Chapter 1
The Economics of REITs

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1.1 Introduction

Real Estate Investment Trusts (REITs) gained wide acceptance in the United States during the 1990s and have spread internationally, for example Japan, Australia and have gradually being introduced in European countries. For institutional clients in particular, REITs are vehicles that provide indirect real estate investments.

This chapter considers how different real estate investment products as financing vehicles are differentiated from one another. The chapter aims to forward draft criteria for the use of different investment vehicles in particular the optimal design of REITs. The question of the optimal construction of investment vehicles is closely linked to the optimal financial structure of a company. It is argued in this chapter that the neoclassical theory of finance is not able to differentiate between different financing vehicles. While Williamson's (1988) financial theory approach is able to differentiate between debt and equity, it is also not capable of distinguishing between various forms of equity and mezzanine capital. Hence, further development of financial theory towards the concept of latitude is needed, in order to be able to identify real estate investment products and formulate recommendations for their design.

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1.2 The Neoclassical Theory of Finance and the NIE Approach

From a new institutional economics (NIE) perspective financing can be viewed as a body of rules and regulations that lay down information and co-management rights as well as monetary claims, Alchian and Demsetz (1972). An alternative perspective is that financing can be understood as a series of payments starting with an incoming payment followed by a number of payouts. On the basis of this interpretation, an investment, conversely, is a series of payments beginning with a payout followed by a number of incoming payments, Drukarczyk (2003). This encapsulates the neoclassical theory of finance and forms the basis of both methods of investment appraisal (e.g. DCF) and the quantification and transformation of risk into return in the capital asset pricing model (CAPM), Markowitz (1952).

The question of the optimal financing of an investment, usually treated as a question of the optimal financial structure of a company, is a problem of corporate finance. Under a horizontal financing rule, asset terms should be matched with liability terms. According to the leverage theorem it is possible to optimise capital structure, i.e. to minimise the WACC. This was a fist vertical financing rule based on the assumption of imperfect capital markets. Modigliani and Miller (1958) formulated a second vertical financing rule based on the assumption of perfect capital markets, postulating the irrelevance of capital structure.

The new institutional economics has been gaining acceptability internationally, Richter and Furubotn (2003) and embraces a multitude of theoretical approaches, such as: property rights approach, principal-agent approach, theory of relational contracts, transaction cost economics, new institutional economics of the state. Schneider (1995) in reconstructing institutional economics considered that an institution serves to reduce the insecurity of income and can be distinguished into systems of rules (governance structures) and systems of actions (organisations). A financing institution like credits or shares can be interpreted, in accordance with Schneider's conception, as a form of an institutional manifestation.

Transaction cost economics as part of the new institutional economics was initially developed in parallel to and remained independent from the development of corporate finance. Williamson (1991) is amongst the proponents of transaction cost economics which beginning can be dated to Coase's The Nature of the Firm in 1937. The question that drives the origin and the development of transaction cost economics is the question of the optimal transaction as an alternative between delivery of a service inside a company or via the market Coase (1937).

As illustrated by Fig. 1.1, Williamson (1991) postulates a relationship between the complexity of a transaction and the transaction cost depending on the form of transaction (via market or hierarchy), and in doing so explains the existence of companies as hierarchical organisations. The specificity of an asset means that a player who wishes to offer a factor has a low chance of redeploying this factor for another purpose, so that in a market transaction, especially in the context of the assumption of opportunistic behaviour, there is a high risk of sinking costs, which

