The Pro-Cyclical Behaviour of Players in the Office Market - Interests, Pressures and Possible Alternatives

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"Buy when everyone else is selling and hold until everyone else is buying. This is not merely a catch slogan, it is the very essence of successful investment!!"

John Paul Getty

1. INTRODUCTION

Since their emergence in the post-war period, office rental markets have been subjected to strong cyclical up- and downswings, to an even greater extent than other real estate markets.[1] During the course of the office market cycles, there was almost always a crisis of overproduction, with associated high vacancy rates. These crises originated in the economic fluctuations of the general economy and the special workings of the real estate market: they had negative effects on all market participants. Developers, investors and financiers were affected by high financial losses, and planners were confronted with uncompleted properties[2] as well as deteriorating buildings and locations.[3]

Although the players in the market were aware of its cyclical variations and the resulting negative effects, many of them behaved in a cyclical manner and thereby increased the magnitude of the overproduction crises. This phenomenon has often been explained by the erroneous behaviour of individual market players[4], although particular patterns of psychological behaviour have been put forward, e.g.

- the gold digger mentality: players being tempted to follow the example of others who had achieved high profits by being able to market their development at the beginning of a cycle.[5]

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- the gambler's fallacy, a theory in which many market players believed that they could even improve on the market leader's initial success.[6]
- the Midas syndrome[7], an explanation based on the players' over-assessment of their own abilities. As the players were confident that their projects would succeed, even as others were failing[8], they continued to plan, finance and acquire further properties although having long been aware of the indications that the market was deteriorating.
- the belief in the greater fool, according to which the players were convinced that they would always be able to find a purchaser, even for poor properties.[9]
- the developer's fascination for his project and the opportunities for personal fulfilment offered by the planning and development of a property. An analysis of major projects in London and New York, for example, expressed astonishment at the extent "to which they have been driven by individual male egos that find self-expression in building tall buildings and imprinting their personae on the landscape."[10]

Until now, however, academic studies have only seldom discussed whether the special functioning of the office market could also be responsible for the pro-cyclical dealings of market participants, in addition to these psychologically-motivated behaviour patterns. The subject of the present analysis is therefore to demonstrate and summarise these general conditions. With the help of the tools and the restraining measures that the players are currently developing and implementing, alternative methods, which could avoid the effect of the market forces mentioned, will also be demonstrated.

Firstly however the general circumstances and the behaviour of the individual groups of market players will be described.

> Two groups, office occupiers and the state, will not be explicitly described, although their dealings can contribute to major dislocations of the office market. Although users, with their cyclically varying demand for office accommodation, have sparked office property booms and slumps, their dealings were exclusively aimed at satisfying their original space requirements. When agreeing to a new lease, they benefit from a tenants' market or complain about the high rents

in a landlords' market. Changes in behaviour aimed at reducing the amplitude of the market cycle could not result from these experiences, however, as the demand for space cannot be coordinated with the fluctuations of the real estate market.

In the past, the German government has influenced the market with tax allowances for depreciation. Particularly in the former East Germany, these measures served to subsidise investment and the economy. They were however not intended as instruments to control the property market.

As the government's actions were not directed at controlling the real estate market, its behaviour did not change in reaction to market phases and therefore cannot be interpreted as pro-cyclical conduct. It will therefore not be further discussed.

Following an investigation of their previous behaviour patterns, it will be shown how market players have reacted to their experiences in the most recent slump. As the office markets in Germany are still relatively young and have only gone through a few cycles, market players were unprepared for past slumps. They have learned from these crises, however, and are now trying to tackle them with new instruments and tactics. These measures, which are described and assessed in the final chapter, could also indirectly lead to a reduction in the upswings and downturns of the general economy.

2. THE PLAYERS - THEIR GENERAL CIRCUMSTANCES AND BEHAVIOURAL PATTERNS

Project Developers

Project developers are the key players in the office market.[11] They carry out activities "that are necessary or effective ... for building on sites or for their preparation for another user."[12] They thereby combine "location, project concept and capital so that ... competitive ... investment in construction can be created or ensured."[13] The developer's contribution comprises providing the expert knowledge required for the development of a real estate investment and assuming the risks of development. When completed, the property will be sold, either to an investor or an owner-occupier.[14] The sale price is related to a multiplier of the achievable annual rental income.

From this field of activity arose a pattern of behaviour that has contributed to the overproduction of office accommodation in the past. Firstly, the dependence of the sale price on the achievable rent and the capitalisation factor should be pointed out. The prospects of making a profit were thus greatest if rents were at their highest, or if there was a rapidly rising trend, and the willingness of the market to pay a higher multiplier was at its height. Both conditions occurred in phases when the level of rents was being influenced by demand from occupiers[15] at the same time as the size of the multiplier was being determined by demand from investors. The latter rose both because of the general economic upswing and the paucity of supply of existing office buildings. In such phases project development appeared to be extremely lucrative, and developers commenced their activities. The fragmented structure of demand[16] resulted in many developers planning and building at the same time, unaware for a long period of each other's actions. A few years later, as the projects were ready for occupation, it became clear that too much accommodation had been constructed.[17] The long development period for real estate[18] also meant that, in addition, general economic conditions had frequently changed during the planning and construction phases, reducing the demand for office space. What would in any event have been an oversupply then came together with falling demand, resulting in high vacancies and lower rental values. Developers could then only dispose of their projects at much lower prices than anticipated, if at all.

The increasing demand for office buildings also encouraged developers to invest in sites, often peripheral, which were not yet established office locations. Amongst other reasons, these were attractive because they were more easily available than the city-centre locations sought after by numerous developers. However, such locations have a higher risk of vacancy and loss of rental income. On the one hand, they are the last to benefit from an upswing and the first to suffer from a downturn. On the other, they tend to be preferred by less creditworthy tenants. The lower level of market transparency on the periphery, as compared with the city centre, further increases the risk of a lack of knowledge of competitors' activities and therefore of underestimating supply when deciding to commence a real estate investment.[19]

The high level of effort required to secure and acquire a site was an additional reason to continue with a project once started, even when changes to the market situation had resulted in reduced prospects of success. Securing a site is often a risky and long drawn-out process, so that even at this point a considerable amount of time and money has already been invested in the project.[20] Halting development activity means abandoning the possibility not only of recovering the costs already incurred but also of covering the continuing site finance costs through income from the investment.

Pressure not to call a halt to projects once started also results from the requirement to place a project at the beginning of a cycle, in order to be particularly successful. This forces developers to act quickly. Once the decision to start a project has been made, it is rarely reconsidered during the development.[21]

In addition, in boom phases the first decision in favour of a development project had also to be made against the clock. Rapidly rising land prices tempted developers to purchase quickly. As many developers made up their minds to purchase in such phases, they further stimulated land prices and created their own market. The escalating prices then forced all market participants to ever faster and ill-considered action.[22]

The time pressure was mostly increased by the fact that project development was started very late, i.e. at the point when the boom phase was beginning. There is no doubt that the low point or the downturn phase of a cycle would have been more suitable.

At such times there would have been the advantage of land, capital, staff and construction costs being at their lowest. In addition, the completed property could have been offered on the market at a favourable time. However, in a downturn project developers frequently lacked the necessary capital, either in the form of equity or access to loans.[23]

During downturns, developers frequently had their capital tied up in projects built during the last boom and which market oversupply prevented them from disposing as planned. These buildings often had high vacancy rates, and the originally envisaged rental value was no longer achievable, although the finance costs continued to be payable. They therefore gave rise to financial outflows and reduced the developers' equity coverage. In such a situation it was hardly possible for developers to make capital available for new investments. Further difficulties were caused by the higher level of equity required by the banks in such phases. Because of the perceived increased risk, they demanded an increase in the proportion of equity - if they were prepared to provide the necessary loans at all.

In any case, at this point in the cycle the banks assessed the developers' creditworthiness as low because they were at best unlikely to make a profit in the situation described. As the value of the properties owned by the developers had fallen because of the poor real estate market,[24] they were able to offer only small amounts of security. Developers were unable or unwilling to demonstrate the degree of pre-letting[25] demanded by the banks in such a phase. On the one hand, potential tenants would not sign pre-letting agreements when there was such an oversupply of space available for immediate occupation. On the other hand, developers were themselves unwilling to sign pre-letting contracts in a period of low rental values.

