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A Comparison of the IAS and the Accounting Standards in Europe and US for the Real Estate Industry

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Abstract

In June 2000 the European Commission issued an updated strategy on accounting harmonisation, which was approved in June 2002 by the European Parliament. The regulation 1606/2002 states that by 2005 all listed companies in the European Union, including banks and insurance companies should conform to the international accounting standards (IAS). As a consequence it is important to analyse national standards in Europe and ensure the convergence to international standards in the best possible manner for each country and industry.

There is little authoritative literature regarding the principles of accounting for the real estate industry in Europe. Real estate industry is a sector that raises special accounting issues, such as: the costing of inventories, the timing for classifying an inventory as finished goods, the timing for the recognition of cost of sales, the value and timing for recognition of revenues and the accounting of customer's guarantees.

The Financial Accounting Standard Board (FASB) and the American Institute of Certified Public Accountants (AICPA) publishes specific guidelines and pronouncements dedicated to real estate issues. However there is nothing similar in European Union countries, or in the IAS (which apply to all industries). As a consequence, this paper takes the point of view of an investor or a property developer, surveys the IAS that relate to real estate development major accounting issues, and simultaneously compares each of the issues with the present accounting standards in the USA, in three major players in Europe (France, UK and Germany) and Portugal, a small country that is rarely studied. This work aims to find out how satisfactory the IAS are for standardising the accounts of real estate developers and how far the various countries analysed are from the required new standards. Therefore, it is apparent that this research is useful for property developers, accountants, and accounting regulators.

We conclude that the implementation of the IAS allow for significant discretion in the Real Estate industry and consequently, in spite of some convergence across nations, it is unlikely to find uniformity of accounting across companies of this sector that engage in similar activities.

Key words: IAS - International Accounting Standards, Property Development, Real Estate Accounting

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1. Introduction

The adoption of International Financial Reporting Standards (IFRS) in the European Union is an opportunity for standardising accounting and financial reporting per country and industry. It is worth noting that real estate industry has specific characteristics that raises special accounting issues. The production process is very long and the classification of real estate as an asset may differ, depending on the purpose of the investor and the developer for producing such property:

- If property is to be explored by the developer, then it should be classified as property, plant and equipment;
- If property is developed for earning rentals or capital appreciation, then it should be classified as property investment;
- If it is built for sale, then it is an inventory.

As a consequence, depending on the accounting standards used, and their interpretation, costing of real estate may differ upon asset classification.

A diversity of practices can also be observed regarding the capitalization of costs of new properties but also improvements, replacements, additions and terms synonymous to these such as redevelopments, refurbishments, renovations, and rehabilitations. According to American Institute of Certified Public Accountants (AICPA) website this is "one of the most prevalent accounting problems in the real estate industry at this time" in the US.

Another characteristic of property development with accounting consequences for the recognition of sales and the cost of sales, is that property can not be replicated, with sales agreements negotiated and contracts designed for specific needs of each buyer and seller, which usually includes a guarantee or, eventually is enforced by country law.

Additionally it is now also common to include, in such contracts, a package of free services or under the market price, for a certain period of time after the sale date or lease.

Taking into account the nature of the industry, are of particular interest the standards in the US dedicated to the real estate industry:

- The statements of the Financial Accounting Standard Board (FASB)[1] and;
- The guidelines and pronouncements published by the American Institute of Certified Public Accountants (AICPA)[2].

As International Accounting Standards are designed to serve all industries and not specifically the real estate industry, the standards for this industry are spread over various IAS and it is also likely that some of them may not consider the particular characteristics of this industry.

In this paper we discuss two specific accounting issues of the Real Estate industry – the accounting for real estate costs and asset values, and the accounting for real estate revenues. We survey the IAS related to these two issues and discuss their adequacy in standardising the accounts. At the same time we analyse the standards in US, in three major countries in Europe (France, UK and Germany) and Portugal, a small European country that is rarely studied, to understand how far they are from the IAS requirements.

The real estate costing requires a cost capitalisation policy for inventories (real estate for sales) and fixed assets (either real estate for exploration or for rent purposes) including cost allocation policies, depreciation, and impairment. This is discussed in Section 2. The real estate revenues require specific criteria for recognition of a sale and consequent revenue, and specific accrual accounting policy, which is discussed in Section 3. Sections 2 and 3 ends with a summary including a table with the differences found in the various accounting standards analysed. Finally Section 4 presents the conclusions.

It is evident that many other real estate accounting issues could be discussed such as the sale of options, environmental accounting, income taxes, real estate ventures, securitisation of the property, etc., however the decision of selecting these two major issues is because they are most common to any real estate developer, and are sufficient to evidence the need for better standardisation across Europe and also within the IAS.

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[1] FAS no. 66 *Accounting for Sales of Real Estate* and FAS no. 67 *Accounting for Costs and Initial Rental Operations of Real Estate Projects*.

