporations have established office there, and even a branch of the EU administration is being located on the site.

A great deal of such flagship projects are already implemented, but many are in a marketing stage, where the difficulty is to attract and convince investors in the midst of falling demand and existing excess new dwelling and office space supply (Kauko, 2009). According to an informant, another reason for the weak demand for urban renewal in Budapest is that increased suburbanisation has led to a considerable loss of the City population.



Figure 2. Map of the inner areas of Budapest

While some academics say that at present a more appropriate turn is taking place in relation to the spatial development of Budapest, it is not seen in daily life. Decisions are often still made on political grounds. Thus, lots of corruption occurs at the district authority level, and furthermore, conflicts prevail between district authorities, when these are in the hands of different political parties. The government is accused of not being democratic, and in Budapest several public investment decisions have led to problems that have developed into scandals. Based on this account it seems very unlikely that any redevelopment happens unless owners and developers gain profits. Therefore, from a technical point of view of value creation, the role of the profit maximizing municipality ought to be more active, because rezoning for higher uses generates higher selling prices (cf. Kovács, 2009). One of the informants furthermore mentioned the possibility to form covenants between developers and district authorities.

3.3. The sustainability of land use in Metropolitan Budapest

The urban experience under post-socialism is characterized by difference, dynamics and increasing heterogeneous process where the space for manoeuvres is opened up for corporate centres of the global economy on the one hand and for local actors on the other hand (Stenning, 2004). In Budapest like in many cities in Eastern Europe (as will be described in section 4), due to the economic restructuring, new ownership and the emerging property market, huge spatial changes occurred, but with different pace in different parts of the urban area (cf. Barta et al., 2006; Kovács, 2009). And as already noted, this has had problematic consequences for sustainability in general and social sustainability in particular.

Even against the backdrop of considerable institutional overhaul, in Hungary some basic weak land use regulations and planning principles were laid down in the late 1990s; this was a time when the economic situation was more positive and the political will towards urban renewal stronger than at present. After the fall of communism, the attempts to solve the problems in the 1990s resulted in the neoliberal Budapest Model of urban development - which Pallai (2003) tries to defend. In general, planning and policy in post-socialist Hungary is decentralised and fragmented. Related to this general problem, two issues can be brought up with regard to the planning and urban development of the Budapest region:

- 1) The issue concerning the hierarchical structure of area development designated in land use plans and zoning ordinances of Budapest.
- 2) The issue about conflicts across municipalities.

For the first issue, one informant points out that, according to land use regulations, everywhere in Hungary restrictions on building are considerably stricter for so called 'outer areas' than for their opposite, 'inner areas'. These distinctions and this hierarchy existed even before the year 1990. (In 1997 the planning law was amended but de facto much of this system is still in place). For the second issue, as already explained, the new act put the districts on the same level with metropolitan municipality, which meant a lot of conflicts across districts and between the city and individual districts. For Budapest, the 1997 act on planning and building contained a specific provision for Budapest in the sense that a more hierarchical structure was retained through the two tier planning system of Budapest. This has filled some of the 'planning vacuum' of the 1990s as well as removed some of the conflicts between different district authorities (see Locsmándi et al., 2000). According to an informant, while "in planning issues the new hierarchical structure at least on paper guarantees some kind of coordination," much of the Hungarian everyday planning practice has not improved significantly since the study by Locsmándi and colleagues was written over a decade ago.

It can be argued that the increased weight of private ownership and private development would have necessitated a more comprehensive regulation covering the whole settlement (Barta et al., 2006, p. 60). In the same spirit Földi (2006) asserts that, while sporadic opportunities arise for developers, a guiding strategy at the national level is missing in Hungary. An overall weak sustainability aspect in all three dimensions is a consequence of the above described policy coordination failures that prevail across Budapest municipalities (i.e. districts) and between the city and the neighbouring settlements (see Földi, 2006). (While this paper focuses on the doings of the earlier regime, after the local elections of fall 2010 the Mayors of the majority of Budapest districts are from the moderate right wing party FiDeSz, which obviously has changed the situation to great extent in so far as the potential conflicts do not result from party politics anymore.)

3.4. Urban regeneration and property development in Budapest

3.4.1. Inventory of the current situation

It is to note that all current projects are completely private – the local government has no role beyond giving permission in any of them. A great deal of projects are already implemented, but many are in a marketing stage, where the difficulty is to attract and convince investors in the midst of falling demand and existing excess new dwelling and office space supply. The following list comprises the most important ongoing projects and serves here to illustrate the market situation in Spring 2010:

- Simplon Udvar in a project by ING RE, 100 new homes were built in connection with a large shopping centre.
- Duna City (see subsection 3.5. below.)
- Öböl project a public park on the Buda side in district XI; waterfront dwellings built by a Portuguese company (Nádorkert in Figure 2).
- In district IX, a residential project near the Lurdy center (southern edge of Figure 2), the Olimpia group (one of many Israeli development companies operating in Budapest) bought the site from a Spanish investor, who in turn had bought if from a private person.
- Marina Part in Angyalföld (district XIII, see Figure 2) near Duna Plaza is the first large Danube waterfront project, comprising exclusive flats for well-to-do buyers.

