

Constructing tomorrow, today

Annual construction conference

21 March 2018

Grant Thornton



Welcome

Oliver O'Connor
Head of Construction
Grant Thornton

Agenda

8.20am	Jim Power, Owner, Jim Power Economics Limited
8.35am	Richard Barrett, Founder, Bartra Capital
8.55am	Tanya Duncan, Managing Director, Interxion
9.15am	Stephen Tennant, Partner, Grant Thornton
9.30am	Paul Mitchell, Director, Mitchell McDermott
9.50am	Panel discussion
10.00am	Owen Reilly, Owner, Owen Reilly
10.20am	Closing remarks, Oliver O'Connor, Grant Thornton Financial Counselling



Quick look back

2017 Construction Review:

Output	Excess of €16.2 billion	[Up 16%]
OnSite	Excess of €7.6 billion	[Up 17%]
Plans Granted	Excess of €8.7 billion	[Down 21%]
Plans Submitted	Excess of €10.5 billion	[Down 4%]



Present day

Residential: >19k unit completed in '17
>22.5k anticipated for '18

Commercial: Gradual slowdown in pipeline

Industrial: Value exceed €2.7 bn / Data Centres incl. Facebook

“

“Change is the law of life. And those who look only to the past or present are certain to miss the future”.

John F. Kennedy

”

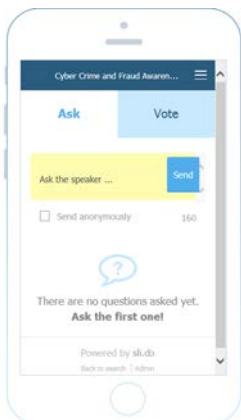
The importance of tomorrow

- Build to Rent
- Co-Living
- Data Centres
- Forward funding
- Virtual reality
- Impact on your business / you?



Sli.do

- Simply enter sli.do into the address bar of your browser
- Sign in with event code #gtconstruction
- Touch the 'ask' screen if you wish to ask a question— you can do so anonymously or sign your name to it



Jim Power

Owner

Jim Power Economics Limited

**Grant Thornton Construction
Conference
Jim Power
March 2^{1st} 2018**



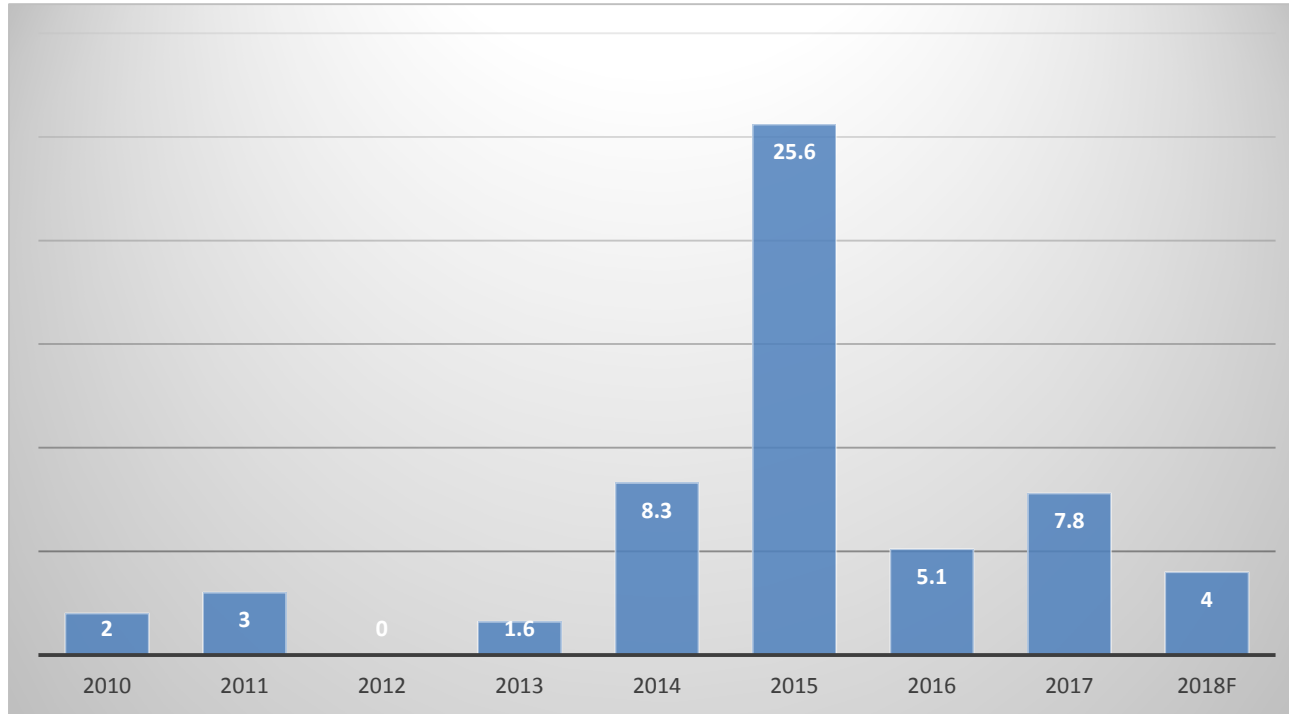
Jim Power
economics

The Global Context

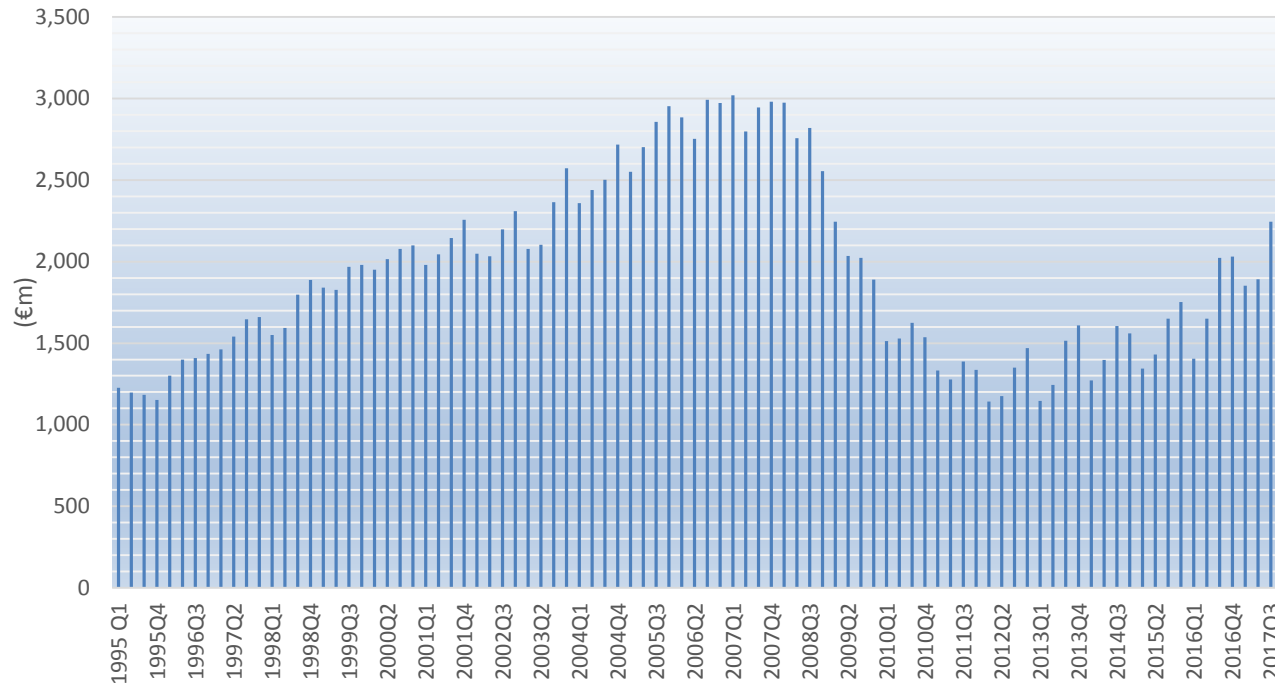
- Global economy in strong synchronized upswing
- Implications for Official Interest Rates > US 0-1.5%; UK 0.25-0.5%; ECB 0-?
- Bond yields edging up
- Threats from Trump's Trade Policies; Brexit; Equity Markets; Central Bank panic

- Strong domestic momentum
- Labour market very strong – labour shortages?
- Housing & Public Services big political issues
- Brexit – threats & opportunities
- Corporation Tax agendas

GDP Growth



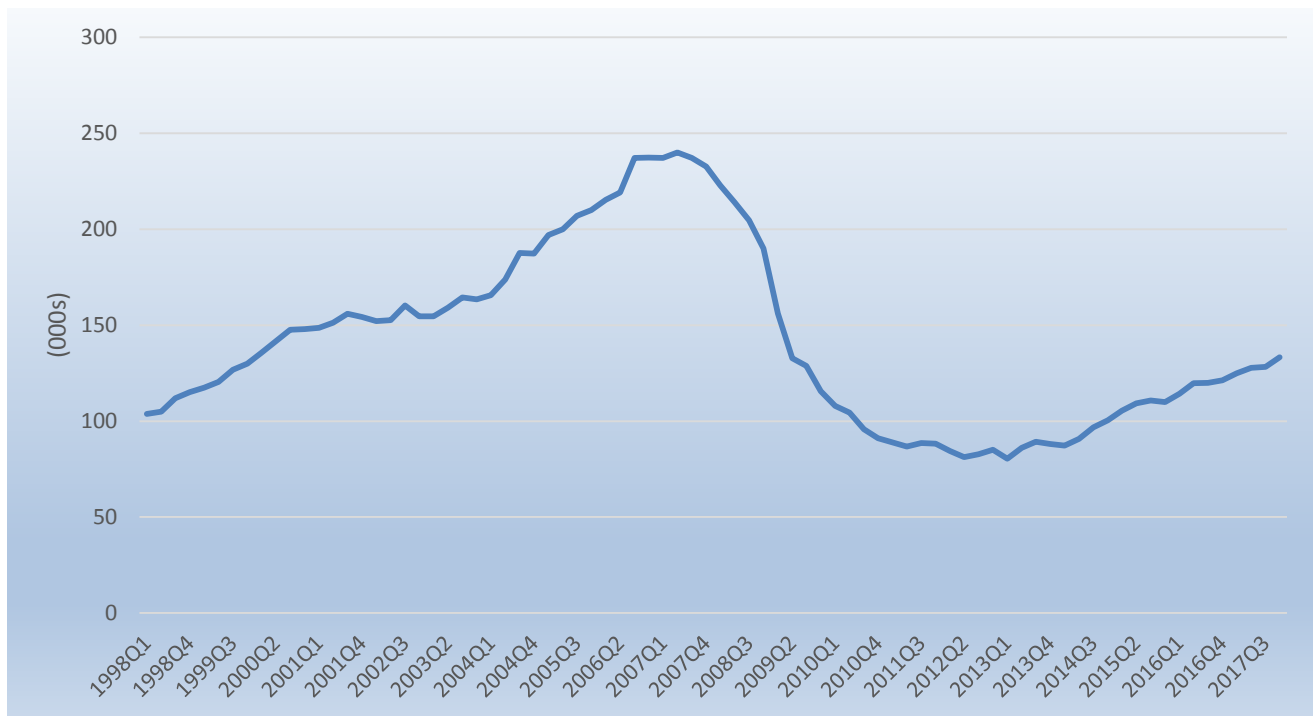
Gross Value Added Construction



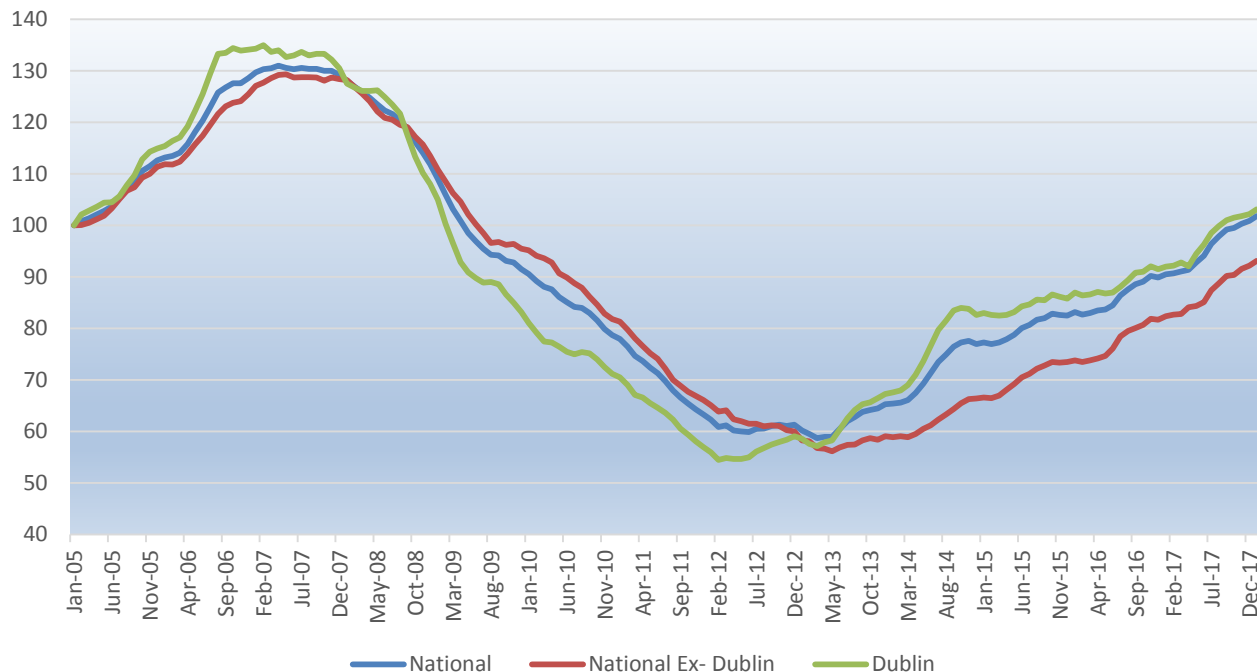
Capital Formation 2017

- Building & Construction +16.7%
 - New Dwellings +32.6%
 - All Other Building & Construction +13.2%

