

'The economic feasibility of urban renewal in Barcelona: some case study projects'



Joaquim Clusa,
economist , M.Sc. Planning (Reading 1973-1975)



Oxford Brooks University group
Prof. Geoff Keogh
Barcelona , 28 May, 2012

(www.murclusa.cat)

LAST ORDERS 16/05

Hi Joaquim

Thanks for that. I look forward to seeing you.

I've just had a quick look at your chapter, which is going to be superb for explaining the mechanisms of value allocation, etc.

Just to remind you, though, that this group will be focusing on commercial property (specifically retail and office) and not residential, so it would be good if you can slant your presentation in that direction.

Best wishes, Geoff

**INCLUSIONARY HOUSING IN INTERNATIONAL PERSPECTIVE
AFFORDABLE HOUSING, SOCIAL INCLUSION AND LAND VALUE RECAPTURE**

Edited by

NICO CALAVITAT AND ALLAN MALLACH

**LINCOLN INSTITUTE OF LAND POLICY- BOSTON
2010**

**Ch 7. Spain's Constitutional Mandates
The Right to Housing, Land Value Recapture, and Inclusionary Housing**

**Nico Calavita, Joaquim Clusa, Sara Mur, and Robert Wiener
pp 239-274**

**REVISTA ECONÒMICA DE CATALUNYA, nº 64 – Novembre 2011
ECONOMIST ASSOCIATION**

**URBAN PLANNING IMPACT AND REAL ESTATE IMPACT OF 22@:
THE FUTURE BARCELONA CBD**

Sara Mur & Joaquim Clusa

pp 30-53

Availables in www.murclusa.cat + Prof. Geoff Keogh



Renewal operations in Barcelona 2000- 2030-POTENTIAL: 56.000 FLATS /124.000 RESIDENTS + 267.000 JOBS (1 working resident- 4 jobs) Completed (+- 40%:

FÒRUM: 80% (*)

22@: 45% (*)

PLAÇA D'EUROPA: 85% (*)

LA MARINA: 10% (*)

BIOPOL-FIRA BCN-ALTRES GV: 100%

CIUTAT DE LA JUSTÍCIA: 100%

HABITATGE PROTEGIT: 50%

STAND BY (54.000 res- 45%-59.000 jobs – 25%) :

LA VERNEDA: 19.000 res. +9.100 jobs (*)

VALLBONA: 5.000 res. +800 jobs (*)

SAGRERA STATION: 30.000 res +19.000 jobs (*)

ZONA FRANCA-BZID: 20.000 jobs

(*) **Mur&Clusa or BR economic feasibility study**

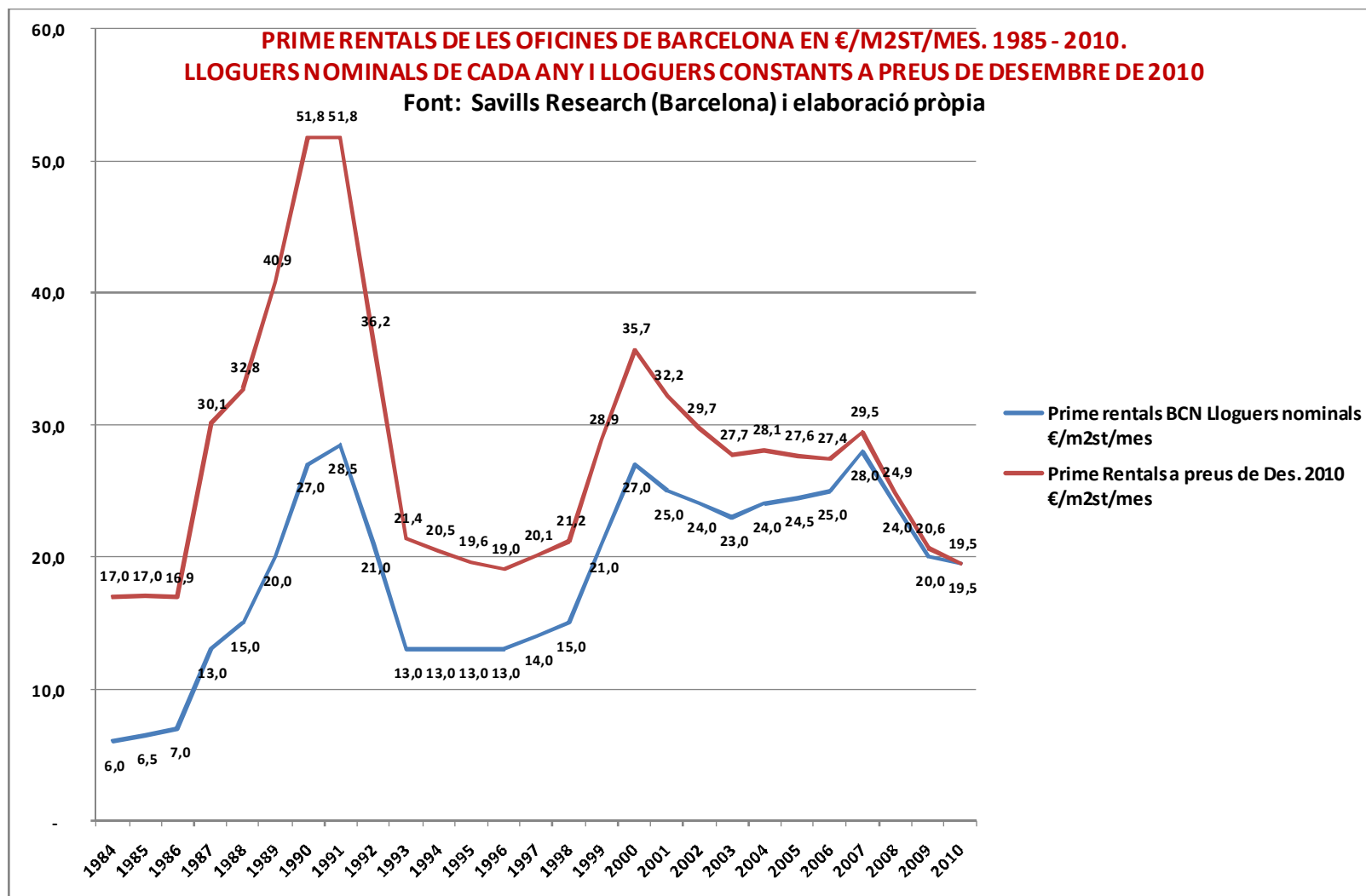
GRANS OPERACIONS DE BARCELONA

OPERACIÓ	RESI-DENTS		ACTIUS		LLOCS DE TREBALL - ACTIUS
	HABITAT- GES Nº	Nº	Nº	LLOCS DE TREBALL Nº	Nº
22@ (2000)	4.000	8.800	4.180	150.000	125.820
FORUM	6.273	14.766	7.014	14.211	7.197
PRIM	3.509	7.720	3.667	884	-2.783
ESTACIÓ SAGRERA I ENTORN	9.410	20.703	9.834	17.515	7.682
BZ INNOVACIÓ (ZONA FRANCA)				20.000	20.000
LA VERNEDA	8.781	19.088	9.067	9.090	23
LA MARINA	10.865	23.904	11.354	10.405	-949
VALLBONA	2.120	4.876	2.316	818	-1.498
PLAÇA D'EUROPA L'H	1.684	3.705	1.760	8.477	6.718
BIOPOL L'H	-	-	-	13.213	13.213
CIUTAT DE LA JUSTÍCIA L'H	-	-	-	3.000	3.000
FIRA DE BARCELONA (2000) L'H	-	-	-	3.429	3.429
ALTRES GRAN VIA L'H	-	-	-	12.636	12.636
OPERACIONS PROGRAMA D'HABITATGE 2011	9.350	20.570	9.771	2.825	-6.946
TOTAL	55.992	124.132	58.963	266.503	207.540
(22@/TOTAL)	7%	7%	7%	56%	61%
(22@ + comjunt Sagrera)/TOTAL	30%	30%	30%	63%	63%
(22@ + comjunt Sagrera)/TOTAL BCN	31%	31%	31%	75%	78%

**ENLARGEMENT IKEA- GV2 COMMERCIAL CENTRES IN PLAÇA
D'EUROPA (6.600 + 9100 M2):
1.250 €/ m2 FLOORSPACE**

- Negotiations started in **Desember 2010** with an offer of 790 €/m2 and closed on May 2012, one week ago
- **May 2010**: IKEA buys the land for a new commercial centre in Sabadell- 25 Km from Barcelona at 760 €/m2 (60% built now), advised by GestVal
- **Desember 2011**. Mur&Clusa advises L-H council 1.400 €/m2, on the basis of different transaction in the metropolitan region applying location coefficients.
- **Desember 2011**: IKEA criticizes M&C report coefficients and transforms 1.400 € into 1.140 €/m2. new M&C report answering criticisms.
- **February 2011**: IKEA offers 1.200 €/m2
- **March 2012**. Mur/Clusa presents report on the transaction of SPLAU commercial centre in Cornellà (15 Km from Barcelona and 6 Km from Pláça Europa) of October 2011 for +- 3.500 €/m2 (based on average rent of 22€/m2 shop/month) and +-1300 €/m2 for the land
- **March 2012**: M&C recommend to accept 1.200 €/m2
- **April 2012**: IKEA presents 2 new reports (Aguirre Newman + GestVal) with 950 and 1.050 €/m2, based on rents of 16 €/m2/month, and retiring the 1.200 €/m2 offer
- **May 17, 2012**: Agreement for 1.250 €/m2

OFFICE PRIME RENTS IN BARCELONA ACCORDING SAVILLS IN CURRENT AND
 CONSTANT PRICES 1084- 2011
 1990-91 LEVELS NOT REACHED AGAIN
 ACTUAL LEVEL (19 €) AT 1996 LEVEL, IN REAL TERMS