On the other hand, certain new inventions aimed at actively (re)generating favourable conditions for the buyer emerged on the market, because of the financial crisis. In the campaign of *Elephant Holding*, the developer pays part of the interest of the loan. In the respective campaigns of *ForestHill Natura project* (district III, north-western corner in Figure 2) and *Reviczky Liget* (district XVIII), if 15 new buyers join together, they receive a 15% reduction in price together with an allowance of 5% for the VAT (hence 20% reduction in total). Similar but smaller scale innovations exist too.

3.4.2. Sustainable development strategies

The prices of new built property are most of the time higher than the second hand market (e.g. Csanádi et al., 2010). As shown in the appendix, the opposite is true for a rather small portion of the recorded sales. Although this comparison of sq.m. prices is only based on a few months period of observation, it is nevertheless indicative of the general picture. This could, in principle, suggest that including a higher cost post contributed to sustainability is viable. However, only in the office market sustainability elements are established actively - glass surface, 'green' heating, technical issues and so forth. In Törökbálint the building of Pannon GMS (today Telenor Hungary) headquarters got a prize for being the 'most innovative'; this is not only about technology, but also how to organise the work in a functional sense. In another case, in 2007 the developer who won the planning contract for building the 'Government district' site near the western railway station (Nyugati, in Figure 2 between Terézváros and Ujlipótváros) aimed at a 'green building' – a building that is energy efficient, does not cause emissions and/or uses renewable energy. Another promising tendency is that the local government might give permit only if the developer makes provision for public area services, such as enlarges the tram-line. However, almost no similar solutions exist on the residential market.

However, no social or economic sustainability aspects about how the new building(s) will fit into the surrounding environment are on the agenda. In accordance with the descriptions above, an informant claims that in Hungary sustainability is yet not the top agenda, although certifications are used by a few market players who are trying to differentiate their products (mainly new built office buildings) on the market. Solar power is introduced in a small number of hotels, and most recently in a municipal renewal project involving a prefab housing estate.

Based on this evidence, the Hungarian type of gated communities (residential park, *lakópark*, *lakókert*), a product meant for the upper-market consumers is not sustainable with respect to environmental-ecological, social-cultural or economic-financial dimensions. According to an informant most (but not all) of the new developments in Hungary are such residential parks. These often represent the latest 'bling' rather than profound 'green' solutions. Socially, they are also dubious, because they isolate the wealthy inhabitants of the area from the poor ones (cf. Csanádi et al., 2010; Bitušiková and Luther, 2010). Economically they might offer functional diversity onto a supply driven market – thus in principle a sustainable aspect – but the market is already met in Budapest. There are also smaller private developments that do not belong to this category; these are ordinary condominiums without fenced areas.

As one of the informants pointed out, urban sprawl - an unsustainable phenomena - occurs everywhere and especially in the Budapest region. This, despite the best of political intentions, insofar as a major initiative to curb suburban sprawl was introduced in 2005: namely, the Act on Spatial Planning in the Agglomeration of Budapest. With the adoption of this spatial regulatory plan, the settlements around Budapest have lost their exclusive rights to rezone land (I am indebted to a referee for this note). Furthermore, the informant cited above notes that the economic position of local governments differs a lot across Hungary; in many cases local public goods such as the maintenance of the street networks lacks necessary funding. He continues that a local government can get funds from real estate developers by allowing new areas to be built. In 'outer' areas one can build only if the plan is changed. For this to take place, the local government – which at times is corrupt – needs to be lobbied first. The main motive for a change in plan then is the anticipated enormous rise in land rent. Another motive is that the municipality also benefits from the possible provision of public infrastructure, at least in the short term.

This seems good for everyone, but not necessary for the sustainability of a city-region (e.g. due to a shrinkage of green zones around cities). On the other hand, this informant points out that the sustainability rhetoric is popular as it is required in EU funded projects. However, many of such projects are in principle triggered by property developers as opposed to government. The problem then is to get the private and public sectors to work together, which is difficult due to the power imbalance between the two actor types; already in the 90s the plans were frequently changed after the site had been developed (Locsmándi and colleagues (2000, p. 41).

3.5. The Case of Duna City

3.5.1. The starting point

In 2006 first connection concerning functions, building size, volumes, architectural outlooks, and market prices for the *Duna City* 'mega- project' in the southern part of district IX (at the southern edge of Figure 2) was made between a planner, architect and urban and real estate consultant (*Ecorys*). This project team started to change the regulation plan and the *Duna City* consortium begun to buy land from the area. Two Hungarian based investors participated in the consortium: (1) *Questor* – a small investment fund; (2) *Groupius* – a construction company.

