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Socioeconomic dynamics and property rights regulation as driving forces of urban spatial development: the case of Vienna

Socioeconomic dynamics and property rights regulation as driving forces of urban spatial development:
the case of Vienna

Wolfgang Blaas\textsuperscript{i} and Gerlinde Oppolzer\textsuperscript{ii}


Introduction

In this paper\textsuperscript{1} we explain recent changes in urban structures and CBD functions in Vienna by entrepreneurial decisions to locate office buildings. The decisions to site office facilities are seen, in turn, as dependent on quantitative and qualitative demand for office space, and on the particular spatial conditions of the local office supply. The question we are dealing with in this paper is whether the recently observed pattern of location decisions may be explained by general (global) demand factors largely independent of the local economy in combination with the local institutional framework of the supply side. By looking more deeply into the two sides of the market we want to shed some light on one particular causal chain of urban structural development.

The paper has five parts. After a brief discussion of the location-theoretical background (part 1) we describe the main factors driving office demand (part 2). The third part gives an overall picture of the local regulation of the market. The fourth part is empirical in nature and sums up the market developments of the Vienna office market in recent years. Finally, in the fifth part some suggestions are given how these developments could be guided towards a more balanced urban policy.

\textsuperscript{1} The paper is based on two studies on the effects of office building siting on the spatial structure of Vienna (Austria): Blaas, W., Oppolzer, G., Puchinger, K., Rosenberger, M., Zuckerstätter, R. 2003 and Puchinger, K., Resch, A., Blaas, W., 2003.
1 Theoretical basis

The last decade was characterized by a general trend towards privatization and smaller public sectors, reinforced (in Europe) by the requirements of budget consolidation leading to expenditure cut backs on all levels of the state. One manifestation of this process was that urban (development) planning came under heavy pressure from both the budget front and the ideological front. While the reduced influence on urban development of public decision making may be a matter of concern, one might argue that if market forces increase their potential to shape the urban geography then the ability to explain urban development of economic theories in general and of location theories in particular would increase. This is where we set off our argument.

It has become standard practice to distinguish three broad groups of location theories: (1) neoclassical theories (normative theories); (2) behavioral theories and (3) structural approaches.

Neoclassical theories assume the ideal firm where the location decision is part of (short run) profit maximizing. Spatial structures are then deduced from this kind of optimization behaviour. The other two lines of theories are of inductive nature, starting off from empirical results which then are being generalized to gain hypotheses. Behavioral theories take into account organisational and technological determinants of location decisions, whereas structural approaches bridge the gap to macroeconomic and social developments as sig-

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3 e.g. industrial location theory (Weber, 1909), locational rent theory (v. Thünen, 1826, Alonso, 1964),


5 e.g. Geography of enterprise (McNee, 1960, Krumme, 1966), infrastructure theory (Tuchtfeldt, 1977, Jochim-
significant drivers of (changes in) siting behaviour.
Our approach may be seen as combining elements of structural and behavioral theories. It is structural in the sense that we take global economic and social trends (e.g. developments in the information and communication technology) as the departure for analyzing location scenarios. It is behavioral in the sense that we assign production technologies and organizational changes an important role in locational decisions. It goes without saying, however, that underneath these determinants profit maximizing (by choosing a location that minimizes costs or opens up new or larger markets) remains a behavioral constant.
Since office employment is the dominant kind of labour in agglomerations (but increasingly also on the macroeconomic scale), we analyse the locational behaviour of service firms, and in particular of business services, using Vienna as an empirical example.

2 Socio-economic dynamics and its impact on locational preferences of firms

We want to describe urban developments according to the following rationale (see also Table 1). (1) Socio-economic and technological changes produce reactions of the market in the sense that (a) firms and/or activities disappear from the market and new firms and/or activities (i.e. products) emerge; and (b) existing firms grow, shrink and reorganize their business according to quantitative and qualitative changes in the environment of the firm. (2) These reactions by individual firms have a number of effects on different markets, e.g. on the labour market. The effects we are interested in are those on the market for office locations due to their spatial and therefore urban dimension. However, what we do observe in the market for office locations is the result of
both demand forces and supply forces. Whereas the demand side may be seen as determined mainly by general or even global changes, the supply side is strongly governed by local conditions and regulations. We deal with the demand side in this section and the supply side in section 3.