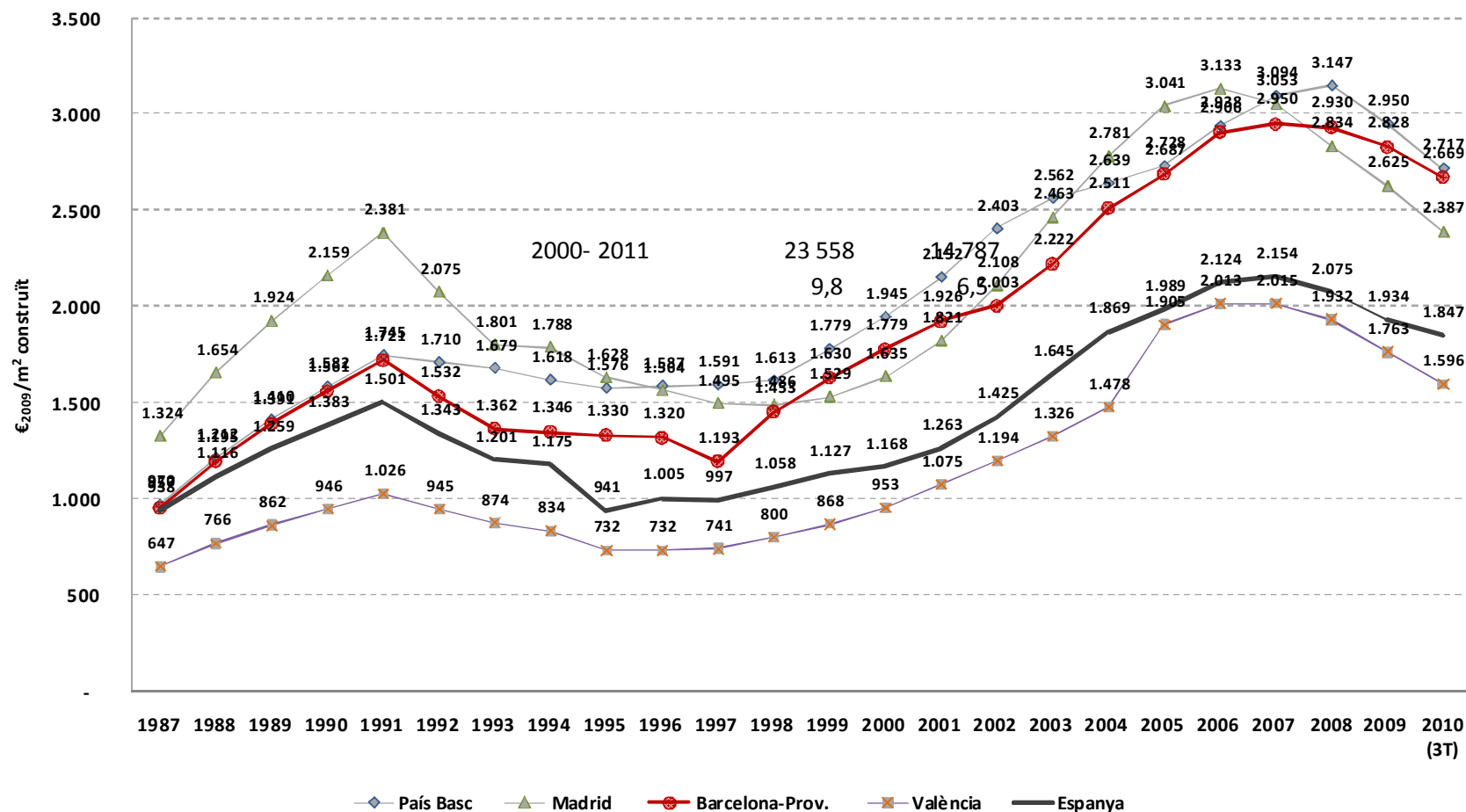
ELS PREUS IMMOBILIARIS PUJEN I BAIXEN:

ENTRE 1991 I 1997 ES VAN REDUIR UN 35% - IPC DESCOMPTAT- I NO VAN TORNAR A ASSOLIR ELS PREUS MÀXIMS DE 1991 FINS EL 1999 – 8 ANYS-

Diferència de 1 a 2 entre València i Madrid / 1 a 1,25 entre BCN i Madrid- Prov.

PREUS DE L'HABITATGE D'OBRA NOVA 1987- 2010 EN VALORS CONSTANTS DE 2010 € PER M2 C.ONSTRUÏT

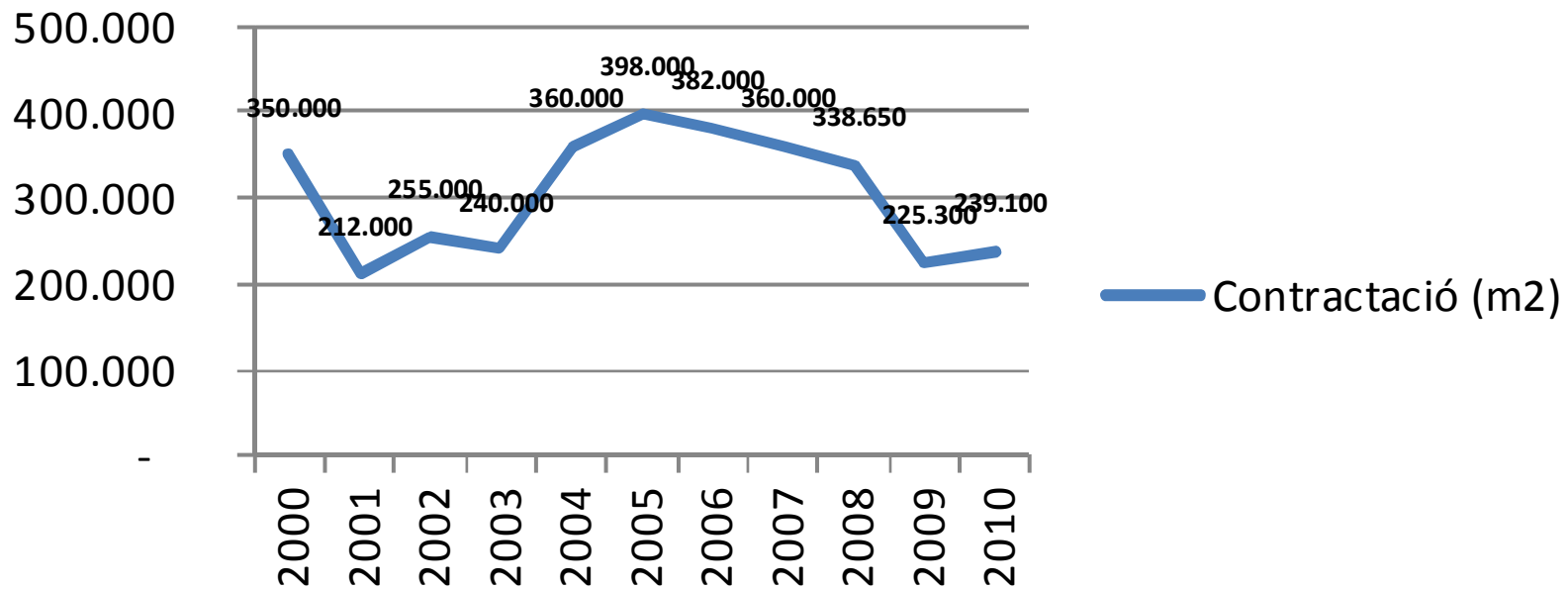
Font: Elaboració pròpia en base a dades del Ministerio de Vivienda



OFFICE NEW CONTRACTS IN BARCELONA 2000-
2010: +- 230.000 m2
+- 45% MADRID

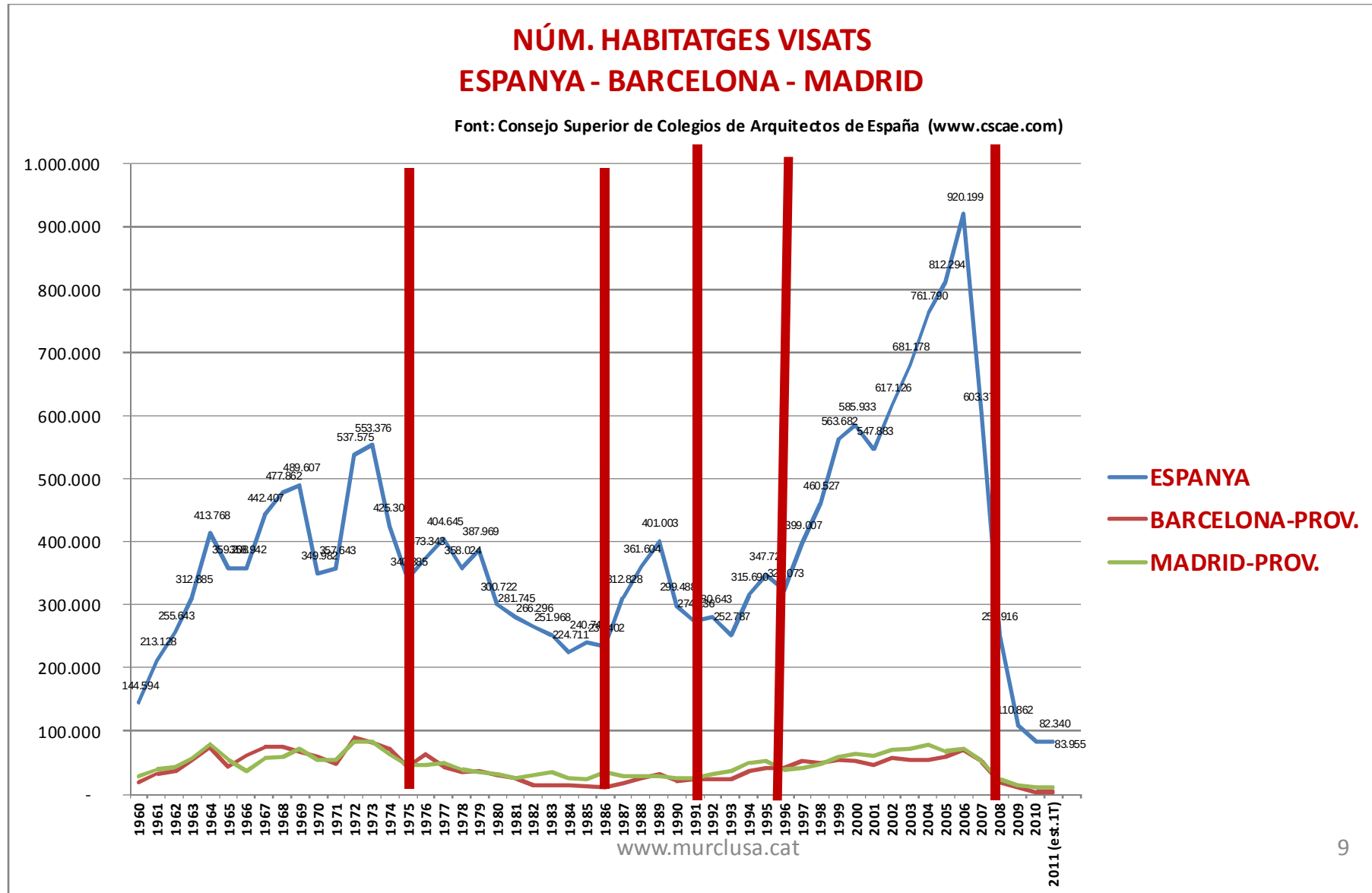
**Contractació (m2) d'Oficines a Barcelona.
2000-2010.**

Font: Forcadell (2011)