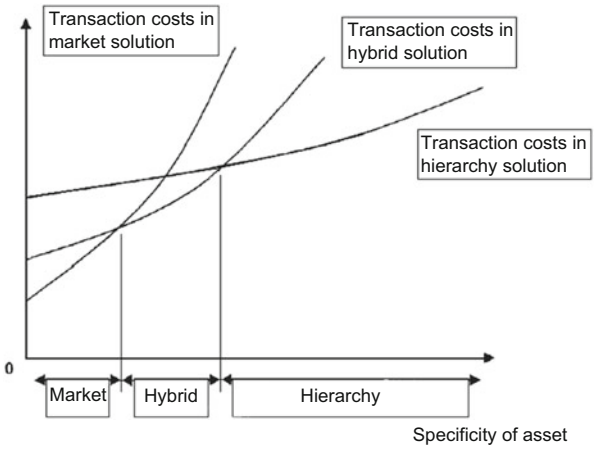

Fig. 1.1 Costs of forms of transaction (Source: Williamson 1991, p. 116)

will be anticipated by the promoter and therefore leads to high transaction costs. Different forms of transactions respond to factor specificity with different levels of transaction costs. In Williamson's 1988 paper Corporate Finance and Corporate Governance, transaction cost economics considerations are transferred to the question of the optimal financing structure, in particular financing with debt and equity, as forms of transactions or forms of governance.

According to Williamson, it is not the risk, measured as the distribution of a company's cash-flow, that determines the debt ratio, but the specificity of the assets (Fig. 1.2).

The case of the equity ratios of the construction industry (ER of 7.9 %) and the pharmaceutical industry (ER of 34.4 %) in Germany in 2004 provides a pertinent example of Williamson's postulate (Deutsche Bundesbank 2006). There are only very few industries that experience such pronounced business cycles as the construction sector and therefore risks in the form of variability of profits. Nevertheless, the construction industry can manage with a very low equity ratio due to the low specificity of the assets. In contrast, the pharmaceutical industry has a relatively steady demand, but due to the high specificity of the assets, its equity ratio is comparatively high. With this postulation on the interrelationship between the specificity of assets to be financed and the question whether these can or cannot be financed with debt, Williamson achieves a plausible explanation for the financing behaviour of companies with respect to the use of debt.

Williamson's approach has far-reaching importance for real estate economics. On the one hand, it addresses the question of lending on real estate investments, but also raises the issue of specificity for property developers and investors, as well as for non-real estate companies as users of real estate. For example, if the lease of property is interpreted as providing real capital in the form of credit from the landlord to the tenant, then Williamson's postulate on financing can help resolve the question whether it is more opportune to buy or to rent an apartment, Sotelo (1996), Sotelo and Hähndel (2009).

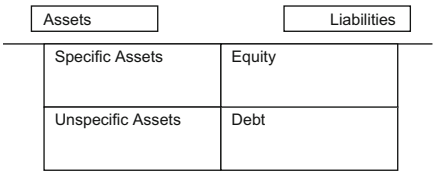

Fig. 1.2 Williamson's postulate on financing

Although transaction cost economics can be applied in many ways to real estate economics, this concept however does not describe forms of financing that lie beyond or in between equity and debt. While it may be possible to recognize other forms of financing, such as the broad range of real estate investment products (closed-ended real estate funds, open-ended real estate funds and real estate companies or REITS) as mezzanine forms of financing Williamson's financing approach alone does not deliver explanatory tools to further differentiate or explain these hybrid forms of financing. In literature these hybrid forms of finance are primarily explained based on information economics Rudolph (2004).

1.3 Financing Vehicles as Forms of Governance: Latitude as a Key Concept

Financing can be interpreted as a relationship between the financier (principal) and the management of the entity receiving the financing (agent). What characterises the principal-agent relationship is that information is asymmetrically distributed between the agent and the principal. It is assumed that the principal, while being able to monitor the agent's results, is not able to monitor the agent's input. The relevant literature, Jensen and Meckling (1976) primarily deals with which incentives the principal can use to achieve far-reaching conformity between the interests of the agent and his own, while minimising transaction costs.

Although the principal-agent approach is considered as constituting part of new institutional economics, it goes far beyond Schneider's interpretation of an institution in that the principal-agent approach not only considers the institutions that are suited to reduce income uncertainty in the relationship between principal and agent, but discusses the issue of the hierarchical relationship between the principal and agent itself. In this way, economics becomes a social science of governance relations and not of institutions. Financing can be interpreted as limiting the agent's latitude by the principal. Different financial institutions offer different latitudes of action within the relationship between the principal and the agent. Further regulations of a financing institution, namely those regarding monetary claims, information and co-management rights result from the latitude in this approach. Incentives are combinations of monetary claims, information and co-management rights within certain latitude. By placing latitude in the focus of studying a financing institution, the principal-agent relationship becomes a governance relationship (Fig. 1.3).

