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An Institutional Economic Analysis of Securitization in Real Estate

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The paper deals with principal-agent-relationships that can be found in the growing market for securitized real estate. The aim of the paper is to determine the most relevant principal-agent-relationships in common practice and to deduce possible negative effects of these relationships for investors.

On this basis the paper outlines the requirements of efficient contracts to counter these negative effects to establish efficient markets. As an introduction into the matter principal-agent-constellations from conventional securitization are compared to real estate-specific constellations. For illustration various examples from practice are included into the analysis.

Contents

1 Introduction

Real Estate can without doubt be identified as the oldest form of investment known to man. Even in the modern high technology economies real estate is a dominant economic factor, although the demands of investors and users have changed with time. The increasing need for high and secure returns, driven by the rising global competition through open markets, also affects the investment in real estate. The intrinsic immobility of real estate calls for other means of economic exchange. Securitized real estate is the logical answer to the demand for efficient international diversification of real estate portfolios. Yet, despite the theoretical charm of the solution, securitized real estate has failed to meet the high expectations of potential investors.

There are many factors influencing the viability of securitized real estate. The New Institutional Economics is a suitable instrument to analyze the decisive factors in the relationship between the investor and the management of the investment vehicle, which ultimately determines the success of an investment form. The paper will use the New Institutional Economics approach to locate the decisive determinants for the viability of securitized real estate and search for explanations for the moderate performance of many forms of securitized real estate.[1]

2 The Market for Securitized Real Estate

2.1 Market Developments in Germany and in the United Kingdom

Germany as well as the UK lack an instrument similar to the American REIT. Real estate companies underlie the same regulations as all other publicly listed companies. The market capitalization of German real estate companies amounted to approximately 13 bio € in September 2001. In the UK the situation is similar. The market capitalization of British real estate companies exceeds 22 bio £[2].

In Germany the number of public listed real estate companies has seen a steady growth; however this is not due to the public placement of newly formed property companies but by the development of former non-property companies into the real

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[1] Compare Waldmann, Immobilien-Aktien enttäuschten Kapitalanleger.
[2] Source: Datastream: Market capitalization of UK listed property companies as of January 14, 2002 as far as available.

estate business in the course of the closure of the original line of business. Moreover it would be exaggerated to speak of a drastic growth and establishment of real estate companies as an investment vehicle for indirect real estate investments. Currently the market has entered a phase of stagnation. This is illustrated by the example of the Bayerische Immobilien AG, which has recently decided to put off its planed secondary offering, intended to increase its free float from 3% to 25%. Furthermore the initial public offering of the Viterra AG, which was an alternative to a direct sale of the real estate subsidiary of the EON AG, was dismissed as an option due to the low expected price.

In Great Britain the development has even been regressive. Many companies have been taken private in the past year, due to the high discount on their Net Asset Value. The trend towards Going Private in the UK does not only apply to the real estate sector, yet it is very eminent there. The development was started a year ago through the Going Private of the real estate group MEPC. BPT followed in March 2001, Delcaney in April. Furthermore, Burford Holdings, Frogmore Estates, Regalian and the Moorfield Group were delisted. In many cases the current share price lies 25% and more, in some instances even almost 50% under the Net Asset Value. This low valuation reflects not only the hesitance of institutional investors to place their stake in smaller companies; but also highly capitalized real estate companies experience regularly undervaluation, as the MEPC takeover proved. In this environment it does not surprise that even companies like Moorfield that specialize in the takeover of undervalued real estate companies refrain from public listing.[3]

2.2 Development of the REIT-sector in the USA

Unlike in Germany and Great Britain, in the USA there is an institutionalized form of traded real estate securities, which have to fulfill certain requirements in order to be recognized as a REIT and receive tax exemption on the corporate level. The market capitalization of REITs has seen a steady growth. From 1990 to 1994 the number of REITs has almost doubled, from 119 to 226. The market capitalization has increased five times from 8,7 bio USD to 44,3 bio USD over the same period. At the end of 2000 the NAREIT counted only 189 REITs, but the market capitalization has climbed up to 140 bio USD. The discounts on the Net Asset Value are in average significantly lower than in Germany or Great Britain. Furthermore, contrary to Germany or Great

[3] Compare Uhlig, Exodus von Immobilienfirmen an der Londoner Börse.