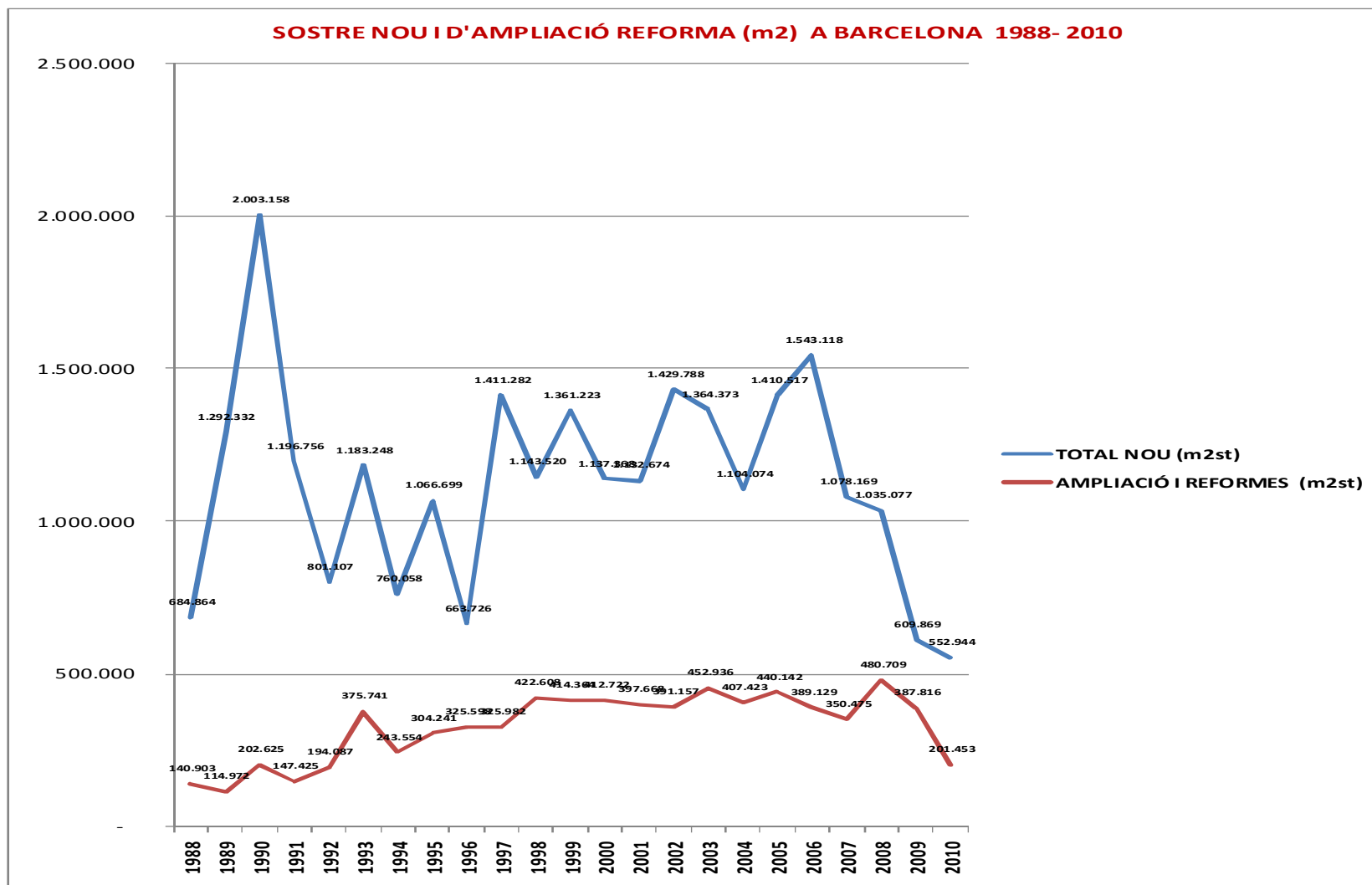


HI HEM ARRIBAT SEMPRE A **BATZAGADES I SOTRACS** PERQUÈ S'HA PRODUÏT PER ALTS I BAIXOS MOLT PRONUNCIATS –
CICLES ECONÒMICS:

1960-1975 (16).....1976- 1986 (11)..... 1987 -1991 (5)..... 1991 – 1995 (6).....1996- 2007 (11) 2008- 2011 (4)
AL 2008-2011 ES CONSTRUEIXEN MENYS HABITAGES QUE EL 1960. ENTRE UN CICLE I UN ALTRE HI HA 1,5 MILIONS DE PERSONES MÉS A CAT(+ - 25%)



BCN NEW CONSTRUCTION LICENSES 1988-2010- M2 FLOORSPACE

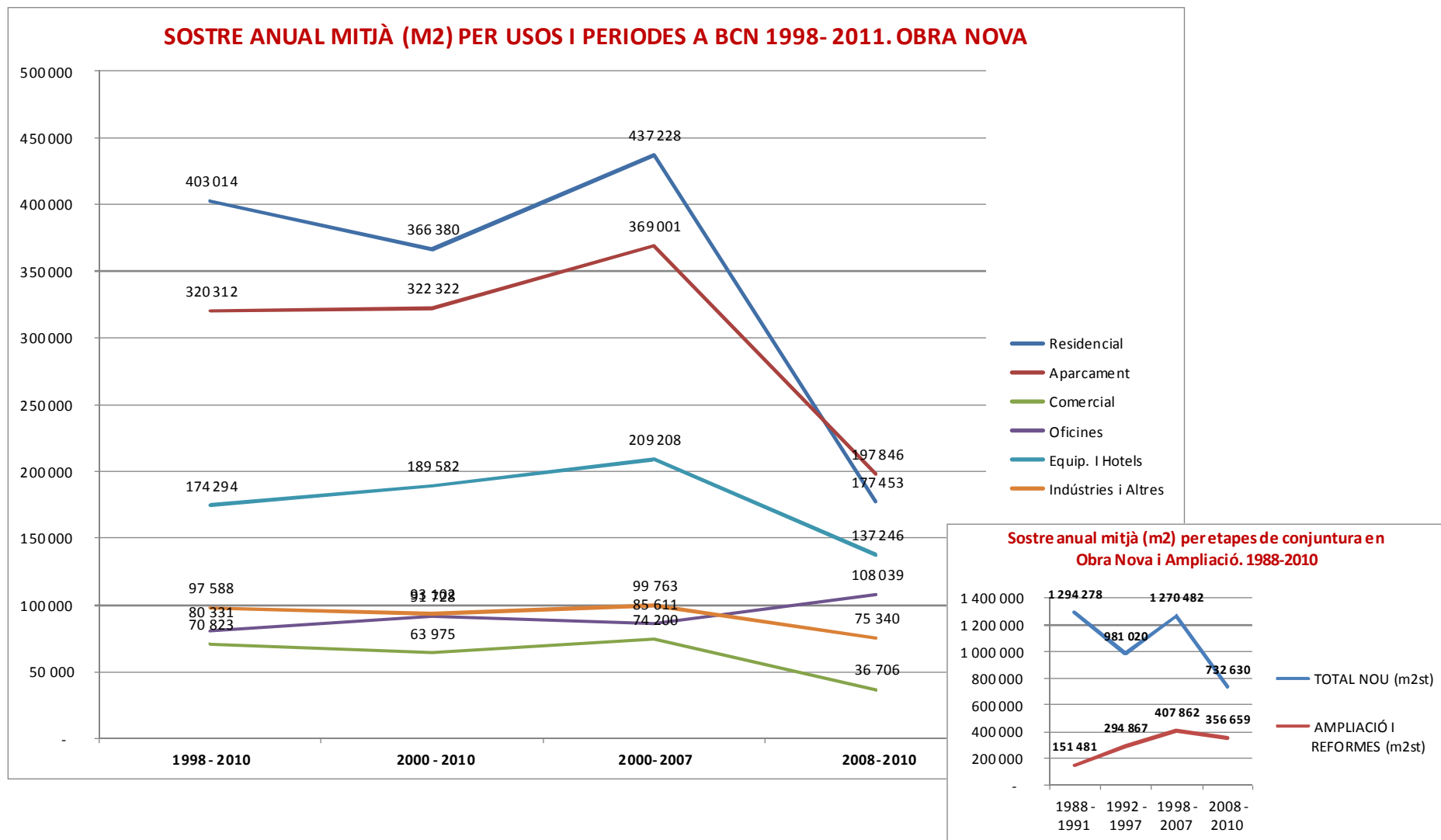


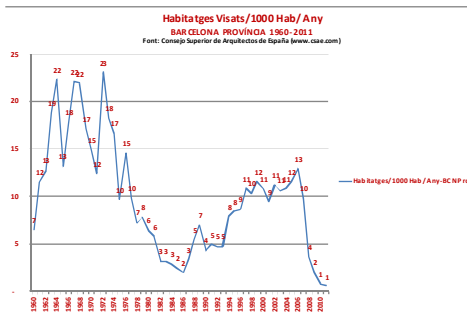
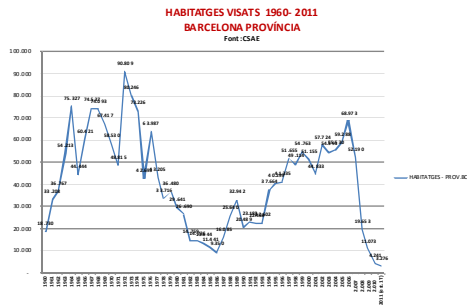
BCN FLOORSPACE DYNAMICS 1998- 2010.

Commercial : 37.000 m2/year (2008-2010)- 74.000 m2/year (2000-2007)

Offices: 108.000 m2/year (2008-2010) – 74.000 m2/year (2000-2008)- Green shots

Total new licenses: 793.000 m2/year (2008-2010) -1.270.000 m2/y (2000-2010)