The core of the project comprises the wholesale market Nagyvasartelep - a Hungarian historical heritage site. After that the aim was to acquire smaller plots and eventually reach Soroksári út, a main artery for southbound traffic on the Pest side. All works, including the demolishing of a railway line and bridge was done privately, although a deal was made with the district authorities in order to try to change the regulation plan towards higher allowed densities. However, according to the cultural sustainability argument this should not be allowed: that the new developments never should 'compete for airspace' with the old churches, parliament and other heritage buildings of the city. Nonetheless, to allow some higher building densities outside the ring road are discussed though, because another argument is that, if the aim is to develop Budapest into a polycentric - and thereby more sustainable - direction, we need even more sub-centres than is the case in this metropolis at present. The district authority supported these plans, but the metropolitan government also had the right to participate in the decision-making due to the size of the project. Ongoing discussions in the metropolitan government suggest that there will be a development agreement. The benefit for the metropolitan government is that the city will get a lot of infrastructure investment. This brings us to the first issue of analytic interest.

3.5.2. Sustainability elements included in Duna City

It can be argued that the (changed) regulation plan together with agreements with the municipality can produce an outcome with certain sustainable elements. First, the traditional arguments of sustainability such as energy saving or 'green' buildings have been discussed, but whether they will be included is uncertain at the time of writing. Second, affordable housing is already included in the development plans and this will not be changed. Third, public infrastructure – as mentioned above, an important factor - is already secured. However, the original ambitious idea of connecting with the above mentioned Info Park situated on the other side of the river will probably be too difficult to implement. In the following, we look at these elements more closely.

The site had advantages as well as disadvantages. On the positive side, it takes only five minutes to the city core, in other words the accessibility is good. On the negative side, the key issue is that the public transport is not so good, although in the long term metro line 5 will connect *Szentendre Hév* (the northbound regional train running on the Buda side) with *Rackéve Hév* (the southbound regional train running on the Pest side, with end stop next to the *Duna City* site); a less tangible problem is that the 'mental map' of Budapest people is that the *Lagymanos Bridge* is ugly and demarks the beginning of the traditional 'industrial wasteland' of the city. Fortunately, land here was mainly used as a logistic area and is therefore not as contaminated as most Brownfields in Budapest. Indeed this could be a high-prestige project comprising office, retail and residential functions. The idea is wise: to utilise the existing morphology including waterfront location.

Looking at the residential projects, the idea is to provide different kinds of housing projects. In particular, high-rise buildings with lower priced dwellings were to be built next to the railway. All other buildings apart from the abovementioned heritage parts were demolished, and instead road connections and traffic junctions were built.

For the potential sustainability of the planned office and retail buildings, a Dutch architect bureau had some ideas concerning environmental-ecological sustainability such as 'green' building and geothermal energy (which would even be cheaper in the mid-term). However, such plans are on an idea level only as the detailed plans are not ready yet, and the project since 2008 is experiencing uncertainty stemming from the financial crisis. At the time of writing this is a cleared site ready for development. This brings us to the second important question of interest for this case.

3.5.3. The demand for Duna City

The project is currently in standby due to financial difficulties. (Here it is to observe that in *Duna City* no such innovative financial schemes as described above are implemented; nor is there any targeting of foreign tenants or investors.) However, it is anticipated that the financial situation changes, which then would generate the necessary demand. The problem is that the current financial difficulties mean an uncertainty about whether 'green' aspects will be supported. Here the twist is that the investors of the project are backed by the new government (i.e. the opposition of 2002-10), which, in effect means that when policies that they had touted during their opposition years, such as subsidies for sustainable design and house-building, will be put in practice, continuing the *Duna City* is bound to become viable again. (It is argued that housing is the key to the construction industry – a strong driver of the Budapest and Hungarian economy.) If such a change triggers the completion of the project in its most sustainable mode (i.e. including 'green' design, affordable housing, and public infrastructure) it must be considered a shift in policymaking to the right track.

4. COMPARISON WITH OTHER CEE CITIES

A wealth of recent evidence on urban property developments concerns Baltic (e.g. Standl and Krupickaite, 2004; Julegina et al., 2009) and Balkan cities (e.g. Tsenkova, 2009) rather than their more centrally (i.e. from a European perspective) located counterparts. In fairness, it is questionable to assume Budapest to be comparable to this body of work. In part, this is due to its similarity to cities in the German speaking - or rather, German influenced -Europe. Furthermore, due to the quick pace of change the evidence has a short shelf-life, thus rendering studies older than ten years or so outdated. Nevertheless, a few case studies from the most comparable CEE cities together with more general reviews of the post-socialist circumstances are reviewed below. These studies scrutinize the different urban development and real estate sustainability issues covered in this contribution.

In general, contemporary economic growth and efficiency strategies adopted by East Bloc countries can be criticized for neglecting collective consumption of amenities (Nedović-Budić and Tsenkova, 2006; see also Andrusz, 2006). Bratislava is a good case in point, as Bitušiková and Luther (2010) show. Here the new urban strategies and policies targeted investment in public spaces in the historic city centre on two levels: inhabitants demanded revitalisation of city centre and at the same time economic reforms triggered restoration of buildings by the new owners. However, despite the original intentions of reviving the socio-cultural and residential functions, in most cases new business functions took over due to the high cost of reconstructing the historic buildings. This state of affairs was most visible in the large-scale Danube waterfront redevelopment projects, where foreign developers targeted upper-class residents only and mostly did not pay attention to the local identity, these authors assert. While the aims in terms of revitalizing urban life, integrating diverse populations, reviving the residential functions and attracting foreign investors and tourists work towards sustainability, the downside of such a strategy is that growing commercialisation of the centre also makes it inaccessible for many people (see Bitušiková and Luther, 2010). Schwegler (2006) in his study on Komarno (Slovakia) finds that this applies for small towns too, even if these have undergone a seemingly successful rehabilitation of their core areas.