Britain, premiums on the Net Asset Value can be observed. This on the one hand documents the maturity of the investment vehicle REIT, on the other hand the better institutionalized incentives and tax privileges play an important role in the positive development of this segment. The authors focus on the institutional aspects of successful real estate investment vehicles. For this purpose the New Institutional Economics are applied to securitized real estate investments, to uncover the mechanisms that enhance or inhibit the acceptance of this investment form.[4]

3 The Instrument of the New Institutional Economics

3.1 Adequacy and Applicability

The focus of this paper are the systematic deficiencies of securitized real estate. Therefore factors for the underperformance of individual securitized real estate products (such as differences in taxation, incoherent investment strategy, inefficient financing etc.) are neglected (Compare Illustration 1). The aim is rather to distinguish the common deficiencies of the asset class securitized real estate. These can be found in the relationship between the management of the investment vehicle and the investor, which is subject of this paper. Underperformance of a traded real estate investment vehicle as expressed in a discount on the NAV of the securitized real estate must be attributed to the investment vehicle including its management (ceteris paribus). If differences in taxation and financing for directly held and securitized real estate are abstracted, only the relationship between investor and management can account for discounts or premiums on the NAV of the held real estate (Compare Illustration 2).[5]

The analysis of the relevance of contractual and non-contractual relationships is domain of the New Institutional Economics. Therefore the theory is the adequate tool to uncover the systematic deficiencies of securitized real estate. In the next step the applicability to the matter will be established.

Securitized real estate can be met in many forms across the continents. An efficient application of the New Institutional Economics however limits the analysis to two parties: principal and agent. The investor is the principal while the management acts

[4] Compare Cleis, Der Reiz der REIT.

[5] Note: Common reasons for underperformance can be: thin trading of shares/units, lack of established trading markets and price volatility. As these factors are exogenous and thus not under the control of investor or management, they are not included into the analysis.

as the investor's agent. The approach lends itself to basic equity investment vehicles (e.g. REITs, Property Companies, Property Shares), as they can be described effectively in the above-mentioned form.

