

REAL ESTATE MASS APPRAISAL SYSTEMS IN EUROPE

Main characteristics and factors that define property value

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PERCOM Project - Goals and Challenges

Main objectives:

Characterization and critical analysis of Portuguese land readjustment practice in detail plans;

Contribute to proposing a more efficient and effective land readjustment execution model to address the problem of the conjugation of interests in the urban development process.

Expected outputs:

Formulation of a real estate valuation model;

Highlight eventual amendments in the legal framework;

Identify ways to fund the execution of detail plans.

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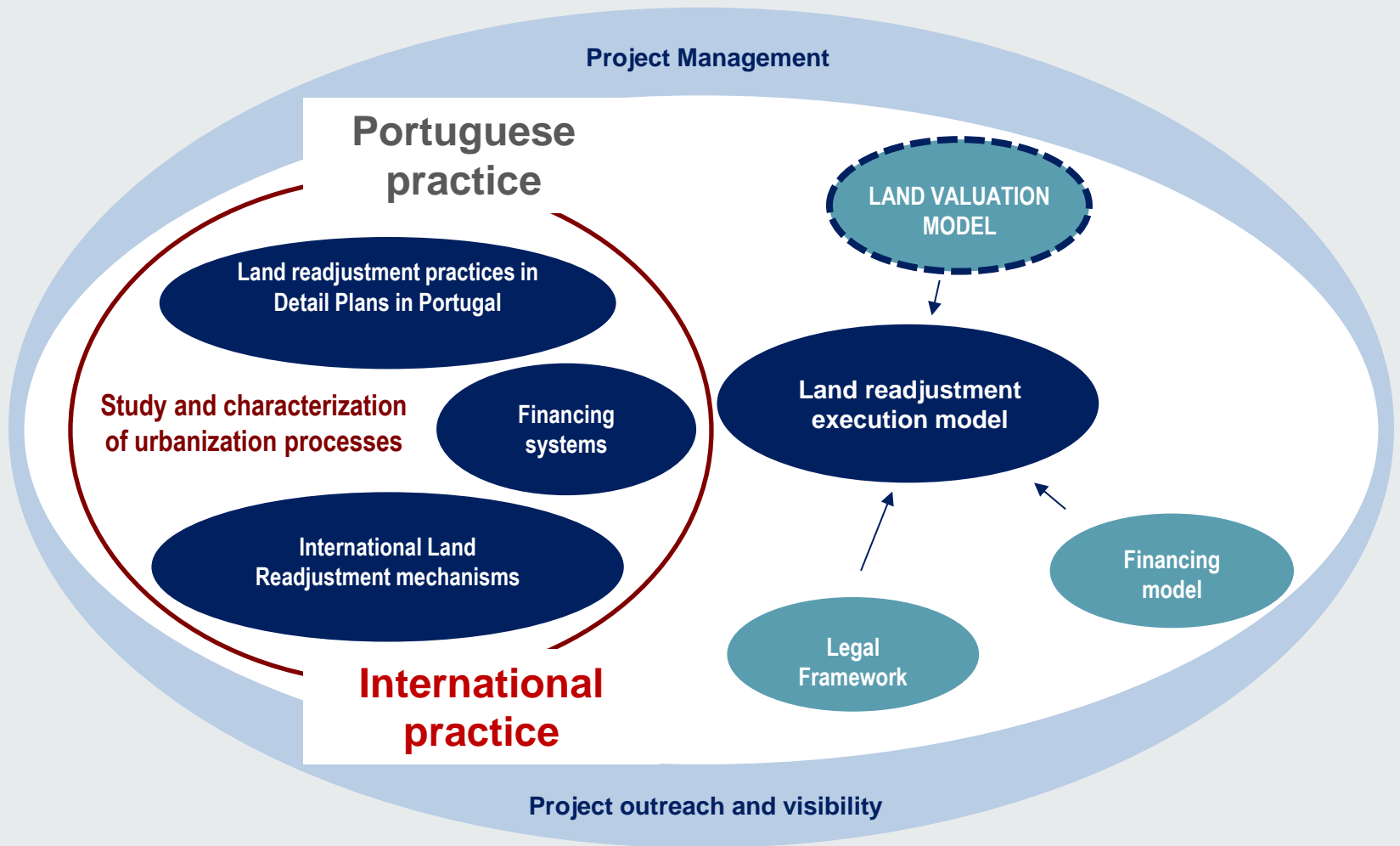
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Real estate mass appraisal systems