2.1 Information and communication technologies

The recent developments in information and communication technologies (ICT) have been the object of many studies and are well known to the scientific community. It is therefore sufficient to summarize those aspects which may be relevant for the purposes of our topic:

- Prices of information transport have fallen and continue to do so
- Costs of information acquisition and information processing have fallen and continue to do so
- New information technology hardware is increasingly user-friendly and allows to process large amounts of information with high quality and high speed

Market reactions

These technological changes have generated a number of market reactions, of which the following ones are of particular importance for our discussion:

(1) New firms in the information and telecommunication branches have emerged (“The New Economy”) and new activities like e-commerce, e-procurement etc. have evolved. (2) Supplier markets and selling markets have spatially enlarged on account of easier and cheaper long distance communication. (3) Remote control and electronic monitoring of production (e.g. via internet and intranet) have established opportunities for expanding firms to consider remote locations for siting new plants, and/or to relocate parts of the company to cheaper locations (also called fragmentation).
Demand for office space

The primary consequences of the above mentioned market reactions for the demand side of the office market are that technical equipment of office buildings with information and computer infrastructures are considered absolutely necessary. Companies relocate into new office buildings because of qualitative more than quantitative requirements. Hence, we expect no more (or only marginal) demand for buildings without such technical facilities or for buildings where it is unduly costly to install these ex post. Those office buildings remain unoccupied and become obsolete after a relatively short time. Furthermore, remote control techniques encourage the partitioning of company functions along least-cost calculations of the factors land and employment.
Table 1: The impact of socio-economic trends and land regulation on the market for office locations (simplified)

<table>
<thead>
<tr>
<th>Socio-economic or technological trend</th>
<th>Market reactions on the level of individual firms</th>
<th>Impact on the market for office locations (empirical findings)</th>
<th>Land regulations (the case of Vienna)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Evolution of ICT</td>
<td>Emergence/disappearance of activities (products) and firms</td>
<td>High demand for fully equipped office buildings. Older buildings hard to adapt become obsolete</td>
<td>Regulatory provisions</td>
</tr>
<tr>
<td>Globalized competition</td>
<td>Relocation of firms/plants</td>
<td>Fragmentation</td>
<td>Vienna building code</td>
</tr>
<tr>
<td>Increased role of shareholder value</td>
<td>Reorganization of production processes: Standardisation and automatisation of non-specialized services</td>
<td>Flexible offices</td>
<td>Old Town Conservation Act</td>
</tr>
<tr>
<td>Retreat of the state</td>
<td>Spatial separation of business functions spatial decomposition of production, Acceleration of product cycles, Flexibilization, etc.</td>
<td>High demand for large, space-efficient buildings on one hand, and for prestigious (high-rise) buildings on exceptional locations on the other hand.</td>
<td>Federal Conservation of Monuments Act</td>
</tr>
<tr>
<td>Increased share of services and business services in GDP</td>
<td>(Spatial) changes in selling markets (enlargement)</td>
<td>Technology and service clusters (new centralities), Demand for peripheral locations with good transport connection to the city and the airport</td>
<td>International commitments</td>
</tr>
<tr>
<td>Increased importance of human capital</td>
<td>New customer relations</td>
<td>Demand for locations providing high &quot;density of contacts&quot; and economies of scope</td>
<td>Cultural World Heritage restrictions</td>
</tr>
<tr>
<td></td>
<td>(Spatial) Changes in supplier markets (enlargement)</td>
<td></td>
<td>Planning documents</td>
</tr>
</tbody>
</table>

Source: Authors' own draft
2.2 Globalized competition and greater importance of shareholder value

With globalization and the growing weight of shareholders on management decisions, the competition to realize high rates of profit intensified. When competition gets fiercer and the scale of competition gets beyond the national border and into the international or even global scenery, firms try to survive by either rolling back competition via mergers and acquisitions or they try to strengthen their competitive position by capturing new markets and/or by cutting back their costs.