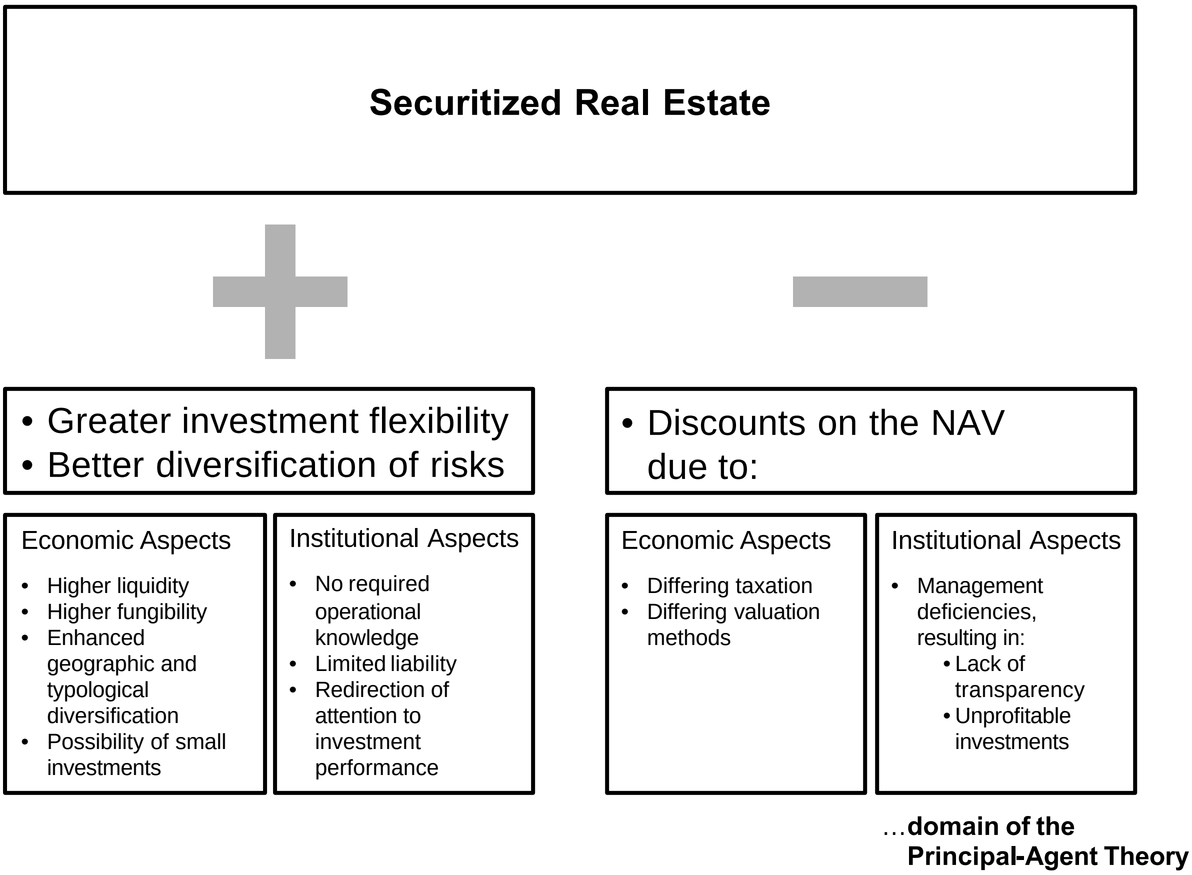

Illustration 1: Context of the paper

In order to generate comparable and concise conclusions, the relationship between principal and agent must be reduced to the essential determinants, which will be shown next.

3.2 Basics of the New Institutional Economics

The new Institutional Economics was established as an extension of the classical economic theory to include the economic relevance and characteristics of institutions. The New Institutional Economics also deals with the economic analysis of legal contractual relationships, which apply for instance to the relationship between an investor and the management of his investment. At its core lies the separation of ownership and control, which is typical for securitized investments. This is subject of the Agency Theory, which is sub domain of the New Institutional Economics.

The Agency Theory deals with the contractual relationship between two parties. The principal employs the agent to fulfill a task in his place. To satisfactorily complete the task the principal also grants the agent a limited freedom of choice. The information after the closed contract is considered distributed asymmetrically in two ways: 1) the efforts of the agent cannot be observed directly by the principal and 2) the agent makes an observation that the principal does not make. Furthermore it is too costly for the principal to acquire the information. This problem field is known as Moral Hazard.[6]