A further reason for the oversupply resulted from developers aiming to sell their completed buildings, which is why they only tended to pursue short- to medium-term objectives.[26] Stable market conditions, which provide long-term security for the letting and hence the value of the property, were of no interest to developers. On the contrary, as the aims of project developers were to plan and then turn over properties, they were forced continuously to place new properties on the market. The fact that, by doing so, they were driving existing buildings out of the market was of no importance to them. The introduction to the market of ever-newer projects complying with the most modern standards meant that existing buildings were ever more quickly made obsolete. A consequence of the entry of developers to the market was therefore a shorter product life cycle for buildings. This resulted in an increasing number of properties that were unlettable without refurbishment.[27]

A few developers tried to escape the dilemma of having to develop projects in unfavourable market phases by expanding into other regional markets or the markets for other types of property.[28] However, as they were frequently unfamiliar with the characteristics or the key players in the new regional markets[29] and as they lacked the staff with appropriate expertise for the development of other types of property,[30] such investment decisions were inevitably subject to a higher risk of misjudgement.[31]

The developers' unwillingness to restrain their activities was additionally brought about by the particular functioning of the building industry. A developer's success depends only on the abilities and contacts of its staff.[32] A reduction in staff numbers therefore makes a later recovery in production more difficult,[33] which is why developers refrain from such steps if possible.

Erroneous decisions in favour of project developments also resulted from unfortunate organisational structures. In boom phases the companies – and their staff numbers – grew rapidly. It required some time to set up the corresponding decision-making and organisational structures. However, as leading staff were needed to complete work on projects, the necessary amount of time was hardly ever available. The result was that missing or unfavourable decision-making structures contributed to a higher error rate.[34] This expansion was not merely the result of temptation but rather resulted from a pressure that the firms could rarely avoid. Just as in the USA, where many development firms were quoted on the stock market, they were subjected to the compulsion to deliver high growth rates. Nevertheless, during the progress of the cycle it became more difficult to achieve these rates of growth. On the one hand this was because the base for calculation of the growth rate was continually rising,[35] while on the other hand the cost of development in the boom phase rose disproportionately (sites, construction costs and finance all became more expensive), and therefore the yields achieved on individual projects fell.[36] To compensate for this, ever more numerous and larger projects had to be developed.

An additional incentive to grow resulted from the increased confidence that the banks placed in larger firms, making it easier for them to gain access to the necessary outside financing. [37]

In many cases a further reason for wrong decisions lay in the age structure of the decision makers. Firms that were already running in the previous cycle and had experienced a market collapse tended to be more hesitant with the decision to commence a development. In contrast, at the start of the boom the most successful firms were often those that lacked this experience and were therefore less inhibited in commencing a project. [38] As these developers had no experience in recognising imminent crises, not infrequently the signs of the coming downturn escaped their notice.

The circumstances described in principle applied to all developers, however in varying intensity depending on their organisational structures. Firms who, for example, had access to equity capital, either from other activities or from cautious actions in previous cycles, could act independently of the banks. This also applied to firms who did not sell projects immediately on completion but held them, at least for a time. This enabled them to offer the banks a higher level of security. In addition, such firms were more interested in long-term value and therefore developed fewer locations with high risk of voids.

A different behaviour pattern also resulted from the way firms were regionally organised. Developers who were active in regional units had better opportunities to recognise when the cycle had passed the optimum time for investment than companies that were nationally active. They also had more detailed local knowledge and therefore could often better single out locations lacking in development potential. Unlike national firms, however, these developers did not have the opportunity to observe the progress of developments in other markets that had been commenced earlier and to emulate them in their own. In addition, national market players operated on a more strongly data-oriented basis and so were less likely to run the risk of developing projects motivated solely by emotional factors. They also had the opportunity to take advantage of the timing differences between individual markets and to transfer their activities to those markets where the most favourable investment conditions prevailed.

The constraints on the players were also governed by whether a development firm was independent or was part of a larger group. Employees of a member of a group of companies were subject to stronger pressures to justify themselves than those in independent firms and therefore acted more carefully. On the one hand, therefore, they only selected projects that, because of their location, had smaller risk of voids, while on the other hand they were often forced to start development later in order to comply with the pre-letting requirements of the parent organisation.

Special conditions applied to developers who belonged to construction companies. For them even developments that did not make a profit could be shown to be viable, as the parent company could make sufficient profit on the construction work.

Private and public development organisations must also be differently judged. The latter are often required to develop properties with the aim of improving the economic structure of a region. One result of this was that their objectives were on a long-term basis. Properties were fitted out to a high standard in order that they would be lettable even in difficult phases. However, they were also compelled to construct properties in just the locations where there was so high a level of risk of voids that private investors were not interested in them.

Developers who were integrated in industrial or service organisations, or who were founded by or developed from such firms, often had to deal with locations where there was a high risk of vacancy. This was because, for structural reasons, they were required to market or develop redundant properties owned by the parent company. The majority of such properties were not in city centre locations.

Such companies tended to aggravate the property cycle by starting to market potential development sites very late in a cycle. There were two main reasons: firstly, they were constrained by the high book values set during the previous high-value phase; and secondly, they also wanted to benefit from the expected rise in values. Unlike other developers, however, this group was not subject to the pressure to continue with a project because an acquisition had already taken place and finance costs were mounting.

Financiers

As developers have only limited amounts of equity, securing finance is a significant component of project development.[39] For this reason, financial institutions must be regarded as one of the most important groups of players in the property market. The opinion has even been put forward that it is the availability of cash that tempts developers to undertake risky investments. According to one developer "There is a belief that bankers finance what builders build. In fact, the opposite is true. Money is the sine qua non. If you have money you will build."[40]

By backing risky projects, banks became subject to the same pressures as the developers themselves. Financial institutions make profits by lending money, making it continually necessary to conclude new loan agreements.[41] In this respect banks were subject to increasing competition.[42] Since the end of the 1970s, with high inflation and falling interest rates, governments in Western industrialised countries had allowed the liberalisation and deregulation of the international financial markets.[43] This forced banks to reduce their margins and to accept higher levels of risk. They looked for other investment vehicles, which they believed could be found directly in the boom phase of the real estate economy.[44] As the economic upswing of the early 1980s began, the banks also experienced a large capital influx, which once again had to be placed in investments.

There is no doubt that the increased pressure of competition in the investment market[45] contributed to a casual attitude to project risks and to an over-optimistic assessment of the market.[46] The development of new financing methods, which were characterised by higher risks, could also be explained by conditions in the finance markets. For example, in the 1980s a type of financing known as cross-financing was increasingly used.[47] The underlying assumption was that the best way to repay a loan was to take out a new one. In boom phases this model worked outstandingly well. Particularly in the USA, it contributed to a drastic rise in supply in the office market. The method however brought an increased level of risk, which rose from loan to loan and quickly fuelled the beginning of the crises of the 1980s.[48]

In rising cycles, developers used the banks' corporate mentality already described by presenting them with feasibility studies based on similar considerations. For example, they used existing properties as security and so justified higher mortgage values. They also used the maximum proportion of borrowing in order to increase the equity yield.[49] These considerations[50] were, however, only successful as long as the total capital yield remained above the interest rate on borrowed capital. If this were no longer the case, the situation was reversed (the leverage effect[51]). In the upswing phase of the real estate cycle these feasibility studies persuaded bankers that developers would be making higher profits, which made them ever willing to make new funds available to the real estate economy.

The liberalisation also allowed the financiers themselves to have an equity share in the development of projects. The formerly usual separation of functions had saddled the financiers with higher risks, while not allowing them to profit from successful developments.[52] New forms of financing,[53] integrating the financier as a partner in project development,[54] offered better potential profits but blurred the boundaries between development, investment and financing.[55] The role of the financier as a controlling authority then largely disappeared.

The financing of properties without adequate checking of their viability was further encouraged by the remuneration systems of several banks, which operated on the basis of commission payments. Frequently they rewarded just the closing of a loan contract, without taking into account the associated risk. Bank staff that were remunerated by such criteria were hardly encouraged to put the security of the firm in the forefront of their consideration.[56] The supervisory mechanisms that the banks applied to the allocation of funds were largely based on the borrower's creditworthiness. [57] As has been shown, this creditworthiness is particularly poor in phases of the cycle when it would be particularly advantageous to start a development. In contrast, it is particularly good when the conditions necessary for a successful development have deteriorated. The banks' security measures therefore led them to decline real estate financing in phases that would have been advantageous for development by indicating that there were high risks. In contrast, during favourable market phases property financing could not be approved because the security assessment methods suggested that risks were high.

