Summary

The issue of the value of things has preoccupied people for ages. Also, they are not only merchants or philosophers, marketers or investment analysts who wonder what price a potential buyer is prepared to pay. Value is a subjective concept and is difficult to determine.

The question of how objects should be valued is also encountered in the depreciation issue; how to value downwardly an object that wears by its use, and how to account for the adjustment in value, i.e. to depreciate it? Obviously, a gradual reduction in the value of an asset must be reflected in the balance sheet. If not, an overoptimistic picture is presented and investors, creditors, and insurers will be wrong-footed.

Would it not be preferable to capitalise assets for their fair value, i.e. the price that would be paid for them in a free market? In that way it would be simple to reconcile the accounts to objective market data. Anyone who has an eye for an object – which, in this doctoral thesis specifically is property/real estate – that is or has been used, will take account of that fact. He will realise that what he would buy is not a new, modern asset but an object that has already benefitted someone else. Revaluing it down to 'market value' (or 'fair value') could ignore the fact that the object has a greater value to a buyer than the price which has been paid. The reason why someone buys the object is that he wants to achieve a certain return. In many instances, the price in the market need not reflect the value or the benefit of the object to a specific company or individual.

Wear of property

The issue of the real purport of devaluing things emphatically emerges when dealing with assets which: 1) have a long useful life within a company, 2) are not completely worn at the end of that useful life, and 3) can have a substantial value in the exchange of goods with third parties to whom the asset may be useful.

When discussing the issue of depreciation, one conveniently tends to think of a specific machine that initially is heavily utilized as a result of the demand for the output it produces. Because of this use, it wears fast and is soon 'finished' and almost valueless. Following this line of thought, initially there is a large demand and a large output resulting in large revenue, and later on a diminishing demand with decreasing output and declining revenue. In such a course of events it is prudent to write down the purchase price of the machine within a short period of time because of the large physical wear (technical wear) and the rapidly decreasing demand and revenue (obsolescence). Both the value to the company and the 'market value' of such a machine will fall fast.

While this example may or may not be typical for machines, the reality for property is quite different. Property does not usually wear so fast physically (technically) and economically, if only because the land (often) has an endless useful life. At first sight the building itself also has a long service life.

However, a more subtle approach can and should be taken: for the foundations and the frame of the building it is obvious to assume a longer physical life than for electrical and mechanical installations (for instance the air-conditioning) or the partitioning walls. Yet, an even more subtle view is appropriate: depending upon the degree of maintenance, which would, for instance, result in an extension of the useful life, as well as the property's specific use – an elegant office mansion reconverted into a workshop or clinic – wear and tear varies and the useful life may thus be different from company to company.

Here, again, we encounter a subjective element in the valuation, as a property almost never provides its services in its entire life to one user only. A building can have all kinds of uses, e.g. a residence or workshop, a hospital or a factory, an office or a warehouse, a church or a carpet discount shop. Many objects have indeed had such functions during their existence. In its long life cycle (construction, purchase, ownership, selling,
demolition, restoration, etc.) an object may have provided very diverse services to its successive and very diverse users. Moreover, these different users may also have varying appreciations of its value that may strongly differ from the price third parties in the property market are prepared to pay. These third parties, in their turn, may be motivated by countless implicit or explicit, weighable or unweighable factors that influence the value. Examples of such factors are: the type of property (office, shop, residence, industrial property), the flexibility of the property, the location it is in, the business cycle, and the state of the property market at a certain moment in time in a certain place.

An important distinction in this study is the difference between property a company uses for itself (such as a plant), and property that is leased to third parties. The former use is called 'own use property' and the latter 'investment property'. For investment property it may be more readily assumed that the subjective value judgement of a company will (have to) match the prices in the market for similar property. All this culminates in the dilemma: in depreciating property should we take into account the subjective value judgement of a company, the probable changes in the value in the property market, some reduction in efficiency, or a combination of these elements?

The basic principle: fair and consistent business practice

Since 1893, when the concept of depreciation was introduced in the fiscal legislation in the Netherlands, the principle has been the freedom of the fairly operating merchant to determine the depreciation costs according to his own, subjective views. The evolution of the depreciation concept was linked to the concept of 'fair and consistent business practice' (in English sometimes referred to as 'sound business practice') and its substantiation was primarily left to the court of justice. Parliament, though, was wary of large, unrestricted amounts of depreciation and their consequences for tax revenue. Thus, a number of delineations or parameters for depreciation according to fair and consistent business practice have been clearly established.