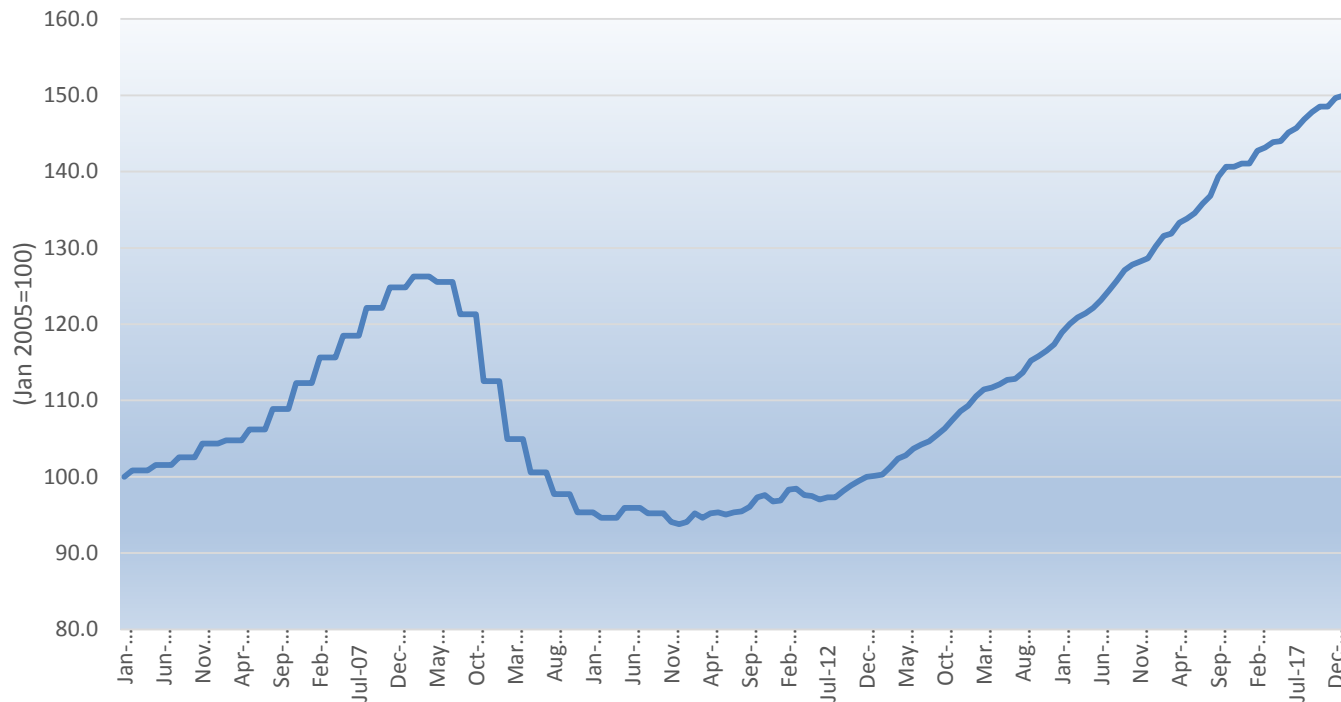
Construction Employment



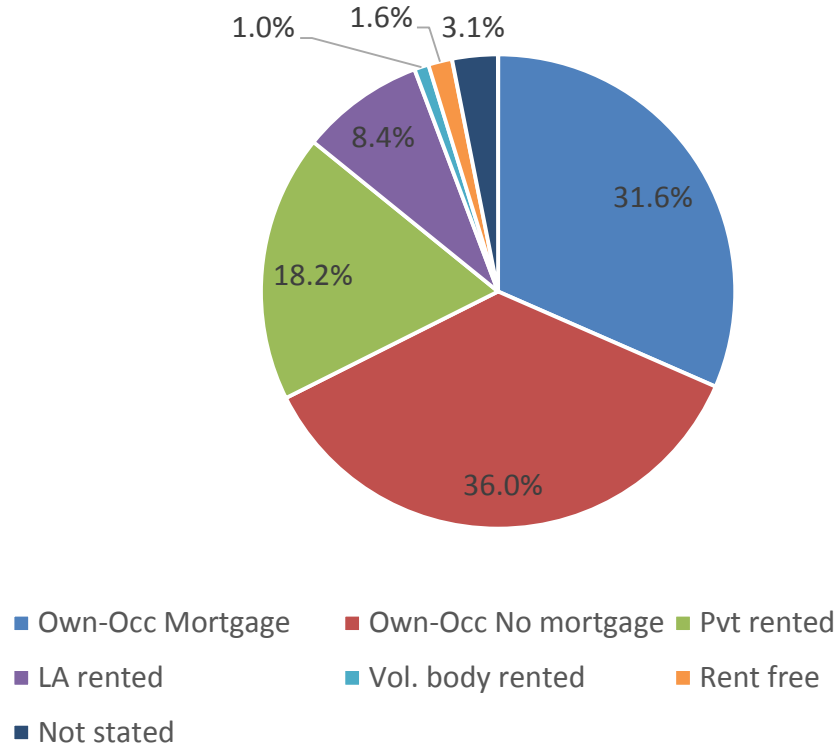
House Price Index



Private Rents



Housing Tenure 2016



Distribution of Household Expenditure, 1980-2016

	1980	1987	1994-1995	1999-2000	2004-2005	2009-2010	2015-2016
Food	27.7	25.2	22.7	20.4	18.1	16.2	14.7
Alcohol & tobacco	7.2	8.0	7.7	7.6	6.0	4.9	3.3
Clothing & footwear	8.9	6.7	6.4	6.1	5.4	4.9	4.0
Fuel & light	6.1	6.3	5.0	3.8	3.9	4.4	4.6
Housing	7.2	8.8	9.8	9.6	12.0	18.2	19.6
Household non-durable goods	1.9	2.1	2.3	2.5	2.2	2.0	2.0
Household durable goods	5.5	3.9	3.6	4.6	4.5	3.7	3.3
Transport	14.9	13.6	14.3	16.4	15.6	14.3	14.9
Misc goods, services & other expenditure	20.5	25.4	28.2	29.0	32.2	31.3	33.6
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0

The Construction Agenda

- Housing the key social & economic issue of our time
- Owner Occupier, Social & Rental Housing key priorities
- Strong commercial demand
- Ireland 2040 a strong template

**Thank you.
Any Questions?**



Jim Power
economics

+353 1 499 0097
info@jimpowereconomics.ie

Keynote

Richard Barrett
Founder
Bartra Capital



Grant Thornton Construction Conference Croke Park

21st March 2018



Residential

Trends and Prospects



Summary Conclusions

- ❑ Taking the balance of pros and cons, good prospects for at least 5 years. Supply deficits cannot be cured in a lesser time
- ❑ Structural move towards renting
- ❑ Market currently delivering the wrong product – smaller habitation units required by the population structure
- ❑ Central Bank Mortgage Guidelines creating a 2 tier population



Factors supporting Demand

- Robust Population Growth, supported by net migration flows
- Strong Economic underpinning
- Labour market strength
- Increased credit availability
- Supportive Government Policy
- No Stock overhang
- Infrastructural improvements
- Brexit

= Demand level forecasts



Demographics

1. Population set to grow 25% by 2030 to 5.79m*
2. Net migration forecast to 13,000 pa to 2021*
3. Life expectancy increase

Men 78.4 to 82.9

Women 82.9 to 86.5

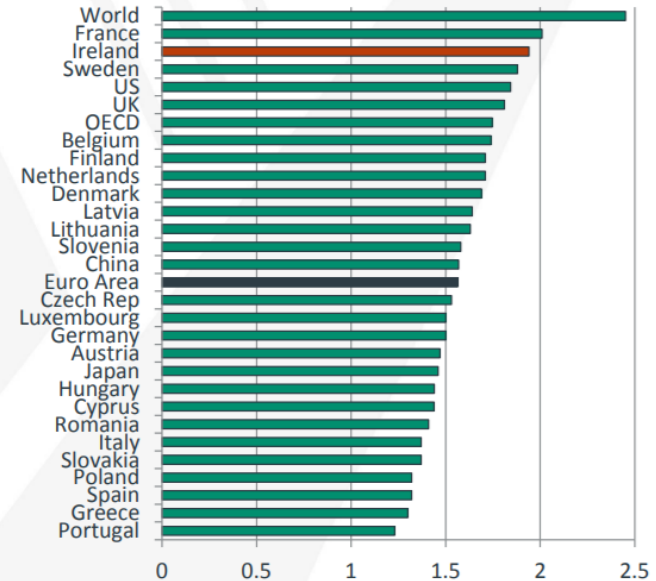
Number of older people > 80 to increase by 94% = less circulation of housing stock*

* Source: ESRI

Demographics

4. Global trends likely to keep fertility rates to 1.94:1 or less

Fertility rates in Ireland are above typical international replacement rates



Source:
NTMA

Demographics



Homes

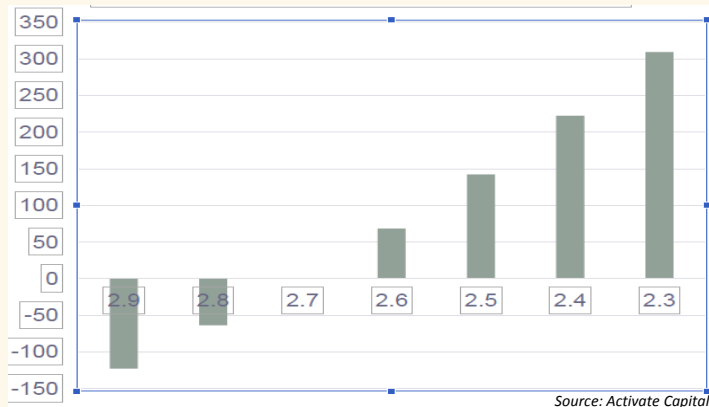
Average household size in 2016 = 2.7 persons

Fall in average household size to 2.6 infers 100,000 new dwellings

Fall to 2.3 (EU average) infers 300,000 more dwellings at today's population

Fall to 2.3 infers 375,000 at projected increase population to 2030 and 2.3/house

Number of extra dwellings required (000s) for a population of 4.8m, for different average household sizes (relative to 2.7)



Huge demand for smaller homes



Demographics

5. Using the long term growth ratio in population to households of 1.2731 infers 227,366 units required 2012-2016.
Using the projected households to population ratio of 2.3: 1 infers 151,480 units required.

55,403 units completed 2012-2016*

The resultant deficit is an estimate of the **pent up demand** in the market of **96,077** to **171,963** units.....on top of an increased annual deficit because of the demand/supply imbalance

Growth in Ireland's Housing Stock compared with Growth in Population (1991 – 2016)

	State Household stock	State Population	Growth in Households	Growth in Population	Ratio of Growth (Population to Households)
Census					
1991	1,160,249	3,525,719	Base year	Base year	Base year
1996	1,258,948	3,626,087	98,699	100,368	1.0169
2002	1,460,053	3,917,203	201,105	291,116	1.4476
2006	1,769,613	4,239,848	309,560	322,645	1.0423
2011	1,994,845	4,588,252	225,232	348,404	1.5469
2016	2,003,645	4,761,865	8,800	173,613	19.7288
25-year growth	843,396	1,236,146	843,396	1,236,146	1.4657
1996-2011 growth			834,596	1,062,533	1.2731

*Hooke & McDonald



Demographics

6. 1996-2016 Census

67% of **added** households had 1-2 persons – but only 21% of added stock was the most appropriate form of housing for those people..... **Apartments**

Number of 1-2 person households > 25 times the number of **apartments** for 1-2 persons

1-2 person households now 52% of all households

Number of 1-2 person households : 50% of all households 50% of remaining c 50% households – 3 persons

900,000 of 1-2 person households : 350,000 units for 1-2 persons

Dublin : 900,000 young singles; 95,000 studios But only 36,000 modern

870,000 singles 20-39 years in Ireland

300,000 singles 40-64yrs

80,000 singles 65+yrs

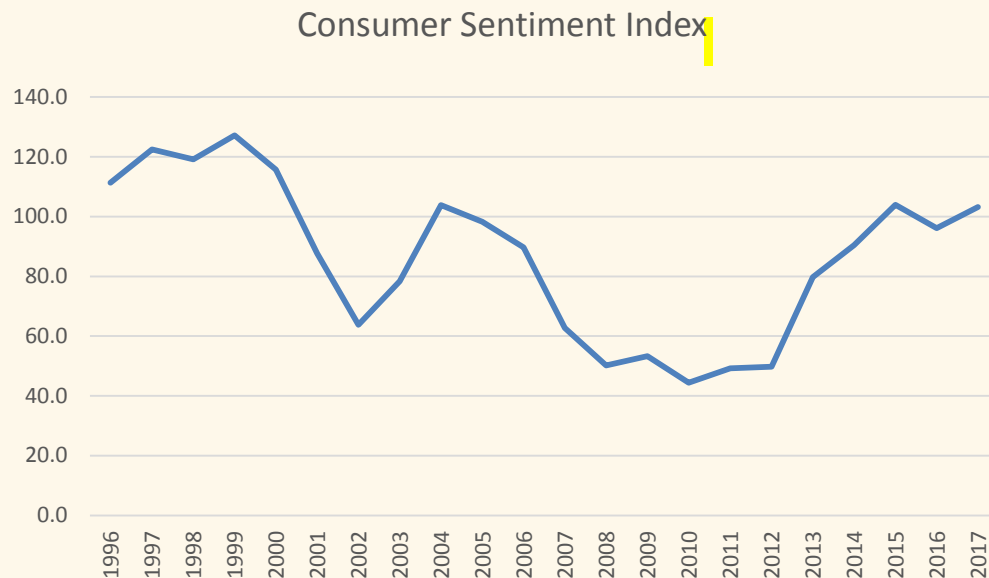
220,000 married/cohabiting couples < 60yrs with no children living with them

165,000 couples > 60yrs with no children living with them



Labour Market Strength

Consumer Sentiment Index Graphs



Source: ESRI/KBC



Strong Economic Underpinning

Strong Economic Underpinning

	2015	2016	2017	2018	2019
Core domestic demand	4.8%	5.4%	2.8%	4.3%	3.7%
Exports	38.4%	4.6%	5.1%	3.0%	2.8%
Imports	26.0%	16.4%	-7.9%	1.8%	3.0%
GDP	25.6%	5.1%	8.1%	3.9%	3.1%
GNP	16.3%	9.6%	7.2%	5.5%	2.9%

Source: CSO, Goodbody



Labour Market Strength

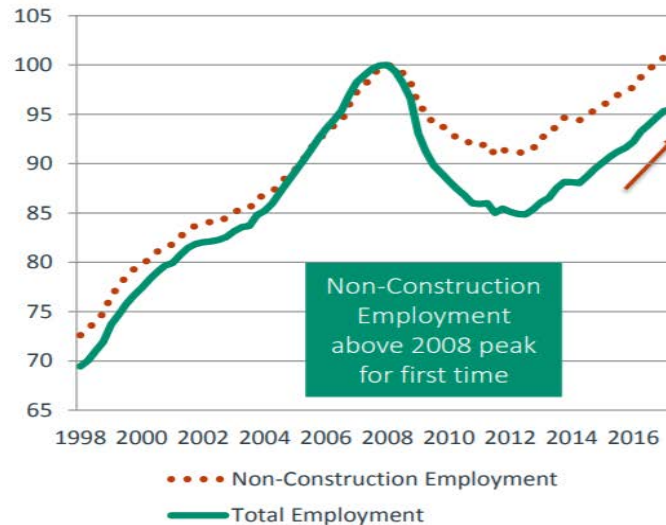
2.2m in Employment

Unemployment rate: 6.1%
in November 2017



Source: CSO

Employment up 12.6%
from cyclical low (2008 peak = 100)