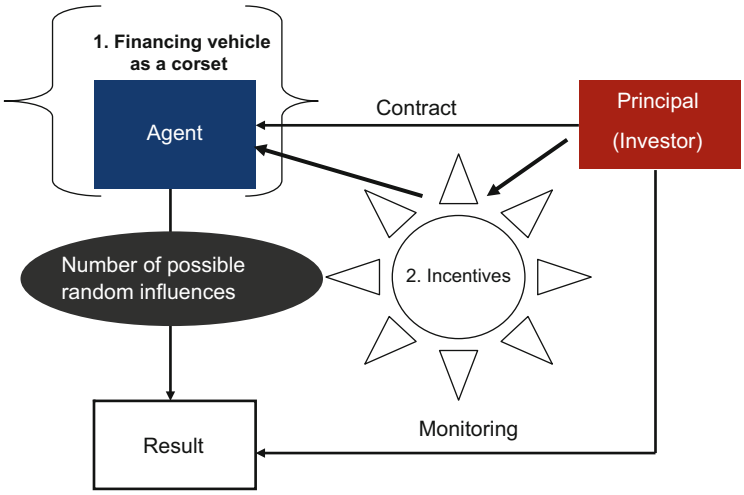

Fig. 1.3 Finance as a principal-agent issue

In essence, the latitude of a financing institution defines the range of possible uses for the financial resources provided by the principal to the agent for fulfilling the tasks. If for example a financier grants a credit to the agent, the latitude is usually very small, as the use of financial funds is clearly regulated in the credit contract. Credit contracts in the real estate industry, for instance in acquisition financing, often include a provision according to which the correct use of funds must be guaranteed by a notary. If an investor subscribes to a closed-ended real estate fund, it is usually known at the time of subscription which property is purchased at which price or which tenant leases it for a certain term, so that the agent has only limited latitude; thus the agent's latitude is already used in full. If an investor subscribes to a German open-ended real estate fund, the German Investment Act (KAGB) regulates which investments are permissible and to what extent. If an investor buys a US REIT, there are also regulations regarding possible investments, for example a high percentage of profits has to be generated from real estate, and also, real estate assets must constitute a certain proportion of total assets. When purchasing a share (stock) in a real estate corporation, in contrast, latitude is considerably larger, as there are virtually no legal restraints regarding the company's investments. Figure 1.4 schematically illustrates the growing latitude of financing institutions:

With different financing vehicles there are different capital costs. Credits can be obtained at the lowest cost; venture capital is the most expensive capital as illustrated by Fig. 1.5.

Figure 1.5 relates capital costs to latitude. Capital costs arise independently from the volatility of the financed asset and if latitude is large, so are capital costs. If the principal allows the agent a wide latitude, under the assumptions of bounded rationality and moral hazard there is a high level of insecurity for the principal.