Market reactions

Flexibilization

Among the large number of possible market reactions to these global trends, flexibilization as a method of cost cutting is of particular importance for our topic. Flexibilization as a process of reorganization of production may be seen as a market reaction to the requirements of cost cutting, closely connected to and inspired by ICT evolutions. Important facets of flexibilization are:

- Outsourcing
- Just-in-time-production
- Flexible and mobile labour relations
- Teleworking

Fragmentation

To capture new markets and to simultaneously reduce costs may be achieved by diverting direct investment to developing countries. The rise of multinational corporations was accompanied by a center-periphery location pattern which is also a much discussed problem in regional economics. The center accommodates strategic entrepreneurial functions like R&D, marketing etc., whereas the periphery is the location for goods (and increasingly also service) production. One of the consequences for the highly industrialized (western) European ag-
glomerations is that companies site their strategic units predominantly at places where highly-qualified (research and other) personnel find an appropriate social, cultural and leisure environment.

**Demand for office space**

Since flexibilization means predominantly segmentation and fragmentation of functions and production processes (e.g. along the production chain), the spatial distribution of office demand will consequently be more widely dispersed. Therefore, central business districts will tend to lose ground vis a vis decentral locations.

Flexibilization of the production process finds its spatial correspondence in flexible offices: Offices with moveable walls, expandable in size, sometimes even flexible renting contracts for short-time office users (e.g. before and after a conference)

Companies seeking to reduce their rent expenses are looking for space-efficient offices. In modern office buildings, the average workplace size per employee is 12–15 m², whereas in old buildings it is usually 20 m² or more. According to developers, the most efficient division of space can be achieved in buildings of at least 10,000 m² GFS in 7-10 floors. The trend clearly goes to large-scale developments.

A further trend associated with the quest for high-quality work environment may be seen in the growing demand for office space at new and luxurious locations (e.g. waterfront sites), and for office space at beautiful and original building complexes representing a *zeitgeist*-architecture.

**2.3 Retreat of the state**

With Thatcher and Reagan it became fashionable to win elections on the promise to “get the state off our backs” and to push forward the market ideology. While it was perfectly appropriate to substitute private for public (or semi-public) suppliers in some industrial branches (e.g. in the telecom-sector), it be-
came soon quite obvious that in other areas privatization in itself was no guarantee for an adequate supply of goods and services. Notwithstanding these mixed successes of privatization a definite trend towards a smaller public sector developed in European economies (and elsewhere).

**Market reactions**

The gradual retreat of the state encouraged the emergence of new activities and firms in the private sector, substituting public supply (at least partly) in a number of service sectors (e.g. in education, health, but also in real estate business). Furthermore, entrepreneurial principles (efficiency, cost-minimizing, etc.) gained more influence within public management.

**Demand for office space**

Public institutions reorganize their locations in line with reduced public functions and in order to cut the operating costs for the remaining functions. The latter may be done by leaving central and expensive locations, and leaving old-age and prestigious buildings to relocate in less expensive places and in buildings with modern technical equipment. Another version is to sell public building assets to private real estate companies and then lease back only that part of office space which is actually needed. Many of the former state-owned companies (railways, mail, telecommunication etc.) are in the process of consolidation and re-structuring. Some of them leave their traditional location and become important new players in the real estate market. Others try to gain additional returns by developing and leasing areas they don’t need for their own activity any more.

2.4 Growth of the service sector

The growth of the service sector is relevant in the context of the paper because of the concomitant shift in the demand for office buildings. Since services concentrate in metropolitan areas their location behavior is of particular importance
to our topic. In Vienna as a medium-large European agglomeration (1.8 mil inhabitants), the share of service employment in total employment is about 80%.

Market reactions
It is crucial to recognize that not only did the third sector grow (absolutely and relatively at the expense of the other two sectors), but that there were also important shifts within the secondary and the tertiary sector.
Within industrial production, the increasing weight of service functions (e.g. R&D, marketing etc.) led to a “functional tertiarization”\(^6\). Furthermore, inspired and reinforced by other general trends already mentioned above (fragmentation, ICT developments, etc.) producer services increased their share in GDP and employment.
For our argument it is therefore important to distinguish between activities serving primarily the consumer (e.g. retail business) and activities serving primarily the producer (e.g. marketing firms, head-hunters etc.).