[2] The Statements of Positions (SOP) 75-2 and 78-2 *Accounting Practices of Real Estate Investments Trusts*; SOP 78-9 *Accounting for Investment in Real Estate Ventures*; SOP 92-1 *Accounting for Real Estate Syndication Income* and the *Guide for the Use of Real Estate Appraisal Information*.

2. Accounting for real estate costs and value

This section deals with the accounting policy of costs incurred on land and real estate development up-to-the-point of sale or up-to-the-point of normal operations for income producing properties. For a real estate company, this measurement relates to the following three items:

- Inventories – if the real estate is for sale;
- Land, property, and equipment – if the real estate is held for use in the operations of the owner;
- Investment property – if the real estate is to earn rentals, for capital appreciation or both.

Inventories

According to IAS 2 - *Inventories*, the cost of inventories should include:

- All costs of purchase of goods and other assets held for resale, raw materials, components, and supplies used in production. For a real estate developer it should include the acquisition of land, cost of site preparation, land improvement, development, and construction. Also considered as part of the purchase price are any duties or non-refundable taxes, transport and handling costs in bringing inventories to their present location and condition, and other costs attributable to the acquisition of the inventories. Any trade discount and rebates are deducted to determine the acquisition cost;
- The conversion costs of finished goods and work-in-progress. These costs include the direct costs such as direct labour, and a systematic allocation of variable and fixed production overheads based on the normal capacity of the production facilities. No guidance is given by the IAS for the definition of normal or abnormal production;
- Others costs incurred in bringing the inventories to their present location and condition. For a real estate developer it may be appropriate to include the pre-acquisition costs, professional fees of architects and engineers, etc.

According to IAS 23 - *Borrowing costs*, interest expenses may also be incorporated into the cost of inventories, during the construction phase and until the moment it is complete, because real estate projects require a substantial amount of time to bring to a saleable or operational condition. It is the author's opinion that the same capitalisation procedure may apply to property taxes and insurances related to the project, however it is not explicit in the IAS.

While capitalisation of borrowing costs is optional in IAS and in the UK, it is mandatory in the US. In the US, property taxes and insurance costs on real estate should be treated similarly to borrowing costs. According to Portuguese Accounting Standards (Plano Oficial de Contas) it is not permitted to capitalise interest into inventories. However, it is allowable to capitalise them during the construction phase of Fixed Assets. In France (Plan Comptable Général) the borrowing costs can be capitalised if the production cycle is longer than one year. In Germany interest expenses may be included in manufacturing costs during the production period.

The IAS 2 excludes the following items from the cost of inventories:

- Administrative overheads that do not contribute to bringing inventories to their present location and condition;
- Unallocated costs of production;
- Wasted material, labour costs and other production cost in excess of the normal;
- Storage costs and interest expenses after completion;
- Cost of distribution to customers and selling expenses.

However, in US, some of the selling costs of real estate should be accounted for in the same manner as the construction costs (e.g. cost of model units, related furnishings, sales facilities, legal fees for preparing prospectus, semi-permanent signs). Moreover, certain prepaid expenses such as sales commissions on specific future income should be charged to operations in the period where revenue occurs. In the US, only costs incurred to sell real estate that do not meet the criteria of project costs or prepaid expenses should be charged to the period in which they are incurred.

There are other issues in the accounting for real estate costs discussed in the US that we were unable to find either in the accounting standards of the European countries analysed or in the IAS, such as, amenities, donations capitalised costs of abandoned real estate, change intended use of real estate, existence of incidental operations and rental operation of real estate.

The method of accounting *amenities* is certainly dependent upon the plans of the management. If the plans are for transferring them with sales units the US accounting standards classify the amenity as a common cost and allocate it to each unit sold. If the plan is to sell the amenity separately, or retention by the developer, the US standard is that capitalised costs of the amenity that exceed the estimated fair value should be allocated as common costs to each unit. The US accounting standards also discuss the methods of allocating the cost to the units.

Donations of real estate to municipalities or other governmental agencies for uses that will benefit the project is a frequent situation for a real estate developer. For the US standards, this should be considered as a common cost of the units.

Capitalised costs of abandoned real estate are written-off as a current expense by the US real estate accounting standards.

Change in intended use may happen in real estate businesses after the developer has incurred significant development and construction costs. According to US standards, these costs should be charged to the period to the extent that capitalised incurred costs and the costs to be incurred for the new project exceed the net realisable value of the project revised. However, if there is no formal plan of use, the incurred cost should be charged to the period to the extent they exceed the estimated realisable value of the property as it is, assuming it would be sold in the market.

Incidental operations occur when the developer engages in revenue-producing activities during the holding or development period. Examples of these situations are restaurants, and other amenities that are managed by the developer during a transition period. According to US real estate accounting standards, the profit generated from these incidental activities should be accounted as a reduction of capitalised project costs.

Rental operations raise a number of issues such as the definition of activity initiation, and the associated revenues and costs. In the US all costs incurred by rental operations should be deferred and charged to future periods, independently of being production, commercial or administrative. Examples of such costs include commissions, legal fees, cost of credit investigation, costs for preparing documentation, costs of unit models and related furnishings, rental facilities, semi-permanent signs, grand openings and brochures.