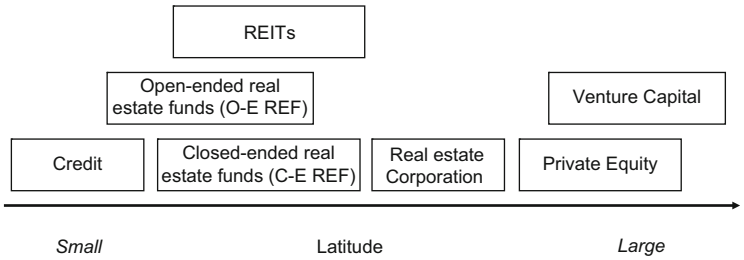

Fig. 1.4 Latitude of different forms of financing

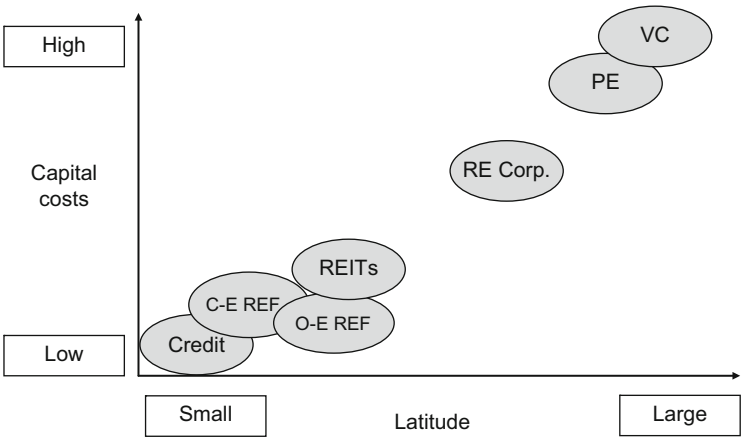

Fig. 1.5 Latitude and capital costs

It is this insecurity resulting from the latitude granted, which is principally independent from the risk measured as the volatility of assets, that leads to higher claims for return on investment of the principal sui generis. The reduction of latitude by means of regulation within a financing vehicle implies a reduction of the principal's insecurity, which he responds to with lower capital costs. Hence, the new postulate on financing is: reduce the latitude of a financing vehicle as much as possible in order to minimise capital costs or put differently the latitude offered by the vehicle shall be fully used by the agent, as it is paid for in any case and separate those business activities that each require a different latitude and keep adjusting latitude to the current necessity over time. Latitude thus explains why equity is more expensive than debt, irrespective of the type of assets financed.

1.4 Applying the New Postulate on Financing: Developing Best Practices for REITs

The postulate on optimal latitude offers a wide variety of applications, particularly in the area of real estate investment products and identifies REITs as a practical vehicle for disinvestment of private equity companies. For example, Fig. 1.6 illustrates, based on the example of a shopping mall, how real estate is optimally financed at the different life cycle stages.

This instrument can also be applied to interpret the increase of investments by private equity funds in housing as witnessed in Germany (Fig. 1.7). In this example, real estate is held by non-real estate companies and by public enterprises. The associated latitude is fundamentally too high for holding a real estate portfolio and is sold to private equity firms who with very high latitude and corresponding capital costs restructure portfolios and disinvest, using a variety of investment vehicles with lower latitude, such as open-ended or closed-ended real estate investment funds and REITs.

The examples in Figs. 1.6 and 1.7 illustrate how from a financial theory perspective, it is possible to make analytical statements regarding the fundamental characteristics of REITs and provide recommendations for the optimal design of REITs. Although REIT regimes in different countries may not be identical, tax transparency and the limitation to real estate activities are common features. However, regarding what exactly are real estate activities, which activities are permitted and which are not, and whether certain activities are only permitted within a limited scope, differences in REIT regimes become apparent. Whether stock-exchange listing is obligatory for REITs or not appears as a further essential characteristic of REITs, as well as the question of internal or external management.

1.4.1 Tax Transparency of REITs

Tax transparency is a fundamental characteristic of REITs, however it is useful to review the economic reasons for the legitimacy of tax transparency and, conversely, the reasons for tax transparency allow conclusions to be drawn regarding the design of REITs. The economic legitimacy of tax transparency of REITs results from the character of debt associated with the reduced latitude of REITs. After all, so far debt – viewed from an international perspective – is usually tax transparent. While the return on equity, company earnings, is usually taxed on a corporate level, interests paid on credits can for the most part be deducted from earnings and paid out in a tax transparent manner to the creditors, who ultimately pay taxes on these at their individual tax rates. Therefore, also for tax reasons, REITs should be limited in their business activities to such an extent that their latitude is considerably reduced, as with debt. Unlimited latitude of REITs would lead to distortion of competition between property developers and real estate service providers and REITs.