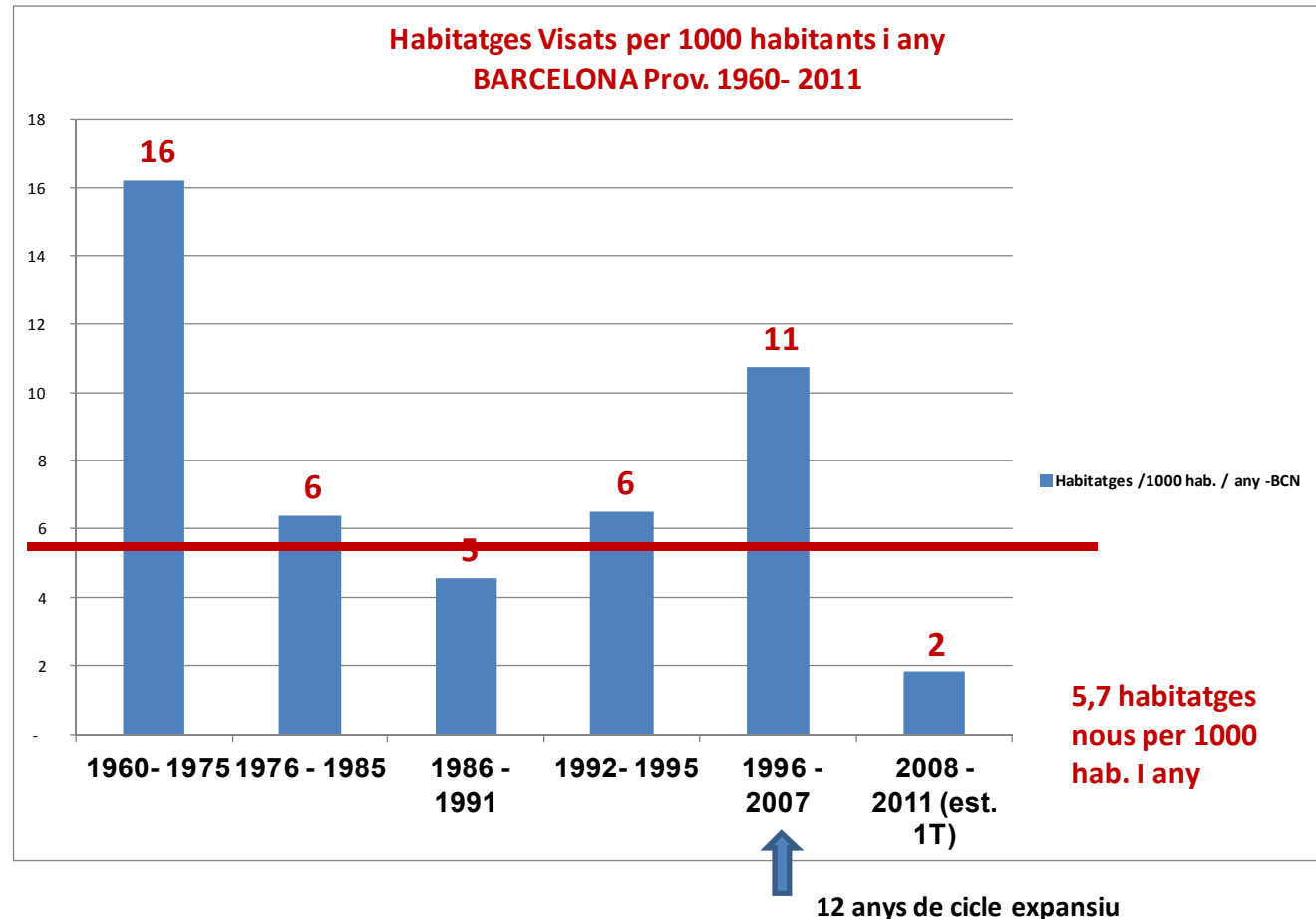


“NECESSITATS”:

40.000 HABITATGES NOUS CAT
(Llei d’Urbanisme 2006):

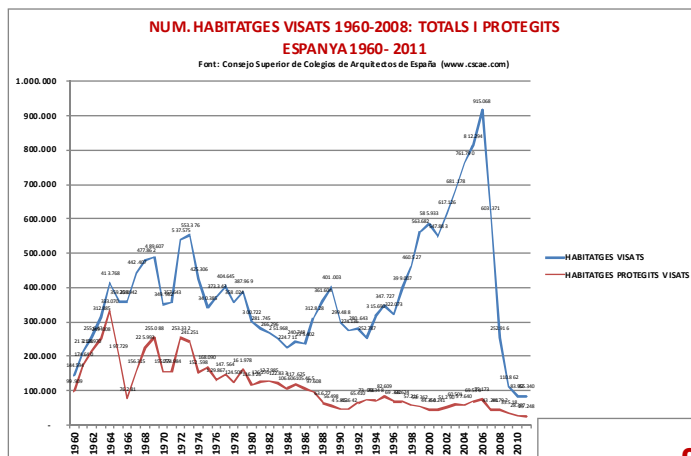
5,7 Habitatges nous /1000 Hab./any= 6

BARCELONA- PROVÍNCIA: PRODUCCIÓ 1960- 2011 – 51 ANYS



Als 60s vam produir més habitatges en relació a la població

1976- 1985: Efecte de la Transitòria del PGM de 1976 demanant llicències amb la normativa del PG 1953 (> 100.000 habitatges a BCN)



**QUANT HPO ES
NECESSITAT?: +-60% (Llei
d'urbanisme 2008)**

→ DÈFICITS ACUMULATS

**Excepte cap al final del cicle
virtuós per la il·lusió
monetària de les hipoteques
barates i els 30 anys de
termini**

**A recordar que el 1983
es construïa HPO a l'Eixample
de Barcelona**

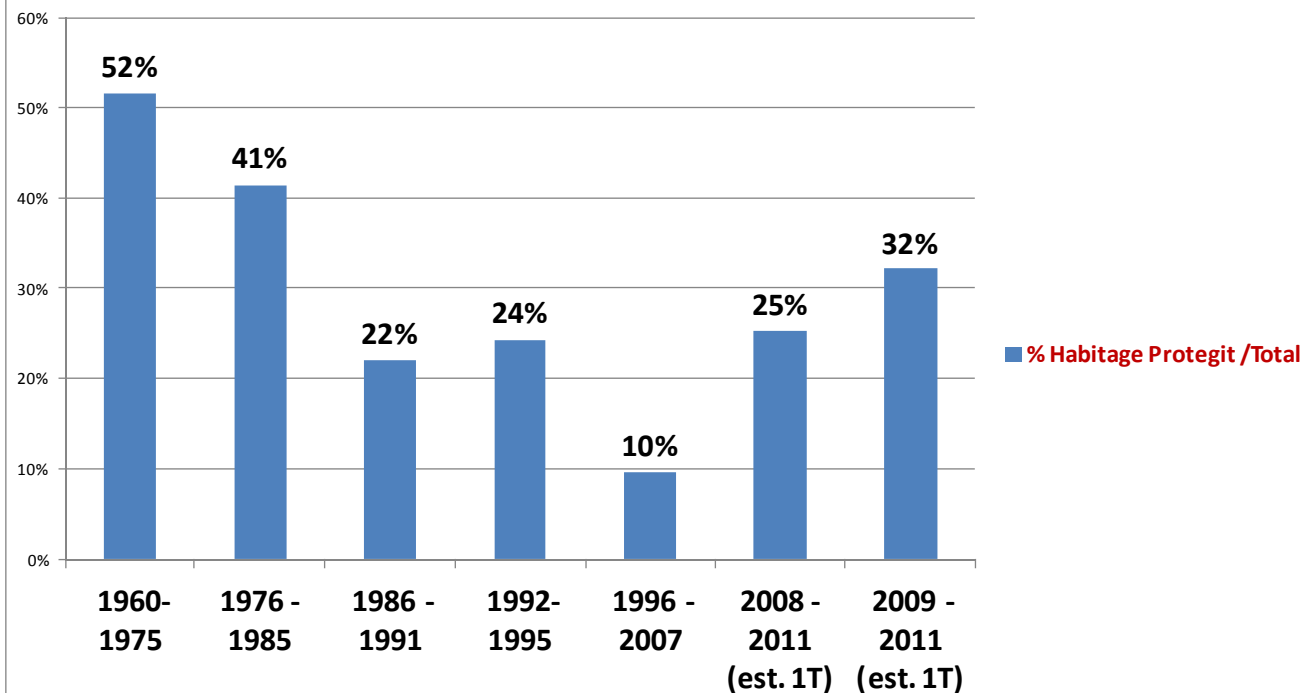
HABITATGE PROTEGIT:

“MOTOR” A 1960-75 (cicle expansiu) I 1975-86 (cicle recessiu)
“ACOMPANYA” I FA COHESIÓ SOCIAL (52% I 41%!!!)
**“MARGINAL” DURANT EL CICLE VIRTUÓS (1996- 2007)- IL·LUSIÓ
 MONETÀRIA PER HIPOTEQUES BARATES I TERMINIS LLARGS**
**“PER SOTA DE LES NECESSITATS” DURANT LA CRISI PER
 MANTENIMENT DELS PREUS ALTS**
COIXÍ PER A LA CRISI? (2008- 2017?)

% Habatge Protegit /Total. Num. habitages visats

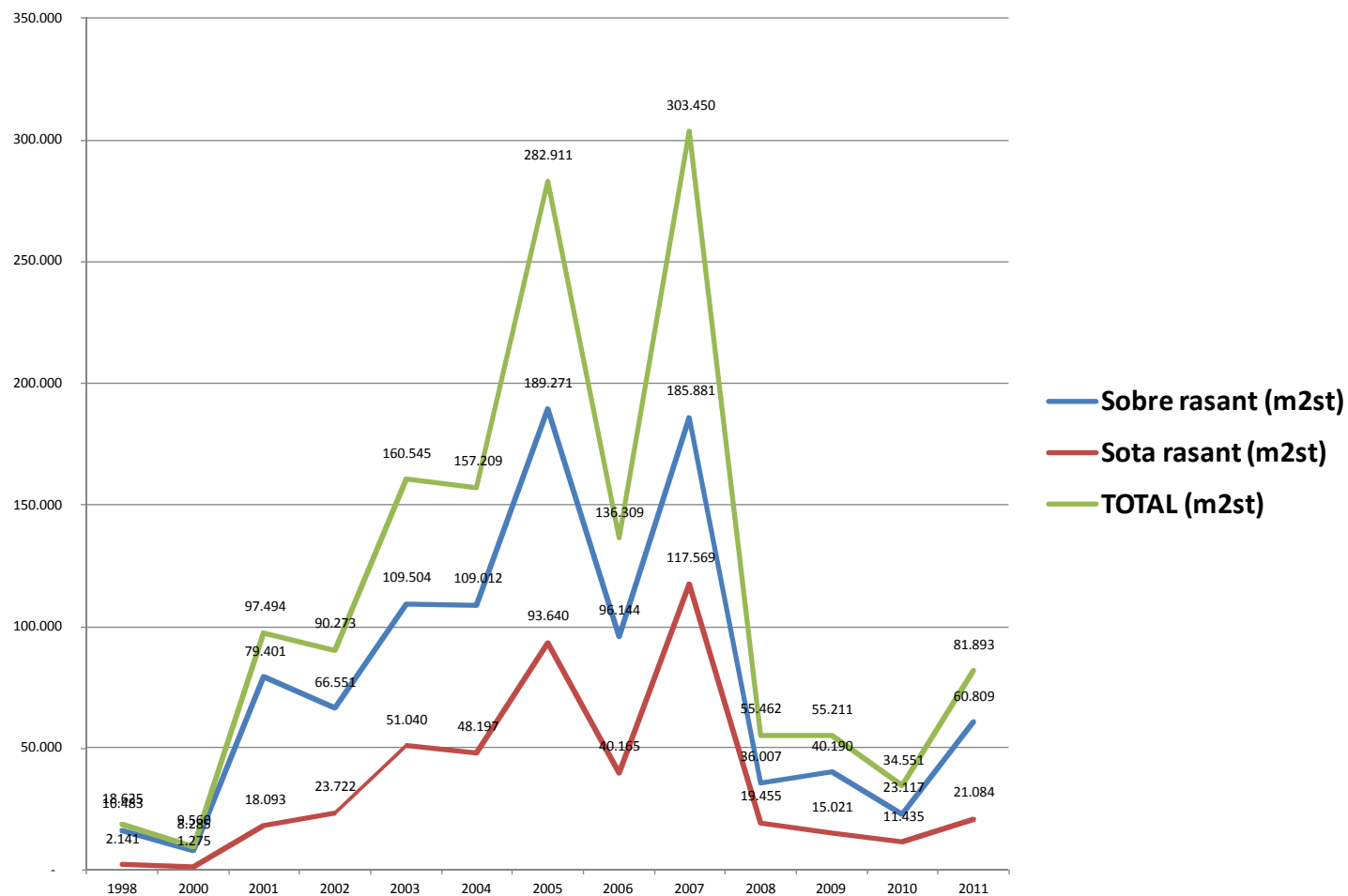
ESPANYA 1960 - 2011

Font: Consejo Superior de Arquitectos de España: csaec.com



CRISIS IMPACT IN THE 22@: GREEN SHOTS. INCREASES IN 2011 ON LAND ALREADY TRANSFORMED

22@. Llicències aprovades 1998- 2011
Superfícies sobre i sota rasant en m2 construïts
Font: Llicències aprovades 22@ i elaboració pròpia