In the fiscal determination of profit the traditional concept 'sound business practice' is an autonomous concept and refers to the method by which a merchant would want to establish his profits. Insights from 'business economics' can contribute important elements to the interpretation of the law. This discipline has important building blocks to offer for the fiscal concept of fair and consistent business practice, as well as measures for testing the subjective views of the company. Common practice in business and non-fiscal prescriptions need not provide criteria for what in fact constitutes 'fair and consistent'.

Fair and consistent business practice is a dynamic concept that evolves continuously. Views and opinions which the Supreme Court of justice of the Netherlands (Hoge Raad), initially rejected, may become acceptable as a consequence of changed circumstances and insights. Adjusted opinions, or the influence of sophisticated techniques may cause the courts to reconsider earlier decisions. When dealing with depreciation and the downward adjustments of value it thus would be wise to take cognizance of the views in the past.

In the past few decades the measurement of the performance of property has experienced substantial developments, but the renewed insights have not yet been incorporated in the area of taxes. In their essence these developments entail that increasingly data become, or rather should become, available for analysis and for making comparisons with other investment categories. The emergence of the discounted cash flow method, in particular, is important as a tool for the analysis of property.

The basic principle of fair and consistent business practice is that profits and expenses must be *apportioned* as accurately as possible to the years to which they refer. After the profits have been determined, the costs must be allocated to these profits.
This is fundamental. Next, the tenet is that a merchant may be *prudent*. Also, for purposes of *simplicity* and practicability, exceptions to the basic principle should be allowed. In weighing the principles of fair and consistent business practice in their relative priority, the Supreme Court of justice gives precedence to the principles of correctly and consistently allocating profits (realisation principle) and expenses (matching principle) to a financial year on the basis of their causal relationship. The technical or economic burden with regard to a particular year must also be allocated to that year. In exceptional situations this principle yields precedence to the principle of prudence.

Under the principle of simplicity the company has a certain leeway to establish the amounts of depreciation. The difference, however, should not become so large as to require an adjustment of the fairness and consistency principle. The depreciation expenses must be established in good faith and with a practicable accuracy. Depreciation should not serve to augment the reserves for periods of adversity, but should compensate for the probable impairment.

**Definition of the problem area**

This study focuses on the 'regular' depreciation of property according to fair and consistent business practice. The valuation of stocks of property, and the writing down of moveable goods and commercial rights or entitlements will not, or will only marginally be dealt with. Depreciating private investment property according to the previous income tax regimen, will repeatedly be touched upon, though not in any detail. Nor was an empirical study made to technical or economic wear and tear patterns of buildings. This dissertation seeks to answer the following question:

**What should be reflected in the depreciation of property in the fiscal sense?**

In order to answer this question an exploration of the boundaries of depreciation has been made. Relevant decisions, rulings, critical notes, views and ideas that have been published and recorded in case law and in domestic and foreign literature have been gathered, inventoried and analysed. In doing so, it soon became evident that the term *depreciation* was not unambiguously defined. Neither in the Netherlands, nor in countries with a comparable legal system, has this subject been approached and elaborated from one perspective only.

The basis of this study is provided by fiscal legislation, but where deemed useful and permitted links were made with views and understandings from, amongst other things, civil law (the *Burgerlijk Wetboek* of the Netherlands), property theory (with regard to investing, constructing, and managing), accountancy (International Accounting Standards, Directives on Financial Accounting), economics, capital investment analysis (discounted cash flow and internal rate of return), and valuation theory (value concepts). These individual perspectives interface and overlap. They can be distinguished from each other, but not always separated; practitioners of these disciplines use each other's (progressive) insight.