Even when financiers were well aware of the risks of a project, financing it might have been sensible for the financial institutions. For example, banks always considered financing construction work in instances where they had already provided funds for the site and for development costs. The borrower could only obtain an income - and pay back the existing credit - after the property was completed. The banks were therefore always prepared to continue financing the project provided at least that there were sufficient pre-lets, or the chance of achieving sufficient lettings, to pay back both the original and additional loans. That the banks, by doing so, were increasing the amount of vacant space on the market as a whole was of no importance to them.

Investors

Investors aim, above all, to make a profit by investing their capital. The size of an investment in real estate depends on two main factors: the volume of capital to be placed; and how the expected yields from alternative forms of investment, such as bonds, stocks and shares, etc., compare with those of real estate investments.

The returns on real estate come from rental income and growth in the capital value of the property. In boom phases both increase: rental income because formerly vacant space can be let, and because new lettings can be agreed at higher rents; capital value because it is directly linked to the annual rental income by the capitalisation factor (years' purchase). As variations in the real estate market were greater than in many other markets, in boom phases the real estate market improved in competitiveness compared with other types of investment. The effect was to redistribute investments in favour of the property market. The increased demand for real estate investments confronted a reduced supply, as developers had only been able to complete small numbers of buildings in the preceding crisis. The result was a scramble for the few properties on the market, making investors prepared to acquire them at a higher multiple of annual rental income. This further boosted capital growth and made real estate investment even more attractive in comparison with other types. In such phases, investors tended to disconnect the valuation of a property from the achievable rental income. This turned speculation on resale value into a substantial impetus to plump for real estate investments. [58]

This process was further accelerated by the second element that determined the volume of investment in real estate: the overall amount of available capital. As property market booms for the most part coincided with general economic upswings, higher incomes were achieved throughout the economy. These had to be invested in *inter alia* the real estate market.

Investors who already had property in their portfolios were receiving funds in the form of rental income, which had to be reinvested. Investors were therefore under pressure to deal further on the real estate market when conditions could, at best, be described as less than optimal.

The amplitude of the cycle was increased by the phenomenon of investors ever more often being their own tenants. As an example, in the City of London, the prime location in the British capital, more than 50% of office space is already owned by – and let to – companies in the "financial services," "insurance," "real estate" and "legal and economic consultants" sectors.

Almost 30% of the buildings are both owned and occupied by the financial sector.[59] If these firms could achieve good growth rates in their core businesses, they normally increased their staff. This again strengthened new demand in the office market and resulted in higher rents. At that time office property was an interesting investment, and the previous occupiers invested the profits from their core businesses in such buildings. Yields from the property business then contributed to the further success of the company and so to further staff increases. In this way investors created their own demand and started their own boom. However, they increased the real estate market's susceptibility to risk. External shocks, for example on the international financial markets, now had direct effects on the real estate market. Staff cuts in the above-mentioned sectors then caused losses in the property divisions of the same companies and so further collapses in the financial markets and so on. This positive feedback started downward spirals, leading to crises on the real estate markets.

Compared with the noticeably pro-cyclical actions of all investors, the behaviour patterns of different groups of investors varied to some extent. For example, statutory regulations[60] restricted the amount of capital that insurance companies and pension funds were allowed to invest in real estate. This took some of the pressure from the investment market. In addition, these groups were subject to the regulations of the *Versicherungsaufsichtsgesetz* (insurance supervision law), which gave them a duty of care to their investors.[61] This meant that they were able to select only relatively safe properties for investment. As a result, developers were not encouraged to construct buildings that had no chance of letting in the long term due to the characteristics of their location or fit-out.

In contrast, statutory regulations require open-ended funds to invest a set proportion of their current assets in real estate.[62] Their inflows of capital in economic upswings forced them into acquisitions at exactly the most inopportune moment. For this reason they were an important driving force behind the upward spiral. However, as open-ended funds bias their investment decisions more towards long-term value increase than initial yield,[63] they purchased very few buildings likely to have letting problems in the long term. Like the insurance companies and pension funds, they therefore did not encourage the development of additional accommodation in unattractive locations.

Quoted real estate corporations are only slowly gaining importance in the German market. It is therefore not possible to derive typical behaviour from past experiences. However, some of the effects of the real estate corporations' entry to the market merit discussion. As their shares, because of their price level, are suitable for all classes of investor, an increase in the amount of capital invested in real estate could result.[64] This could heat up competition in the market.

The market entry of quoted real estate corporations also enabled new methods of financing for property firms. These made them less dependent on bank loans, [65] thereby weakening the banks' controlling function and making more funds available to developers.

As stock can easily be purchased or sold,[66] funds can flow very quickly either in or out of the market. This could contribute to investment decisions being made more quickly following the increase in demand. The resulting rise in purchase prices for property would, however, quickly make yields less attractive and therefore curb new investment. All in all, this could flatten out the cycle. The quick reactions of stockholders must however be put into perspective with the amount of time that the corporations need to acquire or sell property.

The amount of vacant office space could, on the other hand, be increased by property investment decisions becoming more strongly linked to stock market movements and further distanced from occupier demand.[67] The investors' interest in short-term gains and the frequency with which reports are issued force the real estate corporations to seek high growth rates and report continual successes. Even in boom phases this can exert pressure to acquire new properties, which could further fuel the real estate market.

In the past, closed-end funds have also contributed significantly to the production of vacancies. They enjoyed attractive tax write-down possibilities, which meant that tax considerations were always at the forefront of their investment decision-making. The yield on rental income and capital growth were regarded as being of only small importance. This increased their readiness to invest in properties burdened with high risk of voids, thus contributing to a steep rise in the volume of construction, particularly in the former East Germany, and so too to dramatic increases in vacancy rates. The repeal of the *Sonder-Afa* (special depreciation allowance) and other restrictions on tax write-down will however mean that, in the future, the return from rental income and capital value increases will once again be major criteria for closed-end funds. Because of complicated resale conditions, investment in closed-end funds must be on a long-term basis.[68] In the future, therefore, this group of investors could even contribute to the stabilisation of the real estate markets.

Consultants

In the approach to making an investment decision, consultants are instructed by developers, investors or financiers to assess the prospects of success and the value of the property. Although their reports influence their clients' opinions, their actions have only indirect and therefore smaller effects on the movements of the market than those of the players already described. Positive appraisals of projects in boom phases can however contribute to the initiation of schemes that increase the oversupply on the market.

In this connection consultants are often alleged to have issued *Gefälligkeitsgutachten* (reports which reflect the client's desires rather than being objective). The background to this point of view is the "principal-agent-problem" or agency-theory. This states that it is in each valuer's own economic interest not to report what he or she themselves thinks, but rather what the client considers correct.[69] The theory is that consultants do not want to upset their clients, which might cause them to instruct competitors to report on other projects.

In many cases, consultants have high hopes of receiving additional instructions, within the scope of a project, once development has started. These could include contracts for continuing consultancy services. Should the adviser be associated with other organisations in the real estate or financial sectors (e.g. firms of agents, building companies, banks) these further instructions could also be for the provision of other services (e.g. finance, project control, marketing) or acting as a general contractor for construction work. The hope of receiving further instructions could have made consultants tend to ignore the mood of the sector and to err on the side of overvaluation of projects.

Town Authorities

Because of their restricted scope of action, the activities of municipalities have had less effect on the movements of the market than those of developers, investors and financiers. However, their actions have also often been pro-cyclical[70] and have contributed to crises of over-production. Authorities have therefore often increased the supply of space during booms. The reasons for this are complex. Worthy of mention are, for instance, the actions of lobbyists representing the real estate market. To gain the potential for new developments, in times of high demand they have argued more strongly with the municipality's political representatives to have additional land released for office use.

The town councillors frequently gave in to this pressure in the hope of supporting economic growth. Their idea was that, by allowing the construction of modern office space, they were making accommodation available to companies who would create high-quality jobs.[71] This perspective was confirmed, in boom phases, as the demand for office space rose. Expanding firms then migrated to the periphery because they found that there was either no adequate office space in urban centres, or that which was available was far too expensive.

In such phases industrial firms also left the cities. One reason was that higher land values had increased their opportunity costs, while on the other hand in such phases they had expanded but found that rapidly rising land prices ruled out a move within the city. The broad political consensus which the desires of the real estate lobby encountered was thus largely that employment and tax policies were of major significance.

Large and attractive projects, particularly when built at the peak of a cycle,[72] also improve a town's image and therefore its chances of being successful in the competition with other local and national locations. Councils who maintained a restrictive policy to releasing land in upswing phases ran the risk of being viewed as anti-investment. Such an approach was therefore almost impossible to defend.

In slumps, however, releasing land for development was carried out very restrictively. Amongst others, the group of lobbyists made up of the market-leading investors and developers pushed for this policy. To protect their own properties, these players wanted to block the granting of planning approval for further office buildings.