Sýkora (2005) notes that market reforms (privatisation and deregulation) in these countries have lead to neighbourhood changes that have much common with western cities, gentrification being a particular phenomenon here. He observes how in Prague the property markets have had a significant role insofar as the inner areas have been revitalized by commercial developments including conversion of old residential functions to offices. According to another study by Sýkora (2006), on the supply side government directed reforms such as privatization and rental deregulation, and on the demand side the emerging private sector actors, notably foreign firms, created the conditions for establishing urban property markets in Prague and other cities in the Czech Republic. This development, fuelled by neoliberal policies including a program for industrial zones stimulated massive suburbanisation around Prague. As it was recognised that sprawl threatens sustainable metropolitan development, towards the end of the 90s a more complex strategy emerged. This ambitious development strategy includes various moments of improvement such as competitiveness, quality-of life and infrastructure. However, problems still exist, notably that most FDIs flow into Greenfield locations and the cooperation between City and NGO actors is difficult.

From the descriptions of Bratislava and Prague one notices much similarity with the situation in Budapest. Elsewhere, comparative research has attempted to identify not only similarities but also differences between any two or more cities under study. In a particularly well-informed study, Taşan-Kok (2004) shows how, despite the fact that urban property developments in general are result of investment opportunities and restrictions, differences in institutional context are marked across the post-communist circumstances. After the transition, in Warsaw a more cautious attitude of municipality government towards private businesses prevailed than in Budapest; furthermore, in Warsaw the administrative structure (a four level territorial hierarchy until a new Act of 2002) was more complex than in Budapest. Tasan-Kok (2004), pp. 116-117) nevetheless concludes that, while economic institutions in Hungary were quicker and more willing to globalise than in Poland, municipalities in both countries used property development as primary spatial/urban development strategy (cf. Sýkora, 2006).

According to Keivani et al. (2002) since the early 1990s large-scale office and retail developments have risen in the city centre as well as out of town locations of Warsaw. This is because this city has been subject to a significant level of international real estate investment and development activity in support of the regional functions of trans-national corporations as well as access to the large Polish domestic market. (Here is a marked difference to Budapest and Hungary, where development until recently has been mostly driven by international investors).

Moreover, in the Central and Eastern European (CEE) context development projects are almost exclusively of the large, supply-led type. As noted by Leishman and Warren (in subsection 2.1.), this by definition is an unsustainable tendency. Bodnár and Molnár (2010) compare the supply-driven process of establishing gated residential parks in Budapest and Berlin. According to their findings planned housing developments in Berlin and Budapest are different from the cases most frequently discussed in the gated community literature, and also from each other.

To delve further into the differences between urban development outcomes in post-socialist circumstances, Rebernik (2004) stresses the lesser social degradation in Slovenian cities compared to other transitional CEE cities. According to Pichler-Milanović and Zavodnik Lamoršek (2010) the Ljubljana region has become competitive due to successful macro-level policies and reforms. Furthermore, new spatial management and planning acts have sustained long term spatial development strategies geared towards sustainable development of land use plans on one hand, and the financial-economic needs of investors and land owners on the other. They note however that a successful continued implementation of different plans and strategies amidst current global economic slowdown faces demanding challenges of all actors involved not the least concerning energy efficiency and retrofitting of buildings as well as provision for a low carbon urban environment.

The conclusion from the literature is interesting. The variation in property development experiences and planning and policy frameworks across this sample of CEE Capital Cities is perhaps surprising, given their relative similarities of their recent past. Nevertheless, a trend towards convergence rather than divergence is probably still the more valid description of reality here. While the findings from the different studies covered are not strictly comparable in terms of the issues covered, apparently cities in different CEE countries much face the same problems with real estate sustainability: spatial inequality, urban sprawl and lack of cooperation. The exceptions here are the Slovenian cities, where the corresponding sustainability evaluation of the property development outcomes is more favourable, probably much because of the influence of a different macro level framework than elsewhere in the region.

5. CONCLUSIONS

Hamnett (2003) shows how, since 1979 in UK the state has set the parameters for the market to operate, and, as a consequence, most key decisions are taken elsewhere than in local planning boards. As a result decisionmakers see land use regulations and strategic planning functions as unnecessary at best and unwanted at worst. After the transition this neo-liberal mode of decision-making was copied by the urban property development circumstances in Hungary. This state of affairs implied unsustainable development practices regarding the provision and maintenance of the built environment. The problem still is that due to the serious financial constraints that the local public economies face, and because planning as an ideology is not popular, the Hungarian system is unclear and there is plenty of ambiguity in terms of the specific instruments of land use regulation and environmental policies. Against the backdrop provided by Tiesdell and Allmendinger (2005), for Hungary, the casual conclusion would be that the planning system is even less reliable than the British system in terms of information provision (see subsection 2.2). As it was pointed out in one of the interviews, formally recognised planning principles are not necessarily honoured in the actual planning practice.