**The research**

At the core of this study is a discussion of the traditional depreciation formula: ('cost' - residual value)/useful life. Each chapter in the study has been set up chronologically as far as possible, following the development of fiscal case law and the Dutch (fiscal and non-fiscal) literature in order to demonstrate the evolution of ideas and theories. Thus, the first chapter provides an overview of the history of the law with regard to depreciation. The starting point is the year 1893 when the Company Tax Act (*Wet op de Bedrijfsbelasting*) came into effect. The development of the concept of depreciation has been linked to the notion of 'sound business practice' and its substantiation and elaboration has been largely left to the courts.
Chapter 2 discusses the argument for depreciating property. The picture emerges of a lengthy and dogged struggle of the tax judges with the issue in order to arrive at a useful and unambiguous meaning of the concept of depreciation. Should we link up with the 'use' a company makes of a property, or the 'consumption of usable service units', or the 'development of its value', or even something different? What are the outlines of the depreciation concept should be is sketched at the end Chapter 2. The way in which the fiscal concept of depreciation of property has been defined in surrounding countries is also dealt with in this Chapter.

Chapter 3 is about the object of depreciation, and the question dealt with is if and how a property can unambiguously be split into individual assets or parts with depreciation potential of their own. This would offer the opportunity to depreciate separately and at varying rates parts of a building which decline in value (a shop front loses its value faster than the foundations) without having to offset the depreciation by an increase in value of other parts (for instance the land). The latter parts could then be valued for as much as, but not more than the 'all-inclusive' purchase price or production costs.

Chapter 4 discusses the starting point of fiscal depreciation, i.e. the inclusive purchase price or production cost. Some specific issues with regard to the moment of purchase are also dealt with. The 'fiscal cost' puts a ceiling to the depreciation as the object cannot be depreciated for more than this cost (of which several versions exist), apart from later write-ups for alterations, improvements, etc. Production costs are incurred when an object is built by the company itself. To this, special rules apply which will be treated separately, such as when depreciation can start and what consequences purchase prices that are set 'too high' or 'too low' may have for the depreciation immediately after the purchase. A separate paragraph discusses the issue of revaluing or devaluing which occur when buildings are demolished.

Another variable in the depreciation formula, the residual value, is the subject of Chapter 5. This variable constitutes the floor of the depreciation potential. A key question is in which terms the concept of 'residual value' should be defined, and at which moment in time the residual value should be appraised: at its purchasing date, somewhere during the holding period, or at the end of the probable useful life. With regard to determining profits the Supreme Court has decided that the focus should be at the end of the useful life. However, it has subsequently allowed for exemptions. In essence, these exemptions state that in specific cases it is permitted to ignore any increase in value of the land. Next, it is explained why, when, and how residual values can be computed, and what part rises in price ('inflation') play.

Which useful life (technical, economic, or other) should be used in the depreciation formula is the question Chapter 6 will try to answer. Fiscal practice has its lists and rules of thumb. However, it will be demonstrated that in many cases these cannot be accurate for fiscal purposes as the useful life of the property within the company is at issue, and not some 'general' service life. The appraisal process, as well as the question whether the personal circumstances of the owner or the specific circumstances of the company could have any bearing upon the useful life, will be discussed separately.

After having treated the depreciation potential in Chapters 3, 4, and 5 and the number of years over which depreciation should be spread in Chapter 6, the study explains the allocation issue in Chapter 7, i.e. the question of which portion of the depreciation potential is related to which year. This appears to be extremely tough subject matter on which many scholars have racked their brains. This issue is closely related to the question what really is the purpose of depreciation? Many different reasons for depreciation have been presented and translated into as many depreciation methods each deemed to be superior. For property the straight line method of depreciation is considered the starting point for fiscal purposes. Initially, the declining balance method of depreciation (high amounts at first which decrease in time) was controversial in case law. The Supreme Court, however, has gradually increased the range of its applicability.
In addition, the application of a progressive allocation system (initially low amounts which increase in time) is appearing to become more acceptable.

Chapter 8 explains the interfaces between depreciation and related subjects: maintenance (8A), valuating downward to lower going concern value for tax purposes (8B), and additional write-downs for calamities (8C). In case law and the literature the relationship between (countering wear and tear through) maintenance and depreciation has already been established at an earlier stage. Thus, the useful life and the residual value of a property and, as a consequence, the depreciation allowance can be changed by carrying out, or by not carrying out, maintenance or (major) repair works.