A further aspect of the pro-cyclical behaviour of town authorities resulted from their own ownership of land. They often owned large areas, suitable for office use, directly in the town centre. As land values rose, the temptation to balance their budgets by selling such land increased. At the same time, the opportunity costs of their owner-occupied properties in the town centre were rising. In contrast, when land prices are falling, councils find it politically almost impossible to reach agreement on the sale of their own land. In most authorities there is an - at least unwritten - rule that public land should never be sold at less than the *Bodenrichtwert* (guide value - published by the council's valuation panel). As these guide values are based on comparison with past transactions, falling land values can often make them higher than the prices that could be achieved on the open market.

As well as these deliberately controlled methods, councils sometimes inadvertently intensified the real estate market cycle. As they did not observe the market systematically, often they had hardly any indication of the current phase of the cycle. The poor acquisition of data at local levels affected not just the councils themselves, who instigated incorrect controls[73] because of their ignorance of the market, but also the other players in the market. This latter group made decisions that were inopportune because they had to be based on a background of inadequate information.

Unintentional effects on the market also resulted from the long period that was required to implement a plan once it had been instigated.[74] This however need not always have been disadvantageous. If a council intended to act pro-cyclically for the reasons already described, it often happened that, because of the length of time required to put through a development plan, the market situation had changed by the time the plan came into force. The council's action thus had an inadvertent anti-cyclical effect.

3. ALTERNATIVE METHODS

The motives and background factors affecting the players in the real estate market already described have shown that their pro-cyclical actions are, on the whole, not attributable to incorrect behaviour by individuals. They are rather based on mechanisms inherent in the real estate market and on interaction with other market participants. This limits the opportunities for individual players to behave anti-cyclically. However, within the limits of market conditions already discussed, modified approaches for all market players are conceivable.

Because of the varying importance and the sharply differing room for maneuver of the individual players, their respective opportunities to exercise influence also vary in importance. Without doubt, the largest contribution to levelling the amplitude of the office market cycle can be achieved by the actions of the key market players: the project developers, investors and financiers. Developers in particular even have an interest in developing new projects in crisis phases, in order to maintain their staff, as far as possible, at the same level. Their lack of funds in real estate market crises, however, limits not only their possibilities for anti-cyclical actions but also those of investors.

The financial institutions have greater structural autonomy. They are often only constrained by internal political conditions, so that the courage of the banks to support new developments even in - and at the heart of - slumps could lead to a more even production of office accommodation.

Consultants and local authorities have only indirect influence on market movements, but even their actions can support a damping of the amplitude of the office market cycle.

The negative experiences that the market players have suffered in past office market slumps have resulted in all of them researching and implementing alternative methods, not least because it is in their own interests.

Developers

Project developers are dependent on finding the optimal moment for investment decisions, or alternatively on determining when the point in time for making a promising investment has passed by. As a result, developers now give a higher relative importance to market research than they did a few years ago. Analysis of competitors now contributes clarification, at a very early stage of the development, of whether too many competitors are planning projects and how demand is expected to develop. Careful analysis of locations helps to ensure that the special requirements of investors and occupiers are met, so that the building will enjoy beneficial competitive conditions even if the market were to have deteriorated by the time of its marketing.

Market and location analyses contribute to making the development process more objective and thereby phasing out the psychological factors mentioned in the introduction. If carried out at the start of the project, market research slows the progress of the project. In extreme cases this could even result in its failure. The result is that developers increasingly keep a continuous watch on the market. This gives them the opportunity to spot potential developments early and to commence projects quickly enough to be able to gain competitive advantage. The high cost of this course of action means that they limit it to a handful of locations and make detailed adjustments to match the goals of their organisation.[75]

To reduce the time pressure caused by site acquisition at the start of the development of a project, the mechanism of agreeing purchase options has been in use for some time. It can, however, only be used in falling or static market conditions, as site owners are not prepared to commit themselves contractually to fixed prices during economic upswings. They assume that the value of their interest will increase and therefore, on completion of the final purchase contract, would be higher than the price earlier agreed.

However, developers also aim to include the site owner as a partner in the project, thereby making the acquisition of the site unnecessary. As partners they look for owners who themselves have some knowledge of development and the ability to take part in the project. Companies and institutions that meet these requirements and who are in ownership of interesting potential sites include for instance Deutsche Telekom AG, Deutsche Bahn (rail) AG and the local authorities.

There is a third method, used by developers trying a new tack to reduce development risks. This is to acquire existing properties that have sufficient rental income at least to cover the cost of financing them. Redevelopment or additional development of the site can then be put off until what appears to be an opportune moment.

To be able to maintain their activities even in phases when the development of new properties in their own market appears inadvisable, some developers are also applying a diversification strategy. To reduce the risk of wrong decisions resulting from lack of knowledge of markets in other regions or for different types of property, many firms are now employing appropriately qualified staff and/or entering into joint ventures with developers experienced in the relevant region or product.

A few players are even trying to keep their order books steady by taking up other types of activity[76]. These include, for instance, advisory services, which have the advantage of being in particular demand in crisis phases, exactly when the developer badly needs new fields of activity.[77] An example would be advising owners on the revitalisation of buildings that are no longer in line with market requirements.

The coordination of projects with varying lengths can also contribute to a more even workload. At the start of boom phases, only those projects that can be completed in the short term would be commenced, while longer-term projects will be started when the economic situation begins to be weaker. This process is complemented by a far-sighted manpower policy. A cautious recruitment policy is operated, particularly in boom phases, including checks on whether particular services can be bought in from external providers. In critical phases the firm's own staff would be used.

To optimise the decision-making structure of the company, nowadays directors do not just plan such strategies themselves but rather buy in support from professional management consultants. Firms are ever-increasingly applying for certification under the DIN EN ISO 9002ff standards. These industrial quality management standards not only validate all the company's organisational, decision-making and operational structures but can also improve the confidence other market players (e.g. banks or investors) place in the company.

Developers are increasingly sending their professional staff on special continuing education courses, so that young project developers, lacking experience of slumps in the real estate market, have at least a theoretical knowledge of market cycles

Financiers

Banks are reacting to their painful experiences in the last real estate market slump by increasing strategic controls on their lending portfolios. The aim of these controls is the diversification of existing and new business in order to optimise the relationship between risk and return in their real estate involvement.[78] The dispersion of financing over different regional markets and varying property types is being supplemented by integrating real estate credit into their overall portfolios. In unfavourable phases of the real estate market, other types of financing will be given preference.

The strategic aims for the whole credit portfolio are being supplemented by new guidelines, intended to check the quality of each credit commitment.[79] The financial institutions are paying increasing attention to the functional suitability of each property and are placing less stress than before on the creditworthiness of the borrower.[80]

By doing so, firstly they reflect that, with the high levels of outside financing now usual, the property often represents the only security. Secondly, this procedure results from the realisation that the credit standing of a developer is often at its lowest when the chances of a successful development are greatest and vice-versa. As well as conventional valuations, banks are increasingly applying rating methods, like those already introduced to assess clients' creditworthiness, to real estate.[81]

By setting up their own real estate companies or departments, the financial institutions are also creating real estate-specific advisory capabilities. These are being used, on the one hand, to identify high-risk properties in order to turn down loan applications on them, and on the other hand to follow the progress of projects on which positive financing decisions have been made. This requires the banks to become involved in the project earlier than they would have done a few years ago.[82] Supplemented by continuous surveillance of the market through newly established market research departments, this approach enables the risks and potential benefits of a development to be better foreseen. Even in critical times, the risk of financing a new project could therefore be taken.

A final measure is a reworking of the system of remuneration, to reward credit negotiators for the quality of the loans they arrange rather than just the volume.

Investors

Investors are also increasingly applying market research as a tool to enable them to adapt early to the phases of the market and, where possible, to invest in an earlier phase of the cycle.[83]

As well as spreading assets between different forms of investments, control within the real estate portfolio is at the heart of the minimisation of risk.[84] The diversification of holdings over various markets, tenant structures and types of real estate, to take advantage of the phase displacement between different markets, aids this aim.[85]

Diversification of the portfolio also represents the only opportunity to moderate the consequences of effects - not inherent in the real estate market - which result from the simultaneous use and ownership of property. The increasing attention investors pay to marketability and resale possibilities when acquiring a property also aids in minimising risk. By doing so they guarantee successful letting of the property even in an unfavourable market.