T. Kauko

It must be kept in mind that in much of Eastern Europe the context changed from complete planning to practically a planning-free situation, and while at present some planning is on the agenda people tend to distrust the authorities. In Budapest, and more generally in the CEE urban context, massive changes in the built environment have taken place (and continue to take place). The question of debate is whether such developments are socially just or sustainable - even economically. In other words, when social goals are lacking, it is the profitability of the investment that drives urban property development, and then it all boils down to one question: how to raise funds? In such circumstances maintaining the business activity is difficult and one needs to try every possible strategy. It is thus unsurprising that private investors are attracted with all possible semi-legal means.

Especially for urban regeneration Budapest appears unsustainable as social goals are lacking altogether and only the supply-side and profit matter. The goal in a strategy where the middle-class is targeted is that building new owner-occupied housing would attract more affluent neighbourhood population and thereby lead to economic and social revitalization, which subsequently would accumulate across the city and generate a regional 'knock-on' effect. The inevitable problem is however the inability of such a strategy to provide housing for low income groups in a polarized housing and labour market (cf. Cameron, 2006). A further problem is that in Hungary the new gated community-like developments (residential parks) are almost completely seller-driven. In accordance with the arguments of Leishman and Warren (2010), a turn towards a more sustainable paradigm of property development and urban renewal would then be possible only if the projects become more buyer-and tenant-driven (see subsection 2.1). This would however only be likely through establishing some kinds of demand side financial incentives. For this we need courageous policymakers and market actors. The findings of the previous section show that beside the management of urban land use and local environments also the macro level decisions here have a role to play.

REFERENCES

- Adair, A., Berry, J., Gibb, K., Hutchison, N., McGreal, S. and Watkins, C. (2005) Urban regeneration, property indices and market performance. In: Adams, D., Watkins, C. and White, M. (eds.), *Planning, Public Policy & Property Markets*. Oxford: Blackwell Publishing, pp. 148–166.
- Adams, D., Watkins, C. and White, M. (2005) Planning, public policy and property markets: current relations and future challenges. In: Adams, D., Watkins, C. and White, M. (eds.), *Planning, Public Policy & Property Markets*. Oxford: Blackwell Publishing, pp. 239–251. doi:10.1002/9780470757789
- Andrusz, G. (2006) Wall and mall: a metaphor for metamorphosis. In: Tsenkova, S. and Nedović-Budić, Z. (ed.), The urban mosaic of post-socialist Europe. Space, institutions and policy, Heidelberg: Physica-Verlag, pp. 71–90. doi:10.1007/3-7908-1727-9_4
- Barta, Gy., Beluszky, P., Czirfusz, M., Győri, R. and Kukely, Gy. (2006) Rehabilitating the Brownfield zones of Budapest. Centre for Regional Studies of Hungarian Academy of Sciences. Discussion papers No. 51, Pecs.
- Bitušiková, A. and Luther, D. (2010) Sustainable diversity and public space in the city of Bratislava, Slovakia, Anthropological Notebooks, 16(2), pp. 5–18.
- Bodnár, J. and Molnár, V. (2010) Reconfiguring private and public: state, capital and new housing developments in Berlin and Budapest, Urban Studies, 47(4), pp. 789-812. doi:10.1177/0042098009351188
- Bramley, G. and Power, S. (2009) Urban form and social sustainability: the role of density and housing type, *Environment and Planning B: Planning and Design*, 36(9), pp. 30–48. doi:10.1068/b33129
- Cameron, S. (2006) From low demand to rising aspirations: housing market renewal within regional and neighbourhood regeneration policy, *Housing Studies*, 21(1), pp. 3–16. doi:10.1080/02673030500391015
- Cameron, S. and Doling, J. (1994) Housing neighbourhoods and urban regeneration, Urban