Case studies:

- Germany
- Denmark
- Spain
- Italy

vs. Portugal

Expropriation

Tax appraisal

Topics analysed:

- General characteristics of real estate value formation
- Appraisal frequency
- Discretionary value defining factors
- Distinction between discretionary and non discretionary factors

Main characteristics

Expropriation appraisal	
Germany	Italy
<ul style="list-style-type: none"> • “Fair value” (<i>verkehrswert</i>); • Market value; • Disregards value fluctuations caused by the expropriation act or plan. 	<ul style="list-style-type: none"> • “Fair value” (<i>giusto prezzo</i>); • Market value or others; • Considers value fluctuations caused by the expropriation act or plan.
Denmark	Spain
<ul style="list-style-type: none"> • “Full compensation” (<i>fuldstændig erstatning</i>); • Market value. 	<ul style="list-style-type: none"> • “Fair value” (<i>justiprecio</i>); • Market value or others; • Disregards value fluctuations caused by the expropriation act or plan; • Appraisal of rural land disregards expectations for urban conversion.

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Main characteristics

Tax appraisal	
Germany	Italy
<ul style="list-style-type: none"> • Based on general appraisals in 1935 and 1964, with revised values in 1974; • No general reappraisals; • 5%-10% of market value. 	<ul style="list-style-type: none"> • Based on market values referenced to the 1988/89 biennium; • No general reappraisals; • No real connection with market value.
Denmark	Spain (urban real estates)
<ul style="list-style-type: none"> • Based on the statistical analysis of property sales' values since the previous general appraisal; • Biannual general reappraisals; • Market value or best economic use value. 	<ul style="list-style-type: none"> • Based on market studies of real estate transaction values; • General reappraisals every 5 to 10 years; • 50% of market value.

Discretionary degree of the model

	Expropriation appraisal		
	Totally closed model	Discretionary factors	Totally open model
Germany			Each real estate type appraised by a specific method
Denmark			All real estate are appraised by market value, without a specific method
Spain		Some location factors and the real estate promotion coefficient, although between reference ranges	Urban plots appraised by the comparative method
Italy	Agricultural land		Other real estate appraised by market value, without a specific method

Discretionary degree of the model

	Tax appraisal		
	Totally closed model	Discretionary factors	Totally open model
Germany	Yes		
Denmark	Yes		
Spain		Some coefficients applied to land and constructions, although between reference ranges	
Italy		Cadastral category; Cadastral class	Unbuilt plots ready for construction are appraised by their market value, through the comparative method

Factors used in the definition of the value

Expropriation appraisal	
Germany	Italy
<ul style="list-style-type: none"> • Plot and built area size; • Location. 	<ul style="list-style-type: none"> • Plot and built area size; • Location; • Ability to generate agricultural income.
Denmark	Spain
<ul style="list-style-type: none"> • Plot and built area size; • Location. 	<ul style="list-style-type: none"> • Plot and built area size; • Location; • Ability to generate agricultural income; • Conservation; • Building age; • Type of use; • Building typology; • Gross floor area ratio; • Public debt reference rates.

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Factors used in the definition of the value

Tax appraisal	
Germany	Italy
<ul style="list-style-type: none"> • Real estate size; • Location; • Ability to generate income; • Building typology; • Conservation; • Building age. 	<ul style="list-style-type: none"> • Real estate size by metric unity; • Location; • Ability to generate income; • Building typology; • Type of use; • Building characteristics.
Denmark	Spain
<ul style="list-style-type: none"> • Plot and built area size; • Location; • Ability to generate income; • Building typology; • Type of use; • Gross floor area ratio; • Building age; • Construction materials; • Rehabilitation; • Equipment. 	<ul style="list-style-type: none"> • Plot and built area size; • Location; • Ability to generate agricultural income; • Type of use; • Gross floor area ratio; • Building age; • Construction materials; • Rehabilitation; • Physical and building characteristics of the plot (depth; number of facades; irregular shape; dimension below adequate).