Demand for office space
This distinction offers a perspective to very different location patterns. First, consumer services settle down where the purchasing power is located and/or where the accessibility and/or convenience for consumers is good. The latter is typical for shopping malls and shopping centers at the periphery of or outside densely populated areas, because only there is enough room for large shopping complexes and parking lots (type 1a demand). The former drives office demand for services which spatially concentrate in a few privileged parts of the highly populated inner circles of metropolitan agglomerations (type 1b demand). Second and in contrast to consumer services, producer services usually need short distances to the companies commissioning and buying these services and therefore look for office space in the surrounding of their main clients (type 2 demand).

\(^6\) cf. Mayerhofer, 2000b
3 Property rights regulation and construction law in Vienna

Land use, construction and maintenance of buildings is heavily regulated in Vienna, in particular in the first district (CBD), the historic center of Vienna. Several laws, aiming to guarantee an appropriate land-use and to preserve the historic and cultural heritage of Vienna’s City, have a cumulative restrictive impact on real estate development:

Regulatory provisions

The central legislative instrument regulating all land-use and construction activity in Vienna is the Vienna building code, in force since 1930 and amended several times since. It comprises planning law (issue of Land Use, zoning and Development Plans) as well as building law including the regulations on granting building permissions (safety standards, building densities etc.).

In 1972 the so-called Old Town Conservation Act was added to the building code. The law had the effect that municipal conservation interests did not have to be referred to the federal Austrian conservation authority but could be implemented on municipal level by assigning conservation zones for dedicated areas of the city. The purpose was to protect characteristic historical buildings or ensembles from demolition or undesirable change. Nevertheless, sites could additionally obtain the status of “preserved monument” according to the federal Preservation of Monuments act. The main implications of conservation zones were that facades could not be changed any more and even partial demolitions of buildings were prohibited. Until 2002, 150 conservation zones were assigned, including 12,000 objects and covering 8% of Vienna’s entire building

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7 Old Town Conservation Amendment, Province of Vienna Law Gazette, No. 16/1972
stock\(^8\), including almost the entire first district.

**Zoning**

In the eighties the number of residents in the inner districts declined, followed by a conversion of apartments into office space and other uses. The city government reacted to this development considered undesirable by assigning *“housing zones”* for most parts of the inner districts, including the city. It implies that in all in newly erected buildings within the zone at least 80% of the gross floor space, not regarding the ground floor, is reserved for residential use. In old buildings flats may not be converted into offices any more. Expansions even of existing offices therefore are in most cases prohibited. Exceptions of *housing zone* regulations are only made along high-ranking streets and traditional industrial zones. In the very common case of superposed conservation and housing zones building owners are very much restricted in developing their real estate: Demolition and new construction becomes practically impossible, and even modifications such as loft conversions have to respect the 80% residential privilege amongst other issues. In case an object is protected both by the federal and the municipal monument preservation law each modification requires the permission of both authorities which means that time and transaction costs of development increase cumulatively.

**International commitments**

Since December, 2001, the historic centre of Vienna is listed as a UNESCO Cultural World Heritage site\(^9\). For this international recognition the City of Vienna guarantees the utmost protection of the building structure within the framework of the existing national and provincial laws for both the core zone

\[^8\] City of Vienna on behalf of the Republic of Austria (2002): Report on the requests and recommendations made by the world heritage committee regarding the world heritage site “Historic centre of Vienna (Austria) 

(first district and Belvedere) and the buffer zone (surrounding zone of approx. 3-5 blocks, partly without historical meaning).

During the past months, the conflict between conservation and development interests gained public awareness and was intensely discussed in connection with a planned high-rise building project at the rail station Wien Mitte, next to the city centre and within the “buffer zone” of the World heritage zone. The concept designed an urban renewal development for office and commercial use including four towers. The highest would have a height of 95m, thereby exceeding the existing buildings adjacent to the project by 30m. Whereas the need of revitalising the shabby area was accepted by all parties, the dimensions of the project in proximity to the historical centre of Vienna provoked the opposition of many stakeholders including citizen’s associations and a group of well-known architects cf. Roland Rainer. The discussion culminated when ICOMOS, (International Council of monuments and sites), the scientific body of UNESCO, expressed in the report of the annual World Heritage conference “serious concern about the Wien-Mitte urban development project (...) in particular about the architectural solutions and the height of the proposed towers”. In order to avoid a possible derecognition of the World Heritage Status the City of Vienna was asked to react. In its statement, the city defended the dimensions of the project by showing visualisations from various angles and pointing on the strict conservation laws in Vienna. Finally, in March 2003, the investors themselves withdrew the development stating that the economic risk was too high because of legal uncertainty.