Property, Plant and Equipment

If the real estate is for exploration by the real estate developer, it should be registered as "Property, Plant, and Equipment" (PPE). According to IAS 16 – *Property, Plant and Equipment,* this item is recognised initially at cost using the same costing principles as inventories. Subsequently the item of PPE should be measured at cost or fair value, less accumulated depreciation and any write-down for impairment. Upward revaluations are permitted as long as are made at fair value for all items in the same class and kept in the balance sheet not differing materially from fair value, with sufficient regularity in their revaluations. Items with

high volatility should be valued annually, for others a regularity of three or five years may be sufficient. The variation in value resulted from the revaluation should be credited directly to the equity under the heading "revaluation surplus".

While IAS 16 uses the term "fair value" and states that it must be determined on the basis of existing use, the International Valuation Standard no. 1 (IVS 1) defines the term "market value" rather than "fair value" and, after its revision in 1998, it requires that the market value of an asset to be based on its highest and best use. IVS 2 also uses the concept of depreciated replacement cost to be used for those properties that "are rarely if ever sold on the open market except as part of the sale of the business in occupation" (IVS 2).

We may conclude that both committees (accountants and valuators) should work together more in order to have common concepts. However the valuators approach is probably consistent with IASC intention, as it is consistent for the plant and equipment item. The IAS 16 clearly suggests that fair value of plant and equipment is the market value, and if there is no evidence of market value because of specialised nature of the plant and equipment, they are valued at depreciated replacement cost. IAS 16 also puts emphasises on additional disclosures when PPE are stated at revalued amounts, such as the basis of revaluation, the date of revaluation, whether an external qualified valuer was involved, etc.

The traditional accounting in the US does not permit recording appreciation of real estate either as PPE or investment property. However, the FASB encourages the disclosure of current values applying the FASB Statement no. 89 - *Financial Reporting and Changing Prices.* There is, however, little guidance for real estate companies on the presentation of current value information. Firms may follow a comprehensive approach where current values of all their assets and liabilities are displayed in conjunction with the historical cost, or a piecemeal approach, which involves the presentation of the current values of certain assets and liabilities in the notes to the financial statements.

Unlike other European countries, French tax law requires a capital gain tax if a gain in value is recognised in the accounts, except for the revaluation under government order that happens from time to time during highly inflationary periods. Although the revalued asset can be depreciated for tax purposes it is obvious that only loss making companies might find revaluation attractive.

In Germany, tangible fixed assets must not exceed acquisition. As a consequence revaluation is not an appropriate standard.

Until the implementation the FRS 15 in March 2000, the UK did not have proper accounting standards for tangible fixed assets, except for its amortisation (the SSAP 12 Accounting for Depreciation). However, Eccles and Holt (2000) report that: "65 per cent of companies included in the survey database of *Company Reporting* in February 1997 carried revalued assets in their accounts", but valuations were not carried out regularly as half of the companies that had their assets revalued, "do not have any valuations that were more recent than five years old". Market value was already an accepted practice, but with much discretion for creative accounting. FRS 15 has already brought the UK PPE accounting closer to the IAS 16.

Portugal also published an accounting standard in 1995 (DC 16) that is in accordance with IAS. However, for cultural reasons most of the companies continue to use the historical cost methods. Only firms with weak capital structure tend to use the current value approach, as it will reinforce their reported equity value.

The IAS 16 allows companies to revalue some of the PPE classes and leave others at their historical cost. Each company may adopt different practices across different classes, and as a consequence the required consistency across companies is not met for financial analysis comparison.

Investment properties

The IAS 40 - *Investment property* defines investment property as an investment in land, a building or part of a building held to earn rentals or for capital appreciation or both (IAS 40).

The investment property is initially measured at cost, which includes the acquisition price and any directly attributable expenditure such as legal fees, unrecoverable taxes, and other transaction costs. If the investment property is self-constructed the cost is measured according to IAS 16. Subsequently the investment property should be measured at either cost less depreciation and any accumulated impairment similarly to IAS 16, or preferably at fair value with changes in value recognised in the income statement.

This accounting standard (as the one on PPE) is clearly a compromise between the "historical cost approach" and the "current value approach". The problem is that such a hybrid system favours the perpetuation of existing practices in each country and company, which does not attain the desired aim of international comparability between companies.

Most accounting standards of continental European Union countries (Portugal, France and Germany) are based on the historical cost principle and investment properties are treated as any other property in PPE for costing, depreciation and revaluation, but some have already changed their standards to conform with an option for current value.

What IAS 40 changes clearly is the practice of most countries in terms of accounting treatment of revaluation because revaluation surplus is usually included directly in the equity and not in the income statement as required by the IAS 40.