Studies, 31(7), pp. 1211–1223. doi:10.1080/00420989420081031

- Csanádi, G., Csizmady, A. and Olt, G. (2010) Recent trends in urban renewal in Budapest, *Urbani izziv*, 211, pp. 117–125.
- Cheshire, P. (2005) Unpriced regulatory risk and the competition of rules: unconsidered implications of land use planning, *Journal of Property Research*, 22(2-3), pp. 225-244. doi:10.1080/09599910500453863
- Couch, C. and Fraser, C. (2003) Introduction: the European context and theoretical framework. In: Couch, C., Fraser, C., and Percy, S. (eds.), Urban Regeneration in Europe, Real Estate Issues. Oxford: Blackwell Science, pp. 1–16.
- The Economist, 8 April, 2010 "Hungary's election: Victory for Viktor?" Available Online at: http:// www.economist.com/world/europe/displaystory.cfm?story_id=15868591 [accessed 21 April, 2010].
- Fisher, R. (2010) The role of local government in designing sustainable cities. Presentation at the EU Sustainable energy week (EUSEW), 22–26 March, Brussels.
- Földi, Zs. (2006) Neighbourhood dynamics in Inner-Budapest. A realist approach. Nederlands geographical studies 350. Utrecht University, Utrecht.
- Hamnett, C. (2003) Unequal city. London in the global arena (Routledge, London).
- Heurkens, E. (2009) Changing public and private roles in urban area development in the Netherlands. In: Castells, M, Burkhalter, L., Sassen, S., etc. (eds.), *The Urban Question – Urbanism Beyond Neo-Liberalism*. pp. 345–355. International Forum on Urbanism [IFoU], Rotterdam, The Netherlands. Available Online at: http:// newurbanquestion.ifou.org/proceedings/9%20 Changing%20Planning%20Cultures/full%20papers/F014_Heurkens_Erwin_Changing_public_ and_private_roles_DS_Reviewed.pdf [accessed 4 November 2009].
- Jones, C. and Watkins, C. (1996) Urban regeneration and sustainable markets, Urban Studies, 33(7), pp. 1129–1140. doi:10.1080/00420989650011546
- Julegina, A., Cars, G. and Holt-Jensen, A. (2009) Housing policies, path dependencies and present challenges. In: Holt-Jensen, A. and Pollock, E. (eds.), Urban Sustainability and Governance: New Challenges in Nordic-Baltic Housing Policies. New York: Nova Science Publishers, pp. 13–29.

- Kauko, T. (2003) Planning processes, development potential and house prices: contesting positive and normative argumentation, focus article, Housing, *Theory and Society*, 20(3), pp. 113– 126.
- Kauko, T. (2006) Urban housing patterns in a tide of change: Spatial structure and residential property values in Budapest in a comparative perspective. DUP Science, Delft.
- Kauko, T. (2007) An analysis of housing location attributes in the inner city of Budapest, Hungary, using expert judgements, International Journal of Strategic Property Management, 11(4), pp. 209–225.
- Kauko, T. (2008) From modelling tools towards the market itself – an opportunity for sustainability assessment? *International Journal of Strategic Property Management*, 12(2), pp. 95–107.
- Kauko, T. (2009) The housing market dynamics of two Budapest neighbourhoods, *Housing Studies*, 24(5), pp. 587–610.
- Keivani, R. Parsa, A. and McGreal, S. (2002) Institutions and urban change in a globalising world – the case of Warsaw, *Cities*, 19(3), pp. 183–193. doi:10.1016/S0264-2751(02)00015-X
- Kovács, Z. (2009) Social and economic transformation of historical neighbourhoods in Budapest, *Tijdschrift voor Economische en Sociale Ge*ografie, 100(4), pp. 399–416. doi:10.1111/j.1467-9663.2009.00549.x
- Leishman, C and Warren, F. (2005) Planning for consumers' new-build housing choices. In: Adams, D., Watkins, C. and White, M. (eds.), *Planning, Public Policy & Property Markets.* Oxford: Blackwell Publishing, pp. 167–184.
- Locsmándi, G., Péteri, G. and Varga-Ötvös, B. (2000) Urban planning and capital investment financing in Hungary. Local Government and Public Service Reform Initiative, Open Society Institute, Budapest.
- Mitkus, S. and Sostak, O. R. (2009) Preservation of healthy and harmonious residential and work environment during urban development, *International Journal of Strategic Property Management*, 13(4), pp. 339–357. doi:10.3846/1648-715X.2009.13.339-357
- Monk, S., Short, C. and Whitehead, C. (2005) Planning obligations and affordable housing. In: Adams, D., Watkins, C. and White, M. (eds.), *Planning, Public Policy & Property Markets.* Oxford: Blackwell Publishing, pp. 185–208.

- Nedović-Budić, Z. and Tsenkova, S. (2006) The urban mosaic of post-socialist Europe (with P. Marcuse). In: Tsenkova, S. and Nedović-Budić, Z. (ed.), *The Urban Mosaic of Post-Socialist Europe. Space, Institutions and Policy.* Heidelberg: Physica-Verlag, pp. 3–20.
- Nguyen, M. T. (2005) Does affordable housing detrimentally affect property values? A review of the literature, *Journal of Planning Literature*, 20(1), pp. 15–26. doi:10.1177/0885412205277069
- Pallai, K. (2003) The Budapest model a liberal urban policy experiment. Budapest.
- Pichler-Milanović, N. and Zavodnik Lamoršek, A. (2010) Urban land use management in Ljubljana: from competitiveness to sustainability – or vice versa? *REALCORP Proceedings*/ Tagungsband, Vienna 18-20 May, pp. 817–825. Available online at: http://www.corp.at/archive/ CORP2010_212.pdf [accessed 10 May 2011]
- Raagmaa, G. (2009) Planning theories and development practices. Past dependencies contra new ideology: impact of planning for sustainable housing development. In: Holt-Jensen, A. and Pollock, E. (eds.), Urban Sustainability and Governance: New Challenges in Nordic-Baltic Housing Policies. New York: Nova Science Publishers, pp. 77–99.
- Rebernik, D. (2004) Recent development of Slovene towns: social structure and transformation, *Dela*, pp. 139–144.
- Ribeiro, F. L. (2008) Urban regeneration economics, International Journal of Strategic Property Management, 12(3), pp. 203–213. doi:10.3846/1648-715X.2008.12.203-213
- Rosenburg, L. and Watkins, C. (1999) Longitudinal monitoring of housing renewal in the urban core: reflections on the experience of Glasgow's Merchant City, Urban Studies, 36(11), pp. 1973–1996. doi:10.1080/0042098992719
- Ruoppila, S. (2007) Establishing a marketorienteated urban planning system after state socialism: the case of Tallinn, *European Planning Studies*, 15(3), pp. 405-427. doi:10.1080/09654310601017117
- Schwegler, B. (2006) Entrepreneurial governance and the urban restructuring of a Slovakian town. In: Tsenkova S. and Nedović-Budić Z. (ed.), The urban mosaic of post-socialist Europe. Space, institutions and policy. Heidelberg: Physica-Verlag, pp. 295-318. doi:10.1007/3-7908-1727-9_15