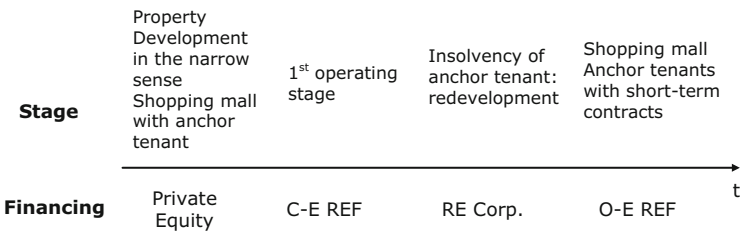

Fig. 1.6 Latitude and capital costs, shopping mall example

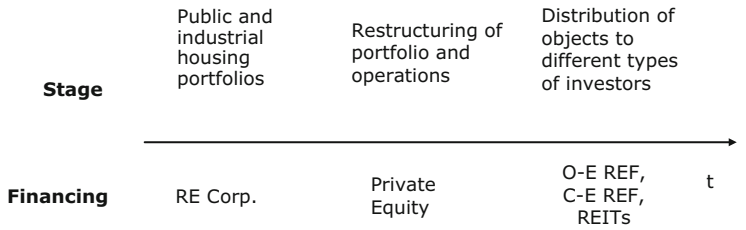

Fig. 1.7 Restructuring of housing portfolios and latitude of financing

1.4.2 Free Float Requirements

When REITs were introduced in the United States in 1961, the product was conceived for retail investors. In order to limit the influence of individual investors, the so-called 5/50 rule laid down that no more than 50 % of capital may be held by no fewer than five investors. However, following recognition that REITs are primarily a product for institutional investors and not for retail investors, this rule was de facto abolished for institutional investors with the Omnibus Reconciliation Act of 1993. Both in the UK and in Germany, a 10 % limit on individual shareholder stakes in REITs has been fixed for tax reasons. The background to this regulation lies in double taxation agreements and EU directives such as the Parents-Subsidiary Directive, the consequence of which is that income from dividends in holdings of over 10 % can be taxed only minimally, if at all, in the country of situs of a real estate.

A free float requirement needs to be rejected as a major part of the investor market would be practically excluded from the market and public housing companies would no longer be able to privatise substantial parts of there shares transforming themselves into REITs first. For going public a liquid market is needed and liquidity can not be imposed by law. In Germany, the legislator has deliberately allowed for the possibility of owning more than 10 % of the capital through subsidiary vehicles, keeping at the same time an obligation for a minimum free flow.

In the future, tax transparency of REITs may become even more important, as a number of industrial countries, such as the United States and Germany, are

increasingly limiting tax transparency of corporate debt. In a tax framework in which debt is tax transparent, but equity is not, international groups in particular are motivated by means of arranging the proportions of debt and equity in foreign subsidiaries in order to minimise corporate income in countries with higher corporate taxes. Thus legislators (e.g. Germany) are wishing to put taxation on a basis that chooses earnings before interests and taxes. In economies with a high degree of tertiarisation, real estate forms the predominant part of the capital stock, for example in Germany, this share is about 88 %. If REITs become the only remaining tax transparent form of financing for real estate the market of REITs may become one of unimagined growth opportunities.

1.4.3 The Rationale of REITs

REITs serve as an asset custodian for real estate whereas non-real estate companies, usually corporations, have a higher latitude than is required for holding a real estate portfolio and the capital costs of the companies are higher than the performance of the real estate they hold. If these companies dispose of their real estate, bound capital is released and can be employed for actual business purposes. Hence, by selling real estate, non-real estate companies can add value. To the extent that REITs generate their performance from real estate trading or development activities, their capital costs can increase and become too high for financing the property assets. A discount between the market capitalisation of the REIT and the net asset value (NAV) of the portfolio can be the result.

REITs as real estate investment products are supposed to reproduce the performance of real estate. Only then are they at all attractive for institutional investors (such as insurance companies), as an alternative to direct real estate investments. Regarding the issue of diversification into real estate related activities (administration, building, brokering), investors can achieve this aim by adding suitable stocks to their portfolio. Direct diversification by the REIT's management constitutes an unnecessary lack of separation of activities that should be financed differently and reduces the possibility of representing the performance of the real estate portfolio hold in the financing vehicle.