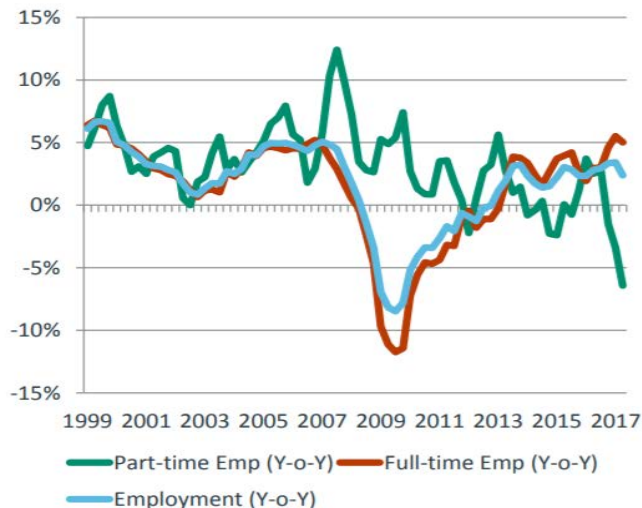




Labour Market Strength

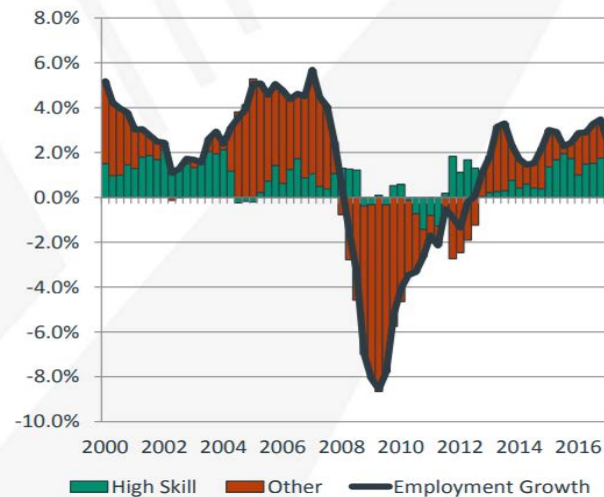
Shift from part time to full time employment

Substantial shift from part-time employment to full-time employment in recent quarters



Higher Skilled hires

Over 55% of all employment growth has been high skilled since start of 2014



Source: Eurostat; [CSO](#)

High Skill jobs include the ISCO08 defined groupings Managers, Professionals, Technicians and associate professionals



Labour Market Strength

Tightening labour market = higher employee bargaining power = higher wages

Household net disposal income at peak 2007 levels

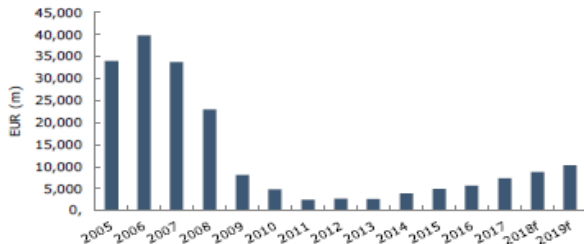


Increased Credit Availability

Increased Credit Availability

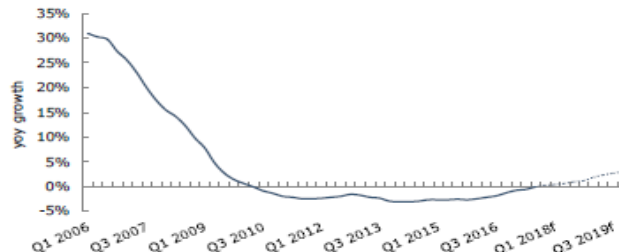
	2015	2016	2017	2018	2019
Gross mortgage lending (€m)	4,865	5,655	7,260	8,689	10,219
Growth in gross lending	26%	16%	28%	20%	18%
Net mortgage lending growth (end year)	-2.7%	-1.3%	0.2%	1.1%	3.0%

Total gross mortgage lending



Source: Irish Bankers Association

Net mortgage lending growth



Source: CBI, Goodbody



Supportive Government Policies

Help to Buy Tax Rebate

- Assists First Time Buyers with deposits for **new** homes
- 4,941 HTB claims made July 2016 – Nov 2017 = €62.9m; 12,000 applications made

Rebuilding Ireland Home Loan Scheme

- Introduced Feb 2018
- First Time Buyers
- 90% LTV, subject to income criteria and have been refused mortgages by 2 banks

Infrastructural improvements

- Extension of DART
- Electrification of Maynooth and Drogheda lines – every 5/10 mins instead of 30; less maintenance; less driver skill



Stock of private (non SH) units

- Jan 2018 1,1% of 2nd hand stock nationwide
 - 0.6% Dublin
- Global figure: 4%

Where there was overhang, it wasn't where it was needed**in the Cities**



Brexit

- **Increased FDI**
 - Financial Services (Passporting)
 - Multinational IT & Services
- **Trade Effects**
 - Irish Companies may steal market share from British ones



Demand figures projected

Forecaster	Units pa
Goodbody	35,000
Rebuilding Ireland	30,000 – 35,000
Hooke & McDonald	49,000
Davy	53,000
Ronan Lyons	46,500
National Planning Framework	37,000

Source	National	Greater Dublin Area
Obsolescence	10,000	3,500
Headship	12,500	4,400
Natural Increase	16,000	5,600
Net Migration	8,000	2,800
Total	46,500	16,300
of which Rental	16,500	6,500

Notes: Ronan Lyons calculations, assuming 0.5% obsolescence, a fall in household size to 2.5 by 2030, a natural increase of 40,000 and net migration averaging 20,000 per year (with both the natural increase and net migration in 2.5-person households on average)

All this infers

- A continuing supply deficit
- Strong(ish) price inflationmitigated by Central Bank Guidelines



Negative factors underlying Demand

- High housing cost 51.4% of average industrial wage in Dublin is paid in rent, resulting in
- Excessive wage demands
- Uncompetitiveness
- Barrier to FDI
- Societal dissatisfaction
- Political fragmentation
- Increase in Euro interest rates
- Brexit
- More supply calibrates prices
- CBI “Guidelines”
- Mortgage spreads



Negative factors underlying Demand

- Central Bank Macprudential Guidelines

LTV Limits

For primary dwelling homes:

First Time Buyers:

90%

5% of new lending to FTBs allowed above 90% LTV

Second and Subsequent Buyers:

80%

20% of non-FTB new lending allowed above 80%

LTV

For buy-to-let borrowers (BTLs):

70%

10% of new lending to BTLs allowed above 70% LTV

LTI Limits

For primary dwelling homes:

3.5 times income

Until 31/12/17

All buyers:

20% of new PDH lending above the LTI limit is allowed

From 1/1/18

First Time Buyers:

20% of new lending to FTBs allowed above 3.5 limit

Second and Subsequent Buyers:

10% of non-FTB new lending allowed above 3.5 limit

Source: Central Bank of Ireland



Mortgage spreads

Ireland's interest rates on lending for house purchase the highest in euro area



Source: ECB



Negative factors affecting supply

- Infrastructural issues
- Compliance with planning permissions
- Overly democratic planning participation
- Project Ireland infrastructuredelivery towards 2027
- Inadequate bank funding
- High equity / mezzanine cost
- Part V
- Unviable apartment costs



Unviable apartments / development cost

Category 1:

Suburban | LOW RISE

This type of apartment scheme is generally incorporated into new housing schemes to provide the required planning density. Blocks are typically 3 storey. They are similar in appearance to housing and are built using simple traditional methods. Surface car parking is generally provided as opposed to basement parking.



	SALE PRICE	BUILD PRICE
LOWER RANGE	298k	293k

Category 2:

Suburban | MEDIUM RISE

This type of apartment scheme is generally 3-5 storeys high and forms a separate scheme of apartments. It involves more complicated structure due to height and have more expensive facades. Parking is generally a mix of partial basement (under-croft) with some surface spaces. These blocks are found in suburban locations e.g. Sandyford, Carrickmines etc.



	SALE PRICE	BUILD PRICE
LOWER RANGE	318K	400k

Category 3:

Urban | MEDIUM RISE

This type of apartment scheme is generally 3-8 storeys high and forms a separate scheme of apartments. These blocks are located in urban locations and have higher specification facades and more complicated mechanical and electrical systems. Parking is normally a full basement solution. These blocks are found in urban locations e.g. North Docklands.



	SALE PRICE	BUILD PRICE
LOWER RANGE	337K	470k

Source: SCIS



Negative factors underlying Supply/Price

- Central Bank Mortgage Guidelines
- Reduction in CGT exemption holding period to 4 years
- Vacant Sites Levy – 3% Y1; 7% Y2 et seq
- More supply calibrates prices
- Rent Pressure Zones
- Myth of no equity



Positive factors affecting supply

- Home Building Finance Ireland - €750m for commercial funding of residential development
- 50% of 1 bed/studios
- Changed design requirements
- Studios up to 25% of a development; 37m2
- Less dual aspect
- Reduced room sizes
- No Cars
- More units/life core
- Increased density/height
- Communal Living



Build to Rent

*“Purpose Built Residential Accommodation and associated amenities built specifically for long term rental that is managed and serviced in an institutional manner by an institutional landlord” **

- **Defining characteristics**
- Single owning entity of all units
- Invests in the project as a long term rental undertaking
- Individual units not sold off separately for private ownership and/or subsequent subletting individually
- Covenant to put and maintain into BTR use for 15 years
- Dedicated amenities and facilities specifically for residents e.g. laundrette, gym, cinema room, lounge, café, bar, private dining room, concierge and work spaces
- Creates a shared environment where residents become more integrated and develop a sense of belonging/community with their neighbours in the scheme
- Longer term renters
- Intention to create a specific Use Class under the P&D Regs 2001

* Design Guidelines/Urban Land Institute



Build to Rent

- **Differences to residential for sale**
- Design – more flexibility of Private Amenity space locations
- Fitout – no individual apt washing /drying machines
- Much more communal facilities
- **Renter preference**
- Apartments the preferred choice of 90% of renters

But See the purchases by IRES of houses at Hansfield

- **Assist with Funding**
- Forward Sales: reduces equity gap
- Forward Funding: reduces equity gap furtherAt expense of yield
- Attraction for investors
- Institutional



Build to Rent

- Perfectly REITable or suitable for existing REITs
- Pension Funds, both Irish and foreign
- Stamp duty reduction -2% instead of 6%

Impact:

- Move from Build to Sell to BTR (better returns; less equity; less risk; more debt)
- Structural, not cyclical
- Long lasting – product of societal changes and attitudes



Build to Rent

- Very, very low stock

Dublin Units Available to Rent

Houses	422
Apartments	811
Studios	31
Total	1,264

Rental Stock Available by Area

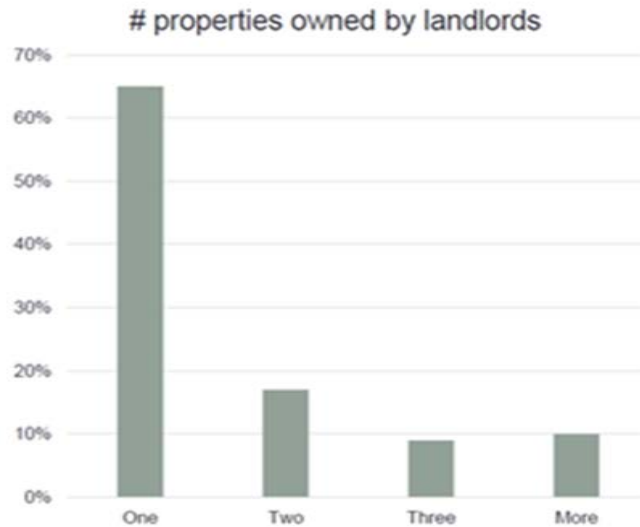
Dublin 1	91
Dublin 2	122
Dublin 3	51
Dublin 4	169
Dublin 5	5
Dublin 6	88
Dublin 6w	28
Dublin 7	42
Dublin 8	69
Dublin 9	47
Dublin 10	1
Dublin 11	13
Dublin 12	20
Dublin 13	29
Dublin 14	40
Dublin 15	61
Dublin 16	20
Dublin 17	4
Dublin 18	92
Dublin 20	7
Dublin 22	10
Dublin 24	21
Total	1,030



Build to Rent

Ireland's rental sector remains largely amateur in nature, with many one-off landlords accidental and/or looking to exit the market

- A 2014 report by the RTB included a survey of 400 landlords
 - 65% of respondents owned just 1 rental property – just 10% own more than 3
 - 36% of landlords surveyed became landlords “by accident”
 - 70% of landlords have an outstanding debt on their property
 - 29% of landlords wish to exit the market
- Roughly 4,200 units in Dublin are owned by professional landlords
 - Kennedy Wilson (~1,100), IRES (~1,000), Marathon (~550), Hibernia (~250)



Source: Residential Tenancies Bureau



High rents

	1 bed apartment		2 bed house		3 bed house		4 bed house		5 bed house	
DUBLIN	Dublin 1	€1,503 9.8%	€1,828 10.6%	€2,259 11.1%	€2,780 10.3%	€3,292 12.8%				
	Dublin 2	€1,750 8.8%	€2,063 7.8%	€2,462 7.9%	€2,848 5.9%	€3,208 -2.7%				
	Dublin 3	€1,444 7.4%	€1,709 8.7%	€2,000 10.4%	€2,277 9.4%	€2,333 5.9%				
	Dublin 4	€1,868 8.9%	€2,124 7.1%	€2,437 7.4%	€2,730 8.2%	€2,962 10.5%				
	Dublin 5	€1,307 10.8%	€1,499 9.7%	€1,787 9.1%	€1,947 9.2%	€2,010 -0.2%				
	Dublin 6	€1,617 8.4%	€1,855 7.4%	€2,212 6.8%	€2,410 6.8%	€2,488 -2.3%				
	Dublin 6W	€1,462 7.5%	€1,677 6.6%	€1,999 5.9%	€2,179 6.0%	€2,249 -3.1%				
	Dublin 7	€1,432 11.8%	€1,642 10.7%	€1,958 10.1%	€2,134 10.1%	€2,202 0.7%				
	Dublin 8	€1,501 11.3%	€1,721 10.3%	€2,052 9.6%	€2,237 9.7%	€2,308 0.3%				
	Dublin 9	€1,351 12.5%	€1,550 11.5%	€1,848 10.8%	€2,014 10.9%	€2,078 1.4%				
	Dublin 10	€1,227 18.6%	€1,408 17.5%	€1,678 16.8%	€1,829 16.8%	€1,888 6.8%				
	Dublin 11	€1,235 9.3%	€1,416 8.3%	€1,688 7.7%	€1,840 7.8%	€1,899 -1.5%				
	Dublin 12	€1,313 10.5%	€1,506 9.5%	€1,795 8.9%	€1,956 8.9%	€2,019 -0.4%				
	Dublin 13	€1,329 10.9%	€1,524 9.9%	€1,817 9.2%	€1,980 9.3%	€2,044 -0.1%				
	Dublin 14	€1,448 8.2%	€1,661 7.2%	€1,981 6.5%	€2,158 6.6%	€2,228 -2.6%				
	Dublin 15	€1,213 11.7%	€1,392 10.7%	€1,659 10.0%	€1,808 10.1%	€1,866 0.6%				
	Dublin 16	€1,292 5.5%	€1,481 4.5%	€1,766 3.9%	€1,925 4.0%	€1,987 -5.0%				
	Dublin 17	€1,275 20.1%	€1,463 19.0%	€1,744 18.3%	€1,900 18.3%	€1,961 8.2%				
	Dublin 18	€1,448 8.2%	€1,661 7.2%	€1,980 6.6%	€2,158 6.7%	€2,228 -2.5%				
	Dublin 20	€1,320 14.2%	€1,514 13.2%	€1,805 12.5%	€1,967 12.5%	€2,030 2.9%				
	Dublin 22	€1,186 11.2%	€1,360 10.2%	€1,621 9.5%	€1,767 9.6%	€1,824 0.2%				
	Dublin 24	€1,222 10.6%	€1,401 9.6%	€1,671 9.0%	€1,821 9.0%	€1,879 -0.3%				
	North Co Dublin	€1,137 9.8%	€1,304 8.8%	€1,555 8.1%	€1,694 8.2%	€1,749 -1.1%				
	South Co Dublin	€1,511 7.3%	€1,732 6.3%	€2,065 5.6%	€2,251 5.7%	€2,323 -3.4%				
	West Dublin	€1,166 10.7%	€1,338 9.7%	€1,595 9.0%	€1,738 9.1%	€1,794 -0.3%				