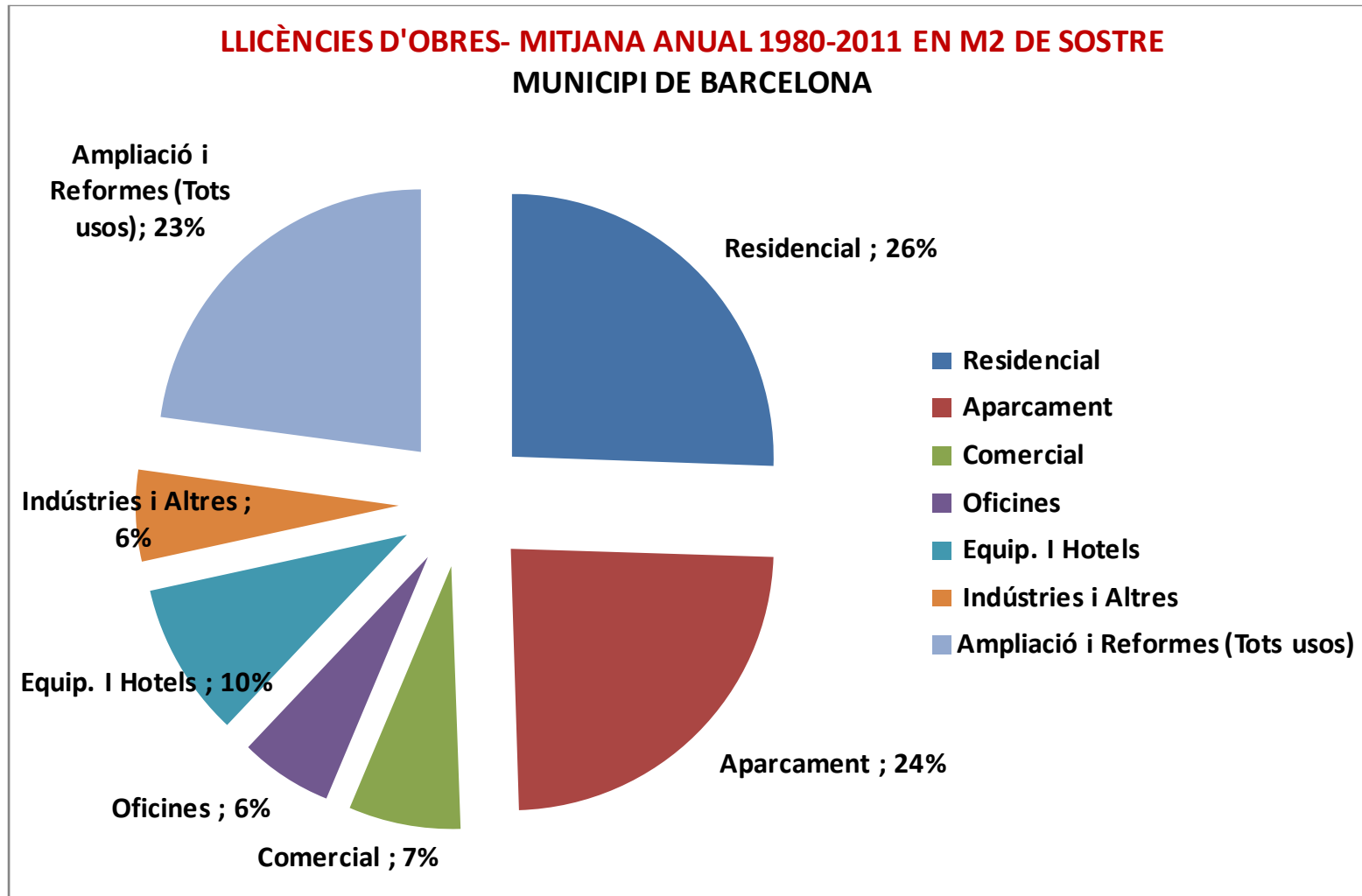
BCN FLOORSPACE DYNAMICS BY USES -DINÀMICA D'USOS A LA CIUTAT

50% HABITATGE I APARCAMENT-parking (68% EN L'ESTOC)

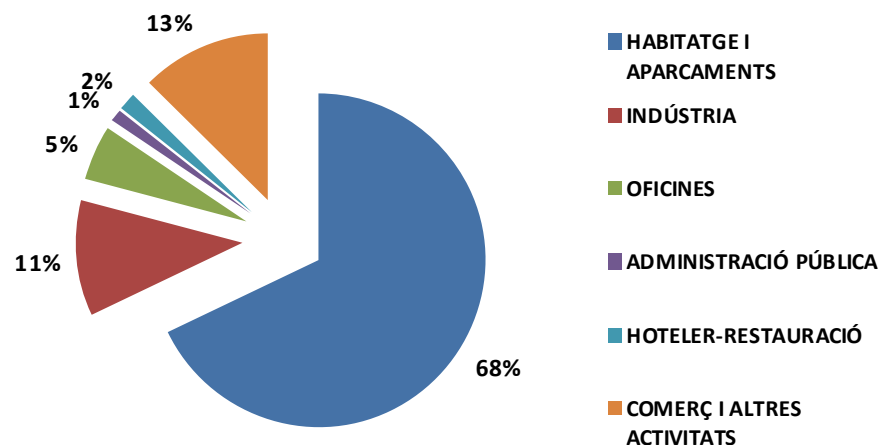
23% AMPLIACIÓ I REFORMES- enlargement and rehabilitation

6% Offices – 7% commercial

0,97% DE CREIXEMENT ANUAL- annual increase



Cadastre de Barcelona. Sostre edificat per usos. 2009.



DE QUINS PRODUCTES IMMOBILIARIS ESTEM PARLANT?.

*** 68% DE SOSTRE RESIDENCIAL I APARCAMENTS**

(+1 DE CADA 3 FAMILIES AMB 2ª RESIDÈNCIA?)

*** 32% DE SOSTRE D'USOS D'ACTIVITAT ECONÒMICA**

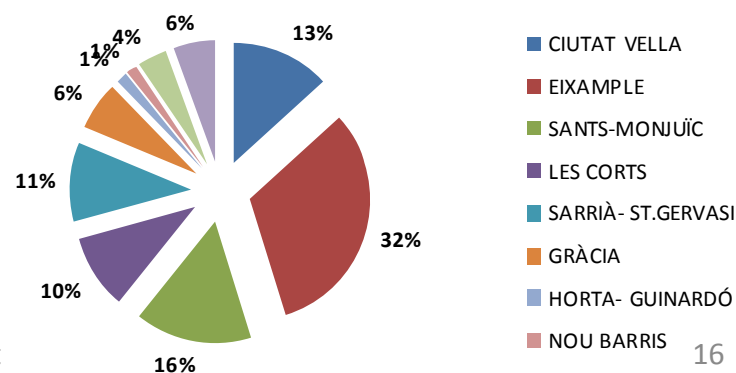
(13% Comerç, 11% Indústria, 5% Oficines, 2% d'Hotels i 1% d'Administració Pública)

La crisi immobiliària i econòmica ha afectat a tots els productes **immobiliaris**- Un **38%** del “problema” és **habitatge producte immobiliari per activitat econòmica**

USOS I LOCALITZACIÓ:

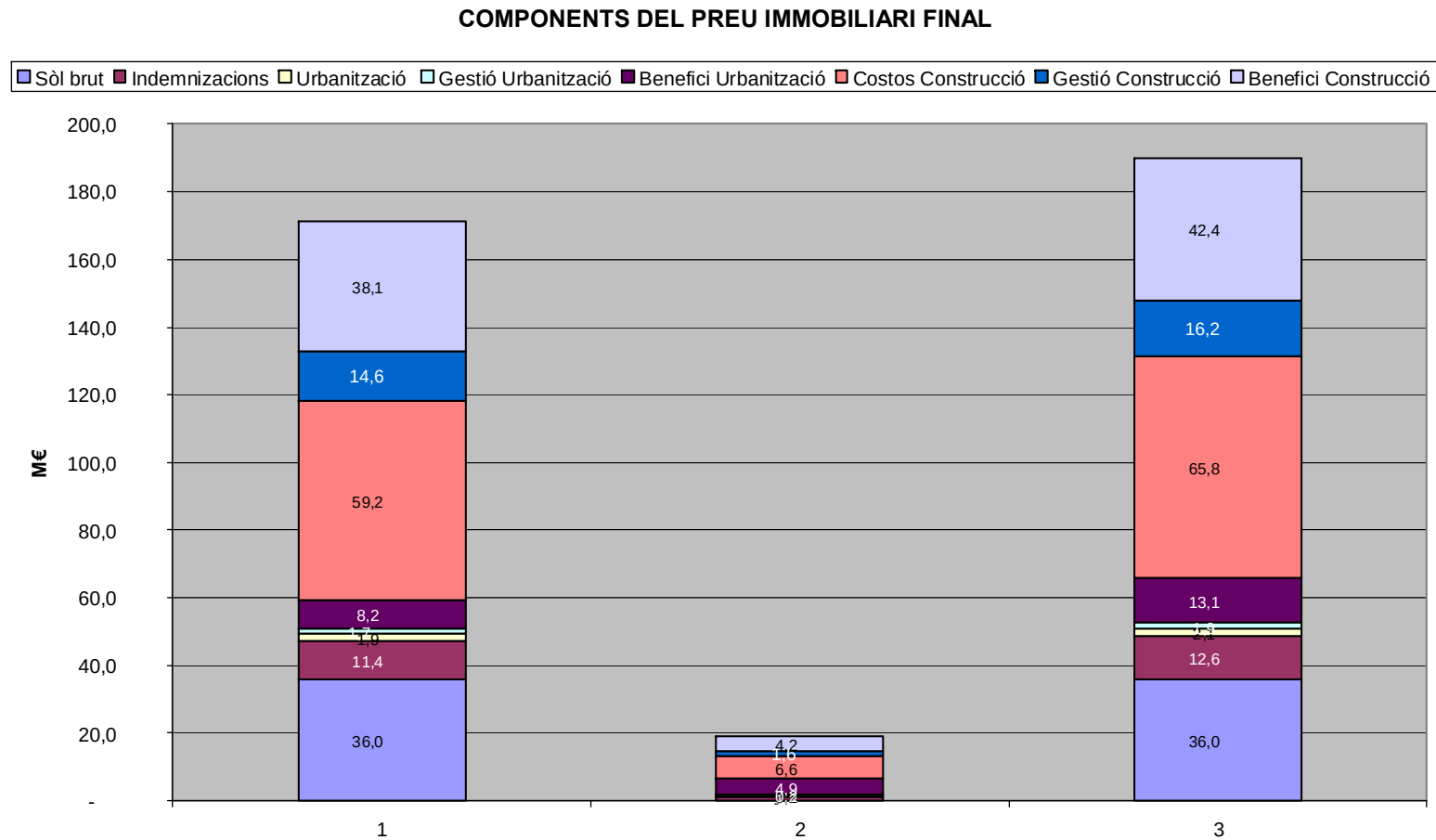
- Les Oficines i el comerç es concentren en prop del 50% en els CENTRES
- Coeficients de +50% als centres en relació a la mitjana municipal i -50% per a les perifèries

BARCELONA. SOSTRE EDIFICAT D'OFICINES+ADMINISTRACIÓ PER DISTRICTES



ECONOMIC FEASIBILITY PARAMETERS IN A RENEWAL OPERATION IN BARCELONA 2005.