As to whether REITs are a separate asset class in terms of performance and therefore offer a suitable means for portfolio diversification has been debated in the literature. Rehkugler et al. (2008) show that, although the performance of REITs correlates more with that of stock markets in the short term, over a 5-year perspective, REITs reflect more the performance of real estate. Over a long-term perspective, REITs are a substitute for direct real estate investment. If REITs are interpreted as an asset class of its own, institutional investors would almost certainly continue to hold real estate in direct or other indirect form in addition to REITs.

Some asset managers consider that, by carrying out real estate trading activities and using real estate cycles, they can increase performance above that of the

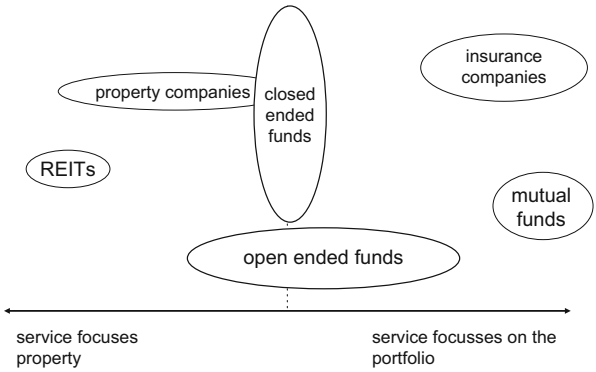

Fig. 1.8 Property investment vehicles and provided service

underlying assets, contradictory to capital market theory. Ling (2005) has shown that expert forecasts regarding the development of real estate markets are systematically no better than random forecasts – a finding that confirms the random-walk hypothesis of efficient capital markets from the neoclassical theory of finance. Thus, REITs should limit themselves to one real estate segment and make this their core competency. Investors are then able to indirectly invest in real estate by means of REITs, use REITs as a means to diversify their portfolios and incorporate considerations of business cycles, as necessary.

The business activities of REITs should therefore be limited to holding and actively managing real estate. Property development activities of a REIT are appropriate and necessary if by this means existing or new property can be optimised for the users. Systematic trading of real estate and trading development, on the other hand, are not suitable activities for REITs, because in this way capital costs are unnecessarily increased and real estate performance is diluted.

Any investment vehicle can be also differentiated according to the service offered to the investor. Some vehicles concentrate on the service on the property itself and some focus on the service on the portfolio. Figure 1.8 shows the spectrum between investment vehicles and offered service.

In mature capital markets investment vehicles focus on either the property service or on the portfolio service. While in Germany open ended funds offer a mixture of both services the market in the US has a clear separation between the property focus of the REITs and the portfolio focus of mutual funds. Table 1.1 shows, that REITs in a mature market are also focused within the property service by concentrating on a usage. Only some 8 % of the US-REITs are diversified. REITs therefore are not bound to work on portfolio selection, but are a suitable vehicle for mutual funds and other institutional investors for their portfolio selection.

Table 1.1 also suggests that REITs are very strong in those property markets, which need the provision of extensive service to the tenant and to the user. This is especially the case in lodging, shopping, and residential.

Table 1.1 Focussed equity- REITs in the mature US-market

No. of REITs	Sector	Equity market cap ($M)	% of total constituents	% of total equity market cap
Industrial/office	30	103.761	20.8 %	16.2 %
Retail	34	165.157	23.6 %	25.8 %
Residential	19	88.415	13.2 %	13.8 %
Diversified	22	53.374	15.3 %	8.3 %
Lodging/resorts	17	37.237	11.8 %	5.8 %
Self storage	4	37.211	2.8 %	5.8 %
Health care	12	87.286	8.3 %	13.6 %
Timber	4	34.090	2.8 %	5.3 %
Infrastructure	2	33.330	1.4 %	5.2 %
Total	144	639.861		

Source: NAREIT, April, 30th 2013

1.4.4 Listing of REITs

Increasing the fungibility of shares by creating a liquid secondary market with a sufficient free flow is an important aim in the implementation of REITs. The US experience has shown that refinancing of REIT markets takes place via the private or the capital market, depending also on the particular cyclical situation of the capital market and the development of REIT markets. Apart from the USA, both the second largest REIT market, Australia, and the fast-growing young market, Japan, have granted freedom of choice regarding stock-market listing for which there are several advantages as briefly listed.