Both IAS (16 and 40) recognise valuation and depreciation of PPE and investment property similarly, which is also the practice in the US and the European continental countries analysed. In contrast with this, the UK recognises PPE and investment property differently. The true and fair view is invoked in the UK by SSAP 19 – *Accounting for investment properties* not only to include the investment properties in the balance sheet, compulsorily at their current market value, but also for not amortising them. As in the other European countries analysed, any change in value of the investment property in the UK is also taken to the equity at the heading "revaluation reserve".

Accounting all gains or losses arising from movements of market values will have a substantial impact on the volatility of earnings reports by real estate companies and companies that hold a large portfolio of investment properties.

What was said in PPE for the US prevails also for investment property. The only addition is that all companies are required to disclose the fair value of their financial instruments, including commercial mortgages (FASB Statement no. 107 – *Disclosures about Fair Value of Financial Instruments*).

It is worth noting that we do not address here the property held under operating leases, where the lessor, based on the IAS 17 – *Accounting for leases*, should recognise it as a receivable and allocate the financial income over the period.

Cost Allocation

For the purpose of internal reporting and decision-making, management uses various costing methods. Any of these methods may be used for financial reporting, but to apply the IAS 2 properly, the real estate developer should use the absorption costing in order to incorporate an allocation of the fixed production cost to real estate under construction (either as inventory or as fixed asset).

Absorption costing is a typical method adopted by financial accountants to measure inventories. As a consequence it is a standard method used by the four European countries analysed. As a general rule, inventories and PPE are initially measured at acquisition or manufacturing cost. In Germany, however, interest expenses may be included in manufacturing cost if incurred for the production of real estate, during the production period. Moreover, the full-cost is an optional system in Germany, while the standard in the other countries is the manufacturing cost.

Cost flow for inventories

IAS 2 allows the use of four methods for the cost of goods (real estate) sold:

- Specific identification, which are specific costs attributed to identified items of inventories.
- FIFO – First in first out
- WAC – Weighted average cost
- LIFO – Last in first out

While the FIFO and the WAC are the recommend methods by IAS, the specific identification is well adapted for the real estate industry as its inventories are not ordinarily interchangeable, and most of the goods and services are related to specific projects. As a consequence it is a commonly accepted method for real estate projects.

It is also observed that the three typical cost flow methods for inventories – FIFO, LIFO and weighted average cost – tend to be used in the various countries analysed. However, while LIFO is not allowed in France and UK (Lawrence, 1996), it is the preferred method used in US, as a basis for tax purposes.

Amortisation

Under IAS 16 the depreciation is based on cost or fair value, depending the option used by the company. It is calculated in a similar way for both methods, requiring an estimation of the depreciable asset's useful life and a selection of a depreciation method.

According to IAS 16 useful life is either the period of time over which it is expected an asset will be used by the owner, or the number of production or similar units that are expected to be obtained from the asset by the owner. On the other hand the depreciation method should reflect the pattern in which the asset is

consummated by the firm and the allowed methods are: the straight-line method, diminishing balance method, the sum-of-the-digit units or any other method that is found to be adequate from an economic point of view.

In continental Europe (Portugal, France and Germany) estimated useful life is commonly taken from legal or tax tables available for various industries and asset items and the most common method used is the straight-line. In Portugal this is the only method directly accepted by tax authorities, and any other method requires special permission to be applied for tax purposes.

Provisions

According to IAS 37 – *Provisions, Contingent Liabilities and Contingent Assets*, a provision should be recognised when:

- The firm has a present legal or constructive obligation, as a result of a past event;
- It is probable that an outflow may occur to settle the obligation;
- The amount of the obligation can be reliably estimated.

This is a reflection of the principle of prudence that is reflected in all European countries' accounting standards.

In Germany, France and Portugal some provisions may be accepted as a cost for tax purposes and consequently are used whenever permissible. In Portugal the maximum acceptance of provisions is established by law.

Impairment

Long-standing practice in all the countries under analysis is to include real estate held for sale or for development and sale, in the balance sheet, at the lower of cost or net realisable value. For operating assets it is also common accounting practice in all the countries analysed that assets should not be carried in excess of its recoverable amount. As a consequence the implementation of IAS 36 - *Impairment of Assets* will not have any impact for these countries' accounting practice.

Accrual basis

All IFRSs, except IAS 7 - *Cash Flow Statements*, follow the accrual basis, that is, the effects of transactions and other events are recognised in the financial accounts as they occur, being reported in the period to which they are related. Accrual

accounting is the basis for all these countries in the study. As a consequence, when sales of real estate are recorded it may be necessary to accrue some estimated costs not yet incurred. No divergence exists with IAS.

Summary of the accounting for real estate costs and value

In general we may conclude from the IAS that real estate developers should initially use the same method of costing independently if the asset is an inventory for sale, a property for managing operations or an investment property for earning rents. Subsequently, the measurement of the asset may differ, because depreciation methods and market value approaches are different for inventories, for operating properties or for investment properties. Moreover impairment is applied to all types of assets, but revaluation is not applied to inventories, as they should kept in the balance sheet at the lower cost and net realisable value.

The IAS and the accounting standards of the countries analysed evidence some differences for costing the real estate either as inventories or as property.