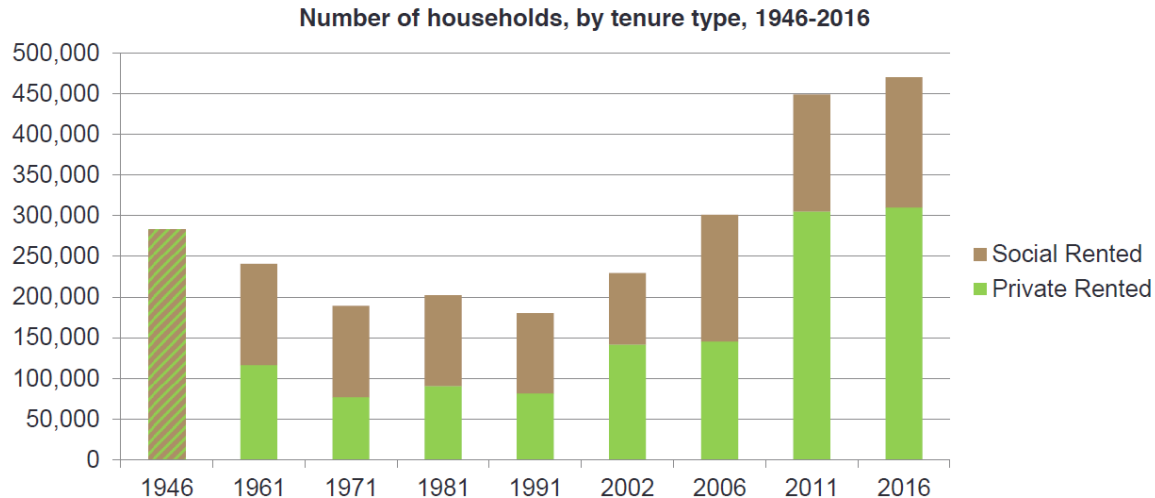
Source: Daft.ie



Move to rent

Innovative funding with capital strength

Ireland's private rented sector has nearly trebled in size since the 1990s



Source: Census (various issues)



Government policy supportive

Government strategy for the Rental Sector **

- Major Expansion
- Properly Funded
- Professionally Managed

Mirrors other countries

- New Model
- Superb Execution
- Conveniently located
- “Affordable” rental accommodation
- Innovative accommodation solutions for the needs of a modern city

Otherwise forcing people to pay more for accommodation they don't need in places not convenient to their work or suited to their lifestyle

** Speech of Minister Eoghan Murphy to Irish Planning Institute



Build to Rent - Dublin

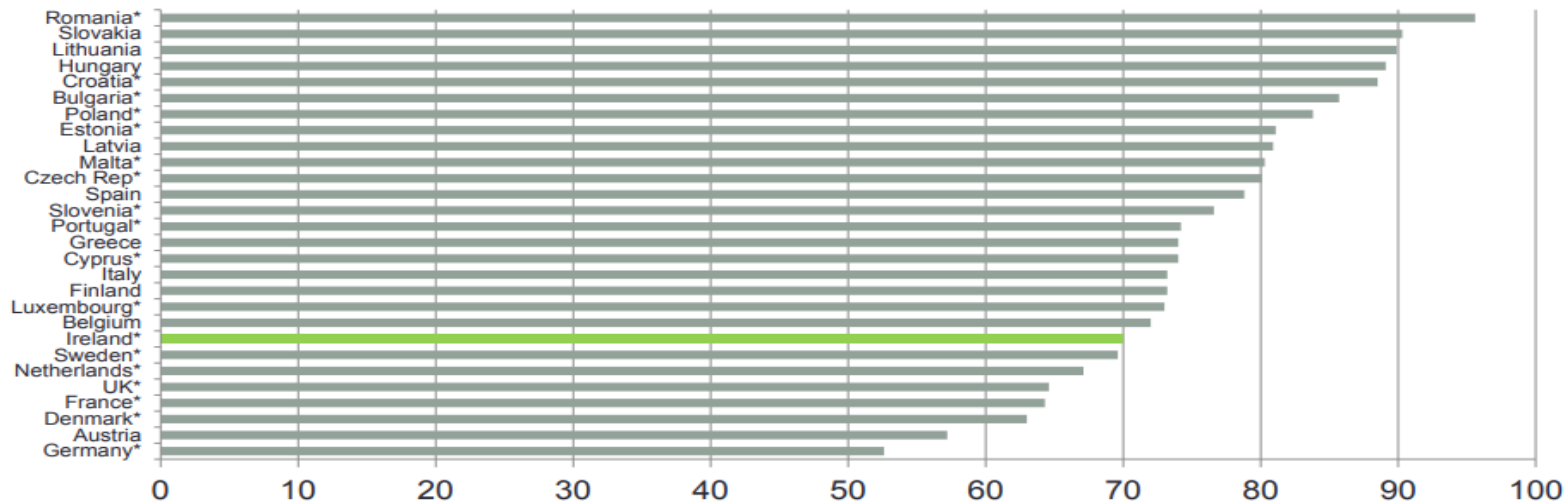
Year	EUR spend	% of Total Investment Spend
2018*	€500m	20
2017	€280m	13.5
2016	€225m	6.5
2015	€220m	6.3

*Hooke & McDonald



Ireland has one of the lowest rates of owner-occupancy in Europe

Owner-occupancy rate, 2014 (or 2013*)



Source: Hypostat



Generation Rent*

- ❑ Chances of a middle income earner owning a home in the UK (without help from Mum & Dad) **DOWN** 50% in the last 2 decades
- ❑ 25-34 year old cohort earning £22.5k – £30.6k **down** 65% since 1997 to 27%
- ❑ Average house price **UP 7 times faster than average incomes**
- ❑ Real house prices **UP** 152% since 1997
- ❑ Real wages+22%

* Source: Fiscal Studies, London



Communal Living Concept

Nothing new.

Broc House, Nutley Lane; Loretto Hall; Hatch Hall and Trinity Hall. These were all SR uses and only had communal reception and dining hall. The newer SR facilities increase the amount of communal/ amenity space to include launderettes, cinema rooms, gyms, cafe, study space etc. The newer firm of Communal Living expands amenity provision even further.

The concept has also been used for institutional retreats and certain hostels .

What is “**new**” is, in the modern way of living.

1. Transience is emphasized over permanence
2. Employment is often contractual rather than permanent time based
3. People change jobs much more frequently
4. People are blocked from purchasing housing by capital starved banks / Central Bank Rules and rent instead
5. Even academia has changed. You no longer stay in the same university for 3/4 years, but you move on Erasmus courses to a different university for a term or a year. TCD is now doing a 4 year degree with Columbia University, New York ; You spend 2 years in each and get a degree from each (that’s Erasmus in advance)
6. People don’t want possessions; anchors for their life. Renting short term suits. It’s like the Uberization of the world (you can see it in the collective working space e.g. WeWork); you take something for as long as you want/ need it.
7. The transitory nature of these existences mean there is a mirrored requirement for social interaction in the living spaces they occupy .

So, the expansion of the concept from SR is due to a confluence of the above factors and a shortage of new build arising from the non build of the Great Recession (which was global in nature; Ireland isn’t in any way unique re shortage of accommodation; see most US cities; UK; Spain; Portugal; Greece; Italy; France (new build in Paris is dramatically less than Dublin); Singapore; HK; Australia; NZ; Japan)

It is the confluence of the factors and the change in societal attitudes that makes this new.



BARTRA

- ☐ Solution to infrastructural deficits
- ☐ Operative sectors preferably based on Government policy and Government Financial support



- ☐ Residential for sale
- ☐ Operational on 15 sites in Dublin
- ☐ Market support based on favourable supply/demand imbalance
- ☐ All sectors of the market in imbalance: will look at any

Social Housing (“SH”) Fund

- ☐ Ireland’s largest
- ☐ Institutionally backed
- ☐ Irish and Foreign institutional presence
- ☐ Huge deficit due to cessation of State building since 2005
- ☐ 90,000 households on Housing Lists; many more qualify and will transfer due to exorbitant rents
- ☐ Government requires private sector to build new units specially designed for SH i.e. doesn’t compete with private market
- ☐ 25 year index linked leases at 95% of market rent



BARTRA Social Homes



Stoneybatter



Pim Street



- ❑ Student Residence like concept of communal living
- ❑ Huge market due to mismatching of supply types



BARTRA

PRS





BARTRA

Student Residential





BARTRA NURSING HOMES

Bartra Capital has commenced a significant investment program in care of the elderly in 2017.

Ireland currently has the fastest ageing population in Europe. In the recently published *Health Service Capacity Review 2018* there will be a +39% growth in the demand for long-term residential care over the next 15 years, which translates to 12,000 additional residential care beds. This expected demand growth is also supported in the ESRI's report on Projections of Demand for Healthcare in Ireland.*

Bartra has a strategy to build, and operate, a nursing home portfolio of approximately 2,500 beds. We have already secured 3 sites with full planning permission for a nursing home in Loughshinny, Santry and Beaumont, delivering 462 beds. We would expect to have secured sites to achieve the balance of the 2,500-bed portfolio by the end of Quarter 2 2018.

Bartra's strategy is to acquire suitable sites and develop a state-of-the art nursing home on each, all built to the highest care standards, HIQA-compliant and enabled capable of delivering more complex care needs (dementia, bariatric, etc.) as well as more traditional elderly care. Bartra's nursing homes will also be capable of delivering respite, rehabilitation, convalescence and day care needs for its residents/patients.

*Sources: ESRI's *Projections of Demand for Healthcare in Ireland, 2015-2030* published in October 2017.
PA Consulting for the Department of Health



BARTRA NURSING HOMES

Northwood Nursing Home



Loughshinny Nursing Home



COMMERCIAL REAL ESTATE

Boston Sidings

Development of 19,000 square metres of prime modern office space at Boston Sidings in the heart of Dublin's Silicon Docks.





COMMERCIAL REAL ESTATE

St George's Church



Orchard Avenue, Citywest



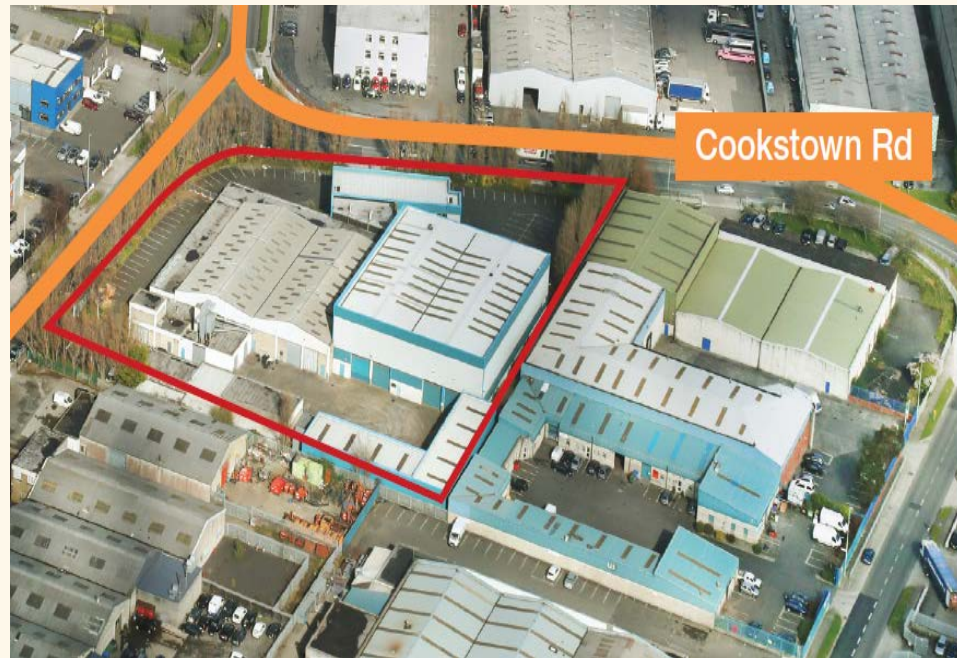


COMMERCIAL REAL ESTATE

Phoenix House



Cookstown





Bartra Tourism & Leisure

Donegal – Cuan Na Rí





Bartra Renewable Energy

Mezzanine for Renewable Energy

- Structuring investment opportunities to achieve attractive risk adjusted returns
 - Requires detailed knowledge of sector, regulation, financing, participants
- Risk/reward differs significantly by stage of development
 - Early stage development risk has increased as planning environment has deteriorated
 - Rewards from long term ownership has decreased as significant capital chasing limited opportunities (under-pricing long term risk)
- Bartra providing flexible mezzanine funding solutions to experienced developers to fund new projects or refinance existing projects
 - Number of wind investment completed – first exit due Q2 2018
 - Number of further investments in progress
- Reviewing other non wind opportunities – renewable heat/anaerobic digestion/solar



Codling Bank Offshore Windfarm





Relm Finance is a leading Irish commercial lending specialist in debt finance for property

- ❖ Property loans from €1m upwards for refinance and new acquisitions
- ❖ Lending to all regions in Ireland
- ❖ Over €100m of loans already funded in the first 18 months
- ❖ All types of commercial property considered including hospitality, car-parks, office, retail, industrial and residential investment



Thank you!