The paragraphs on the going concern value for tax purposes specifically deal with the question whether occasional, permanent reductions in value are (or can be) linked to depreciation. According to the Supreme Court the going concern value for tax purposes is: 'the value that a purchaser, upon acquiring the entire business, would assign to a separate asset if the purchaser were to base such valuation on the acquisition of the entire business and intended to continue the business'. From this pronouncement the conclusion is drawn that the current fiscal concept of the going concern value cannot be used, or only in a very limited sense, and thus an alternative value concept is presented within the total concept of depreciation.

In abnormal events which cause damage to the object of depreciation the depreciation can be increased according to a certain formula. This issue is discussed in the final paragraph of Chapter 8. Chapter 9 provides an overview of the main findings of the research. These findings are summarised in the next paragraphs.

**Research findings and conclusions**

This doctoral thesis focuses on the question: What should be reflected in depreciating property in a fiscal sense? To formulate it differently: according to fair and consistent business practice, what amount should be allocated to a certain financial year as depreciation of a property item? To answer this question, a perspective can be taken between two extremes: either that amount should express the loss of efficiency that an asset suffers within the course of a year, or that amount should express the nominal loss of capital that is incurred on an asset during the course of a year.

The author draws the conclusion that depreciating property reflects the nominal loss of capital incurred during the useful life of an object which should be allocated to the individual years. The company should apportion the difference between the inclusive purchase price or production cost and the future value at selling price at the end of the useful life over the period of time the object is used within the company. This difference is the loss of capital that for whatever reason was incurred during the object's use within the company. Reduced efficiency of (a part of) a property will, in itself, not give rise to depreciation. It is but one element that influences the amount of depreciation. Only if a loss of capital was incurred can reduced efficiency – however defined and computed – have an impact on an amount of depreciation.

The history of the law teaches little of substance on the reasons for depreciation. Occasionally, reference is made to decreasing value, but it is not clear what exactly is meant by this concept. It is emphasised, though, that depreciation should not be based upon the replacement value, or to make a reserve for renewal, and even early case law confirms this position. The depreciation of objects must be based upon 'fair and consistent business practice', that is according to the measures which a fair, prudent, and accurate merchant would apply. Next, it has been left to the courts to substantiate this notion. Often, reference is made to the concept of 'sound business practice' as it is used in (business) economics, and as it governs computing the commercial profit of a company. Adjusting the amounts of depreciation by using index numbers is rejected.

In the professional literature in the Netherlands, depreciation is taken to mean the apportioning of fiscal expenses (the depreciation potential) to the useful life, i.e. as the issue of how the capital loss must be allocated. Occasionally the theoretical framework of
'stock of service units' or 'a store of services' that are gradually consumed is taken as the foundation, but in case law this is not acknowledged in so many words.

In case law of the first half of the last century the capital maintenance concept or the fundraising concept are preponderant. The idea behind these concepts is that by depreciation money is separated and reserved with which in due course a replacement object can be bought. However, funds can only be raised or reserved up to the initial capital invested. Also, these statements allude to the use of a property within the company and to the wear and tear caused by this use. This is based upon the idea that physical wear of an object by its use must be reflected in the depreciation. Factors outside the company seem initially excluded as relevant depreciation variables, but at a later stage they can result in economic deprecations. The question: How exactly to calculate or to measure depreciation according to 'fair and consistent business practice' in any one year – a question that relates to the reasons for depreciation – is not clearly answered in case law. It sidesteps the issue and carries on by determining and adjusting the remaining useful life and residual value and, as a consequence, the emphasis is rather on the systematic apportioning of the capital invested to the remaining useful life. In the second half of the last century the depreciation concept is gradually extended into a method by which the loss of capital can be apportioned according to the development of the useful performance of an asset. The Supreme Court defines the useful performance as the net return on the asset, that is the yield of the asset from which all expenditure is deducted, including that for maintenance. The cost of capital for the funding is dissociated from the issue, and must therefore not be taken into account.

Depreciation potential
From these developments the conclusion is drawn that the Supreme Court wants to measure the depreciation potential in monetary terms (inclusive purchase price or production cost less the future residual value) – or, formulated differently, the loss of capital invested – using the trend of the cash flows as an allocation basis.