**Strategic Planning documents**

Apart from the above mentioned mainly regulatory legal tools there are also general strategic instruments of city development planning.

- The *City of Vienna Development Plan* (1994): A general planning tool, defining principle land use patterns, transport axes and development areas (“axes”) for the entire city. Without direct legal consequences, the plan has the intention to guide and self-bind city planning departments in
their daily decisions. The Development Plan is in the process of revision and will be newly issued in 2005.

- *Strategy Plan for Vienna* (2000). As the editors put it, the strategy plan for Vienna is “a modern planning tool designed by the Vienna city government to provide guidance for future developments. It formulates objectives for an ideal development of the city, which transcend the traditional urban development concepts”. Of interdisciplinary and interdepartmental character, the strategy plan does not focus on spatial development, but defines “strategic priorities” such as: cross-border cooperation, business and employment policy, promotion of technology and education, improving ecological quality. The strategy plan coincides with the political shift in the City government that brought for the first time a conservative city councillor for planning and future developments after a long period of socio-democratic government. It is the first planning tool in Vienna to stress economic policy and the challenge of city competition but misses to link these policies with a spatial vision or instruments of spatial planning.

- After a long discussion process the city issued in 2002 “directives for planning and evaluating high-rise buildings”. The main content is the definition of exclusion criteria by which the erection of high-rise buildings would be prohibited (*exclusion zones* such as all protected areas, important sight lines,...). At the same time, positive criteria (locations suitable for high-rise developments) are developed. However, an important number of high-rise buildings has been erected in the months before the guidelines were issued, several of them not according with the criteria of the directive – leaving the impression that the planning tool was a reaction of the planning department to failures of the recent years.

Almost all legal amendments of the building code and connected laws in the

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period from 1970 to 2000 led to a higher intensity of state regulation within the real estate market expressing a growing public interest of conserving the existing building structure. The only important exception of this principle was the amendment of the building code in 1996, when slight modifications in old buildings without monument status under certain circumstances were simplified leading to a boom of loft conversions in the inner districts. Nevertheless, also this liberalisation is partly foiled by local block development schemes especially since the world heritage status came into effect. It can be seen easily that the existing system of cumulative regulations makes it in effect extremely difficult to construct new office buildings in the center of Vienna.

4 Spatial processes in the Viennese office building market
1995-2001

Because office jobs are the predominant type of employment in the urban labour market, it may be concluded that the office market is of crucial importance for urban spatial structures and developments. On the other hand, office buildings, especially high-rise buildings, are visibly forming the appearance, structure and functioning of a city, and therefore have to be an integral part of urban development policy.

An empirical analysis of all large-scale (>10,000 m² ground floor space, GFS) office developments in Vienna built between 1995 and 2001, gives the following picture:

(1) Companies exposed to global trends (section 2) and at the same time having to comply to restrictive regulation systems (section 3) show a complex pattern of location strategies. They have difficulties to accommodate their changing needs under the property rights regime effective in Vienna in general and in Vienna’s CBD in particular. Hence, office location decisions show a definite trend to leave the CBD or to choose decentral sites, if not leaving Vienna at all (see Figure 1). The inner city of Vienna has signifi-
significantly lost its importance for new office development and for the first time even the total number of service employees in the first district is declining.

*Figure 1: Locational structure of recently erected (1995 – 2001) large office buildings within the City of Vienna in % of new gross floor space*

(2) The last 10 years have been the decade of the largest office space production ever in Vienna. Development was focused rather on periphery locations, especially in the Danube water front area in the Eastern parts of Vienna. There, excellent accessibility for individual traffic and high-ranking public transport accessibility is provided. Approximately 45% of the total office space that has been produced since 1995 in Vienna have been established in high-rise buildings.