Tanya Duncan
Managing Director
Interxion



Tanya Duncan

Managing Director, Interxion Ireland



Highly Engineered for reliability

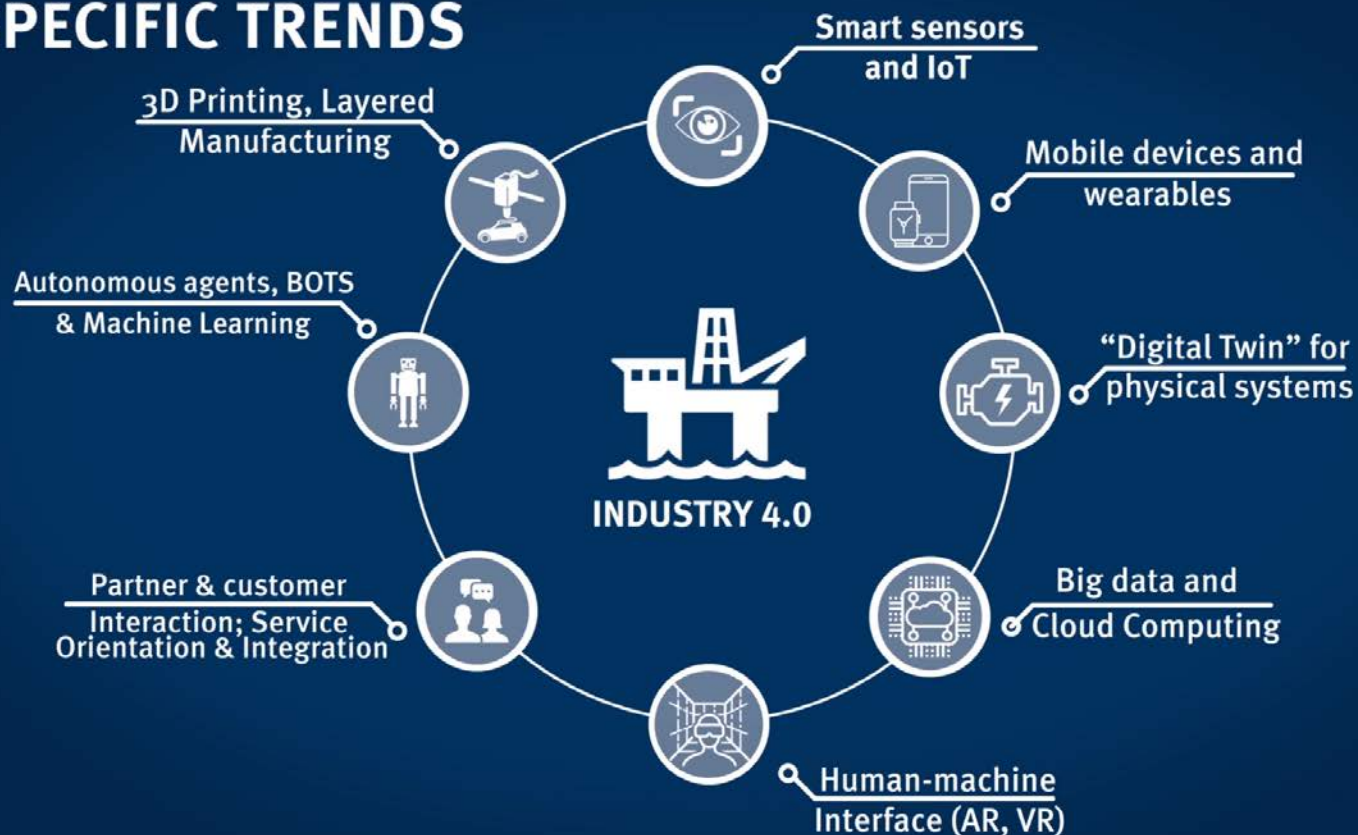


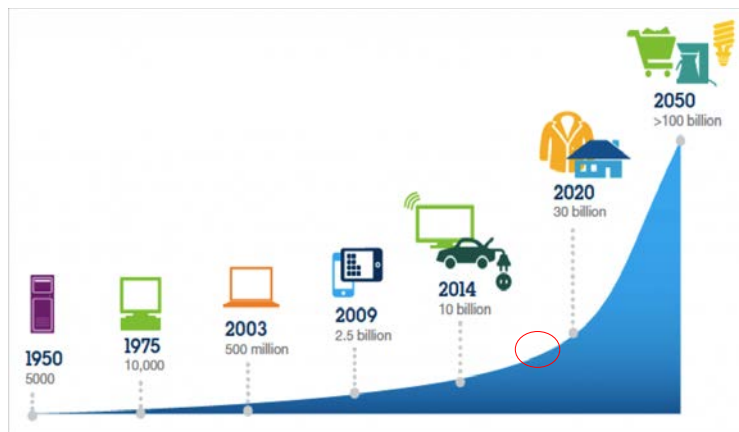
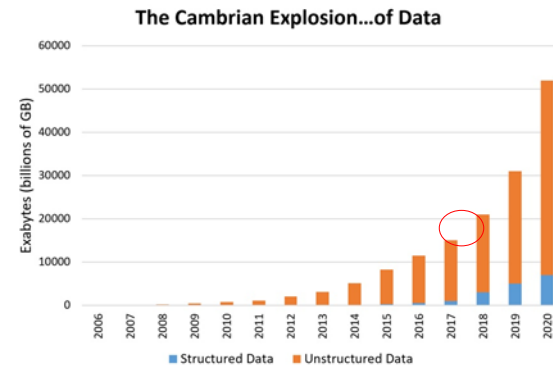
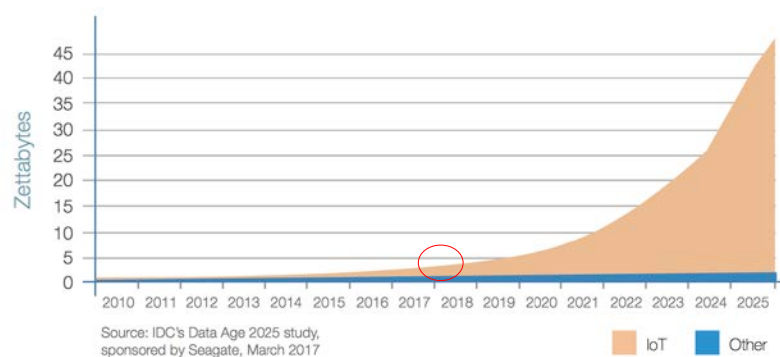
What does a datacentre DO? . . .

- <https://vimeo.com/208151466>

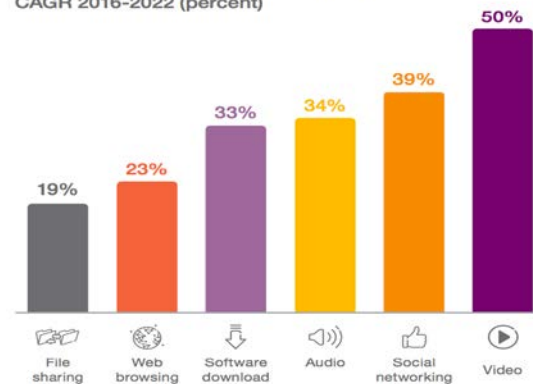
WHAT IS DRIVING THE
INDUSTRY?

SPECIFIC TRENDS





Mobile traffic by application category
CAGR 2016-2022 (percent)



WHY IRELAND?



THE 5Ps OF HOSTING IN IRELAND



POLICY



PEOPLE



PIPES



POWER



PEDIGREE

THE INDUSTRY IN IRELAND

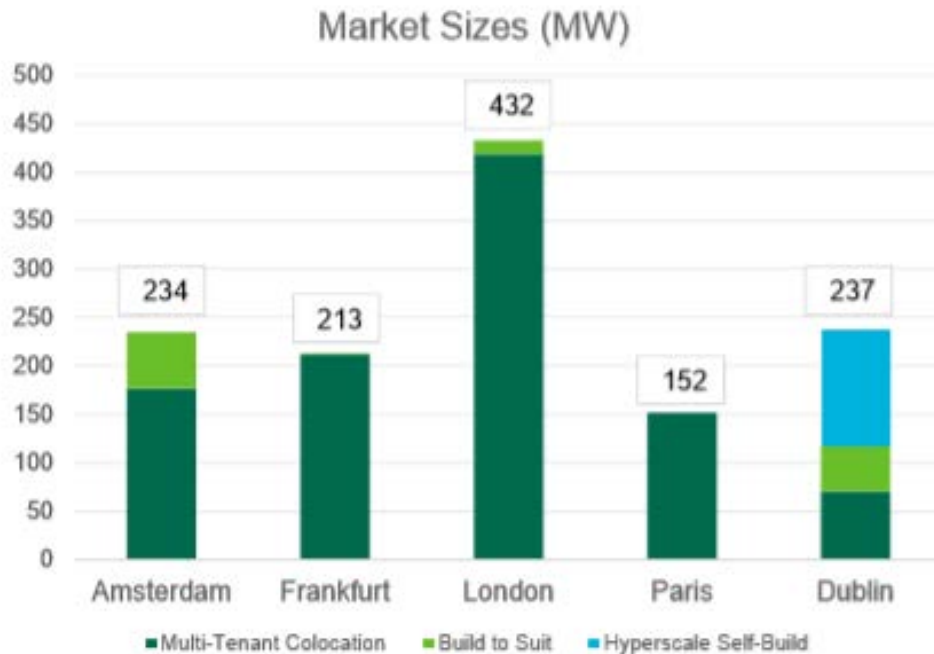


Home Of The Hybrid Cloud



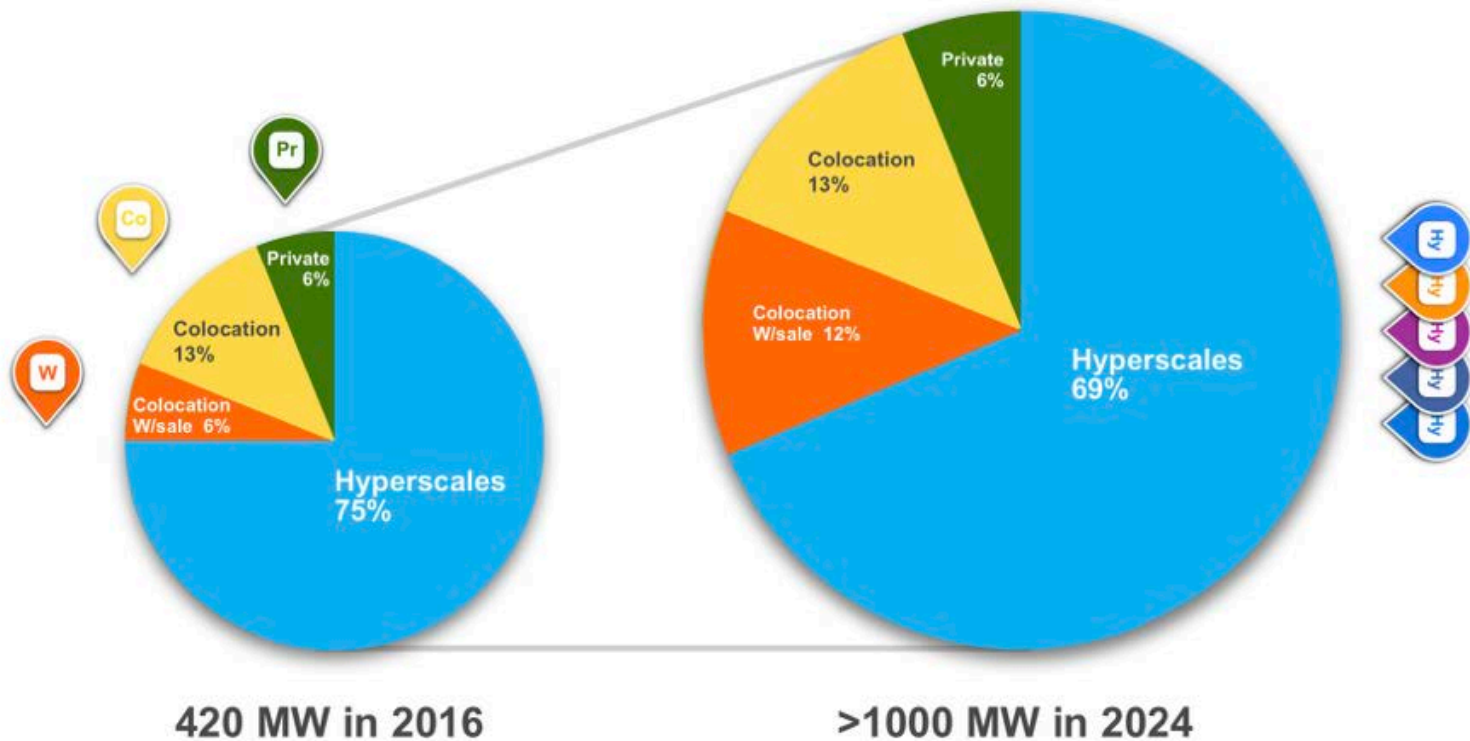
#hostInIreland

MAJOR EUROPEAN MARKETS



- CBRE analysis of the major European markets. “Build to Suit” refers to colocation wholesale.

MARKET OUTLOOK



#hostInIreland

Host in Ireland

Amsterdam ▪ Brussels ▪ Copenhagen ▪ Dublin ▪ Dusseldorf ▪ Frankfurt ▪ London ▪ Madrid ▪ Marseille ▪ Paris ▪ Stockholm ▪ Vienna ▪ Zurich



THANK YOU

www.interxion.com

Paul Mitchell
Director
Mitchell McDermott

New Residential Design Standards



Dublin Landings (BM Services)

21st March 2018

Paul Mitchell

TOPICS

- Apartment Viability
- Apartment Regulations
- Build To Rent (BTR)
- Shared Accommodation / Co-Living



City Block 3 BTR Apartments (QS Services)

Housing Crisis..

- Deepening Housing Crisis
- c.15,000 units completed in 2016
- Market supply substantially less than current demand
- **12%** apartments in Ireland compared to 50% in EU
- 25% of Leinster population (outside Dublin) commute into City
- Commuting: Over 230,000 people commute over 1 hr to work
This is a 30% increase in 5 years ≠ sustainable



Apartment Viability

Apartment Viability

- SCSi Report
- 2,146 apartments over 28 schemes
- Viability issues
- Affordability Issues
- Solutions
- New models



Apartment Viability

Category 1: Suburban (Low Rise)



- Typ. 3 Storeys
- Domestic construction (sim. to housing)
- Blockwork with plastered walls and some brick
- Steel balconies
- PVC windows
- Fixtures & fittings – lower end of scale
- Domestic mech. system e.g. gas boiler
- Surface car parking
- Tarmac & Grass externally

Category 2: Suburban (Medium Rise)



- 3-6 Storeys
- Concrete framed structure and cores
- More brick / precast panels to external facades
- Recessed balconies
- Aluclad windows or similar
- Fixtures & fittings – medium spec
- More complex mech. system
- Partial basement / undercroft parking
- Hard landscaping

Category 3: Urban (Medium Rise)