It is apparent that for IAS, and most European accounting standards, model-units and respective furniture may classify as selling expenses, however from a developer point of view it is clearly a cost associated with the project to be recovered with the sale of property or with the property rentals. As a consequence the US standards follow a more business-point-of-view in capitalising them in the inventory (property for sale) or in the fixed asset (property for exploration or for rental purposes).

Another issue that is unclear in the IAS is the treatment of prepaid expenses such as advertising, sales brochures and commissions advances, provided these costs are associated with the real estate project and their recovery is expected from the sales transactions, exploration or rents that occur in the future. Using the accrual method it is logical that these costs should be deferred and charged to operations in the period in which the sales revenue are earned, as mentioned in US standards.

Similarly, it is rational that costs incurred to rent real estate should be deferred and charged to future periods, when their recovery is reasonable expected from operations. However the IAS's appear not to accept this, except if they are production costs or interest expenses during the construction phase. Examples of such costs include legal expenses, commissions, credit investigations, model units and related furnishing, etc.

The following table summarises the IAS for real estate costs, and the practice in four European countries and the US:

Table 1 – Summary of accounting for real estate costs

Description	IAS	USA	UK	France	Germany	Portugal
Costing real estate:						
Production costs	Yes	Yes	Yes	Yes	Yes	Yes
Borrowing costs	Optional	Yes	Optional	Optional[2]	Optional	No/Optional[3]
Property taxes and insurance	Yes	Yes	Yes	Yes	Yes	Yes
Amenities and donations	?	Yes	Yes	?	?	?
Incidental operations, reduction of costs	?	Yes	?	?	?	?
Administrative overhead costs	No	Yes	No	No	Optional	No
Distribution costs	No	Yes[1]	No	No	No	No
Selling costs	No	Yes[1]	No	No	No	No
Absorption costing, based on normal activity	Yes	Yes[1]	Yes	Yes	Yes[4]	Yes
Lower of cost and net realisable value	Yes	Yes	Yes	Yes	Yes	Yes
Cost flows of inventory accepted:						
Specific identification	Yes	Yes	Yes	Yes	Yes	Yes
Average cost	Yes	Yes	Yes	Yes	Yes	Yes
FIFO	Yes	Yes	Yes	Yes	Yes	Yes
LIFO	Yes	Yes, Tax	No	No[5]	Yes	Yes
Fixed asset:						
PPE at cost, Initially	Yes	Yes	Yes	Yes	Yes	Yes
Policy to carry PPE at current value	Optional	No, but	Optional	No	No	Optional
Amortisation reflects fiscal policy	No	No	No	Yes	Yes	Yes
Revaluations allowed	Yes	No	Yes	Yes, but	No	Yes
Investment property carried at current value	Optional	No, but	Yes	No	No	Optional
Investment property is amortised	Yes	Yes	No	Yes	Yes	Yes
Capital tax gain on accounting revaluations	No	No	No	Yes	No	No
Other issues:						
Provisions reflect fiscal policy	No	No	No	Yes	No	Yes
Impairment	Yes	Yes	Yes	Yes	Yes	Yes
Accrual basis	Yes	Yes	Yes	Yes	Yes	Yes

[1] Other than production costs, if related to the real estate project

[2] Optional, if the production cycle is longer than one year

[3] No for inventories. Optional for fixed assets.

[4] Optionally, administrative and interest expenses may be incorporated in real estate.

[5] Available only for group accounts

It is apparent that capitalisation and allocation costs of real estate vary greatly in the four European countries, especially the borrowing costs and allocation of administrative overhead costs. The US practice is significantly different from IAS and Europe, as distribution costs and selling costs may also be incorporated in real estate. It is also apparent that US standards for accounting real estate costs are much more detailed than the IAS or the national standards in Europe.

Accounting for investment property in most countries is also significantly divergent from the IAS. It is usually carried out at cost less depreciation in all countries (except the UK) while the preferred method of the IAS is the market value. All countries accept, however, revaluation in order that the balance sheet carries the real estate (as a fixed asset) at market value. But the only country that emphasises the importance of true and fair view is the UK, with France being the less adapted

to IAS because of the consequent taxation on the surplus recognised in the accounting. Moreover, the revaluation surplus is recognised in the equity by all countries while the IAS recognises it in the income statement. It is perhaps appropriate for an instant to mention that probably the IAS, "the public in general and the financial world in particular have far too much faith is property valuations" (Brett, 2002). It is worth noting that in the IAS, real estate valuation turns out to be a vital concept for financial statement analysis, which requires a proper reading of the footnotes and understanding of the limitations of such valuations from the financial analysts.

Significant divergence was also found between IAS criteria for amortisation and inventory provisions in the three continental Europe countries analysed, where fiscal policies still determine the practice.

3. Accounting for real estate sales

While in the US, the Statement of Financial Accounting Standard (SFAS) no. 66 - *Accounting for Sales of Real Estate* - categorises sales of real estate for accounting purposes as either retail land sales (sales of lots) and all other sales, there is no IAS specifically dedicated to real estate sales.