One important principle of Viennese urban development policy, as has been stated both in the urban development plan as in the directives for high-rise buildings, is to concentrate dense office developments only at junctions of high-ranking public transport lines. This goal has only partly been achieved: 26% of the recently produced total gross floor space, including two prestigious high-rise buildings have been constructed on locations of poor public transport accessibility. The comparison of the locations of the new office buildings with the City of Vienna Development Plan from 1994 shows quite clearly that a high percentage (42%) of the recently built office space is not situated within the zones the Master plan dedicates for intensive real estate development. Obviously, the Master plan (having no direct legal consequences) is neither understood by the real estate market as an authoritative guide nor as an economic incentive.
(3) The evidence proved that the demand for new office area is no more dominated by quantitative needs correlated with the number of office workers. Within the period of observation, the increasing number of office workers induced by (weak) economic growth and sectoral dynamics explains less than a third of the demand for new office space, whereas relocation tendencies and new qualitative requirements come up for more than two third (Table 2).

**Table 2: Quantitative demand of new office space in Vienna, 1998-2001**

<table>
<thead>
<tr>
<th>Year</th>
<th>Effective demand of new office space</th>
<th>Increase in office employment</th>
<th>Office space demand that can be explained by increase of office employment (supposition: 16m²/employee)</th>
<th>Demand induced by relocation and re-organisation (= demand that cannot be explained by growth)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>[m²]</td>
<td>[no of employees]</td>
<td>Abs. [m²]</td>
<td>% of total demand</td>
</tr>
<tr>
<td>1998</td>
<td>200.000</td>
<td>3.000</td>
<td>48.000</td>
<td>24%</td>
</tr>
<tr>
<td>1999</td>
<td>250.000</td>
<td>7.100</td>
<td>114.000</td>
<td>46%</td>
</tr>
<tr>
<td>2000</td>
<td>300.000</td>
<td>4.900</td>
<td>80.000</td>
<td>27%</td>
</tr>
<tr>
<td>2001</td>
<td>320.000</td>
<td>3.100</td>
<td>50.000</td>
<td>16%</td>
</tr>
<tr>
<td>Total 1998-2001</td>
<td>1.070.000</td>
<td>18.100</td>
<td>292.000</td>
<td>27%</td>
</tr>
</tbody>
</table>

Source: Investkredit (2001), IFIP

(4) This shift can be confirmed by a sectoral analysis of the new office building tenants: There are three sectors which are clearly over-represented in these buildings compared to their share in the urban economy, namely computer services, telecommunication and insurances. These activities show also large differences in expansion rates (Table 3). Therefore, almost contradictory explanations for their relocation decisions can be identified:

- On one hand expansion and high growth (as is the case for computer services and new telecommunication firms),
- On the other hand consolidation and the need of business restructuring (as is the case for the insurance sector and primarily state-owned telecommunication firms).
Table 3: Tenants’ structure in new office buildings in Vienna (selected activities)

<table>
<thead>
<tr>
<th>NACE-Code</th>
<th>Name of activity</th>
<th>Tenants of new office buildings (a)</th>
<th>In all Vienna (2000) (a)</th>
<th>Sector dynamics according to average employment expansion rate 1995-2000, Vienna</th>
</tr>
</thead>
<tbody>
<tr>
<td>51, 52</td>
<td>Wholesale and retail trade service</td>
<td>2834</td>
<td>11.0%</td>
<td>12.7%</td>
</tr>
<tr>
<td>64</td>
<td>Post and telecommunication services</td>
<td>7334</td>
<td>28.4%</td>
<td>2.7%</td>
</tr>
<tr>
<td>65</td>
<td>Financial intermediation services (ex. Insurance serv.)</td>
<td>459</td>
<td>1.8%</td>
<td>3.2%</td>
</tr>
<tr>
<td>66</td>
<td>Insurance and pension funding services</td>
<td>3611</td>
<td>14.0%</td>
<td>1.6%</td>
</tr>
<tr>
<td>72</td>
<td>Computer and related services</td>
<td>4992</td>
<td>19.3%</td>
<td>1.9%</td>
</tr>
<tr>
<td>74</td>
<td>Business services</td>
<td>1920</td>
<td>7.4%</td>
<td>8.5%</td>
</tr>
<tr>
<td>75</td>
<td>Public administration</td>
<td>1548</td>
<td>6.0%</td>
<td>20.9%</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>25867</td>
<td>87.9%</td>
<td>51.5%</td>
</tr>
</tbody>
</table>

(a) 100% do not represent the total employment, but the employment in activities that are represented in new large office buildings. These activities form approx. 86% of Vienna’s total economy.