A further tool used by investors to take advantage of anti-cyclical methods is project development.[86] This offers the possibility to enter the market sooner[87] although it is mainly used by quoted corporations. These companies, often created from formerly industrial concerns,[88] enjoy extensive property ownerships and therefore have the opportunity to plan their actions with optimum timing. Open-ended funds, whose development activities were formerly subject to statutory restrictions, were given much greater possibilities to participate in development by the *dritte Finanzmarktförderungsgesetz* (Finance Market Promotion Act).[89]

When acting as developers, however, investors are subject to all the factors already described in "Developers," including the danger of bringing about crises of overproduction.

Consultants

To reduce the danger of receiving over-favourable reports, aimed at attracting further instructions, developers, investors and financiers are increasingly using in-house consultancy services. This means that advisers are tied to the instructing organisation.

Advisers who erroneously recommend a property are therefore subject to an obligation to justify themselves. In the end this must lead to a more cautious approach to giving advice.

In-house consultancy services however bring the disadvantage of forgoing the market knowledge of external advisers. In particular, those consultants who also function as agents in their local markets have a comprehensive market insight, which cannot be purchased by nationally active developers, investors and financiers. In addition, consultants, who follow a property through its whole life cycle,[90] are familiar with the needs of both investors and end users. If market research is integrated into the organisations of other market players, this knowledge will be lost. There is also the danger that the in-house advisers will adapt to the euphoria of their employers. The desired objectivity and controlling function of the adviser could then disappear. Employing in-house advisers therefore often only supplements the buying in of external consultancy services.

An alternative to this method is already practised in the USA. Some advisers there take a stake in investments they recommend and must thereby substantiate their faith in their own forecasts. Their willingness to share part of the risk themselves should also normally encourage a more cautious approach to advice. However, the linking of advisers to investors reduces the importance of the adviser as a controlling influence.

Town Authorities

One of the most important tasks for local authorities in connection with the control of the office market is the collection and compilation of information. Councils are also taking these responsibilities more seriously as they have recognised that good market knowledge has two main benefits: firstly as an essential prerequisite for their own planning policies; and secondly to assist developers and investors in identifying flawed investments very early and if necessary to abandon them.

Local authorities also exercise influence over the office market by deliberate policies controlling the release of land for development. One of their aims is to avert an oversupply of space. They also strive to avoid the development of accommodation that, albeit appearing attractive in a boom phase, is not in a setting suitable for establishment as an office location in the long term.

This procedure takes for granted precise knowledge of the locational requirements of office companies, the locational circumstances of the planned area and the sustainable level of demand. Many local authorities therefore compile comprehensive market and location analyses before zoning a new area for office uses. Councils increasingly draw up office space plans, which include *inter alia* forecasts of space requirements, on the basis of which the amount of land to be released can be decided. These studies also allow the political discussion process to be carried out objectively.

The hope of being able to react more quickly to changed market circumstances, which followed the introduction of two new mechanisms: development plans related to project proposals and urban planning contracts, has, however, hardly been fulfilled. It is much more to be feared that, in a boom, these instruments will increase pressure from developers and investors for councils to release more land for office development. The pro-cyclical behaviour of local authorities would thereby be reinforced.

To summarise, it is clear that all market players are currently developing and implementing security measures. In general this can be regarded as a positive factor. However, as the methods described are only just becoming effective, it is not yet possible to make an empirically safe forecast of how successful they will be in controlling the scale of future crises of overproduction.

Putting things in perspective, it must also be noted that, characteristically, players in the real estate market are more likely to be cautious under the shadow of a crisis. For that reason it is hardly remarkable that the procedures described have been introduced just in the last few years. However, as developers, investors and financiers tend to carry out only limited activities in times of economic difficulty, the effects of such safety measures are hardly likely to have been shown. It is widely appreciated that setting up security checks in crisis phases can even be counterproductive and can strengthen pro-cyclical behaviour. They prevent the start of a development project at a time that would allow the completed building to be offered at the beginning of a boom phase, the most advantageous moment in economic terms.

It is in periods of economic strength that the setting up of security measures is particularly necessary. The success of the procedures described will depend not only on whether they are suited in principle, but also on willingness of their protagonists to accept the competitive disadvantages of maintaining them in the upswing phase that is just beginning.

The reasons for pro-cyclical behaviour of market players and alternative methods

Player	Reasons for pro-cyclical behaviour	Alternative methods
Developer	• High rents and high capitalisation factors make development the most attractive at the peak of the real estate cycle.	• Continuous observation of the market, in order to find out in advance when the peak of the cycle is likely to occur.
	• Unknown competing properties lead to an incorrect assessment of supply.	• Detailed analysis of the competitive situation before starting development, in order to assess the number of competing properties.
	• Long planning and development periods prevent prompt responses to slumps in demand.	• Carrying out medium-term demand analyses, in order to be able to forecast the time when demand will collapse.
	• Sufficient equity for new projects cannot be made available, as funds are tied up in unsold buildings from the last boom. The lack of rental income from these properties has resulted in losses	• Forward-looking behaviour in the previous phase inhibits the construction of unsaleable and/or non-viable properties and thereby increases liquidity in the next phase • Reduction in the required proportion of outside finance through the bank's participation in profits; the introduction of new financing methods; and the acceptance of higher interest rates (e.g. project company, mezzanine financing, equity kicker).
	• Outside financing cannot be obtained, because in crisis periods creditworthiness is poor	• Forward-looking behaviour in the previous phase inhibits the construction of unsaleable and/or non-viable properties and thereby improves credit standing in the next phase • Certification under DIN EN ISO 9002ff improves acceptance by financiers.
	• Abandoning project development is associated with high costs, as planning and site acquisition costs have already been incurred	• Purchasing an existing property with continuing rental income, which will cover the finance on site acquisition • Agreeing purchase options instead of direct site acquisition • Joint development with the site owner.
	• Rising land prices and the pressure to place a project first in the cycle leave no time to check the quality of the site and the marketability of the project.	• Continuous observation of the market allows early site acquisition and a prompt start to planning, allowing more time.

Player	Reasons for pro-cyclical behaviour	Alternative methods
Developer	• Reduction in manpower causes difficulties at the start of a cycle Developer forced to develop projects in disadvantageous phases in order to maintain staff numbers	• Expanding activities into neighbouring fields (e g advising investors and financiers on problem investments) occupies staff in phases when development would be inopportune • Diversification into other regions or into markets for other types of property can also provide work for staff, even if some sections of the market deteriorate.
	• The developer only makes money from development activities This forces the developer to develop projects even in inopportune phases of the market	• Expanding activities into alternative fields (e g advising investors and financiers on problem investments) removes the pressure to develop projects even in unfavourable phases. • Diversification into other regions or into markets for other types of property can allow the development of further projects, even if some sections of the market deteriorate.
	• Maintaining development activities and staff numbers, even in difficult market phases, necessitates diversifying into unfamiliar regional markets and/or types of real estate of which the developer has little or no expert knowledge	• Employing staff with special knowledge of the new product types, or precise local knowledge when expanding into unfamiliar regional markets • Developing as a joint venture with competent partners.
	• Rapid growth of the company in boom phases requires staff time to set up the corporate structure. They are however needed for development activities.	• Instructing professional corporate advisers. • Certification under DIN EN ISO 9002ff
	• The pressure to present shareholders or partners with high growth rates, even at high entry levels; falling yields from some projects at the end of the boom phase; and the higher level of confidence of the banks in larger concerns encourages "growth at any price".	• Deliberately forgoing quantitative growth at the expense of quality, thereby guaranteeing lower but safer growth rates • Certification under DIN EN ISO 9002 increases the confidence of investors and financiers.
	• At the start of a boom, inexperienced developers tend to be more successful as they act with fewer inhibitions. They are however not familiar with the indications of an impending crisis.	• Theoretical education through special training and CPD courses.

Player	Reasons for pro-cyclical behaviour	Alternative methods
Financiers	• Financiers make money only by placing funds, so that financing must also be carried out in unfavourable phases.	• In less opportune market phases, regrouping of financing in favour of non-real estate loans • Structural changes within the real estate portfolio, including regional markets and other types of property which are still in a favourable phase for investment.
	• Investment calculations on the basis of cross-financing indicate prospects of high profits in boom phases.	• Feasibility studies to be based exclusively on the individual property.
	• New forms of financing allow an equity share in development, by which the financier loses his function as controller.	• Setting up internal controlling bodies, based outside the lending departments
	• The poor creditworthiness of developers in slump periods conflicts with the bank's control systems and makes real estate finance politically unacceptable.	• New forms of financing (e.g. mezzanine, participating mortgage, equity kicker, securitisation) allow a fairer sharing of profit and risk between developer and financier. • Carrying out market and location analyses limits risk. • Strategic portfolio control can optimise the risk/return ratio of a real estate portfolio • Transfer of weighting from credit-worthiness of the borrower to quality of the property.
	• Acquisition and development costs already incurred make it sensible to continue financing a project, even in worsening market conditions, in order to produce a cash flow to service the loan.	• Financing existing properties with continuing rental incomes, which allow the loan to be serviced even if further development is abandoned. • Financing purchase options instead of site acquisition. • Market research, in order to allow timely refusal of site financing in inappropriate parts of the cycle.
	• Pay systems based on commission encourage lower importance being placed in the employer's safety measures.	• Introduction of systems of remuneration that reflect risk as well as the amount of the advance.