Independently of the existence of specific standards for real estate, it is necessary to take into account that in assessing proper accounting treatment for real estate, it is necessary to define clearly the following aspects:

- The date of the consummation of the sale, in order to apply the matching principle, recognising the sale and the cost simultaneously (i.e. the profit);
- Determine the sales value and the respective cost.

The lack of UK accounting standards on revenue recognition led to a number of inconsistent practices across real estate developers as well as across other industries (Holt and Eccles, 2003). As a consequence the Accounting Standard Board (ASB) issued a discussion paper in July 2001, which failed, according to Holt and Eccles (2003) to uncover any new insights into revenue recognition in the property and construction sector.

Criteria for recording a sale

According to IAS 18 – *Revenue*, the revenue from rendering services is recognised as services are rendered and the revenue from the sale of goods should be recognised when all the following conditions are satisfied:

- The seller has transferred to the buyer the significant risks and rewards of ownership;
- The seller no longer has managerial involvement in, or effective control over the goods;
- The amount of revenue can be reliably measured;
- It is probable that the economic benefits will flow to the seller;
- The costs incurred and to be incurred in respect to the transaction can be reliably measured.

For most industries, it is common that:

- The fair value of the consideration coincides with the invoice, making the recognition of the revenue easy; and
- All the criteria mentioned above are met at the same time, so there is little doubt about the timing for recognising the revenue.

However, real estate sales have special conditions where various moments of the transaction, such as the signature of the contract, the advances of payment, the instalment sales, the transfer of the rights to use the property and the legal transfer of the property, make the transactions complex and sometimes difficult to define the consummation date of the sale.

The IAS 18 recommends for real estate sales that the revenue should be recognised when the asset is transferred to the buyer or when the risks and rewards of ownership are transferred. As the law in each country determines the point in time at which the significant risks and rewards of property ownership occurs, a sale might be recognised earlier or later from one country to another.

In general the transfer of risks and rewards occurs at one of the following points:

- Legal title of the property is transferred to the buyer;
- The seller gives the buyer the possession of the property before legal title is transmitted.

If the second case occurs it is necessary to determine if the buyer captures significant risks and rewards of the property ownership, which depends on the national law. Historical practices and the influence of fiscal policies also tend to make the accounting practice in some countries more cautious than in others.

IAS 18 also mentions that revenue is recognised only when it is probable that the seller will receive the consideration. It is common for the real estate developer to structure the sale in order that the title only passes to the buyer after all the consideration is received by the seller without recourse. In that case, it is easy to

see that the sale occurs at the transfer of the title of the property, which coincides with the receiving of the rest of the consideration.

However other real estate transactions and the specificity of each transaction may make it difficult sometimes to define the exact moment of the sale consummation, such as the following examples:

- The seller finances the acquisition. As a consequence the seller may structure the sale as a contract for deed because of concern at being unable to collect the full sales price;
- Some sales agreement may also contain some requirements or conditions that need to be met by the seller, such as regulatory approval of building plans, required zoning changes, etc., which may in any case create some uncertainty about the costs to be incurred, and which may also postpone the timing of revenue;
- A land developer may sell a number of lots to a builder agreeing a receivable subordinated to a construction loan. As a consequence the builder can start constructing without paying off the debt to the developer;
- Depending on the commercial law of each country the sale may be consummated before or after the building is certified for occupancy. If the title cannot legally be passed to the buyer he may not pay the rest of the consideration and some risk is still on the part of the seller.

Portugal issued an accounting standard in 1999, which is similar to the IAS 18. Even with the implementation of the IAS in all European countries, the complexity of real estate sales may result in real estate developers interpreting differently the time of sale consummation defined by the accounting standard. This is an issue that can be empirically tested after the application of the standard, but the most conservative practice will tend to recognise the revenue only with the legal title of the property after the exchange of all consideration. However, from the broad definition of IAS 18 it is likely that we will continue to observe a variety of practices among real estate developers in Europe.

While the IAS 18 is very generic, the US SFAS no. 66 – *Accounting for Sales of Real Estate*, is industry specific and much detailed. Consummating a sale requires meeting the following four criteria:

- The parties are bound by the terms of a contract;
- All consideration has been exchanged;

- Any permanent financing for which the seller is responsible has been arranged;
- Additionally to the three conditions, the building is certified for occupancy.

The SFAS 66 defines the full-accrual method as the basis for accounting real estate sales. It also provides guidance on the appropriate accounting when the four criteria are not met,thereby inhibiting use of the full-accrual method. In that case, it defines other methods of accounting, such as:

- The instalment method – when the substance of a real estate transaction indicates that a sale has occurred for accounting purposes the collection of the sales price cannot be reasonably estimated. This method apportions each principal collection between cost recovered and profit recognising the same ratio as cost and profit are presumed to constitute sales value;
- Cost recovery method – when the substance of real estate transaction is subject to future subordination, or there is uncertainty that all costs will be recovered or uncertainty on the proceeds, then no profit should be recognised until all costs are recouped;
- Reduced-profit method – is used if the buyer's down payment is adequate for full accrual profit recognition but continuing investment criteria is not met.
- Financing method – is applied when the real estate transaction is in substance a financing arrangement rather than a sale.