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Portuguese property tax calculator – SIGIMI



Parameters

- Location
- Building typology
- Plot size,
- Plot occupied area
- Built area
- Equipment
- ...

Simulação Valor Patrimonial Tributário

Para calcular o valor patrimonial do seu prédio, preencha os campos abaixo tendo em atenção que nos campos Coeficiente de Localização, % Terrenos ou Moradia unifamiliar deve digitar os valores indicados no site quando localizou o seu prédio no mapa. Para obter o valor patrimonial carregue em "Calcular". Para obter as definições dos parâmetros utilizados, consulte o [Código do Imposto Municipal sobre Imóveis](#).

Tipo de Prédio

Prédio Edificado

- Propriedade total com ou sem divisões
 Fração de prédio em regime de Propriedade Horizontal

Valores para o cálculo

Afecção: Habitação | Valor de construção fixado pela lei (€/m2): 603,00
 Coeficiente de Localização: 1,25 | Idade do Prédio (anos):

Coeficiente de Qualidade e Conforto

Assinale os elementos que o seu prédio possui

Assinale os elementos que o seu prédio NÃO possui

Localização em condomínio fechado	<input type="checkbox"/>	Inexistência de cozinha	<input type="checkbox"/>
Garagem individual	<input type="checkbox"/>	Inexistência de instalações sanitárias	<input type="checkbox"/>
Garagem colectiva	<input type="checkbox"/>	Inexistência de rede pública ou privada de água	<input type="checkbox"/>
Piscina individual	<input type="checkbox"/>	Inexistência de rede pública ou privada de electricidade	<input type="checkbox"/>
Piscina colectiva	<input type="checkbox"/>	Inexistência de rede pública ou privada de gás	<input type="checkbox"/>
Campo de ténis	<input type="checkbox"/>	Inexistência de rede pública ou privada de esgotos	<input type="checkbox"/>
Outros equipamentos de lazer	<input type="checkbox"/>	Inexistência de ruas pavimentadas	<input type="checkbox"/>
Sistema central de climatização	<input type="checkbox"/>	Existência de áreas inferiores as regulamentares (RGEU)	<input type="checkbox"/>
Elevadores em edifícios de menos de 4 pisos	<input type="checkbox"/>	Inexistência de elevador em edifícios com mais de 3 pisos	<input type="checkbox"/>
Utilização de Técnicas ambientalmente sustentáveis, activas ou passivas	<input type="checkbox"/>		
Moradia unifamiliar (0,00 a 0,20)	<input type="text" value="0"/>	Estado deficiente de conservação (0,00 a 0,05)	<input type="text" value="0"/>
Qualidade construtiva (0,00 a 0,15)	<input type="text" value="0"/>	Localização e operacionalidade relativas (0,00 a 0,05)	<input type="text" value="0"/>
Localização excepcional (0,00 a 0,10)	<input type="text" value="0"/>		
Localização e operacionalidade relativas (0,00 a 0,05)	<input type="text" value="0"/>		

Áreas

Área bruta privativa (m2) | Área de implantação do edifício no solo (m2)
 Área bruta dependente (m2) | Área total do terreno (m2)

Calcular

Discussion and conclusions

Expropriation

- Undergoing changes in order to reduce existing discretion
- Lack of objective rules traditionally causes great value variations in appraisals on litigious cases
- In Spain was created (2011) a complex methodological body supported in objective formulas

Tax appraisal

- Most of the observed systems are using market value as reference
- German and Italian systems have been criticized due the lack of correspondence between tax value and real estate value >> new appraisal models are being discussed
- Danish and Spanish systems have a strong relation with the market value, but are also criticized due to their inability to quickly incorporate the value variations suffered by the market >> regular general revaluations are predicted.

- **A single real estate appraisal system** regardless of the purpose of the valuation?
- **If so, should the reference value be the market value?**
- **More adequate a statistical analysis** of a series of values (demanding a large, reliable and updated database)?

or

- **To pursue a more “sophisticated” system** taking into account an extended array of factors (as the Spanish systems or the Portuguese SIGIMI)?



Project website

<http://projectopercom. tecnico.ulisboa.pt/>

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