Source: Blaas, Puchinger et al. (2003)

Summing up and confronting the empirical findings with the theoretical background, the following conclusions can be drawn:

1. The analysis of the Viennese office market supports the wide-spread theory that the service sector follows the production sector in its tendency of decentralization and deglomeration with a time lag and a steeper rent gradient, therefore still remaining closer to urban agglomerations (cf. Hirsch, 1984, p. 73, Martinelli, 1991, p. 75, Mayerhofer, 2000). In common literature, this effect is generally explained by (a) diffusion of demand from core to more peripherical regions, (b) technological change and (c) relocation because of expansion (Martinelli, 1991, p. 75-80). Our empirical findings suggest a forth influencing factor that intensifies deglomeration of business services: (d) An urban land regulation regime that is more restrictive the closer you get to the city centre.

2. From a city planning point of view, it can be said that, considering office development, in Vienna purely regulatory instruments like land use plan,
protection zones and density restrictions have much more effect than the strategic, anticipative planning tools. Planning instruments manage to enforce conservation interests but they poorly support development: This is first because development strategies are not very often expressed in the planning instruments, and, secondly, even where they are expressed (as e.g. the development axes of the 1994 development plan) they lack economic incentives or legal bindingness. Therefore, they are not understood by the real estate market and office developments are effectuated on locations, where they are not forbidden, but still not necessarily where they are desired by the planning departments.

(3) The underlying theoretical model of the 1994 Vienna development plan is Christaller’s central place theory\textsuperscript{11}. In this hierarchical model, there is one main centre (CBD) which provides all services both for residents and the economy and several sub-centres which provide only a certain range of services. In the logic of the 1994 Urban Development Plan (UDP), sub-centres are to be connected with the main centre by axes of high-ranking public transport and dense development, whereas the sub-centres are connected by the lower ranking transport system (buses, tramway). Centres are supposed to supply residential and economic activities with services and infrastructure. However, our findings show that this model based on the local supply and demand cannot explain location patterns of activities that do not “supply” residents, but other business activities on local, national and international level. The evidence showed that the new office developments did not concentrate in the main centre or in existing sub-centres, but created \textbf{new centralities} by clustering on locations that have not been intensely developed before. Therefore, these clusters show many characteristics of “edge cities”, described in US-American literature\textsuperscript{12}, even if the European correspondents are much smaller and

\textsuperscript{11} Cf Christaller (1933): Die zentralen Orte in Sueddeutschland. Jena.

\textsuperscript{12} According to Anas et al (1998) an edge city is “characterized by large concentrations of office and retail
closer to the central city. Clusters enable personal communication between the tenants, create interaction and agglomeration economies and in many cases offer common facilities. Accessibility is assured by high-ranking transport infrastructure (at least individual transport, optimal both individual and public transport) connecting the new office clusters with the city centre on one hand, and the motorways and the airport at the other hand.

5 Conclusions: a better balance between conservation and development policies

Urban development planning has the difficult role to minimize land use conflicts and to translate spatial development concepts into normative regulations. Therefore, it is often necessary to trade-off diverging interests and to decide ad hoc and in co-operation with all relevant stakeholders including the resident citizens, which decision serves best the “public interest” of an adequate city development.