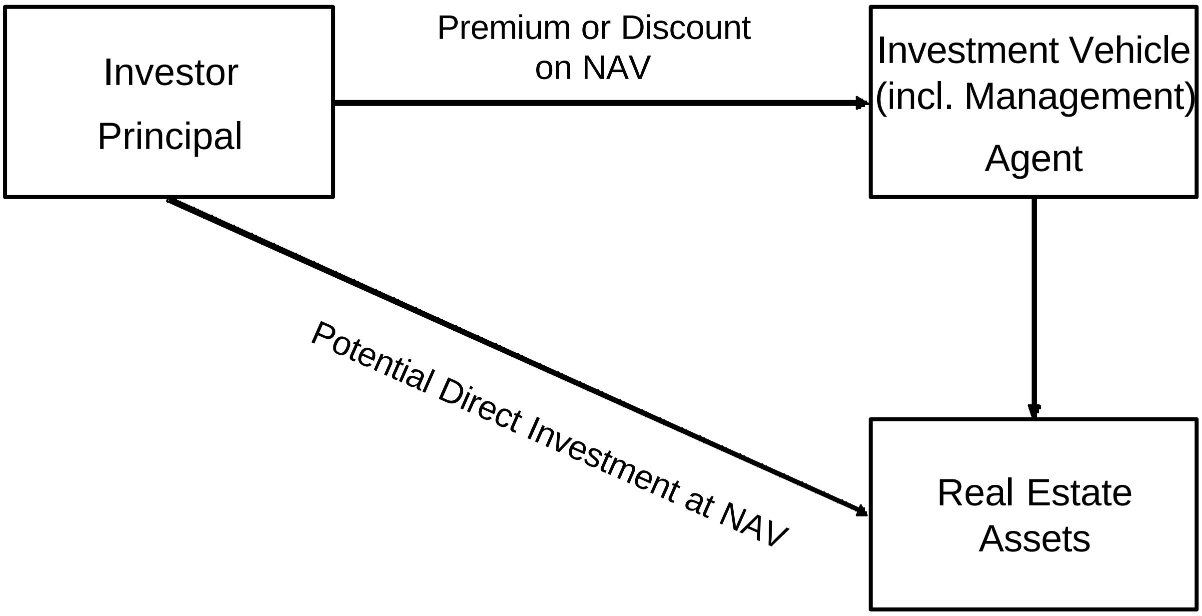

Illustration 2: Principal-Agent-Relationship

A further aspect of the Agency Theory deals with asymmetric information before the contract is completed. The agent has better information concerning his qualities than the principal. This constellation is known as Adverse Selection. It was originally taken from the insurance industry, where the insurance taker has better knowledge of his personal risks than the insurance company. Hence the insurance company faces the risk that only people with higher than average risks buy insurance. This leads to an inefficient distribution of risk as well as economic disadvantages for the insurance company.[7]

6 Compare Richter/Furubotn, Neue Institutionenökonomik, p. 163
7 Macho-Stadler/Pérez-Castrillo, An introduction to the Economics of Information – incentives and contracts, p. 12

4 Analysis of the Relevant Principal-Agent Constellations in Securitized Real Estate

4.1 Pre-Investment Relationship

Real Estate Investment Vehicles compete for capital. Investors have to decide how they place their capital. The investment decision is guided by two attributes, risk and return. In theory the investment process could be reduced to finding the investment opportunity with the best risk-return ratio. However, risk and return are uncertain attributes. Investors have only limited means to distinguish profitable investment opportunities. Information is not always sufficiently available as well as costly to acquire. Therefore investors have to make an investment decision based on incomplete information. This is especially the case for securitized real estate investments.

This situation bears the danger of the phenomenon of the “lemon market” described by Akerlof in 1970. Applied to securitized real estate markets this describes a state in which the profitable investment vehicles leave the market because investors are not willing to pay the full price for a potentially unprofitable investment, due to their lack of information. As more and more profitable investments leave the market the average investment quality will further decrease, making investors even more hesitant to place their capital. This will eventually lead to a collapse of the market. The continuous privatization of public property companies in the UK could be an instance of this phenomenon[8]. However, in order to substantiate this conclusion the profitability of the companies taken private and the ones remaining public would have to be determined.

In principle adverse selection applies to all investment opportunities under asymmetric information. Why should it be of special relevance for securitized real estate? In this context it is helpful to consider the economic characteristics of the asset class real estate. Especially the lack of transparency and the heterogeneity of real estate can be substantial sources of adverse selection problems. Institutional investors have still comparably little experience with securitized real estate and its management. The negative effects of adverse selection are twofold. On the company level they hinder the acquisition of new capital and raise the danger of hostile

[8] Thomaschowski, Britische Immobilienaktien stehen unter Abgabedruck.

takeover due to undervaluation in the capital market. On the aggregated level the market will be inefficient due to thin trading and low general demand. To counter the problem of adverse selection the quality of an investment should be determinable by the investor prior to the placement of his capital.

4.2 Post-Investment Relationship

Once investors have placed their capital the management of the real estate company could act opportunistically, investing the money to maximize their own benefit. The likelihood of moral hazard increases if there is no need for raising further capital in the future.[9] Opportunistic behavior of the management is made possible through the asymmetric distribution of information between principal and agent. The principal (investor) has no direct control over the actions of the agent (management).

Moral hazard can occur in many forms. This begins with the amount of effort that the management puts into the fulfillment of its tasks. The principal has no means to control the effort directly. The output of the management, determined by the success of the investment vehicle, cannot be attributed to the potential effort of the management as other environmental factors influence the success. Should the investment be profitable it cannot be concluded that the success is due to the quality and effort of the management, as sheer luck or a rising market may be the causes. The same holds true for a less profitable investment. As the management has no incentive to put in its full effort, through the lack of control, the likelihood of a sub optimal development increases.