The depreciation potential provides the bandwidth within which the amount of depreciation is decided upon. The inclusive purchase price or production cost serves as the ceiling to the depreciation potential: it is impossible to depreciate more than these amounts. The future residual value constitutes a floor to the depreciation potential. Within this potential another bandwidth exists within which the book value of a property should follow its course. If the indirect or direct recoverable value persistently exceeds the book value of a property, an adjustment of the depreciation allowance, or even its temporary or permanent suspension, would be required according to the author. If the company were to continue to depreciate as usual in such a situation, a larger fiscal loss would be recognised than is realised in reality, and that is, in the opinion of the author, in conflict with the realism in 'fair and consistent practice'. The book value of a property must also not be lower than the going concern value for tax purposes (or, in special cases than the market value).

Dynamic concept
Depreciating exclusively according to the development of the recoverable value of a property is prevented by case law. Temporary fluctuation of the recoverable value does not influence the amount of depreciation as the development of the recoverable value need not reflect the value the property has for the company. A rationally acting company will retain an object for as long as the present value of the income (including the residual value) exceeds the recoverable value. In other words, the value the company derives from exploiting the property within the company (indirect recoverable value) exceeds the selling price (direct recoverable value). In this case it would not be in agreement with 'fair and consistent business practice' to recognise a loss related to the lower recoverable value. For marketable investment property the development of the selling price may
indeed be a proper reflection of the development of the value of its use within the company.

From the analysis it becomes evident that, in fact, a dynamic depreciation and valuation concept has gradually emerged in fiscal case law in which the company can account for various negative factors which influence its property. Thus, cross-connections develop between the concept of the going concern value, the fiscal accounting for maintenance, and extra depreciation as a result of catastrophes.

Depreciation and devaluing to a lower going concern value are in line with each other. Firstly, an object is depreciated, then the fiscal going concern value is tested. If the book value of a property no longer correctly reflects the real state of affairs, and the difference is substantial a single (non-recurring) correction can be made to write the object down to a lower fiscal going concern value. Depreciation is impossible for as long as the going concern value, which is to be adjusted annually, is lower than the inclusive purchase price or production cost less the systematic depreciations. Each year the property is valued at its fiscal going concern value, which in the case of an increasing value implies realising a profit. When, as a result of the upward adjustment of the value, the depreciation curve is again met, the depreciation process continues.

The appraisal method for the fiscal going concern value, as it emerges from case law, cannot or can rarely be used. The classic 'series of steps', consisting of firstly determining the purchase value of the entire company, and then allocating this value including goodwill to each individual asset, is the cause of this impracticability.

An exception has been made for the property of property investment companies. This move is in the authors opinion to be appreciated but, in the current concept of the going concern value for fiscal purposes, it is questionable from a theoretical point of view. It is permitted to revalue a property item downward to its market value plus the transfer costs. Valuing downward to its lower market value an asset which independently produces profits, is not immediately possible within the present concept of the fiscal going concern value. In accounting law a gradual shift is taking place from depreciating property investments on the basis of historical costs towards valuing them directly. For investments in property the system of 'the inclusive purchase price or production cost, or the lower market value' would be acceptable.

Within the concept of depreciating on the basis of 'fair and consistent business practice' it can be justified to permit a single, non-recurring depreciation (in the sense of a correction for earlier under-depreciation) in those cases in which, some time after the investment was made, it appears the value in use of a property differs from the forecast book value calculated on the basis of the 'regular' depreciation scenario outlined above.

Depreciating on the basis of a comparison of present values of future cash flows (including the residual value) at a year's end and beginning is not permitted for tax purposes. Ideally, this procedure would result in a correct reflection of the state of affairs with regard to the property. Here, however, the classic problem is the allocation of cash flows to (groups of) assets.

**Maintenance and depreciation**

A relationship also can be identified between maintenance and depreciation. A depreciation allowance can be split into an amount for technical wear and for economic obsolescence. 'Technical wear and tear' can be mitigated and delayed by maintenance. By proper maintenance the useful life of an object can be lengthened and the residual value be sustained. In establishing the amount of depreciation the company should take into account whether or not it intends to carry out any maintenance (or major repairs). The amount of maintenance to be allocated to any financial year can be established in several ways. Repair and maintenance work can be charged to the year in which it is done. The same applies to any additions to the – fiscally permitted – 'expenses equalization reserve' or 'maintenance provision', and for technical depreciation.
Double entries or mutations must be prevented in order to avoid a deductible item for the same object being entered twice.