COMPONENTS OF THE TOTAL REAL ESTATE PRICE



Density-Edificabilitat: 2,7 m²st/m²s, + 0,3m²st/m²s de cessió a l'Ajuntament per HPO
Office price (2005).Preu de venda d'activitat @= 3.000 €/m²st / P.V, habitatge protegit = 1.456 €/m²st

Average Price. PV mitjà = 2.850 €/m²st

Construction cost. Cost de construcció mitjà: 986 €/m²st

Programme. Calendari: 6 anys

Economic feasibility

Final price:En relació al preu immobiliari:

- **Land**. Valor mitjà de solar: 986 €/m²st (35%)-
- **Construction and promotion management**. Construcció i gestió (inclou comercialització): 1.228 €/m²st (43%)
- **Profit**. Benefici: 635 €/m²st (22%)
- **Profit rate**. Taxa de rendibilitat anual: 15%-TIR

En relació al valor del solar (986 € /m²st)- **Land**:

- **Land ownership**. Sòl abans d'urbanitzar: 600 €/m²st (61%)-
Land ownership: 600x 2,7 = +-1.600 €/m² land
- **Compensations**. Indemnitzacions: 189 €/m²st (19%)
- **Urbanisation**. Urbanització (P.E.I.): 32 €/m²st (3%)
- **Management**. Gestió (inclou 4% del P.E.I. i comercialització): 28 €/m²st (3%)
- **Profit**. Benefici: 137 €/m²st (14%)
- **Profit rate**.Taxa de rendibilitat anual: 15%

VALORS RESIDUALS 2008. ALTERNATIVES SEGONS SITUACIÓ I CARACTERÍSTIQUES

	HPO (general)		HPO Concertat
Valor venda útil	1.940,480	1.940,480	3.001,680
Útil / construït	0,800	0,800	0,800
Valor construït	1.552,384	1.552,384	2.401,344
Cost construcció	812,590	867,230	867,230
Despeses promoció	121,889	130,085	130,085
Marge benefici	0,880	0,880	0,880
Valors residuals:	431,619	368,783	1.115,868

	22@		Hotel
Valor venda útil	4.320,000	5.280,000	6.600,000
Útil / construït	0,850	0,850	0,850
Valor construït	3.672,000	4.488,000	5.610,000
Cost construcció	1.038,380	1.246,056	1.200,000
Despeses promoció	531,834	643,097	360,000
Marge benefici	0,790	0,790	0,790
Valors residuals:	1.330,666	1.656,367	2.871,900

	Habitatge lliure / loft	
Valor venda útil	7.470,00	7.500,00
Útil / construït	0,80	0,80
Valor construït	5.150,00	6.000,00
Cost construcció	1.112,42	1.112,42
Despeses promoció	642,726	693,726
Marge benefici	0,820	0,820
Valors residuals:	2.467,854	3.113,854

Offices prices
2007:

+/-4.500 €/m²

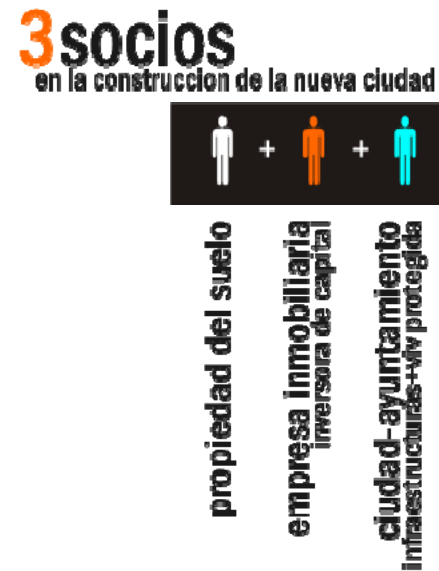
2012: -35%

+/-3000 €/m²

(= +/- 2004-2005)

Distribución de beneficios y cargas en el sistema de planeamiento urbanístico español

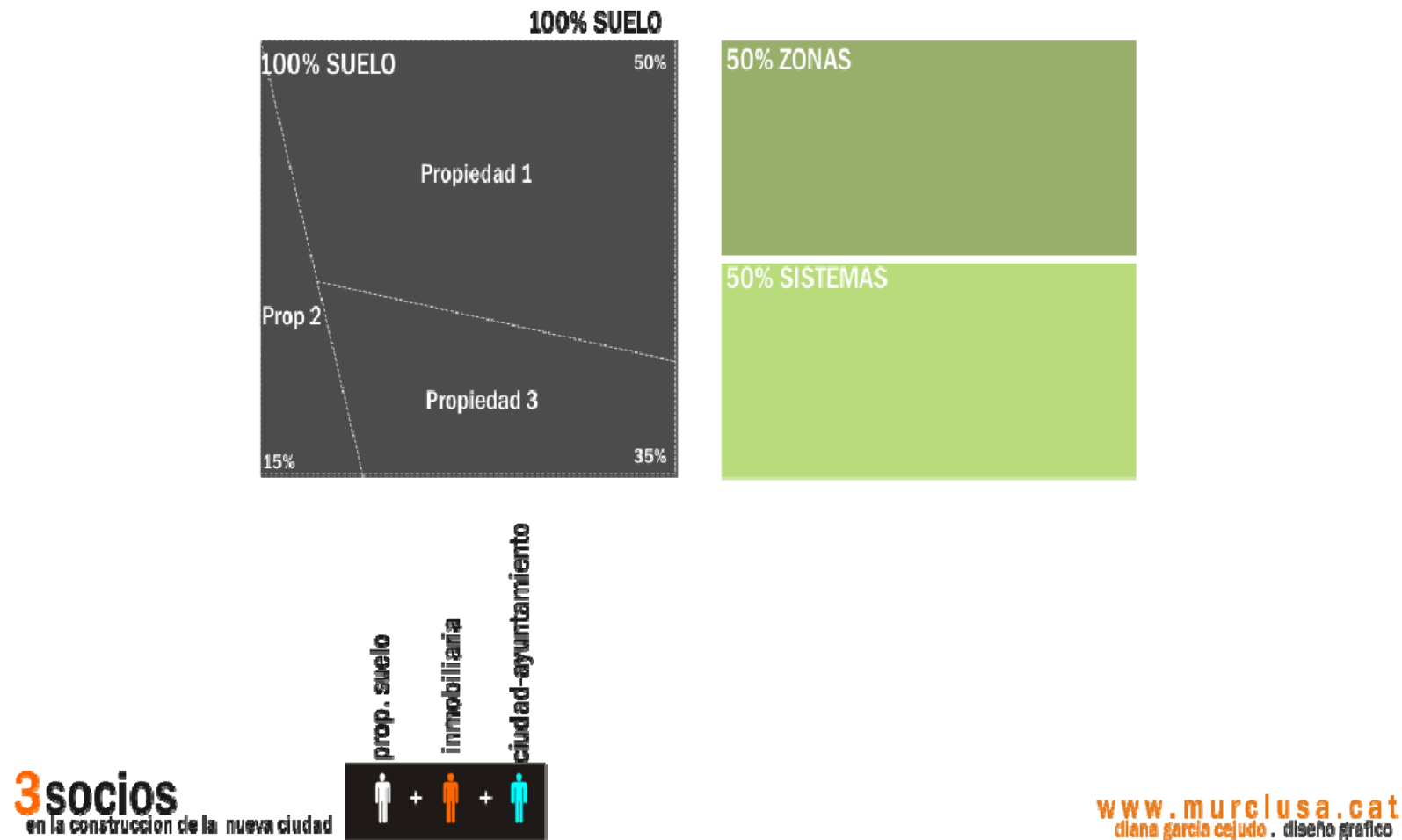
Planeamiento Español (Legislación General) + Planeamiento Catalán (Legislación Ordenación del Territorio)



www.murclusa.cat
diana garcia cejudo. diseño grafico

Distribución de beneficios y cargas en el sistema de planeamiento urbanístico español

Planeamiento Español (Legislación General) + Planeamiento Catalán (Legislación Ordenación del Territorio)

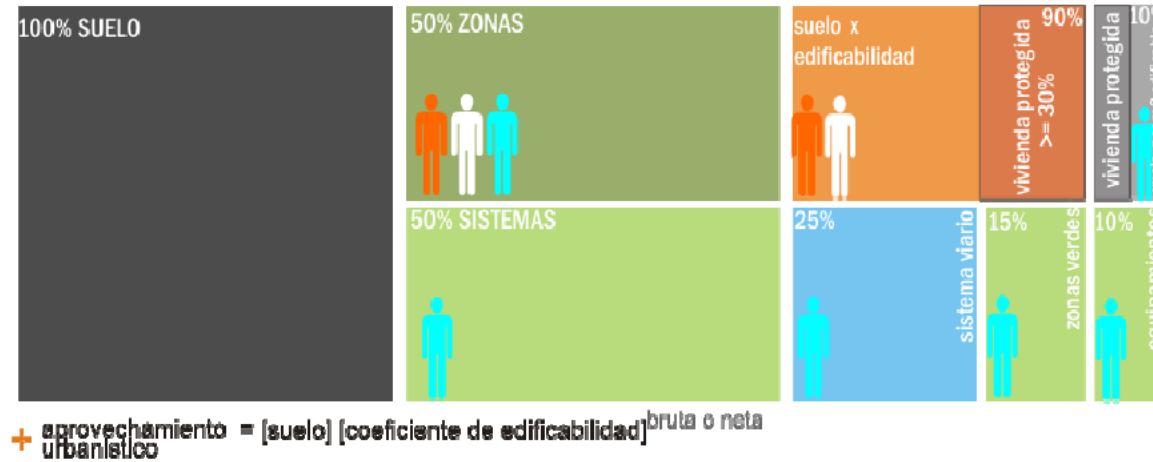
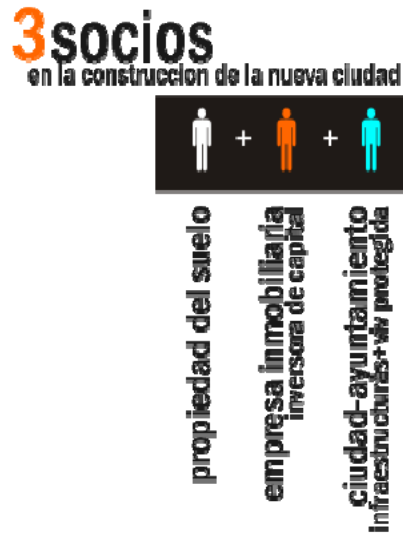