A further danger implied by the asymmetric information can be seen in the managerial decisions of the agent (hidden actions). The interests of principal and agent are not identical. While the principal maximizes his wealth through profitable investment of his capital, the agent maximizes his wealth through the payments for his services. The compensation of managers traditionally correlates with the value of the managed assets. This implies an inherent incentive for managers to increase the amount of assets under his management. This can lead to investment decisions, which are not in the interest of the principal, thus reducing the value of his investment and shifting wealth from the principal to the agent. Particularly real estate

[9] Compare Williamson, The Economic Institutions of Capitalism, p. 325.

investments are vulnerable to this problem, as one bad investment, can harm the profitability of the entire company, due to the high investment volume of real estate.

5 Deduction of Problem Solutions

5.1 Pre-Investment Relationship

The central aspect of the adverse selection problem is the uncertainty regarding the quality of the investment. The investor needs credible proof of the quality of a potential securitized real estate investment, which is called a "signal" in the terminology of the New Institutional Economics. The more information a company discloses about the held real estate the more credible becomes its professionalism and quality orientation. The European Public Real Estate Association recommends to publish information on the sub-portfolio and on the property level. For a detailed listing of the recommended information for disclosure see appendix p. 15.

Another way to establish credible proof of the quality and value of the property is the expertise of a reliable independent third party. Thus the true quality of an investment can be revealed to the investor. Furthermore the employment of a third party is self-enforcing, as investors will only place their capital with companies that have been examined by the independent institution, thus creating an industry standard. Accordingly, the European Public Real Estate Association (EPRA) recommends that all valuations of the company's property should be conducted by external valuers to "maximize investors' level of confidence in the objective nature of the valuation"[10]. Furthermore, EPRA recommends that asset valuations should be disclosed at least once a year, and all assets owned by a company should be valued as of the same date.[11]

A further suitable tool in this context is rating. Rating can take place on two levels: at the corporate level and the property level. This gives real estate companies the opportunity to proof their quality concerning management and assets. Rating allows to combine a large variety of facts into a brief assessment. The investor can use the assessment to focus on the relevant factors for his investment decision. The rating takes the role of a signal, which communicates the quality and the risk exposure of the investment vehicle to potential investors. Notably, the agent will only send out the

[10] EPRA best practices policy recommendations, p. 12.
[11] Compare EPRA best practices policy recommendations, p. 12.

signal, if the associated costs (rating fees etc.) are lower than the expected benefits (lower cost of capital, positive investment cash-flow, stable market capitalization etc.). On the basis of the information conveyed in the signal and his own assessment the principal can make his investment decision.

An additional signal to investors are professional investor relations, offering potential investors detailed information on the strategic orientation and the current assets held by the company. The provided information should include location and type of assets held as well as the current tenants including their solvency. Companies with high quality assets are more likely to provide the information, thus giving investors a signal regarding their quality. However providing transparency for the investors also bears the risk of giving competitors too much insight into the internals of the company. Furthermore the provided information can weaken the negotiation power for the sale of assets, as the estimated value has been revealed to potential buyers.

Generally the investor faces two factors when placing his capital, the quality of the assets and the management. While the assets can be accounted for to a sufficient level (depending upon the transparency provided through the management), the management is an uncertain factor to the investor. To resolve some of the uncertainty, the track record (if available) of the management can be taken into consideration. Lutz Ristow, the former chairman of the RSE AG, can serve as a positive example. When he took over the management of the TAG Tegernsee Immobilien- und Beteiligungs-AG the stock price went up more than 100 %, due to his excellent track record as a manager.[12]

5.2 Post-Investment Relationship

After the investment the principal faces the danger of moral hazard. As with adverse selection the source of the problem is the asymmetric distribution of information and non-congruent interests between principal and agent. Two possibilities of opportunistic behavior have been described. While the level of effort that the management puts in its responsibilities is harder to control, the investment decisions, which may or may not be in the interest of the principal are more essential to the overall profitability.

[12] Compare Donovitz, Der Zug rollte wieder, p. 30.