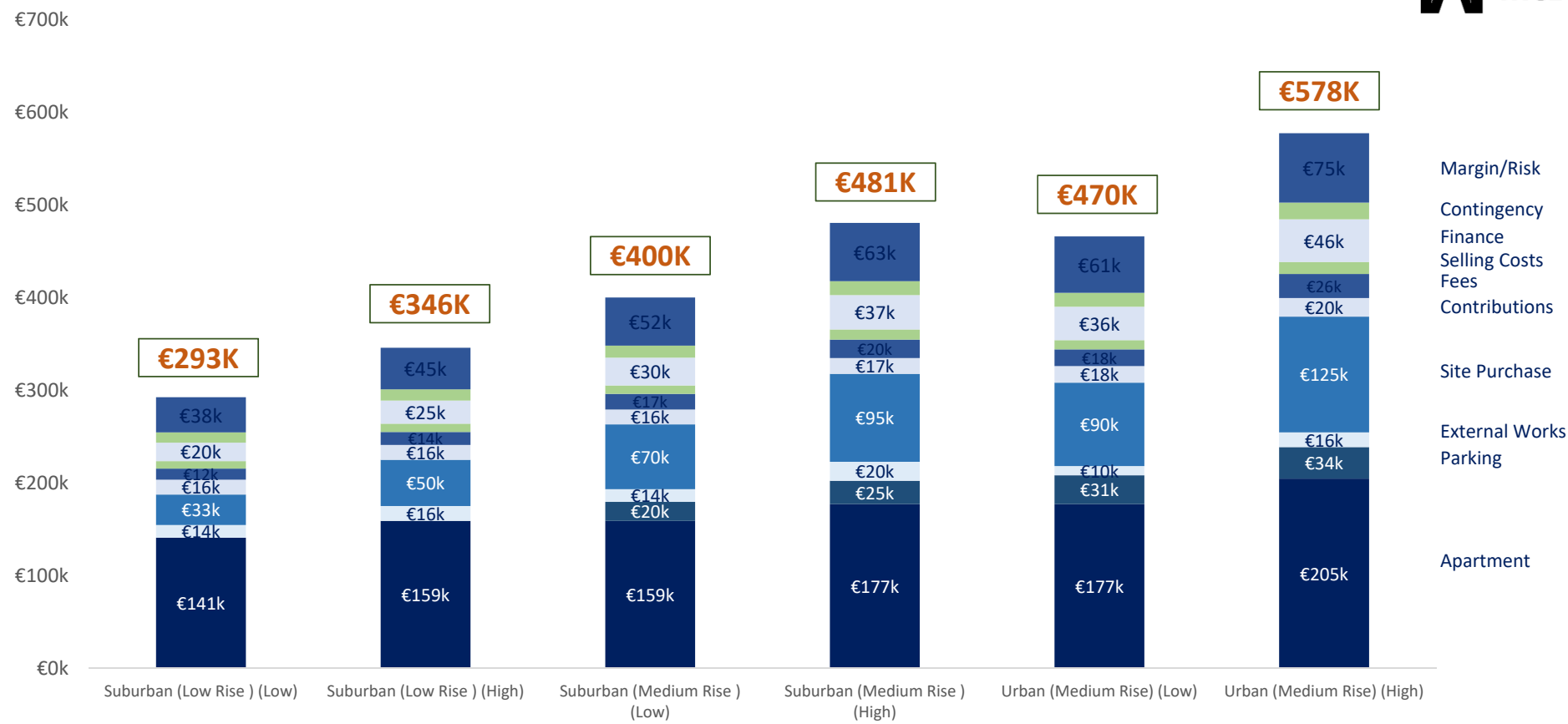
- 5-8 Storeys
- Concrete framed structure and cores
- Facades – more expensive precast/brick/stone
- Recessed balconies/Wintergardens
- Full façade glazing in places
- Fixtures & fittings – higher spec
- More complex mech. system
- Full basement for parking
- Hard landscaping

Apartment Viability

- 'Bricks & Mortar' costs only - excludes abnormal costs, indirect or 'soft costs'
- Construction cost ranges from €155k - €255k (excl. VAT) for a two-bed apartment



Apartment Viability



Cat.1: Suburban (Low Rise)



Cat.2: Suburban (Medium Rise)



Cat.3: Urban (Medium Rise)

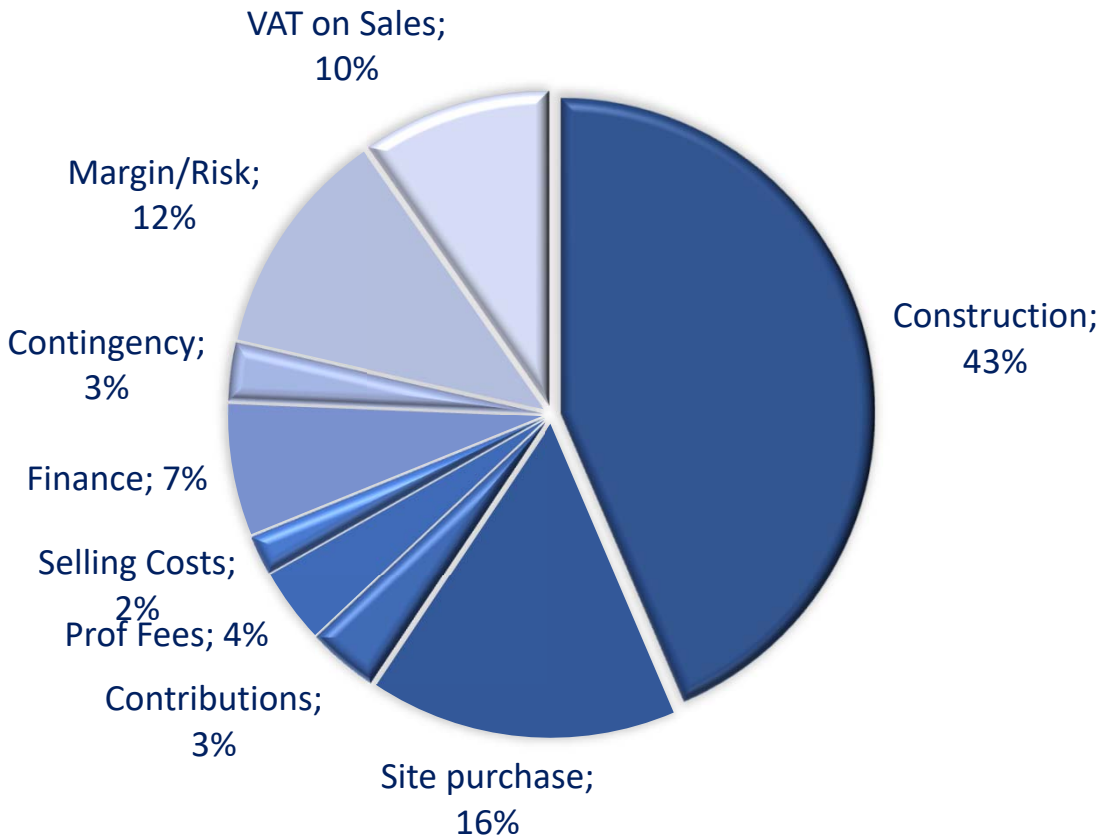
Apartment Viability

Category 2: Suburban (Medium Rise)



(Appraisal for Lower Range)

**% Breakdown of Total Development Costs for Two Bed
Apartment** (incl. VAT on Sales)



Apartment Viability

Site Purchase and Sales Values

- Three Apartment Categories with defined locations provided to number of SCSi Residential Valuers/Agents
 - Category 1:** Carrickmines / Kilternan type locations
 - Category 2:** Sandyford / Leopardstown type locations
 - Category 3:** North Docklands type locations

Category 1: Suburban (Low Rise)



Site Cost	Sales Price
€33,000	€338,000
€50,000	€350,000

Category 2: Suburban (Medium Rise)



Site Cost	Sales Price
€70,000	€361,000
€95,000	€438,000

Category 3: Urban (Medium Rise)



Site Cost	Sales Price
€90,000	€383,000
€125,000	€500,000

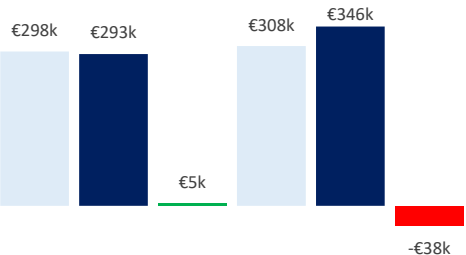
NOTE: Sales Prices include VAT

Apartment Viability

Category 1: Suburban (Low Rise)



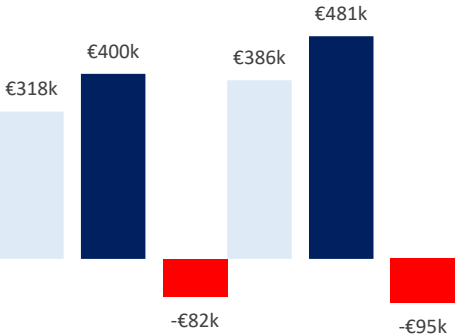
	Range	
	Lower	Higher
Sales Price (exc VAT)	€298k	€308k
Total Cost (exc VAT)	€293k	€346k
Viable / Viability Gap	€5k 2%	-€38k -11%



Category 2: Suburban (Medium Rise)



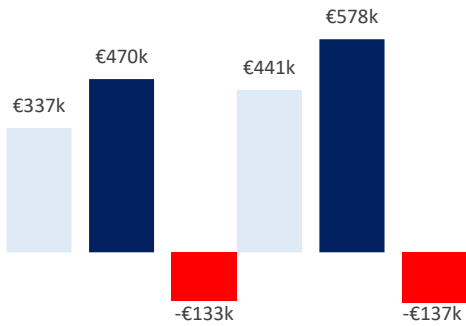
Sales Price (exc VAT)	€318k	€386k
Total Cost (exc VAT)	€400k	€481k
Viable / Viability Gap	-€82k -20%	-€95k -20%



Category 3: Urban (Medium Rise)



Sales Price (exc VAT)	€337k	€441k
Total Cost (exc VAT)	€470k	€578k
Viable / Viability Gap	-€133k -28%	-€137k -24%



Apartment Viability

Affordability

- The sales price of the two-bed apartment reviewed ranges from €338k to €500k. (Category 1,2 & 3)
- A first-time buyer couple would require a 10% deposit of €34-€50k and a combined salary range of €87-€129k to afford these.
- A couple both working earning the average national salary (CSO 2016) earn €90,090 a year.
- The current Central Bank lending rules currently have a Loan to Value (LTV) restriction on mortgages to First-Time buyers of 90% and a Loan to Income (LTI) cap of 3.5 times the salary of the applicant(s).

First Time Buyers
 = 2 x €45k Salaries = €90k

x 3.5 = Available Mortgage = €315k

EXAMPLE 1: Couple both earning Average Salary of €90,090.			
	Cat 1	Cat 2	Cat 3
Sales Price of 2 Bed Apartment (Lower Range)	€338,000	€361,000	€383,000
Deposit Required (10%) (First time buyer)	€33,800	€36,100	€38,300
Mortgage Required	€304,200	€324,900	€344,700
Mortgage available (based on LTI of 3.5)	€315,315	€315,315	€315,315
	€11,115 ✓	-€9,585 ✗	-€29,385 ✗

Apartment Viability

Affordability

- 10 scenarios including Salaries, Budget, Sales Price and Development Cost

AFFORDABILITY SCENARIOS									
Scenarios	Salary Nr.1 (a)	Salary Nr.2 (b)	Combined Salary (c)	Mortgage Available (d)	10% Deposit (e)	Couple's Budget (f)	Apartment Categories (g)	Apartment Sales Price (incl VAT) (h)	Total Apartment Development Cost (incl. VAT) (i)
			(a)+(b)	(c) x 3.5		(d) + (e)			
Scen.1	€45,000	€22,500	€67,500	€236,250	€26,250	€262,500			
Scen.2	€50,000	€25,000	€75,000	€262,500	€29,167	€291,667			
Scen.3	€55,000	€27,500	€82,500	€288,750	€32,083	€320,833			
Scen.4	€60,000	€30,000	€90,000	€315,000	€35,000	€350,000	Cat 1 (Lwr range)	€338,000	€333,203
Scen.5	€65,000	€32,500	€97,500	€341,250	€37,917	€379,167	Cat 1 (Upr range)	€350,000	€387,630
Scen.5						€379,167	Cat 2 (Lwr range)	€361,000	€442,938
Scen.6	€70,000	€35,000	€105,000	€367,500	€40,833	€408,333	Cat 3 (Lwr range)	€383,000	€515,555
Scen.7	€75,000	€37,500	€112,500	€393,750	€43,750	€437,500	Cat 2 (Upr range)	€438,000	€533,097
Scen.8	€80,000	€40,000	€120,000	€420,000	€46,667	€466,667			
Scen.9	€85,000	€42,500	€127,500	€446,250	€49,583	€495,833			
Scen.10	€90,000	€45,000	€135,000	€472,500	€52,500	€525,000	Cat 3 (Upr range)	€500,000	€637,471

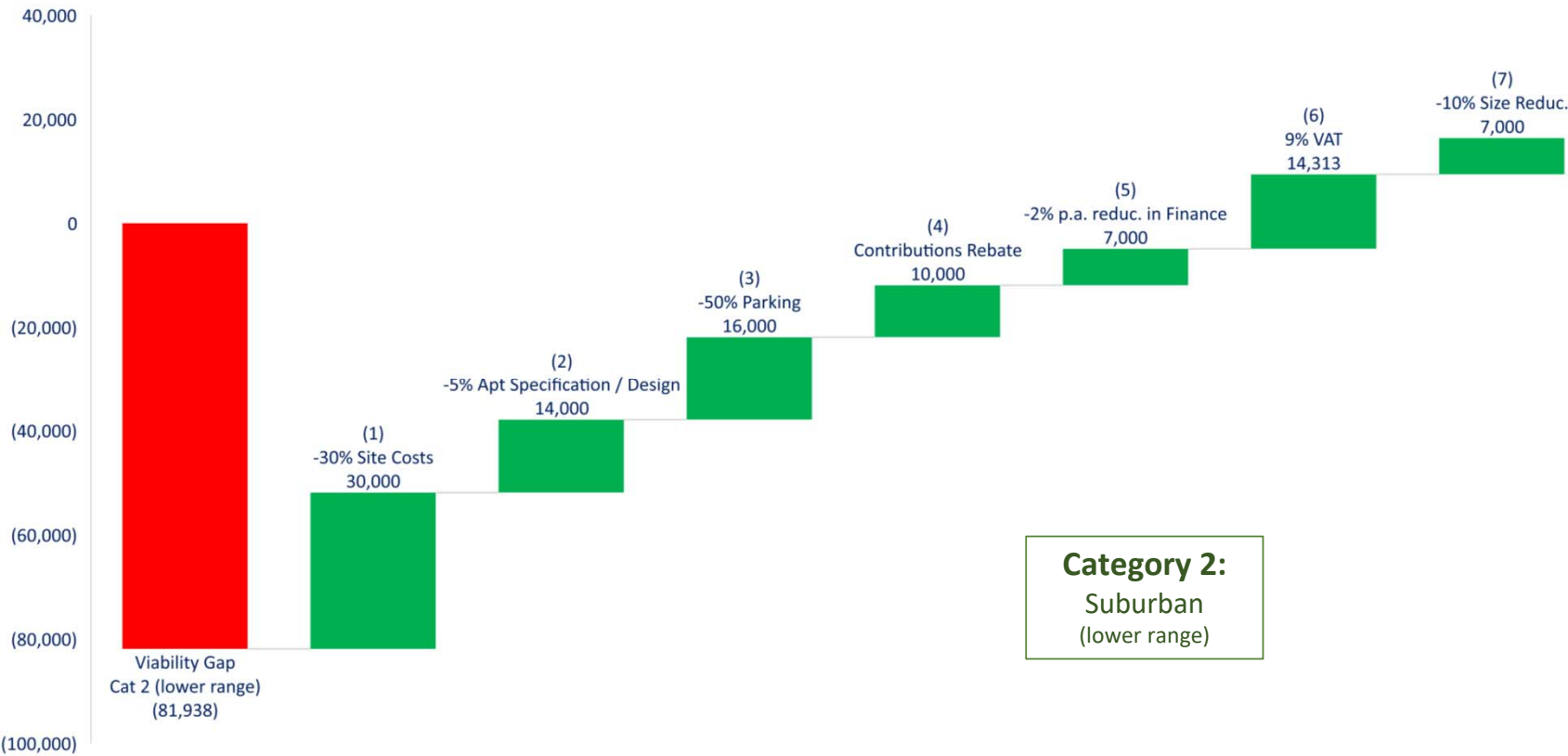
Apartment Viability



Apartment Viability



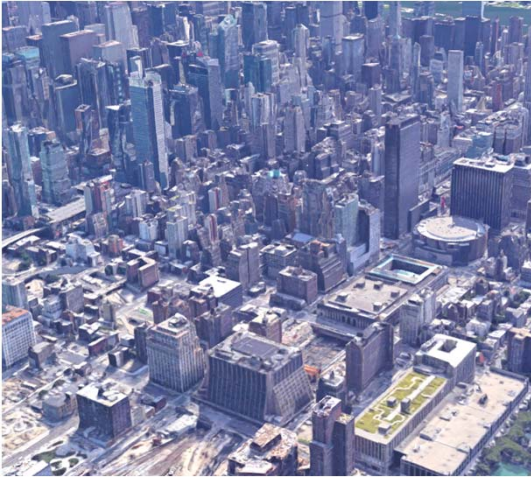
Bridging the Viability Gap..