1. SITUACIÓN DE PARTIDA:

- Propiedad del suelo: varias propiedades
- Planeamiento urbanístico: $\approx$ 50% "Zonas" (usos lucrativos) + $\approx$ 50% "Sistemas" (usos públicos)

Distribución de beneficios y cargas en el sistema de planeamiento urbanístico español

Planeamiento Español (Legislación General) + Planeamiento Catalán (Legislación Ordenación del Territorio)



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diana garcia colado, diseño gráfico

2. “CARGAS” DE “SISTEMAS”:

Cesión del suelo Ayuntamiento

Costes de urbanización completos = Urbanización Local + Infraestructura de Conexión

3. CARGAS DE “ZONAS”

- “Zonas” = 10% cesión al Ayuntamiento

- “Zonas” ≥ 30% Vivienda protegida

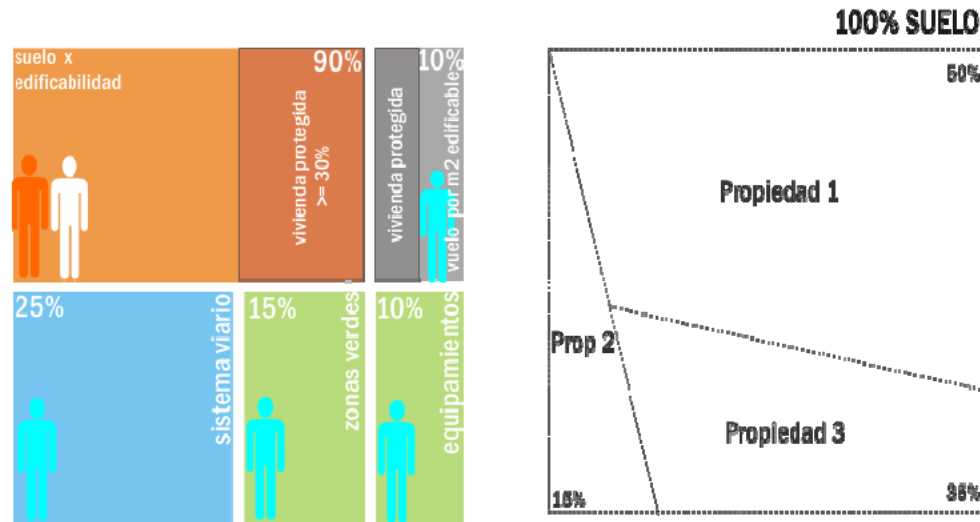
(Tanto en el 10% del Ayto. como en el 90% privado // “Usos no residenciales” = sin carga de vivienda protegida)

4. “BENEFICIOS PRIVADOS” / “Aprovechamiento urbanístico” (valor de mercado)

(90% Suelo x Edificabilidad)

Distribución de beneficios y cargas en el sistema de planeamiento urbanístico español

Planeamiento Español (Legislación General) + Planeamiento Catalán (Legislación Ordenación del Territorio)



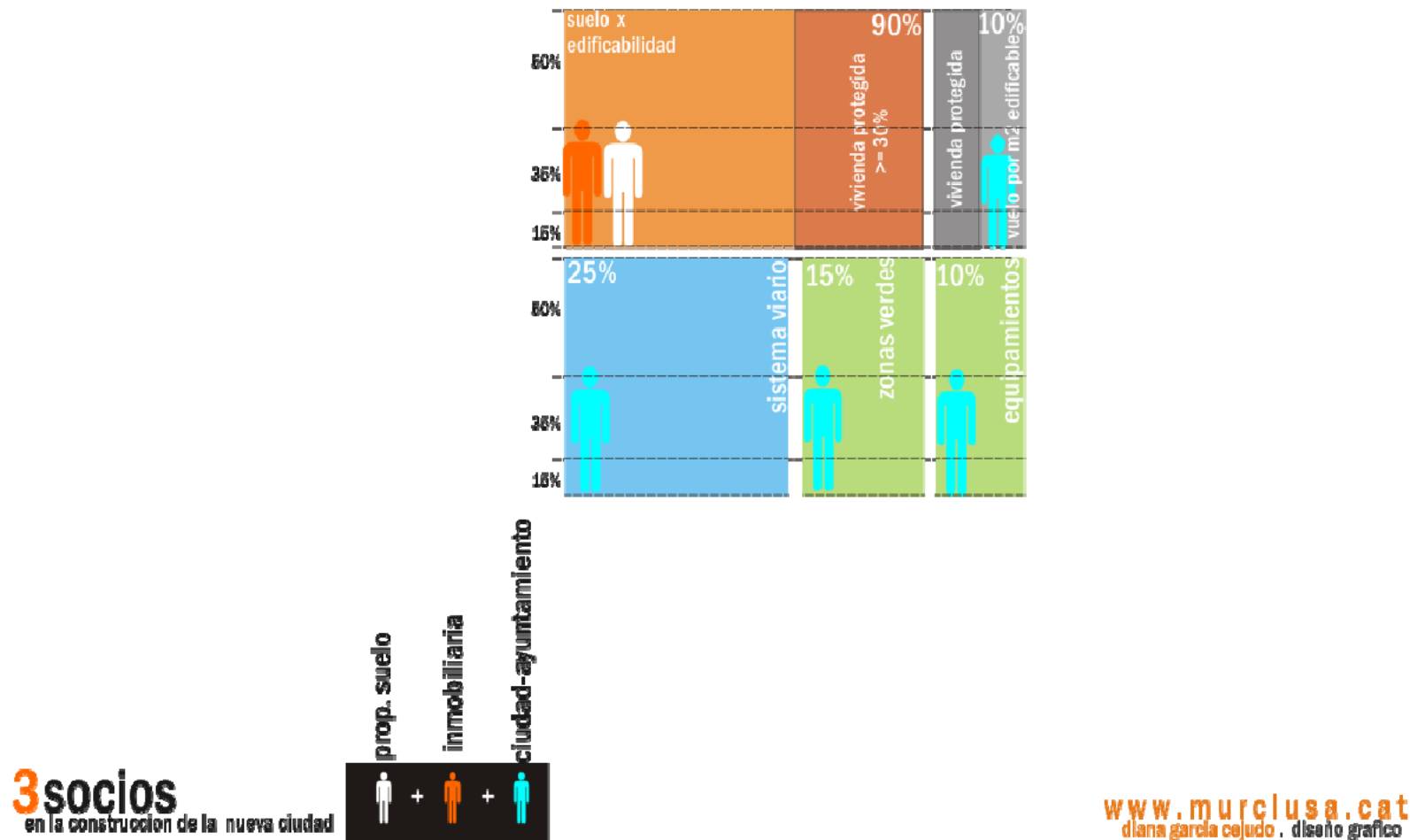
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5. “EQUIDISTRIBUCIÓN”=

- Las “cargas totales de urbanización” (incluida la parte del 10% cedido al Ayuntamiento se “aportan” en proporción a la propiedad del suelo inicial= 50%-35%-15%
- Los “beneficios privados” (90% de los solares edificables) se “reciben” en proporción a la propiedad del suelo inicial

Distribución de beneficios y cargas en el sistema de planeamiento urbanístico español

Planeamiento Español (Legislación General) + Planeamiento Catalán (Legislación Ordenación del Territorio)

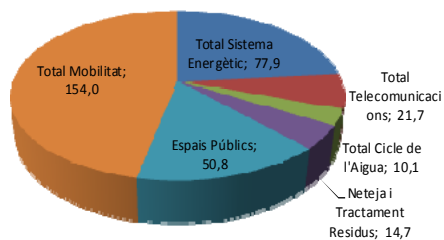


6. SITUACIÓN FINAL

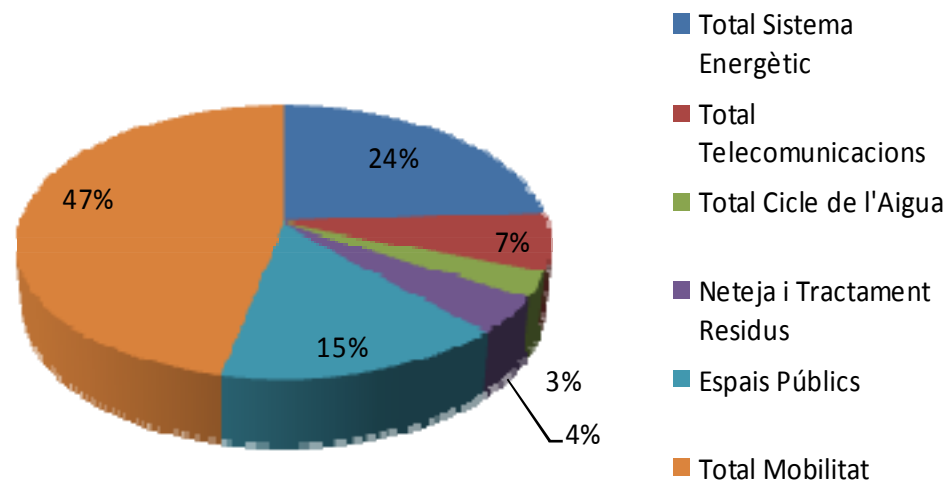
- “Sistemas” urbanizados = Ayuntamiento (Informe de Sostenibilidad Económica de que podrá “mantenerlo)
- 10% del “aprovechamiento” = Ayuntamiento ($\geq 30\%$ Vivienda protegida / $\leq 70\%$ Vivienda Libre)
- 90% “Zonas” ($\geq 30\%$ Vivienda protegida / $\leq 70\%$ Vivienda Libre) = 50%-35%-10% de las propiedades iniciales

RE-URBANISATION AND FINANCING OF 22@: 47% STREETS – ONLY 19% COUNCIL – 40% DEVELOPERS

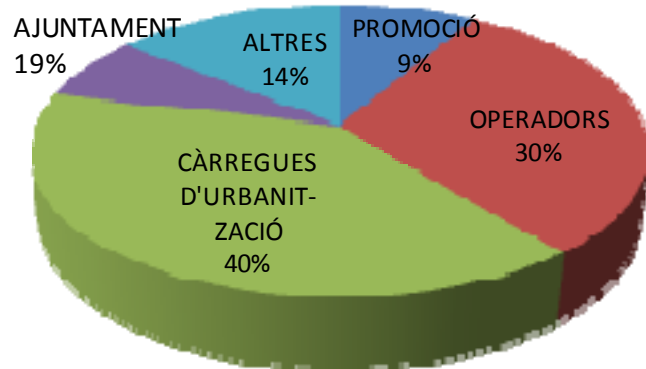
INVERSIONS DEL P.E.I. PER TIPUS D'ACTUACIONS (M€)



INVERSIONS DEL P.E.I. PER TIPUS D'ACTUACIONS (%)