1. Institutional investors such as insurance companies would, at least in a transfer phase, like to be able to hold their investments in non-listed REITs, so that the volatility that is to be expected in the beginning does not directly have an effect on their books.
2. For reasons of capital market discipline, possible delisting is indispensable, as a last and the toughest means of disciplinary action for firms that do not fulfil investors' expectations. A fiscal penalty in the form of the abolition of tax transparency when executing disciplinary action by the capital market would be contra-productive.
3. For a step-by-step transformation of parts of the portfolios of public open-ended real estate funds into REITs, the existence of private REITs would also be of great importance. In a first step, parts of the portfolios could be transformed into non-listed REITs, subsequently a listing with little free flow and price management could be realised in order to reach a large free flow with capital market discipline and reasonable volatility in a mature and liquid market.
4. If the legislator is interested in supervising REITs through an exchange supervisory authority, this could also be required for non-listed REITs.

Table 1.2 Financial classification

	Equity	Mezzanine capital	Debt
Private	Private equity funds	Closed-ended funds, private REITs	Commercial credit
Public	Listed stocks	Listed REITs	MBS, ABS, CDOs, covered bonds, "Pfandbrief"

Neither the obligation nor the prohibition of a stock exchange listing of REITs, on the other hand, seems a suitable measure to reach this aim. From a financial theory perspective, REITs may be considered as mezzanine financing and the classification often found in literature into private and public capital and equity and debt can be extended as outlined in Table 1.2. However, in Europe, listing is obligatory for the young REITs (France, UK, Germany). The reasons for this rule and the developments associated with it are the subject of the country-related Chap. 10.

1.4.5 Management of REITs

In the USA, REITs initially were trusts endowed with an external management. Seemingly the later introduction of an option for an internal management was a factor in the success of US REITs. Indeed, internal management of REITs, often in combination with management shareholdings in the REIT's assets, provides a means to minimise potential conflicts of interest ex ante. With increasing latitude, management is more likely to be internal and from the alternative perspective with reduced latitude, management is more likely to be external. In Demsetz' terminology, financing with equity character have more co-management rights implying internal management. A comparison of the construction of US REITs and Australian REITs on the one hand with Japanese REITs on the other highlights this difference with Japanese REITs, which have the most limited latitude, exclusively having external management.

1.5 Summary and Outlook

The developed new postulate on financing relating to latitude facilitates discrimination between different real estate investment products such as open-ended and closed-ended real estate funds, real estate companies and REITs. Furthermore it lays the foundation for the development of best practice for the design of REITs. According to this postulate, REITs should make theme-oriented investments in real estate assets and avoid commercial supplementary services and increased real estate trading. The obligation for stock exchange listing and the observation of free flow

requirements can be rejected on the basis of financial theory. Tax transparency of REITs can be justified on a financial theory basis, beyond reasons of competition neutrality.

Within Europe, different RIET models have been introduced. France first made no provisions for systematic taxation of foreign investors while the UK and Germany designed their respective REIT regimes to provide for the taxation of foreign investors. While Germany and the UK were still discussing their REIT legislation, the European Court of Justice ruled on September 14, 2006 in the so-called Stauffer case that the location of an entity within the EU cannot be decisive for the question of taxation. If this underlying principle is transferred to European REITs, there is the potential for a EU REIT to invest in other EU states that have REIT structures, without becoming subject to taxation in the country they invest. This would promote competition between European REITs in which case the factors of success for REITs founded on financial theory and discussed in this chapter will be of particular relevance. The development of REITs in Europe should remain an exciting subject.

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