5.2.1 Level of Effort

Since the level of the agent's effort eludes the principal's control (apart from the control over presence at work) the principal has to ensure that it is in the interest of the agent to invest his full effort. This is generally achieved through management incentives. The key to successfully implementing management incentives is to achieve virtual congruence of the interests of the principal and the agent. Then the asymmetric distribution of information will not be of further relevance. Management stock option programs are a popular incentive, however they fail to meet the principal's objectives. The asymmetric pay out structure of stock options lets its value increase with the volatility of the underlying stock. This can lead the management to take risks, which are not in the interest of the principal.

Incentives generally are of monetary nature. Therefore the first requirement for an incentive is a parameter that it is linked to. Possible parameters are the stock price, the Net Asset Value, profit, turnover etc. The principal has to decide which parameter or which combination of parameters reflects his objectives best. There is no universal answer to this question, as it depends on the type of company, the stage of development and the temporal preference for cash of the principal. Nonetheless some assumptions can be made for real estate investment vehicles.

Stable cash flows, steady growth and low risk are typical characteristics of real estate investments. These attributes should be reflected in the investor's objectives. It would be a mismatch if a growth oriented investor placed his capital in real estate, as his expectations will not be met. Real estate, securitized or not, is a long-term investment, often used as a hedge against inflation. Therefore a steady development of the Net Asset Value is a suitable objective and incentive parameter. In an efficient market the Net Asset Value must then translate into a corresponding stock price of the securitized real estate.

Once an incentive scheme has been drawn up it must be substantiated through the corresponding operating figures. An effective incentive scheme must define clearly the numbers by which the success of the agent is determined. A conflict of interest can arise by the fact that the operating figures are usually provided by the management, which thus determines its own success (unless the stock price is the basis of the incentive scheme). It may be advantageous to contract the service of an independent institution such as an auditing firm and professional real estate appraiser to verify the data. As both principal and agent are aware of the asymmetric information distribution, it is in the interest of the management to create the informational transparency by its own effort, thus avoiding intervention by the principal.

5.2.2 Investment Decisions

As the principal's agent the management is held to run the business according to his interests. This applies to the operative decisions as well as to investment decisions. As the profitability of a real estate investment vehicle depends mainly on its assets, investment decisions are of great importance. Additionally to determining the profitability they can also alter the characteristics of the portfolio. A low risk portfolio can be turned into a high risk investment through the participation in large scale project developments. While this can in the best case lead to a higher yield, it cannot be concluded that such a path would lie in the interest of the principal, who might see himself forced to sell his stake.

There are two factors, which drive the investment style of a real estate vehicle. The primary factor is the self-prescribed focus or specialization and thus strategic outline of the vehicle. This serves as a signal for investors, who look for a specific type of investment. The secondary factor is the individual investment style of the management. The key problem is the lack of directional control over the management of the property assets, due to the separation of ownership from control.[13] In order to avoid investment decisions, which do not meet the objectives of the principal, a form of governance is needed. The aim is to verify, that all investments are within the scope of the strategic outline.

While the incentive schemes that govern the level of effort of the management can also serve as an incentive to avoid unprofitable investments, as these negatively influence their compensation, they cannot inhibit investments, which change the risk-return characteristics of the portfolio. On the opposite, if the incentive scheme is implemented as a bonus without downside potential (which resembles a financial option) the management may be encouraged to take greater risks. Therefore it would seem wise, to implement an incentive scheme, which also allows for negative

[13] Compare Newell/Fife, Major property investor attitudes to property securitization, p. 9 and 15.

bonuses, if the economic aims were not met. While this may seems harsh for the management, it only reflects the economic situation of the investor. By establishing congruence of the interests of the principal and the agent, it can be ensured, that the agent acts in the interests of the principal.

5.3 Transparency

It was shown how Principal-Agent Problems can jeopardize the success of a securitized real estate investment. Furthermore mechanisms to eliminate or limit the negative effects of Principal-Agent Problems were introduced. However the most efficient counter measure to Principal-Agent Constellations is the avoidance of asymmetric distribution of information. While many of the world's largest publicly listed companies have learned the importance of transparency and investor relations, this lesson has not reached the majority of real estate companies.[14]

The value of a real estate investment vehicle is based primarily on the value of the underlying assets. This is expressed in the Net Asset Value approach to real estate companies. Therefore it is only logical to communicate the Net Asset Value on a regular basis to the capital market, which should be based on appraisals by independent and qualified appraisers. Lack to do so will almost certainly lead to a discount on the share price, as uncertainty is always punished by investors, who try to protect their interests. However transparency does not stop there, the Net Asset Value is only a static indicator of the assets' value. Investors require detailed information on the future development of the real estate portfolio in order to assess the dynamic value of their investment as well as reproduce the stated Net Asset Value. These are the fundamental requirements for analyst coverage, which is a necessity for efficient pricing. Furthermore institutional investors will require ad hoc publicity. Transparency is the key to efficient pricing, which is in the interest of the agent.