Player	Reasons for pro-cyclical behaviour	Alternative methods
Investors	• Funds always flow to investors in boom phases and so must be invested at an unfavourable time	• Investment of the funds in other forms of investment, as far as this is possible legally and with respect to taxation • Diversification into regional real estate markets and other types of property, if legally possible • Developing own projects, provided legally possible, does not force the purchase of overpriced property in boom phases.
	• Large increases in value in boom phases encourage the disconnection of valuation from potential income, and speculation on potential increases in value.	• Property to be acquired only on the basis of a rigorous income-related valuation.
	• Investors are often their own tenants. External influences increase their demand for space, thereby starting their own real estate boom.	• Diversification of the real estate portfolio between regional markets and types of property lowers the risk from external influences.
Consultants	• Submission of *Gefälligkeitsgutachten* (valuations which reflect the client's desires rather than being objective) in the hope of receiving further instructions on the same or subsequent projects.	• The integration of the consultant into the company creates long-term ties and increases the requirement to justify his decisions • If the consultant participates in the recommended investment his risk is increased, encouraging more careful advice.
Town Authorities	• Insufficient gathering of market information at local level prompts councils and investors to make wrong decisions.	• Continuous observation of the market keeps councils and investors informed and allows decisions tó be made on the basis of adequate information.
	• Lobbyists and relocating firms exert political pressure to release land for office development. Large and attractive projects improve the town's image. Councils who refuse to release land are regarded as anti-investment	• Drawing up an office space plan allows long-term strategies and makes the political discussion process more objective. • Market and location analyses for newly-released office sites lower the risk of developing in locations which, after the boom, will not become established in the long term.
	• Local authority mechanisms are subject to large delays and thus begin to operate at unintended times.	• Continuous observation of the market allows the measure to be introduced at the appropriate time. • Releasing new development land only in areas that, after the boom, can be established as long-term office locations.

NOTES

[1] See Wurtzebach, C H.; Miles, M E ; Cannon, S E : Modern Real Estate, New York, 1994, p 162

[2] See Barras, R : A simple theoretical model of the office-development cycle, in: Environment and Planning A, 1983, volume 15, p 1382

[3] See Krabben, E van der; Boekema, F.: Missing links between urban economic growth theory and real estate development processes: Economic growth and building investments in the city of's-Hertogenbosch, in: Journal of Property Research, 1994, 11, p 127

[4] See Suchman, D R : Managing a Development Company: Interviews with Successful Firms, Washington, D C , 1987

[5] See Whitehead, J C : The Midas Syndrome: An Investigation into Property Booms and Busts, Vancouver 1996, l c , p 15

[6] See Janis cit Whitehead, l c , p 30

[7] See Whitehead, l c , p 31

[8] See Fainstain, S S : The City Builders: Property, Politics, and Planning in London and New York Cambridge (Massachusetts) 1994 p 64

[9] See Fainstain, S S:, l c., p 64

[10] Fainstein, S.S , l c , p 4

[11] See Antwi, A ; Henneberry, J : Developers, non-linearity and asymmetry in the development cycle, in: Journal of Property Research, 1995, 12, p 218

[12] Retter, J : Projektentwicklung, in Falk, Bernd (Hrsg): Immobilien-Handbuch Landsberg/ Lech 1993, p 337

[13] Diederichs, C J.: Grundlagen der Projektentwicklung, in: Schulte, K.-W: Handbuch der Immobilien-Projektentwicklung, Köln 1996, p 29

[14] This is true at least of those developers who can be described as trâder-developers They differ from investor-developers, who hold a property for a long period after completion, and residential developers, who do not construct new projects and only manage their own portfolios (See Cadman, D., Topping, R : Property Development, London 1995, p 12) The last two groups are hybrids of developers and investors

[15] Because the demand for space from users is relatively price-inelastic (See Gibson, V.A ; Lizieri, C : New business practices and the corporate real estate portfolio: How responsive is the UK Property Market, Manuscript of a lecture at the European Real Estate Society, AREUEA International Real Estate conference, Maastricht 1998, p 2), the rental value even rises more rapidly than increasing demand (See Rosen, K R : Toward a model of the office building sector, in AREUEA Journal, Vol 12, No 3, 1984, p 261-)

[16] See Kraus, D G : Bürohäuser als Kapitalanlage, in: Falk, B : Gewerbeimmobilien-Handbuch, Landsberg/Lech 1989, p 36

[17] See Hennings, G : Kaiserlei, Entwicklung und Vermarktung des Kaiserlei-Gebietes, Band II, Dortmund 1989, p 147

[18] See Bone-Winkel; Sotelo: Warum werden Büroflächen (nicht) vermietet, in: Grundstücksmarkt und Grundstückswert 4/95, p 200

[19] See Berry, J ; McGreal, S ; Deddis, B : Urban investment and development, London 1993

[20] See Willis, Carol: Form follows finance - skyscrapers and skylines in New York and Chicago, New York 1995, p 160-

[21] See Whitehead, l c , p 167-

[22] See ibid , p 127-

[23] See Poorvu, W; Cruikshank, J.: The real estate game – The intelligent guide to decision-making and investment, New York, 1999, p 57-

[24] Downs, A.: Overbuilding hurts even prudent developers, in: National Real Estate Investor, 1991, p. 127

[25] Bergsman, S.: Downsizing in 1992 causes less demand, in: National Real Estate Investor, 1992, p29; Levy, J: Sluggish demand breeds fierce lender competition, in: National Real Estate Investor, n.d., p. 46.

[26] See Schleibe, K.: Einkaufscenter-Management ist Marketing-Management. Das Einkaufscenter als Markenartikel, in: Falk, B (Hrsg.): Das große Handbuch Shopping-Center, Landsberg/ Lech 1998, p 109 Diese für Shopping-Center getroffene Aussage gilt analog auch für die Entwicklung von Büroobjekten.

[27] See Krabben, E. v. d.; Boekema, F, l c., p. 216-.

[28] See Melody, T.J.; Wagley, J.F.P: Texas developers diversified to stay afloat; qualified optimism prevails as 1990s approach, in: National Real Estate Investors, 1990, p. 90.

[29] See Isenhöfer, B.: Strategisches Management von Projektentwicklungsunternehmen, Köln 1999, p. 236

[30] See ibid., p 237.

[31] See Whitehead, J. C., l.c., p. 136-.

[32] See Suchman D R., l c., p 4

[33] See Fainstain, S S., l c., p 65

[34] See Whitehead, J. C., l.c., p. 62

[35] See ibid., p. 124

[36] See ibid., p. 125

[37] See ibid., p. 123

[38] See ibid., p. 114

[39] See Murphy, S: One up on Trump, Marina Del Rey, 1992, p. 65.

[40] Fainstein, S.S., l.c., p. 65

[41] See Downs, A.: Cycles in Office Space Markets, in: White, J. (ed.): The Office Building - From concept to Investment Reality, Chicago 1993, p.165.

[42] See Pace, R D.: Limitations on the business of banking: an analysis of expanded securities, insurance, and real estate activities, New York and London 1995, p 3.

[43] See Wilkinson, H.E.: Forces at Work in the Real Estate Industry, in: Zuckerman, H.A.: Problem Real Estate - How to restructure refinance & remarket troubled commercial properties, Chicago 1992, p.5

[44] See Rowe, R.K.: Capital Excess in '80s leads to shortage in '90s, in: National Real Estate Investor, 1990, p. 210

[45] Miller, G.S.: Lenders are adapting to competitive environment, in National Real Estate Investor, 1987, p. 310

[46] See Downs, l.c., p. 165

[47] See Wilkinson, H.E., l.c., p. 8

[48] See e.g. Acron Finanz-Treuhand GmbH: "Auch im Immobiliensektor ist antizyklisches Investieren möglich - international," in: Bulwien, H.; Talkenberger, P. P.: Top Know-how rund um den Immobilienstandort, Idstein 1994, p. 327

[49] See ibid , l.c , p. 9.