- Standl, H. and Krupickaite, D. (2004) Gentrification in Vilnius (Lithuania) – the example of Užupis, *Europa Regional*, 12, pp. 42–51.
- Stenning, A. (2004) Urban change and the localities. In: Bradshaw, M. and Stenning, A. (eds.), East Central Europe and the Former Soviet Union. Harlow: Developing Areas Research Group, pp. 87–108.
- Støa, E. (2009) Housing in the sustainable city issues for an integrated approach. In: Holt-Jensen, A. and Pollock, E. (eds.), Urban Sustainability and Governance: New Challenges in Nordic-Baltic Housing Policies. New York: Nova Science Publishers, pp. 31–48.
- Sýkora, L. (2005) Gentrification in post-communist cities. In: Atkinson, R. and Bridge, G. (eds.), Gentrification in a global context. The new urban colonialism. New York & London: Routledge, pp. 90–105.
- Sýkora, L. (2006) Urban development, policy and planning in the Czech Republic and Prague. In: Altrock, U., Günther, S., Huning, S. and Peters, D. (eds.), Spatial Planning and Urban Development in the New EU Member States: From Adjustment to Reinvention, Aldershot and Burlington: Ashgate, pp. 113–140.
- Taşan-Kok, T. (2004) Budapest, Istanbul, and Warsaw: institutional and spatial change. Eburon, Delft.
- Tiesdell, S. (2004) Integrating affordable housing within market-rate developments: the design dimension, *Environment and Planning B: Planning and Design*, 31, pp. 195–212. doi:10.1068/b2998

- Tiesdell, S. and Allmendinger, P. (2005) Planning tools and markets: towards an extended conceptualisation. In: Adams, D., Watkins, C. and White, M. (eds.), *Planning, Public Policy & Property Markets.* Oxford: Blackwell Publishing, pp. 56–76.
- Tsenkova, S. (2009) Housing policy reforms in post socialist Europe. Lost in transition. Physica-Verlag, Heidelberg. doi:10.1007/978-3-7908-2115-4
- Turskis, Z., Zavadskas, E. K., and Zagorskas, J. (2006) Sustainable city compactness evaluation on the basis of GIS and Bayes rule, *International Journal of Strategic Property Management*, 10(3), pp. 185–207.

INTERVIEWED EXPERTS

- Anonymous, Lecturer, University of Szeged, discussions 14 October 2009 and 30 December 2009; emailing correspondence 18 January 2010 and 11 March 2010.
- Ákos Jakobi, Lecturer, ELTE, discussion 28 September 2009.
- Krisztián Karácsony, Managing Director, ECORYS Hungary, discussion 17 December 2009.
- Gábor Locsmándi, Professor, Budapest University of Technology and Economics, discussion January 2005.
- Gábor Soóki-Toth, Manager, Skoglund Holding, emailing correspondence 27 January 2010.
- David Valkó, Otthon Centrum, discussion 29 September 2009.

SANTRAUKA

ARTĖJA PABAIGA? APIE (NE)DARNIĄ NT PLĖTRĄ BUDAPEŠTO APYLINKĖSE

Tom KAUKO

Darni plėtra apibrėžiama aplinkosaugos, socialiniais ir ekonominiais aspektais. Kintant institucinėms aplinkybėms, miestų NT plėtros darna posocialistinėse šalyse buvo įvairi. 1990 m. pasikeitus režimui Vengrijoje, žemės naudojimas ir NT ekonomika paprastai buvo kraštutinis neoliberalaus, oportunistiško ir plataus masto plėtros bei projektų planavimo variantas. Dėl to miesto atnaujinimas Budapešto priemiesčiuose beveik išskirtinai remiasi privačiomis investicijomis, galbūt išskyrus "stambius projektus", kai vyriausybė suinteresuota užtikrinti aprūpinimą infrastruktūra. Šiame darbe pirmiausia pasiūloma, kaip lanksčiai ir atsižvelgdama į kontekstą vyriausybė turi prisidėti prie NT vystymo. Pateikiamas miesto atnaujinimo ir kitokio NT vystymo aprašymas Budapešto apylinkėse, trumpai apžvelgiami panašūs posocialistiniai miestai. Darbas baigiamas darnos įvertinimu ir kritiniu komentaru apie padėtį šiame kontekstę.