Apartment Viability

Does High Rise = High Density?¹

Manhattan



27,000 people / sq.km.

Paris



26,000 people / sq.km.

Barcelona



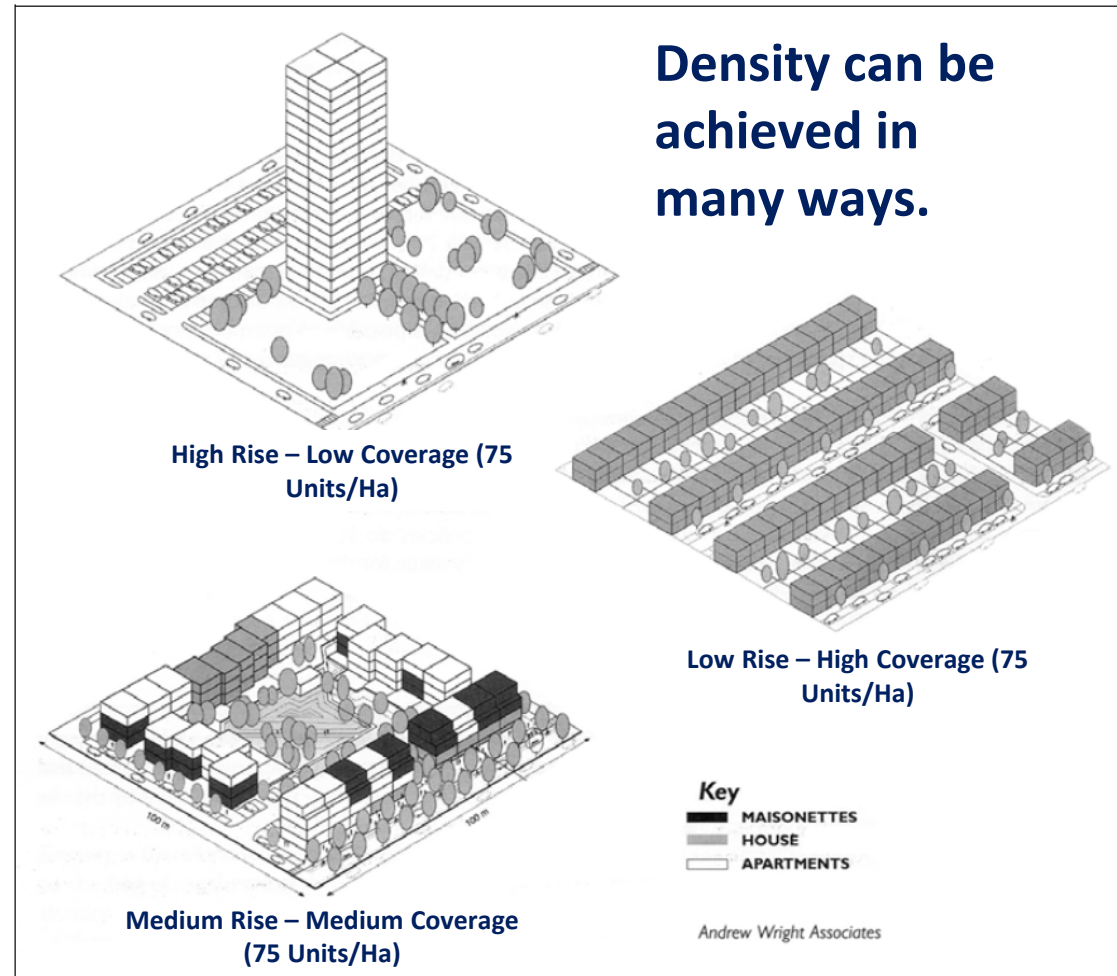
36,000 people / sq.km.

- Dublin City and Suburbs has a density of 3,677 people / sq. km. (Census 2016)

¹ Building Magazine (Feb 2015) *Ike Ijeh*

Apartment Viability

- Relationship between Density and Coverage important



Source: Cope, 2003, p.23

A new model?



Different needs..

Nice pad in town...



..affordable rent close to work..



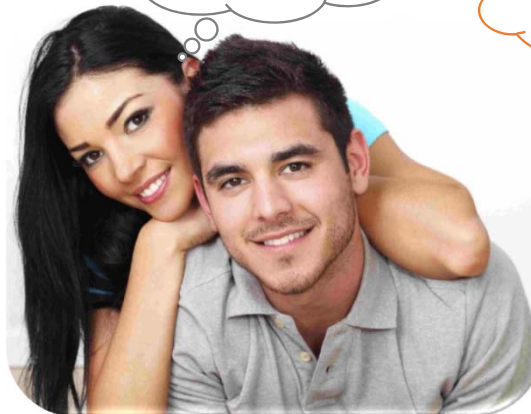
...we need a bigger place..



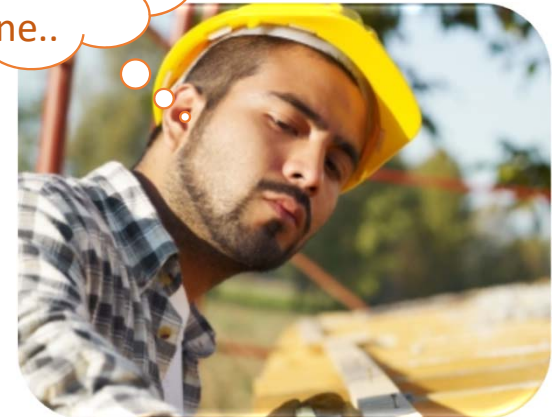
..flexible renting..



..nice 2 bed in city..

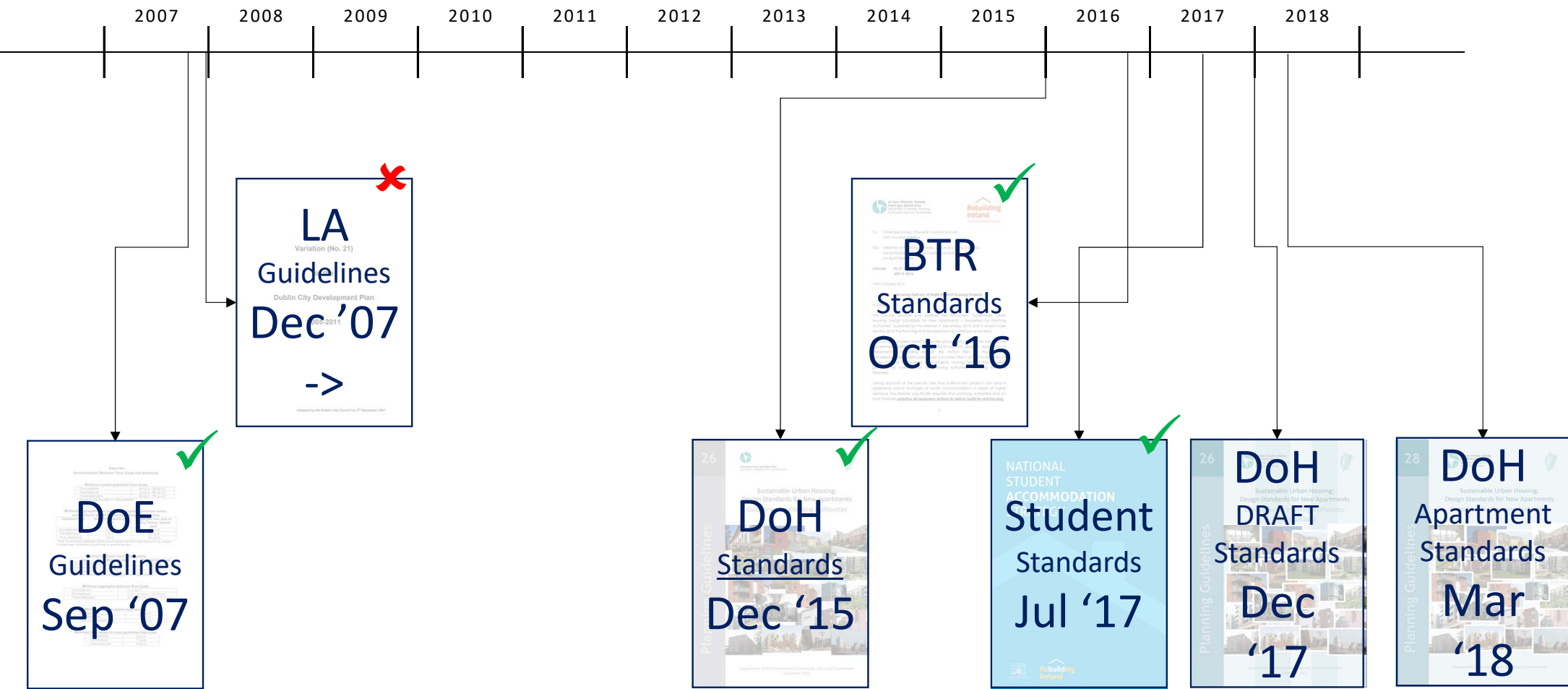


....1 bed would be fine..



Apartment Design Standards

Apartment Design Standards



Design Standards for New Apartments (March 2018)



Build to Sell



- Traditional model

Build To Rent (BTR)



- Similar to standard apartments
- Managed Rental only
- Communal areas
- Way of life

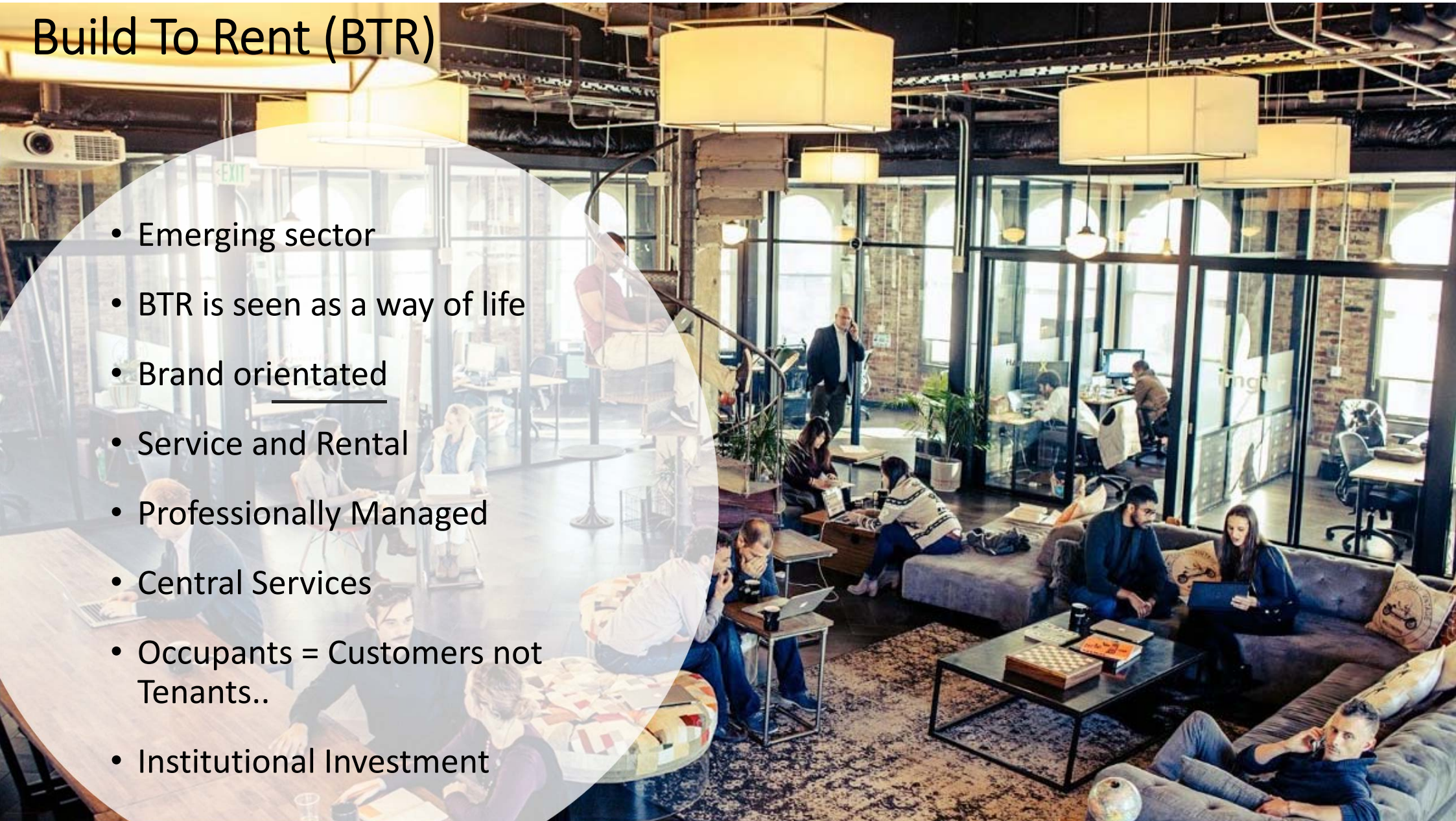
Shared Accommodation



- Similar to Student Model
- 4-6 bedrooms around common kitchen/living
- Communal areas

Build To Rent (BTR)

- Emerging sector
- BTR is seen as a way of life
- Brand orientated
- Service and Rental
- Professionally Managed
- Central Services
- Occupants = Customers not Tenants..
- Institutional Investment