**Depreciation schedule**

When a company starts using a property, it will prepare a depreciation schedule (implicitly or explicitly), determining the all-inclusive purchase price or production cost, the residual value, useful life, and the depreciation method. Numerous variables will be taken into account, such as maintenance planning and economic factors. The company should make a proper scenario analysis for the specific development of the utilisation value of the property within the company. The amounts of depreciation must be established fairly and in good faith, and with realistic accuracy. Depreciation should not serve to augment reserves for periods of adversity, but should compensate for the probable impairment.

The total amount of depreciation is limited to the historical inclusive purchase price or production cost, calculated for the original value of the currency. These determine the ceiling of the amount of depreciation; further depreciating is impossible. This ceiling is incorporated in the Implementation Decree of the Income Tax Act of 1941 (*Besluit Inkomstenbelasting 1941*). From then on the function of the Section on depreciation is to restrict depreciation to 'fair and consistent business practice'.

Depreciation starts as soon as the object is taken into use. If an asset has been produced by the company itself, that company should capitalise the fixed part of the overhead and the interest during the construction period. In principle, it is permitted to revalue the object downward to the lower fiscal going concern value for the period between ordering the object and starting to use it. An inclusive purchase price that is 'too high' cannot result in a single depreciation or devaluation. Not (fully) utilising the object's potential, or using it for a short time only, can result in accelerated depreciation.

If buildings which suffer dilapidations from or worn down by their use in business activities, are demolished and replaced by functionally identical buildings of nearly the same size, the principle of 'fair and consistent business practice' does not compel the company to set off the remaining going concern value against the cost of the new asset. It is permitted to depreciate the remaining going concern value of the old buildings to zero. Substantiating case law must decide whether the remaining going concern value of the building, irrespective of its absolute or relative size, in such a case may be revalued downward by a single, non-recurring depreciation in the year of its demolition. If a building which is not (or is no longer) in use within the company is demolished in order to construct a new building, the former building has not served a useful purpose within the company. In principle it is permitted to devalue the construction costs of the new building to a lower fiscal going concern value, but only in exceptional cases.

**Residual value**

The residual value is the amount of money the property is worth at the end of its useful life within the company and is the selling price that probably can be negotiated at that time. In case law two exceptions to this rule have been formulated that should be taken in a narrow sense. These exceptions refer to an expansion of a property yielding new revenue and the separate use of land and buildings.

The residual value can be adjusted in the interim period in cases in which a substantial change in the residual value can justifiably be considered permanent. Temporary fluctuations in the residual value do not affect the amount of depreciation. If, at the beginning of a financial year, it is certain the residual value has increased, an adjustment may be called for. A high value at sale as established after the termination of the business operations, or as was more or less certain before that fact, does not, in itself, justify any correction of the depreciation.

For estimating the future residual value, various methods are currently in common use and are common knowledge for property professionals. In determining the future
residual value, growth factors must be taken into account. Of those, 'inflation' is a major component or calculation factor. Income tax legislation provides that changes in wages and prices must be left out of the annual determination of the profit. The relevant Section refers to carrying forward by one transaction any future expenses caused by wage or price increases. The future residual value incorporates future changes in prices or wages. These changes should not be brought forward through a single transaction, but they should be added each year to the depreciation burden by apportioning the depreciation potential to the remaining useful life. In this way, each year will be apportioned its share of the changes in wages and prices. Total profits are computed in nominal euro and governed by the 'guilder is guilder' principle or rather the 'euro is euro' principle. Profits are determined in these currencies and not expressed in terms of goods or 'a stock of service units' or 'a store of services'. The call for better accounting for inflation in the determination of profits has not resulted in any fundamental adjustments of the nominalism concept and the 'guilder is guilder' principle. At every moment in the property cycle the value of property is equal to the present value of its future benefits. At any valuation moment within the life cycle any future inflation and price increases must be taken into account. If the calculations are in real terms the same value results as in accounting for inflation because in the former case both numerators and denominators (discount rate) in the computation of the present value are adjusted for inflation.

**Useful life**

To establish the useful life, the company must start from the probable moment of the property's replacement or retirement within the company. Here, the point of view of the company or owner should be taken.