In planning theory as well as in politics in general the principle of “balancing public interests” is fundamental. However, this principle is, if at all, only implicit present in Vienna’s urban planning. Our suggestion is to include the idea of balancing public interests explicit into the Building code or the Old town conservation act in a way, that the preservation of old buildings has priority, but in case other public interests such as well-founded interests of urban development outweigh the interest of conservation, the restrictions could be loosened. We do not favour the demolishing of historic buildings to enable high-rise in-

\[ \text{space in suburban areas, often in conjunction with other types of development, ate the nodes of major express highways. Most are in locations where virtually no development, possibly excepting a small town, existed prior to 1960.} \]
vestments in the middle of historic ensembles. But we argue that the historic city centre and, to a lower extent, also other parts of Vienna have in all centuries received much of their meaning and vitality by the concentration of economic activity and are now for the first time endangered to lose this central function in favour of a museum-like touristic appearance, for the economic benefit of periphery locations that often do not fulfil urbanistic and structural qualifications. Not all buildings in Vienna’s first district are of high architectural or historic value. In small side-streets even signs of decay occur due to the difficult adaptability of buildings *(cf section 2)*, hence there is only little demand and in turn office rents outside of AA-locations are comparatively low. Slightly reduced restrictions in order to foster valorisation and to hold employment in the city would be an adequate strategy for these locations. Therefore, we suggest a new distribution of weights for preservation on the one hand and development interests on the other hand, being convinced that a categorical “either-or”-strategy would rarely be sustainable.

A simplified scheme may illustrate the preference distribution between preservation and development interests (see Figure 2). The lower left corner represent buildings of high historical value on excellent locations – here the preference clearly is in favour of a strict conservation strategy. At the other extreme, the right upper corner represents buildings of low architectural value on low-priced side locations in the city centre. On such a place, development interests clearly will outweigh preservation interests and an revaluation of the site through loosened restrictions and new investment would be an adequate strategy.
Figure 2: Scheme of the weighing process between preservation and development interests

In order to implement these ideas we suggest the following institutional changes:

1. Enhance legal certainty and the predictability of legal decisions by
   - reviewing and completing the long-lasting process of assigning protection zones
   - distinguishing different grades of protection and regulation according to the architectural/historic value of buildings and the structural importance of locations, but leaving enough scope for design case by case
   - defining zones of economic development, where a re-development is

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(a) in a general sense, including both the market price and the significance of the location from an urbanistic point of view.

Source: Authors’ own draft, 2003

\[13\] By assigning zones of economic development we do not recommend to copy the British instrument called “Enterprise zones”, set up in the Eighties by the Thatcher government. In this concept, designated pieces of land in areas of urban decay were virtually completely withdrawn from the influence of local policy and entrusted to a private development corporation in order to attract large-scale private investments, accompanied with important tax reliefs. Even if this concept was economically successful in some cases, it was overshadowed by severe social tensions produced by the suppression of local democratic forces and often did not lead to satisfactory urbanistic results. Additionally, in Vienna we do not see the need for location-specific tax reliefs since we do not deal with explicit problem areas. Zehner (1999): „Enterprise Zones“ in Großbritannien, p. 75ff
desirable (e.g. brownfield sites) or where a combination of historic, revitalised and modern structures can form a balanced pattern; where high ranking public transport and other infrastructure facilities are either existent or planned and where the attractiveness of the location and the surrounding is able to meet the demand of (international) investors.

(2) Optimize administrative procedures by

- (more) co-ordination between different city government departments, the Federal Conservation Authority and planning departments
- accelerating the issue of building permit procedures (“one-stop-shop”)
- consequently implementing the directives for planning and evaluating high-rise buildings in future projects.

(3) Develop a consistent incentive structure by

- developing instruments of compensation for valorisation and deregulation, e.g. to force investors to contribute to infrastructure financing
- consequent enforcement of negotiated public benefits (e.g. parks, kindergardens, social housing, etc.) which have to be provided by investors as a quid pro quo for zoning and building permits.

Like many other European towns with an old history, Vienna takes advantage of her beautiful and well preserved areas and vistas, particularly in the central parts of the city. Furthermore, it is also appropriate to commercially capitalize on this historic capital. However, the danger to degenerate into a “Disney land of forgotten times” must be taken serious in the endeavour to balance the old and the new.
References


City of Vienna on behalf of the Republic of Austria (2002): Report on the requests and recommendations made by the world heritage committee regarding the world heritage site “Historic centre of Vienna (Austria)


Christaller, W., Die zentralen Orte in Süddeutschland. Jena 1933.


Austrian federal law acts:


Province of Vienna law acts:
Old Town Conservation Amendment, Province of Vienna Law Gazette, No. 16/1972

Webpages:
UNESCO World heritage: http://www.unesco.org/sites/1033.htm

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