FINANÇAMENT DE LA INVERSIÓ LOCALITZADA AL 22@ I CONNEXIONS



ESTIMATED CRISIS IMPACT- 2012. Renewal operations not viable

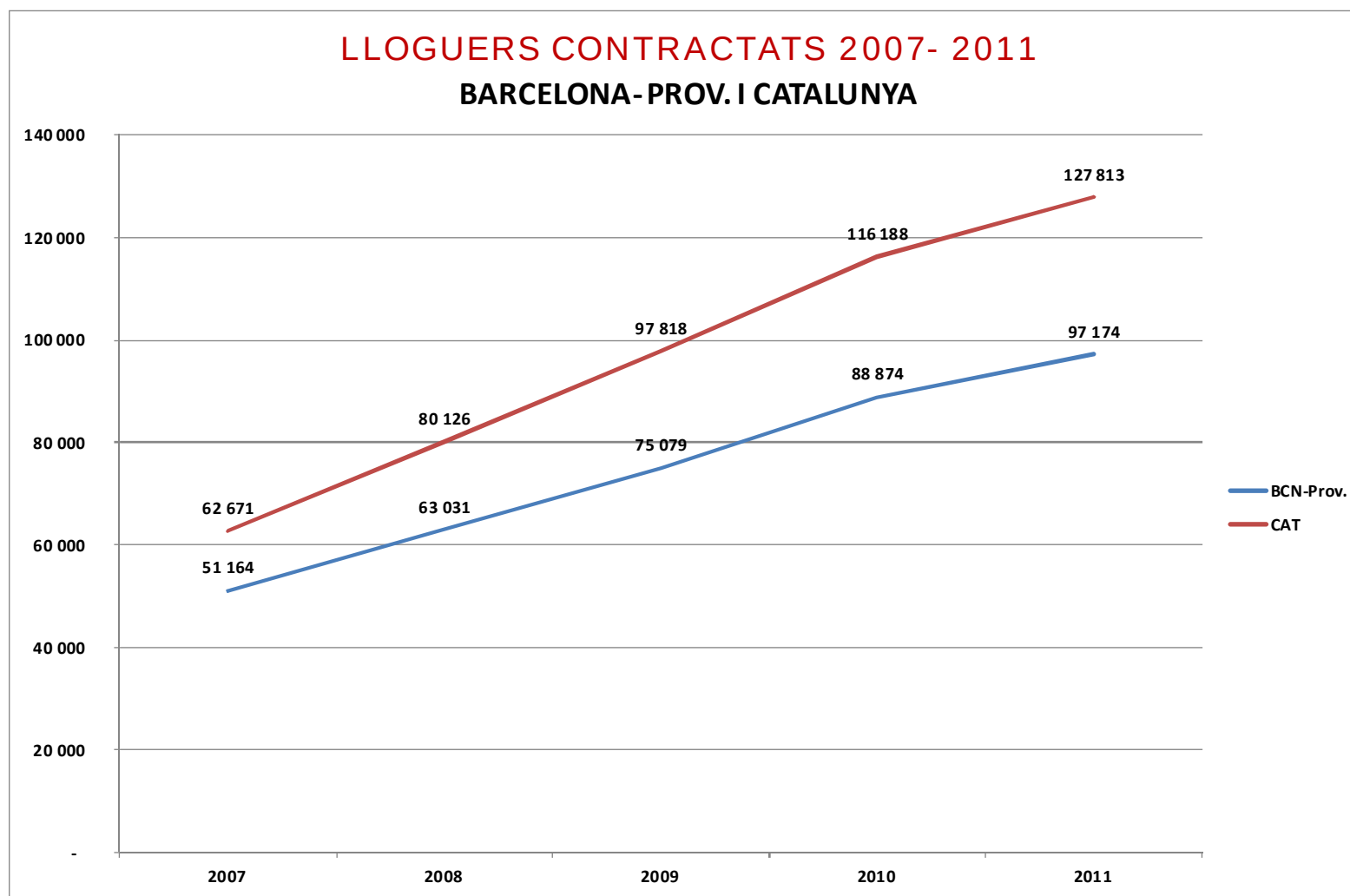
- **Final price: Reduction of +/- 30% (from 2.850 €/m² to +/-1.995 €/m²)**
- **Construction and promotion.** Construcció i gestió (inclou comercialització): 1.228 €/m²st (43%)- **Reduction +/-10% (to 1.105 €/m²)**
- **Profit.** Benefici: 635 €/m²st (22%) – **Adjusted- Reduction 20% (to 508 €/m²)- Profit rate +/-15%?**
- **Land.** Valor mitjà de solar: 986 €/m²st (35%)- **Residual- to 382 €/m²**
- **Compensations + urbanisation+ management: 249 €/m²- Adjusted- Reduction of +/- 20%**
- **Residual for land ownership: +/-133 €/m² (from 600 €/m²)- Land: 133 x 2,7 = 360 €/m² land**
- **Prices of manufacturing sites: +/-900 €/m² (BCN)- 700 €/m² at 20 Km**

"BROTS VERDS"- ES NECESSITEN HABITATGES:

375.000 NOUS LLOGUERS ENTRE 2007 I 2011 A BCN- PROV.

120.000 LLOGUERS PER SOBRE DEL NIVELL DE 2007

LLOGUERS "COM OPCIÓ DE COMPRA"



L'ESTOC PRODUÏT I SENSE VENDRE

EL MERCAT NO S'HA ATURAT DES DEL 2007

Respecte dels pisos produïts des de 2003 (arrodonit)- Exemple d'una promotora de Sabadell

- 40% venuts abans del començament de la crisi (2007)
- **60% BUIITS, el 2007**
- **10% venuts des de 2007- MERCAT TRENCAT DE PISOS EN VENDA**
- **30% llogats des de 2007 – “COIXÍ”** (450 – 600 € /mes- segons localització i habitacions) – **BROT VERD – HA PERMÉS EVITAR EMBARGAMENT- LIMITA PÈRDUES**
- **20% NOUS BUIITS EN VENDA**
- **5+5 ANYS PER VENDRE?**
- **3 ANYS PER A LLOGAR-LOS TOTS?-POSSIBLE**

CON CLUSION

Spain has gone further than any other European country in its pursuit of inclusionary housing. The process was initiated by autonomous governments in the Basque Country and Madrid in the mid-1990s and continued in other regions in subsequent years. It culminated with the national *Ley del Suelo* of 2007, which required that **a minimum of 30 percent of buildable residential land be dedicated to social housing.**

Spain's achievements can be explained by several factors.

First, the country has a long tradition, initiated under the Franco dictatorship, of strong public intervention in the real estate market. A principle exists that **the right to land ownership and development is to be accompanied by obligations and duties**, and land speculation has been singled out as a process to be discouraged.

Second, with the advent of democracy, this tradition was enshrined in the **1978 Constitution**, in which Article 47 calls for “regulating the use of land in accordance with the general interest to prevent speculation,” and for the sharing by the community of “the increased values generated by the urban activities of public bodies.” **Article 47 also declares: “All Spaniards have the right to enjoy decent and adequate housing” and that public authorities shall endeavor to make that right effective.**

Third, since the mid-1990s it has become increasingly clear that past policies were sorely insufficient to accommodate increasing demands for affordable housing, which led to calls for greater action by the government. Finally, the rapid and substantial increase in immigration raised concerns about social and geographic segregation. All these factors, with additional impetus provided by skyrocketing housing prices, contributed to **a kind of perfect storm that legitimized high levels of intervention in the real estate market aimed at recapturing unearned increments in land value to benefit the larger society. The result was inclusionary housing.** + *Financing city level infrastructure*

The actual creation of social housing, however, has been a slow process. Inclusionary housing has been implemented through the dedication of *reservas*, but considerable time can pass before these land set-asides translate into homes for residents. Even in the Basque Country it took almost 10 years to establish the *reservas* system, and it took even longer in Catalonia. ***Ironically, the delay was caused by the very problem inclusionary housing was intended to correct.***

With homes appreciating rapidly, developers could make fortunes in market rate housing, and they fought any action that would curtail their development activity. But, the result could have been merely a postponement of inclusionary housing construction, as localities have obtained ample land ***reservas and developers are now eager to build VPOs.***

For this potential to be fully realized, however, loans need to be provided by banks to builders and buyers of VPO units. Unfortunately, with the financial crisis gripping the country, banks are increasingly reluctant to make loans. Regions and larger localities have created a variety of quasi-independent entities that build social housing, an approach peculiar to Spain. Very few nonprofit organizations in Spain either build social housing, as in the United States, or buy it from developers, as in England or France, and then also manage the housing. These roles are performed in Spain by quasi-public entities, but efforts to increase the presence of nonprofits exist as well. Another example of Spain's more interventionist state is the ARE program in Catalonia, by which the regional government accelerates the development of privately owned land for the production of inclusionary housing. 8

In Spain, as in France, the fostering of spatial integration, or avoidance of social segregation, is of great concern. For example, Catalonia has legislated extensively to foster urban solidarity and avoid concentrations of VPOs. Most striking is a mandate probably inspired by the French *Loi SRU*. It requires that in the 2008–2028 period all Catalan municipalities greater than a certain size achieve a minimum 15 percent of nonmarket housing.

While there is a strong belief in Spain that **the cost of inclusionary housing will be absorbed by the landowner (LESS PROFIT)**, to ensure the political and economic viability of projects it is still important to provide economic analyses of the costs and benefits of various levels of inclusionary housing for **the three parties involved in urban construction: the landowner, the public, and the builder/developer.**

Probably because its planning system is so entangled with financial issues, Spain is a country where the economic implications of planning decisions are carefully analyzed, including those concerning inclusionary housing.

The two case studies presented in this chapter show how different circumstances and contexts led to different levels of land value recapture, while ensuring that developments were still economically viable. **La Marina in Barcelona was based on a complete recapture of potential development value**, and **Vigo's** plan was to recapture 25 percent of land value increases from 2003 to 2007.

Given the collapse of the real estate market after 2008, it remains to be seen what kinds of revisions, if any, will be required in those two plans. Nevertheless, these case studies point the way to a practice that should be adopted by jurisdictions in other countries to assist in the decision-making process that leads to inclusionary housing interventions.

Barcelona: La Marina Plan

Discussion.

The increase in the inclusionary requirements and infrastructure charges in the plan for La Marina reflects the escalating “public-ification” of land values as contemplated at all levels of government, from the national planning laws of the entire post-Franco era, to Catalan regional laws of the last several decades, to the planning practices of the City of Barcelona itself. This constitutionally derived institutional context opened a new approach for the social recovery of land value increases and the guarantee of adequate housing for all families.

The extent to which the “private city” was made to pay more for the benefit of the “public city” (public infrastructure and land for VPOs) reflects the extent to which real estate prices, and consequently land prices, had increased as a result of the real estate boom from 1997 through 2007. Whether those arrangements remain sustainable under existing conditions remains uncertain. DEPENDS ON FINANCIAL CONDITIONS

It should be noted that the inclusionary requirement increases the potential demand for housing because it makes housing accessible to a larger population, thus **potentially playing a countercyclical role now that the 1996–2007 bubble has ended. In that context, the internal rate of return for a developer of inclusionary housing can be even higher than that in the free housing market,** because the VPO units have shorter selling periods and are being built on land bought according to the derived demand price principle, without speculative expectations of future housing price increases.