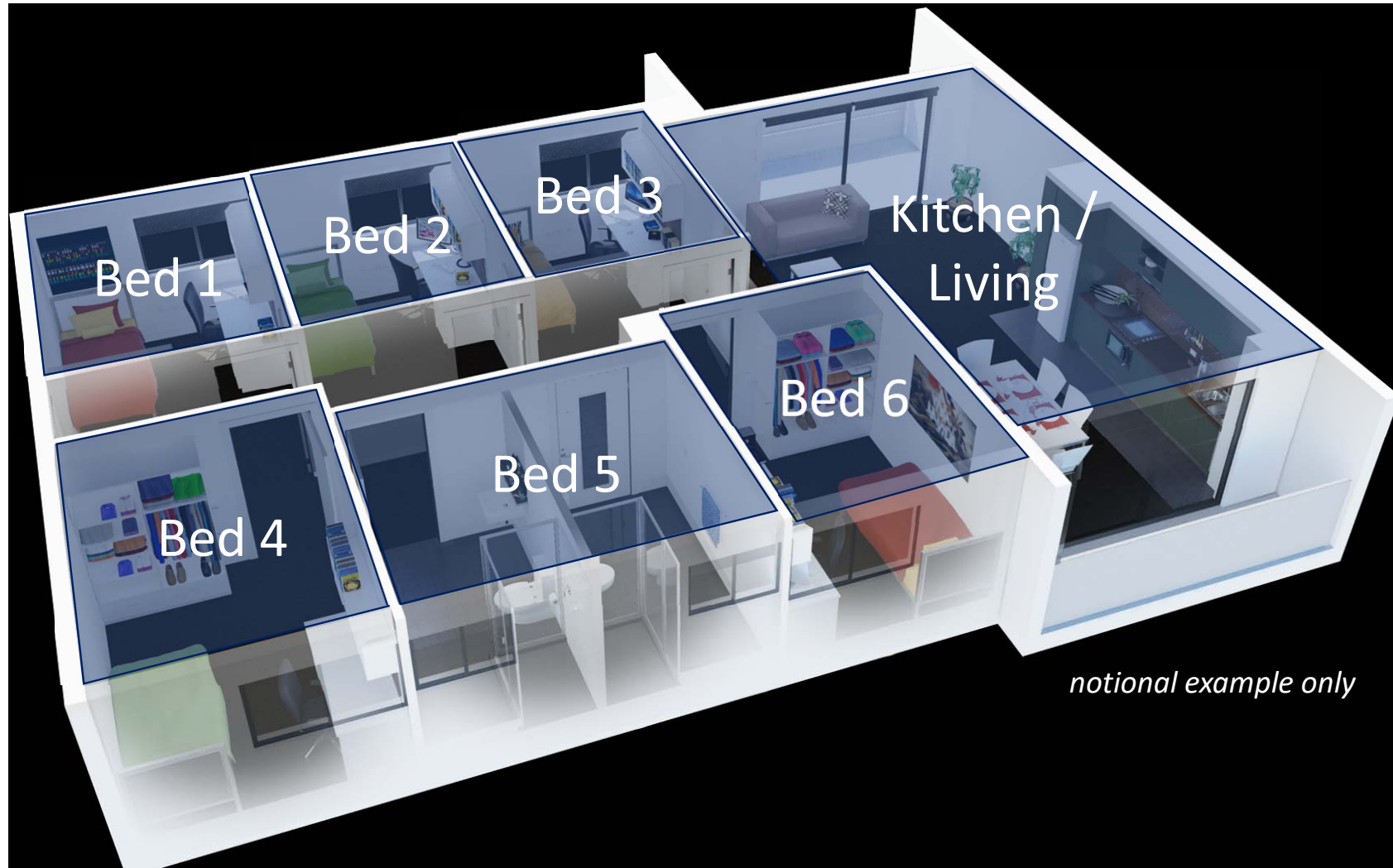


Shared Accommodation / Co-Living

- Cluster Living
- Similar to Student Model
- DoH open to other formats
- Significant opportunity for varied offer
- Requirement to demonstrate need



Shared Accommodation / Co-Living



Standards – Minimum Sizes



Build to Sell

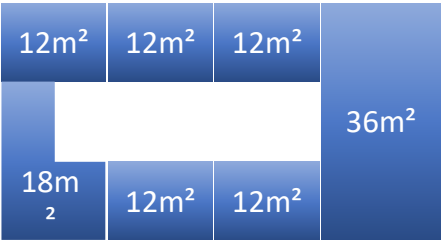
- 37m² Studio *(was 40m²)*
- 45m² 1 Bed
- 63m² 2 Bed (3P) *(new)*
- 73m² 2 Bed
- 90m² 3 Bed
- +10% extra area on majority (when over 9 units)

Build To Rent (BTR)

- 37m² Studio *(was 40m²)*
- 45m² 1 Bed
- 63m² 2 Bed (3P) *(new)*
- 73m² 2 Bed
- 90m² 3 Bed
- No extra space requirement as central communal space required *(Changed)*

Shared Accommodation

- 12m² 1 Bed *(new)*
- 18m² 2 Bed *(new)*
- 8m² Kitchen/Living per person for 1-3 beds *(new)*
- 4m² Kitchen/Living per person for 4-6 beds *(new)*



Standards – Mix



Build to Sell

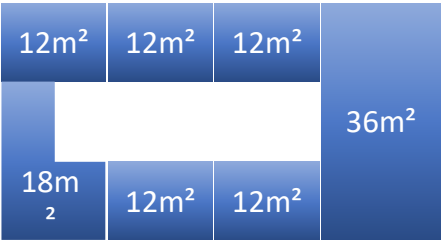
- < 50% 1 Beds/Studios
- < 25% Studios overall
- <10% 2 Bed (3 person)
- No Min for 3 Beds

Build To Rent (BTR)

- No overall restriction on mix

Shared Accommodation

- 2-6 bedrooms per Unit
- Max 8 persons per unit
- NOTE: DoH open to other co-living models



Standards – Dual Aspect

Build to Sell

- >33% - Urban sites
- >50% - Suburban sites

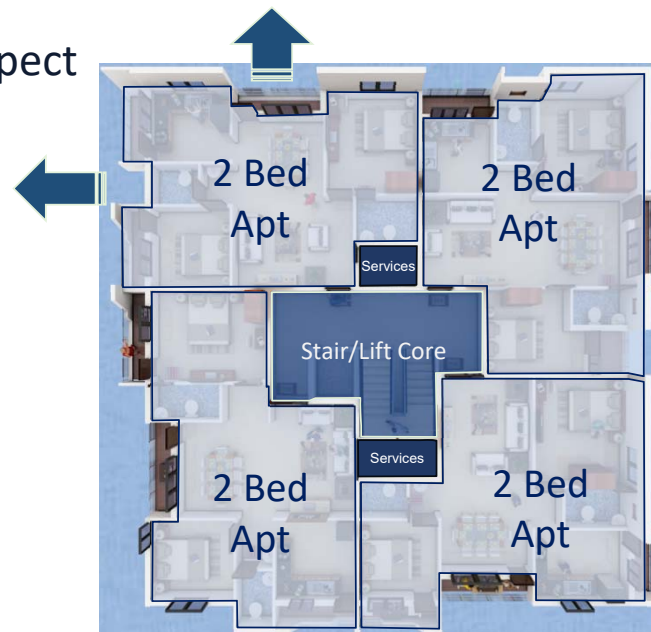
Build To Rent (BTR)

- >33% - Urban sites
- >50% - Suburban sites

Shared Accommodation

- n/a

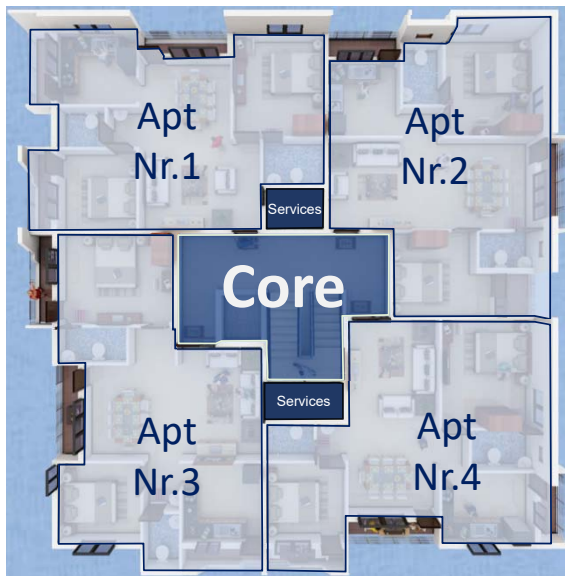
Dual Aspect



Standards – Apartments per Core

Build to Sell

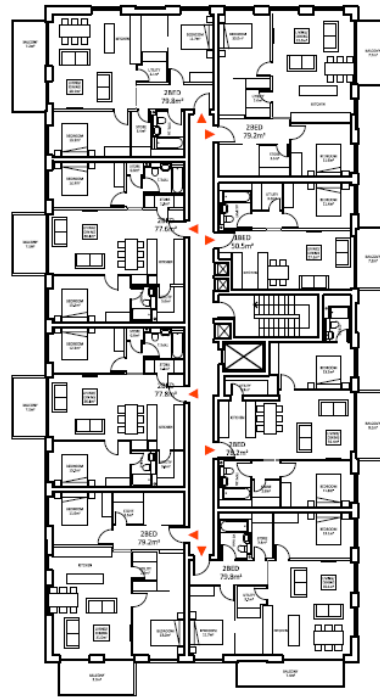
- ≤ 12 Apartments per core



Example of 4 Apartments per Core

Build To Rent (BTR)

- No restriction (*new*)



Shared Accommodation

- n/a



Standards – Car Parking

Build to Sell

- Minimised, substantially reduced or wholly eliminated in **urban** locations (well serviced transport)



- 1 space per unit in peripheral / less accessible locations plus 1 sp./3-4 units for visitors



Build To Rent (BTR)

- Default of minimal or significantly reduced car parking



Shared Accommodation

- Default of minimal or significantly reduced car parking



Standards – Bicycles

Build to Sell

- 1 Bike / bedroom plus 1 per 2 units for visitors
- Secure, permanent, access to public road, managed



Build To Rent (BTR)

- 1 Bike / bedroom plus 1 per 2 units for visitors
- Secure, permanent, access to public road, managed



Shared Accommodation

- 1 Bike / bedroom plus 1 per 2 units for visitors
- Secure, permanent, access to public road, managed



Standards – Ceiling Heights



Build to Sell

- Min. 2.7m on Ground
- Min. 2.4m on Upper floors



Build To Rent (BTR)

- Min. 2.7m on Ground
- Min. 2.4m on Upper floors



Shared Accommodation

- Min. 2.7m on Ground
- Min. 2.4m on Upper floors



Conclusion

Conclusion

- New Regulations welcomed
- Attractive new asset class for institutional investors
- Lack of affordable serviced land = issue
- Viability yet to be tested
- Affordability still an issue
- BTR & Co-Living could change face of urban centres for the better
- Watch this space...



New Residential Design Standards

An aerial night photograph of the Dublin Landings development. The image shows several modern, multi-story residential buildings with glass facades and green roofs. The buildings are illuminated from within, and the surrounding area is lit up. A body of water is visible in the foreground, with a few boats and a red light trail from a moving vehicle. The text 'Thank You' is overlaid in a large, blue, serif font.

Thank You

Dublin Landings (BM Services)

21st March 2018

Paul Mitchell

Panel discussion

- Paul Mitchell, Director, Mitchell McDermott
- Richard Barrett, Founder, Bartra Capital
- Tanya Duncan, Managing Director, Interxion
- Tom Parlon, Director General, CIF

Owen Reilly

Owner

Owen Reilly

Virtual Reality for property marketing

owen**reilly**

Why utilise VR in your marketing strategy?





REACH

COST

owenreilly

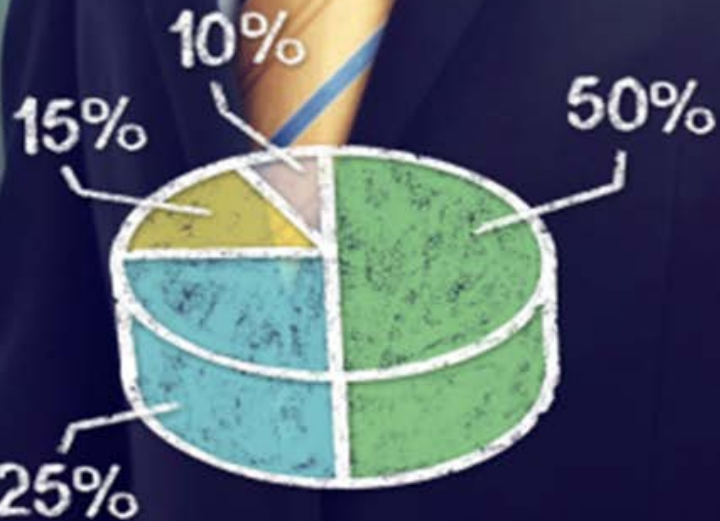
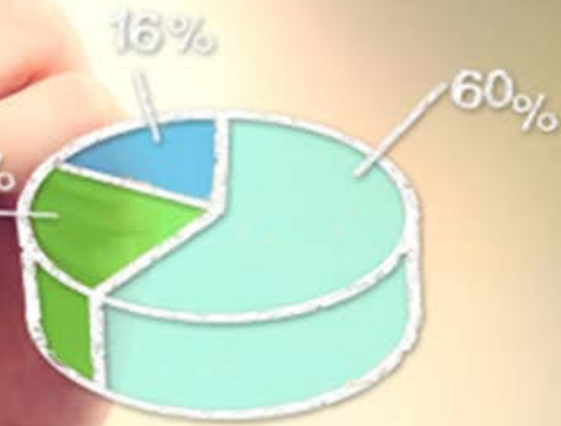


**SAVES
TIME**



Measure

ROI



STRATEGY

TEAMWORK



RESEARCH

INNOVATION



CREATIVITY

PLANNING

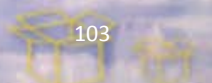
ANALYSIS

VISION

GOAL



SUCCESS



EXPERIENCE



ENGAGEMENT



MAINSTREAM

A close-up, side-profile shot of a person wearing an Oculus VR HD Prototype headset. The person has dark hair and is looking slightly upwards and to the right. The headset is black with a large, rectangular front panel. The Oculus logo and the text "Oculus VR" and "HD Prototype" are visible on the front panel. The background is dark and out of focus, suggesting an indoor setting with blue ambient lighting.

Oculus VR
HD Prototype

RESULTS



Feedback form



Constructing tomorrow, today.

Construction conference

FULL NAME _____ ORGANISATION _____

Overall what is your rating on this morning's event in relation to the below (rate from 1-10, 1 being poor and 10 being excellent)

Jim Power, Owner - Jim Power Economics	<input type="checkbox"/>	Richard Barrett, Founder - Bartra Capital	<input type="checkbox"/>
Tanya Duncan, Managing Director - Intexion	<input type="checkbox"/>	Paul Mitchell, Director - Mitchell McDermott	<input type="checkbox"/>
Panel discussion	<input type="checkbox"/>	Stephen Tennant, Partner - Grant Thornton	<input type="checkbox"/>
Owen Reilly, Owner - Owen Reilly	<input type="checkbox"/>	Insightfulness	<input type="checkbox"/>
Please rate the material for relevance	<input type="checkbox"/>		

Are you interested in further updates/information? Yes ☐ No ☐

If so, please provide your email address: _____

Is there any further topics you would like to hear about or any further comments?

Thank you for attending and completing our feedback form
Grant Thornton

© 2018 Grant Thornton Ireland. All rights reserved. Authorised by Chartered Accountants Ireland ("CAI") to carry on investment business.

Constructing tomorrow, today

Annual construction conference

Thank you