The importance of the useful life within the depreciation concept is usually overestimated, as in depreciation the apportionment of the property costs to the correct financial years has the paramount position. An estimated useful life does not, as yet, indicate much about the probable obsolescence and wear and tear patterns within the company. Establishing the useful life should be a dynamic process. If the probable useful life changes, an adjustment of the residual value for that change should be considered.

The probable useful life or the age of the income tax payer is not a factor in the estimation of the useful life if the present company will be continued by others. This latter point of view the author considers undesirable as the central issue is apportioning the property expenses to the years the income tax payer probably will use the property in his company. From case law, it should not be inferred that the useful life ends at the moment the asset is ultimately put out of use within one company.

The use of a fixed useful life should be discouraged as this ignores the dynamism in the depreciation concept. Everything that in reality will occur after the useful life was predetermined, would remain out of view. By referring to lists of useful lives any specific obsolescence or wear and tear of a property incurred by successive owners/users is readily neglected. The reduction in value of a property in the course of the years, is gradually suffered by the entire series of successive owners. Each owner bears a part of the decrease in value. The depreciation allowance expresses the probable reduction in value suffered by a specific owner during the whole period he owns the property.

When establishing the useful life of an asset, appraisable risks must be taken into account. Ultimately, the only expert who justifiably and reasonably is able to determine the useful life of an object for his own company is the income tax payer himself or the company itself. Decreasing market or rental values could be an indication that the end of the useful life will come earlier.

**Allocation methods**

The methods for apportioning or allocating the depreciation burden to successive financial years have been the subject of many discussions. Depreciation methods are but tools for calculating the annual amount of depreciation. Opting for a particular
method presupposes that 'one only knows what is measured', i.e. the method selected should fit the scope and reasons for depreciating objects.

Depreciation according to the straight line method or, particularly, the declining balance method is the most interesting for a company from a fiscal point of view, and relatively easy to apply. In fiscally depreciating property the straight line method is the first in line. This method takes into account that maintenance expenses increase over time. If an asset wears fast, taking a high percentage depreciation within the straight line method is preferable to depreciating following the declining balance method.

The opportunities for applying declining balance depreciation have gradually increased because the Supreme Court recognises the feature of declining useful performance. The declining balance depreciation becomes an option only in cases where there are, within reason, firm expectations that buildings will produce more benefits in the early years than in later years and that this pattern is typical for the company. A rather steeply declining utilisation value must be plausible or evident. General causes for declining usefulness, such as rapidly changing production methods, are insufficient to justify writing down the book value. If a company applies the declining balance method, accounting for a short useful life can cause double counting.

The useful performance to take into account according to the Supreme Court is the net return of the asset, that is the yield of the asset less all expenses, including those for maintenance. If these expenses increase in future while the gross yield remains constant, 'fair and consistent business practice' permits the application of the declining balance method, the basic principle being that the pattern of the net return must be viewed from the perspective of the company exploiting the asset. To investors in property (landlords or lessors) this net return is the pattern of the net rent or lease, independent of the technical wear and tear or the economic obsolescence caused by the asset's utilisation by the tenant or lessee. Investors who use a property for their own activities must make a link with the pattern of the net return that could have been obtained from the asset. If a company has decided that rented out property can be depreciated according to the declining balance method, this method can be chosen for comparable objects it uses for its own business operations.

A company can chart the fiscally relevant depreciation curve by estimating the incoming and outgoing cash flows (exclusive of any financing costs, but including the cash flow with regard to the residual value) of its investment in the property. These cash flows can be translated into a development pattern of the value by applying a weighted average cost of capital.

**Splitting property**

The question whether a property consisting of a building, and the land it stands on, can be split into several assets or parts, is interesting in two respects. If parts can be distinguished that have wear and tear profiles which differ clearly from the average wear and tear profile of the property, it can be profitable to apply depreciation rates for the respective parts in apportioning expenses to financial years.