| Period | District | Brick flats: price difference (new-old)/new | Single-family homes: price difference (new-old)/new |
|----------------|-------------|--|--|
| January, 2009 | Budapest 01 | -0.04 | n.a. |
| | Budapest 03 | 0.23 | n.a. |
| | Budapest 08 | 0.38 | n.a. |
| | Budapest 10 | 0.14 | n.a. |
| | Budapest 11 | 0.39 | n.a. |
| | Budapest 13 | 0.24 | n.a. |
| | Budapest 14 | 0.12 | n.a. |
| | Budapest 18 | -0.11 | 0.26 |
| | Budapest 20 | 0.44 | n.a. |
| February, 2009 | Budapest 07 | 0.36 | n.a. |
| | Budapest 08 | 0.51 | n.a. |
| | Budapest 09 | 0.24 | n.a. |
| | Budapest 10 | 0.40 | n.a. |
| | Budapest 11 | 0.53 | n.a. |
| | Budapest 13 | 0.14 | n.a. |
| | Budapest 14 | 0.20 | n.a. |
| | Budapest 15 | 0.08 | n.a. |
| | Budapest 17 | -0.41 | n.a. |
| | Budapest 18 | 0.11 | 0.13 |
| March, 2009 | Budapest 03 | 0.25 | n.a. |
| | Budapest 04 | 0.01 | n.a. |
| | Budapest 05 | 0.37 | n.a. |
| | Budapest 06 | 0.32 | n.a. |
| | Budapest 07 | 0.23 | n.a. |
| | Budapest 09 | 0.17 | n.a. |
| | Budapest 10 | 0.37 | n.a. |
| | Budapest 11 | 0.37 | n.a. |
| | Budapest 13 | 0.23 | n.a. |
| | Budapest 14 | 0.19 | n.a. |
| | Budapest 17 | n.a. | 0.29 |
| | Budapest 18 | 0.08 | n.a. |
| | Budapest 20 | n.a. | 0.23 |
| April, 2009 | Budapest 02 | 0.08 | n.a. |
| | Budapest 03 | 0.25 | n.a. |
| | Budapest 08 | 0.34 | n.a. |
| | Budapest 10 | 0.44 | n.a. |
| | Budapest 11 | 0.39 | n.a. |
| | Budapest 12 | n.a. | n.a. |
| | Budapest 13 | 0.11 | n.a. |
| | Budapest 18 | 0.14 | 0.27 |
| | Budapest 20 | 0.15 | n.a. |
| | Budapest 22 | 0.48 | n.a. |
| | | | |

APPENDIX. Price differences between new and old property in Budapest (Source: Otthon Center)

| Period | District | Brick flats: price difference (new–old)/new | Single–family homes: price difference (new–old)/new |
|--------------|-------------|--|--|
| (Continued) | | | |
| May, 2009 | Budapest 01 | 0.50 | n.a. |
| | Budapest 03 | 0.14 | -0.06 |
| | Budapest 04 | -0.02 | n.a. |
| | Budapest 09 | 0.23 | n.a. |
| | Budapest 11 | 0.30 | n.a. |
| | Budapest 13 | 0.04 | n.a. |
| | Budapest 14 | 0.21 | n.a. |
| | Budapest 18 | 0.13 | 0.21 |
| | Budapest 20 | n.a. | -0.49 |
| | Budapest 22 | 0.25 | 0.19 |
| June, 2009 | Budapest 01 | -0.16 | n.a. |
| | Budapest 02 | 0.43 | n.a. |
| | Budapest 03 | 0.19 | n.a. |
| | Budapest 06 | 0.41 | n.a. |
| | Budapest 09 | 0.22 | n.a. |
| | Budapest 10 | 0.31 | n.a. |
| | Budapest 11 | 0.33 | n.a. |
| | Budapest 12 | 0.36 | n.a. |
| | Budapest 13 | 0.26 | n.a. |
| | Budapest 14 | 0.33 | n.a. |
| | Budapest 18 | 0.17 | -0.38 |
| July, 2009 | Budapest 03 | 0.46 | n.a. |
| | Budapest 04 | 0.21 | n.a. |
| | Budapest 06 | -0.23 | n.a. |
| | Budapest 08 | 0.39 | n.a. |
| | Budapest 11 | 0.41 | n.a. |
| | Budapest 13 | 0.27 | n.a. |
| | Budapest 14 | 0.36 | n.a. |
| | Budapest 18 | 0.28 | 0.12 |
| August, 2009 | Budapest 03 | 0.12 | n.a. |
| | Budapest 11 | 0.21 | n.a. |
| | Budapest 14 | 0.04 | n.a. |
| | Budapest 18 | 0.25 | 0.20 |
| | Budapest 22 | 0.22 | n.a. |

Note:

The calculations are based on mean prices per district for each product category during a one month period. A positive ratio indicates the normal case: the prices of new built homes exceed the prices of second hand ones, 75 out of 84 cases belong to this category.

A negative ratio indicates the abnormal case: the prices of second hand homes exceed the prices of new built ones; 9 out of 84 cases belong to this category.