[50] See Fahrhol, B : Neue Formen der Unternehmensfinanzierung, München 1998, p. 18.

[51] See Wöhe, G : Einführung in die Betriebswirtschaftslehre, München 1993, p. 841-.

[52] See Clapp, J M.: Dynamics of office markets, Washington 1993, p 57.

[53] See e.g. Spitzkopf, H -A : Finanzierungsarten und Finanzmanagement für Shopping-Center, in: Falk, B : Das große Handbuch Shopping-Center, Landsberg/Lech 1998, p396- oder Follak, K. P.: Immobilien-Projektfinanzierung, in: Der langfristige Kredit 4/93, p100- oder Nahlik, W: Finanzierung von Immobilien-Developments, in: Die Bank 7/94, p. 391- oder Kremer, M. A; Briese, K -H ; Schroeder-Hohenwarth, J : Innovative Finanzierungsformen, Teil 1 bis 5 in: Immobilien Zeitung, 20.3. bis 30.5. 1997.

[54] See Bone-Winkel, S.: Immobilienanlageprodukte: Überblick und Vergleich, in: Schulte, K.-W; Bone-Winkel, S ; Thomas, Th.: Handbuch Immobilien-Investition, Köln 1998, p 514.

[55] See Baum, A ; Lizieri, C ; Scott; P: Ownership, Occupation and Risk: A View of the London Office Market, Manuscript of a lecture at the European Real Estate Society/ AREUEA International Real Estate Conference, Maastricht, 1998, p. 12-

[56] See Fainstein, S.S., l.c , p. 66.

[57] Vg. Ratcliffe, J ; Stubbs, M : Urban planning and real estate development, London 1996, p. 317.

[58] See e g. Willis, Carol, l.c , p.157 or Hoyt, H : One Hundred Years of Land Values in Chicago, in: Chicago Press, 1933, in: Hoyt, H.: According to Hoyt: 50 years of Homer Hoyt, n.d. , p. 526-

[59] See Baum, A.; Lizieri, C ; Scott, P.: Ownership, Occupation and Risk: A View of the City of London Office Market, Reading 1998, p. 11.

[60] See Bulwien, H : Überblick über den Immobilienanlagemarkt in Deutschland, in: Schulte, K.-W; Bone-Winkel; S ; Thomas, M : Handbuch Immobilien-Investition, Köln 1998, p 67

[61] See Walz, E.: Immobilien im Portfolio von Versicherungsunternehmen, in: Schulte, K.-W; Bone-Winkel; S ; Thomas, M.: Handbuch Immobilien-Investition, Köln 1998, p. 629.

[62] See Amelung, V., E : Gewerbeimmobilien Bauherren, Planer, Wettbewerbe, Berlin, Heidelberg, 1996, p 13.

[63] See Bulwien, H., l c , p. 62

[64] See Loritz, K -G : Welche Chancen hat die Immobilien-AG in Deutschland, in: Zadelmarkt, 10 Jahrgang, 1998, p. 50.

[65] See ibid., p. 52.

[66] See ibid., p 52

[67] See Scharpenack, F.; Nack, U.; Haub, C : Immobilien-Aktiengesellschaften, in: Schulte, K.-W.; Bone-Winkel; S ; Thomas, M.: Handbuch Immobilien-Investition, Köln 1998, p. 679.

[68] See Tiemann, H. J.: Geschlossene Immobilienfonds, in: Schulte, K.-W; Bone-Winkel, S ; Thomas, M.: Handbuch Immobilien-Investition, Köln 1998, p. 619

[69] See Hudson-Wilson, S ; Wurtzebach, C H : Managing real estate portfolios, Burr Ridge, New York 1994

[70] See Willis, C., l.c., p. 168.

[71] See Fainstein, S. S., l c , p. 3.

[72] See ibid., p. 167

[73] See v. Einem, E : Büroflächenentwicklung im regionalen Vergleich, Schriftenreihe "Forschung" des Bundesministers für Raumordnung, Bauwesen und Städtebau, Heft Nr. 484, p. 163

[74] See v. Einem, l c., p. 163

[75] See Hysom, J.L.; Crawford, P.J.: The Evolution of Office Building Research, in: American Real Society, 1997, p. 149

[76] See Leinberger, C.B.: Developers should broaden their job description, in: National Real Estate Investor, 1987, p. 48-; Leinberger, C.B.: Strategy for Real Estate Companies, Washington, 1993, p. 19-; Adams, P.H.: Diversity is key to developers' success in 1990s; housing, renovation, asset management are options, in: National Real Estate Investor, n.d., p. 236

[77] See Isenhöfer, B., l c., p. 245

[78] See Labitzke, Karin: Immobilienportfolio-Management, Teil 2, Manuscript of a lecture on 22.03.1999 in Dresden in the Seminar "Pinnaculum" of the Institute for Corporate Real Estate, p. 4-

[79] Levien, M.B.: Consulting engineers can protect investments, in: National Real Estate Investor, n.d., p. 180

[80] See Prautzsch, W.-A.: Kreditrating bei Immobilienfinanzierungen - Risikoklassensysteme für Baukredite, in: Grundstücksmarkt und Grundstückswert 6/94, p. 321

[81] See Lehner, A. H.: Rating für Immobilenfinanzierung, in: Der langfristige Kredit 11/95, p. 366-

[82] See Nell, Job von: Projektentwickler und Banken - eine nutzenstiftende Symbiose? In: Der Langfristige Kredit 11/99, p. 366; Downs, A.: Lenders and developers to establish new relationships, n.d., p. 22

[83] See Alda, W.: Offene Immobilienfonds, in: Schulte, K.-W; Bone-Winkel, S.; Thomas, M.: Handbuch Immobilien-Investition, Köln 1998, p. 567

[84] This instrument naturally has a limited availability for closed-end funds, at the launch of a fund only.

[85] The *dritte Finanzmarkt-förderungsgesetz* also gives open-ended funds better possibilities to spread risk (creating mixed funds, regional spread). See Alda, W., l c., p. 571

[86] See Cadman; Catalano cit. Bone-Winkel, S.: Das strategische Management von offenen Immobilienfonds, Köln 1994, p. 65; Feinberg, P.: Too much money chasing too little product; more "deep pocket" investors become developers, in: National Real Estate Investors, 1988, p. 55

[87] See Bone-Winkel, S.: Wertschöpfung durch Projektentwicklung, in Schulte, K.-W. (Hrsg.): Handbuch Immobilien-Projektentwicklung, Köln, 1996, p. 437

[88] See Opitz, G.: Geschlossene Immobilienfonds, Freiburg 1995, p. 146

[89] See Alda, W., l.c., p. 571

[90] See Amelung, V. E.: Gewerbeimmobilien Bauherren, Planer, Wettbewerbe, Berlin, Heidelberg 1996, p. 88

BIBLIOGRAPHY

Acron Finanz-Treuhand GmbH: "Auch im Immobiliensektor ist antizyklisches Investieren möglich - international," in: Bulwien, H.; Talkenberger, P. P.: Top Know-how rund um den Immobilienstandort, Idstein 1994

Adams, P.H.: Diversity is key to developers' success in 1990s; housing, renovation, asset management are options, in: National Real Estate Investor, 1994

Alda, W.: Offene Immobilienfonds, in: Schulte, K.-W.; Bone-Winkel, S.; Thomas, M.: Handbuch Immobilien-Investition, Köln 1998

Amdur, T.: Outsource property management or not? In: National Real Estate Investor, 1994

Amelung, V. E.: Gewerbeimmobilien. Bauherren, Planer, Wettbewerbe, Berlin, Heidelberg 1996

Antwi, A.; Henneberry, J.: Developers, non-linearity and asymmetry in the development cycle, in: Journal of Property Research, 1995

Barras, R.: A simple theoretical model of the office-development cycle, in: Environment and Planning A, 1983, volume 15

Baum, A.; Lizieri, C.; Scott; P: Ownership, Occupation and Risk: A View of the London Office Market, Manuscript of a lecture at the European Real Estate Society/ AREUEA International Real Estate Conference Maastricht, 1998

Berger, A.I.: Understanding office vacancy and absorption rates, in: National Real Estate Investor, n.d.