In addition, the issue of splitting property is an important element in the discussion about the residual value. If a property can be split in several assets, then each of these assets has its own depreciation potential. A change in the residual value of one asset has no consequences for the depreciation potential of any other asset. This issue becomes most prominent if it is assumed that the land on which the building stands increases in value, and the value or usefulness of the building itself gradually decreases. The question then arises whether it is permitted to compensate for the decrease in the value or usefulness of the building by the increase of the value or usefulness of the land. In studying case law, the question should be kept in mind whether the residual value is an issue in the case at hand. In a discussion in which the issue of the residual value is absent, the dispute is restricted to the question of whether it is permitted to split a building into parts with different wear and tear profiles for the purpose of calculating the
amount (or the percentage) of depreciation. The residual value does play a major part in the dispute, whenever the sum of one or more residual values distinguishable within the property exceeds the sum of the one or more distinguishable book values. The question whether it is (still) possible to depreciate, must be separated from the question of the rate at which depreciation is (still) allowed. The first question is related to the residual value issue; the second one to calculating the depreciation allowance.

In case law the land plus the building are continuously considered one asset if together they are used as one property within the company. In principle, the surrounding grounds are also part of that one asset, unless these grounds have a different function. In principle, everything that, under civil law, is to be considered a constituent element thereof, is an integral part of the asset (as the principal object). Thus, an integral part of the single asset of the land and the building is everything that cannot be considered 'separate from the asset', or that is 'tailor-made' for it, or without which a building or the land which belongs to it could not function. Its successive uses, the accounting, and the functional and economic relationships within the company are irrelevant. If buildings are joined or if a building is extended, it is, in principle, one asset. If the building is not only used for the business activities of the company, but also is rented out in part to a third party, it can be considered to consist of several individual assets. 'Important, more or less independent parts', or 'non-independent parts' merge into the single asset of land plus building. They are not separate assets with their own depreciation potential.

Reasonably, a building cannot function and is incomplete if one of the following parts are missing: the land on which it stands and the surrounding grounds, construction works, electrical and mechanical installations, fixtures (to the extent that without them a building cannot function), and grounds (to the extent that without them a building cannot function).

In general, it is assumed that depreciation of land is not an urgent issue as it does not 'wear' or 'waste', its existence is infinite, or its value (at selling price) does not decrease because of alternative uses. Land, though, can be depreciated if it is to be expected that its (utilisation) value will continuously and gradually decrease by physical usage or because of external causes.

Simplifications

After a century of depreciation theory, case law and practice many questions remain unanswered. This doctoral thesis deals with many issues in the discussion on depreciation. Fiscal depreciation of property was, and still is, a difficult matter, even if, in the opinion of the author, it is treated rather airily in fiscal practice and in case law. Far too soon recourse is taken to vague notions with regard to the useful life ('a building will last for 25 years'), the depreciation potential ('write down up to the land'), and the apportioning/accrual issue ('the value of a building declines in a straight line').
The concept of loss of efficiency should be geared to property and company. The most important would be the explanation why, for fiscal purposes, this loss of efficiency should be taken into account in the cases in which the loss of capital is less. Also, the artificial splitting up of property into parts – according to which criteria and to which degree? – each with their separate depreciation potential, does not offer, in the authors opinion, any promise in the long run. The same questions that have been dealt with in this dissertation will recur time and again.

Directives on fiscal depreciation, as are issued in other countries, would not be a good idea. These would only create different problem areas. The gradually formulated dynamic depreciation concept – with all its unresolved question – will then be traded in for strict rules.

The future
The question arises whether fiscal depreciation in its present form can last for very long. The answer would be positive, though, with the necessary adjustments, such as to include regular tests of the book value against the direct and indirect realisable value. The future trend as it can be observed in accountancy will be a shift from depreciating on the basis of historical costs towards directly valuating investment property or property for use within the company itself. For investment property the valuation system of 'cost or (lower) market value' will be the obvious choice. For property to be used in the company itself the method and concepts of International Accounting Standard IAS 36 will be an effective starting point towards an independent valuation, whether or not this is in line with a depreciation method.

As has been shown, the question of what really is the value of a property to a company can be answered from different perspectives. For fiscal matters, in accountancy, investment analysis and the appraisal theory the answer will increasingly be based upon future-oriented visions of the cash flows that a property generates. The essence is the same, the stock of concepts, however, still varies. It is recommended that these concepts should be made more transparent, then to harmonize them and to define them unambiguously for use in the above disciplines. This would enormously benefit the theory and practice of valuing property.