In order to control the relative performance of a real estate security the shareholder needs a benchmark. To be expressive the benchmark needs to be a compilation of property companies with the same investment focus and strategy. This however is

[14] One extreme example for information asymmetries is the case of Harpen AG. The management of Harpen AG, a German listed real estate company, extraordinarily depreciated assets resulting in the collapse of earnings before tax from € 16.3 mio. to € 1 mio. The shareholders were only informed about the extraordinary write-off itself. The reasons and the concerned business division were not disclosed. (Sturbeck, Harpen läßt Kleinaktionäre im dunkeln, p. 27)

difficult if property companies lack a strategic outline, as it is the case with many German property companies, which invest in various types of real estate in several countries across Europe. Furthermore, the number of comparable companies is relatively low, which diminishes the chances to compile a representative benchmark. For instance there is only one German real estate company that focuses exclusively on Shopping Centers.

6 Conclusions

The limited success of securitized real estate, despite its obvious advantages, raises the question after the obstacles that this investment form faces. Corporate Governance has been an important issue in the development of the global capital markets. Typically countries with well-developed Corporate Governance mechanisms also have the strongest capital markets in terms of size and turnover. The protection of the investor's interest is a key feature for the acceptance of an investment vehicle. This also applies to securitized real estate. The paper dealt with the most eminent problem fields regarding the protection of the investor's interests. The Agency Theory was employed for this purpose. The two sources of agency problems were identified as the inherent conflict of interests between investor and management and the asymmetric distribution of information between the two parties. Furthermore counter measures were introduced, to limit or eliminate the negative effects. Most importantly, the avoidance of asymmetric distribution of information through efficient investor relations to achieve transparency. Secondly the need for an effective management incentive scheme that truly reflects the investor's interests.

Combined these measures can create the professionalism that today's investors require of modern investment opportunities. Naturally agency issues are only one determinant for a successful investment. The profitability, which is influenced by the economic framework and conditions is a key factor for the future acceptance. However investing capital has always and will always be a matter of trust, which correlates tightly with an efficient corporate governance.

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Appendix

EPRA best practices policy recommendation, October 2001
II(J) Information to be provided on Investment and Development Assets

(i) Description of Issue
What information should a property company publish on its Investment and Development Assets?

(ii) Recommendations and Rationale

Investment properties

Information on sub-portfolios as appropriate (e.g. appropriate sector, region or city):

- Area in square metres
- Average rent per square metre
- Annualised net rent based on current rent roll
- Market rents (ERV) if fully leased at current market rents
- Cash flow
- Operating profit
- Fair Market Value
- Vacancy by area and rent
- Description of lease expiration profile
- Top 10 tenants by rental income
- Rental income breakdown by tenant business sector

EPRA recommends that a complete list of the properties owned should be provided.

The following information should be provided for each property/building in the portfolio:

- Address
- Land Area
- Lettable building space
- Type of property (e.g. the respective proportion of office/retail/residential/storage, etc.)
- Occupancy rate
- Acquisition Date
- Percentage of ownership (and commentary on control provisions)
- Form of ownership (e.g. fee or leasehold ownership)
- Year of construction completion/major refurbishment

Development Assets

Information on sub-portfolios as appropriate: (e.g. appropriate sector, region or city):

- Development costs, including costs to date, costs to completion and capitalized interest
- Breakdown of lettable area according to regions and usage (e.g. office, residential, etc)

The following information should be provided for each development project:

- Address
- Type of property (e.g. the respective proportion of office/retail/residential/storage/etc.)
- Lettable building space
- Expected date of completion
- Percentage of ownership (and commentary on control provisions)
- Status (e.g. planning permission/under construction/letting status, etc.)