Bergsman, S.: Downsizing in 1992 causes less demand, in: National Real Estate Investor, 1992

Berry, J.; McGreal, S.; Deddis, B.: Urban investment and development, London 1993

Bone-Winkel, S.: Immobilienanlageprodukte: Überblick und Vergleich, in: Schulte, K.-W.; Bone-Winkel, S.; Thomas, Th.: Handbuch Immobilien-Investition, Köln 1998

Bone-Winkel, S.: Wertschöpfung durch Projektentwicklung, in Schulte, K.-W. (Hrsg.): Handbuch Immobilien-Projektentwicklung, Köln, 1996

Bone-Winkel; Sotelo: Warum werden Büroflächen (nicht) vermietet, in: Grundstücksmarkt und Grundstückswert 4/95

Bulwien, H.: Überblick über den Immobilienanlagemarkt in Deutschland, in: Schulte, K.-W.; Bone-Winkel; S.; Thomas, M.: Handbuch Immobilien-Investition, Köln 1998

Cadman; Catalano laut Bone-Winkel, S.: Das strategische Management von offenen Immobilienfonds, Köln 1994

Cadman, D., Topping, R.: Property Development, London 1995

Clapp, J.M.: Dynamics of office markets, Washington 1993

Crockett, C.J.: Property Management: Key to prosperity in the 1990s, in: National Real Estate Investor, n.d.

Diederichs, C.J.: Grundlagen der Projektentwicklung, in: Schulte, K.-W.: Handbuch der Immobilien-Projektentwicklung, Köln 1996

Downs, A.: Cycles in Office Space Markets, in: White, J. (Hrsg.): The Office Building - From concept to Investment Reality, Chicago 1993

Downs, A.: Lenders and developers to establish new relationships, in: National Real Estate Investor, n.d.

Downs, A.: Overbuilding hurts even prudent developers, in: National Real Estate Investor, 1991

Fahrhol, B.: Neue Formen der Unternehmensfinanzierung, München 1998

Fainstain, S.S.: The City Builders: Property, Politics and Planning in London and New York, Cambridge (Massachusetts) 1994

Feinberg, P.: Too much money chasing too little product; more "deep pocket" investors become developers, in: National Real Estate Investor, 1988

Follak, K. P.: Immobilien-Projektfinanzierung, in: Der langfristige Kredit 4/93

Gibson, V.A.; Lizieri, C.: New business practices and the corporate real estate portfolio: How responsive is the UK Property Market, Manuscript of a lecture at the European Real Estate Society, AREUEA International Real Estate conference, Maastricht 1998

Hennings, G.: Kaiserlei, Entwicklung und Vermarktung des Kaiserlei-Gebietes, Band II, Dortmund 1989

Hoyt, H.: One hundred years of Land Values in Chicago, in: Chicago Press, 1933, in: Hoyt, H.: According to Hoyt: 50 years of Homer Hoyt, n.d.

Hudson-Wilson, S.; Wurtzebach, C.H.: Managing real estate portfolios, Burr Ridge, New York 1994

Hummel, D.: Zur Prognose regionaler Immobilienmärkte, Potsdam 2000

Hysom, J.L.; Crawford, P.J.: The Evolution of Office Building Research, in: American Real Society, 1997

Isenhöfer, B.: Strategisches Management von Projektentwicklungsunternehmen, Köln 1999

Janis citing Whitehead, J. C.: The Midas Syndrome: An Investigation into Property Booms and Busts, Vancouver 1996

Kincade, E.: Property manager's job becomes more varied, in: National Real Estate Investor, 1987

Krabben, E. van der; Boekema, F.: Missing links between urban economic growth theory and real estate development processes: Economic growth and building investments in the city of 's-Hertogenbosch, in: Journal of Property Research, 1994

Kraus, D.G.: Bürohäuser als Kapitalanlage, in: Falk, B.: Gewerbeimmobilien-Handbuch, Landsberg/Lech 1989

Kremer, M. A; Briese, K.-H.; Schroeder-Hohenwarth, J.: Innovative Finanzierungsformen, Parts 1 to 5 in: Immobilien Zeitung, 20.3. bis 30.5. 1997

Labitzke, K.: Immobilienportfolio-Management, Teil 2, Manuskript of a lecture on 22.03.1999 in Dresden at the Seminar "Pinnaculum" of the Institute for Corporate Real Estate

Lehner, A. H.: Rating für Immobilenfinanzierung, in: Der langfristige Kredit 11/95

Leinberger, C.B.: Developers should broaden their job description, in: National Real Estate Investor, 1987

Leinberger, C.B.: Strategy for real estate companies, Washington 1993

Levien, M.: Consulting engineers can protect investments, in: National Real Estate Investor, n.d.

Levy, J.B.: Lenders tighten spreads to be competitive, in: National Real Estate Investor, 1994

Levy, J.B.: Sluggish demand breeds fierce lender competition, in: National Real Estate Investor, n.d.

Loritz, K.-G.: Welche Chancen hat die Immobilien-AG in Deutschland, in: Zadelmarkt, 10. Jahrgang, 1998

Melody, T.J. Wagley, F.P.: Texas developers diversified to stay afloat; qualified optimism prevails as 1990s approach, in: National Real Estate Investor, n.d.

Miller, G.S.: Lenders are adapting to competitive environment, in National Real Estate Investor, 1987

Morris, R.A.: Not all land investors are land "dealers," in: National Real Estate Investor, 1980

Murphy, S.: One up on Trump, Marina Del Rey, 1993

Nahlik, W.: Finanzierung von Immobilien-Developments, in: Die Bank 7/94

Opitz, G.: Geschlossene Immobilienfonds, Freiburg 1995

Pace, R.D.: Limitations on the business of banking: an analysis of expanded securities, insurance, and real estate activities, New York and London 1995

Poorvu, W.; Cruikshank, J.: The real estate game – The Intelligent Guide to Decision-Making and Investment, New York, 1999

Prautzsch, W.-A.: Kreditrating bei Immobilienfinanzierungen - Risikoklassensysteme für Baukredite, in: Grundstücksmarkt und Grundstückswert 6/94

Ratcliffe, J.; Stubbs, M.: Urban planning and real estate development, London 1996

Retter, J.: Projektentwicklung, in Falk, Bernd (Hrsg.): Immobilien-Handbuch, Landsberg/Lech 1993

Rosen, K.R.: Toward a model of the office building sector, in AREUEA Journal, Vol. 12, No. 3, 1984

Row, R.K.: Capital excess in ´80s leads to shortage in ´90s, in: National Real Estate Investor, 1990

Scharpenack, F.; Nack, U.; Haub, C.: Immobilien-Aktiengesellschaften, in: Schulte, K.-W.; Bone-Winkel; S.; Thomas, M.: Handbuch Immobilien-Investition, Köln 1998

Schleibe, K.: Einkaufscenter-Management ist Marketing-Management. Das Einkaufscenter als Markenartikel, in: Falk, B. (Hrsg.): Das große Handbuch Shopping-Center, Landsberg/Lech 1998

Sinderman, M.: Outsourcing gains speed in corporate world, in: National Real Estate Investor, 1995

Sinderman, M.: Strategic alliances evolve as new way of doing business, in: National Real Estate Investor, 1994

Spitzkopf, H.-A.: Finanzierungsarten und Finanzmanagement für Shopping-Center, in: Falk, B.: Das große Handbuch Shopping-Center, Landsberg/Lech 1998

Suchman, D. R.: Managing a Development Company: Interviews with Successful Firms, Washington, D.C. 1987

Tiemann, H. J.: Geschlossene Immobilienfonds, in: Schulte, K.-W.; Bone-Winkel, S.; Thomas, M.: Handbuch Immobilien-Investition, Köln 1998

v. Einem, E.: Büroflächenentwicklung im regionalen Vergleich, Schriftenreihe "Forschung" des Bundesministers für Raumordnung, Bauwesen und Städtebau, Heft Nr. 484

v. Nell, J.: Projektentwickler und Banken - eine nutzenstiftende Symbiose? In: Der Langfristige Kredit 11/99

Walz, E.: Immobilien im Portfolio von Versicherungsunternehmen, in: Schulte, K.-W.; Bone-Winkel; S.; Thomas, M.: Handbuch Immobilien-Investition, Köln 1998

Whitehead, J. C.: The Midas Syndrome: An Investigation into Property Booms and Busts, Vancouver 1996

Wilkinson, H.E.: Forces at Work in the Real Estate Industry, in: Zuckerman, H.A.: Problem Real Estate - How to restructure refinance & remarket troubled commercial properties, Chicago 1992

Willis, C.: Form follows finance - skyscrapers and skylines in New York and Chicago, New York 1995

Wöhe, G.: Einführung in die Betriebswirtschaftslehre, München 1993

Wurtzebach, C.H.; Miles, M.E.; Cannon, S.E.: Modern Real Estate, New York, 1994