While IAS use a system of general principles, which may be criticised for being too generic, the US real estate accounting for sales has too much detailed prescriptive accounting rules, which is sometimes confused and contradictory.

Determining the sales value

According to IAS 18 the revenue should be measured at fair value of the consideration received or receivable, with deduction of trade discounts and volume rebates and net of taxes that are collected and passed to government authorities.

In most cases the consideration is cash or cash equivalents, but in real estate transactions other forms of payments may occur and structure of payments may include several items. Besides the price of the property, the developer may also invoice, for example, management fees, guarantees for the accomplishment of the agreement, prepaid interest, fees that are required to be paid in advance and applied against amounts due to the seller at a later date. The seller may also

commit to perform certain services without any compensation or with a minimum compensation. The IAS predicts the following cases:

- Exchange of property, where IAS 18 does not regard an exchange of goods or services of similar nature as a revenue generating activity. Revenue may be recognised only on transactions for dissimilar goods and services;
- Deferred payments, which are in substance a financing arrangement: In such cases the consideration is the present value of all future receipts. According to IAS 18 the nominal amount of the consideration consists of two components – revenue from the sale of the real estate and interest revenue. The discount rate to be used is the prevailing interest rate for a similar instrument of an issuer with a similar credit rating.
- Combination of sales of property with separately identified services. For example the sale of the property includes the maintenance services for a certain period (e.g. 3 years). In such cases the consideration must be split between the two components where the service must be measure at the expected cost plus a reasonable profit on that service. The revenue from the sale of the property is, as a consequence, the difference for the total consideration.

The IAS 18 is clear in determining the real estate revenue. However, the interest rate for discounting services rendered in future could be defined more accurately.

Recognition of profit in real estate development under construction contracts

If a sale of undeveloped or partially developed land includes an agreement with the purchaser, requiring the seller to perform future development and construction, it is then under the IAS 11 - *Construction Contacts*, which applies to the financial statement of the contractor, who carries out the contract on behalf of the customer. Both IAS 11 and IAS 18 require the same approach for the sale of goods (real estate) based on the percentage-of-completion method. The principal change, which occurred to IAS 11 after its revision in November 1993, was the elimination of the completed-contract method.

The percentage-of-completion method requires that revenue, costs, and profits to be reported are according to the proportion of the work completed. The costs of the contract are the production costs comprising:

- Direct costs of the specific contract, such as costs of the construction site, site labour costs, site supervision costs, materials, depreciation of plant and equipment used for the contract, costs of moving plant, equipment, materials

and personnel to and from the site, cost of hiring plant and equipment used by the contract, costs of design and technical assistance use on the contract, estimated costs of rectification and guarantee work and claims from third parties;

- Costs that are attributable to the contract such as insurance, costs of design and technical assistance not directly related to the contract, construction overheads such as the preparation and processing of personnel payroll involved in the contract, borrowing costs if the contractor adopts the option given by IAS 23 – *Borrowing Costs*, as it is a real estate item.

The IAS 11 allows for three methods to determine the stage of completion or the percentage-of-completion:

- The proportion that contract costs incurred for work performed bear to the estimated total contract costs (incurred plus to be incurred);
- Surveys of the work performed; or
- Completion of a physical proportion of the contract work.

In our opinion, it would be preferable for the IAS to eliminate alternative methods of calculating the percentage-of-completion, as the existence of alternatives will lead to a variety of practices across companies, and reduces the desirable quality of the accounting information, which is the comparability between companies.

The US accounting for long-term contracts (Accounting Release Bulletin no. 45 *Long-term construction-type contracts*) allows for the use of both methods - the completed-contract and the percentage-of- completion. However the SFAS no. 66 - *Accounting for Real Estate Sales* should be also taken into account and the four conditions previously mentioned should be met to recognise a sale.

In France and Portugal both accounting methods are also accepted. In Portugal, the Institute of Auditors recommends the application of the percentage-of-completion method. This means that all public firms and limited liability firms with two of the three indicators higher than 1,5 million euros of assets, 3,0 million euros of revenues and/or 50 employees should comply with this rule. As a consequence, a large number of companies in this country already comply with the IAS 11. Independently of the accounting method used, income tax in Portugal is based on the instalment method. This method apportions each principal collection between costs recovered and profit recognised in the same ratio as cost and profit, which are assumed to constitute the sales value. This method is also used in US when the substance of a real estate transaction indicates that a sale has occurred for

accounting purposes but the collected total sales price cannot be reasonably estimated (Cammarano and Klink, 1995, p. 115).

In the UK, the profit of work-in-progress under long-term contracts should reflect the proportion of the work carried out to date, but if the outcome cannot be foreseen with reasonable certainty, the firm should not recognise any profit (SSAP 9 – *Stocks and long term contracts* and FRED 28 – *Inventories: construction and service contracts*). Moreover, if a loss is expected, the whole loss should be immediately recognised (Lawrence, 1996, p. 180). As discussed earlier, borrowing costs are optionally included in the cost of the work-in-progress under long-term contracts. According to Holt and Eccles (2003) in spite of the fact that revenue recognition can be done in accordance with the percentage-of-completion, the most popular method in UK is the proportion of costs incurred to the total contract value.

In France the *Règlement no. 99-08* of 24 November 1999 modified the standards of the *Plan Comptable Général* and both methods of accounting – completed contract and percentage-of-completion contract - are accepted, but it is usual to employ the completed-contract method.

In Germany a general rule is to recognise the income when the product or service is almost completely rendered, as it is a method acceptable for tax purposes. However, for long-term projects, in order to avoid high fluctuation on profits, the percentage-of-completion method can be optionally used. In spite of the absence of specific national rules, the income recognition principles of IAS 11 are widely accepted by German firms (Laurence, 1996).

Accounting for real estate sales summary

The definition of the consummation date of a sale in real estate is not an easy issue. The definition under IAS 18 may result in different practices for similar real estate developers. As a consequence it may require a more detailed standard for real estate sales, otherwise financial statements will not be adequately comparable.

The sales value defined by IAS 18 is clearly standardised. However, when there exist future services and revenues, the utilisation of the discount rate could be somehow arbitrarily based on the definition of the interest rate.

The IAS 11 eliminated the completed-contract method, which is the most commonly used in France and Germany, however this is a clearly definition for a better standardisation. Nonetheless, the three options for the definition of completion of work is a source for reducing the level of standardisation.

In Portugal the firms that are obliged to have their accounts audited already comply with the IAS 11, but others may use the completed contract method. Similarly to the IAS, in the UK the percentage-of-completion is the only method accepted.

Table 2 – Long term and construction contracts accounting methods

Description	IAS	USA	UK	France	Germany	Portugal
Construction or long term contracts:						
Completed contract method	No	Yes	No	Yes	Yes	Yes
Percentage-of-completion method	Yes	Yes	Yes	Yes, but..	Yes, but..	Yes

4. Conclusions

Financial statements are artificial constructs of reality attempting to describe the financial situation and economics of companies. In this context, costing real estate as inventories or fixed assets (for exploration or investment) and recognising revenue and cost of sales are vital concepts for the real estate industry, however, the adoption of one or another standard will always generate controversy.

This paper observes the differences between accounting standards among four European Union countries, the USA and the IAS, but also discusses and highlights some property-related issues where doubt of best practices still exists.

This study raises the following criticisms at the IAS, concerning real estate accounting:

- The timing for recognising revenue in the IAS is somehow problematic, because definitions which are too generalised may lead to different interpretations and real estate developers may apply different timings for similar situations, implying different levels of profits, which is not the objective of an accounting standardisation policy;

- It is obvious that the option to account the current value on investment property and PPE relies heavily on independent valuers who are appointed by the company itself, and real estate valuations have their own limitations as predictors of market value. Moreover, investment property and PPE have the option for using either historical cost or their revalued amounts, for each class of assets. It is apparent that cultural differences in accounting across the world might have impeded the IASB on opting for one of the approaches. Historical cost is for some more reliable and easier to audit, while fair value is more relevant for other users of accounting. Giving the opportunity of opting for one or another method across each class of assets will result in various practices across companies in the same industry, and consequently, the required consistency for comparison between companies will not be met;

- IAS also leaves a number of options for inventory cost flow, which is also a source of heterogeneity in the accounts;
- The option for capitalising interest on real estate (either as inventory or as fixed asset) is another weak point for accounting standardisation, as financial analysts require comparable financial statements among firms in the same industry for their analysis, otherwise comparisons across firms are misleading.

This study concludes that the IAS allow for significant discretion in their application in the real estate industry. As a consequence it is unlikely to find uniformity of accounting across nations and companies in this sector that engage in similar activities.

The paper also concludes that accounting standards in continental Europe differ more than the UK standards from the IAS. In Germany, France and Portugal, accounting is clearly influenced by Roman law system while in the US and UK, common law prevails. Major differences are found in areas where tax regulations still play vital role in the continental European countries in establishing accounting standards and practice, such as depreciation and revaluation of assets, accounting for provisions, and recognition of revenues and the consequent costs and profits. As a consequence, it is apparent that the implementation of the IAS will demand a conversion of national practices, requiring in some cases a change of aptitude and culture in the accounting profession. It is also clear that governments of countries under the so-called Roman law system, will have a crucial role in disconnecting the taxation and accounting systems.

In spite of the cultural divergences across countries, and the flexibility exhibited in the IAS, their implementation will in someway approximate the accounting and reporting of the various countries, making the financial statements of real estate industries more comparable across countries, which is one of the assumptions for improving the efficiency of global capital markets.

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