

**Real Estate Investment: A Strategic Approach
Fourth Edition, 2023**

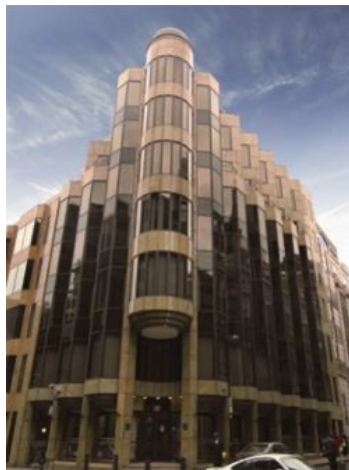
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Wilson Street

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Background

- 7-21 Wilson Street is a 38,000 sq ft London office building developed by Legal and General, a UK insurance company, in 1990
- The property was leased in late 1990 on a 25 year lease to Simmons and Simmons, a partnership of lawyers, with 5-yearly reviews to market rents, upward only
- The lease rent is £1,650,000 (£43psf); by late 1992 the market rent had collapsed to £760,000 - £950,000 (£20-25psf)
- Legal and General sold the building in January 1993 – at what price?
- 10 year fixed interest government bond yield: 8.4%



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September 1992

- The UK is part of the ERM (European Exchange Rate Mechanism) in which sterling is pegged to the deutsche mark at DM2.80 +/- 6%
- Speculators were selling sterling short as they believed it was over-valued and membership of the ERM was unsustainable
- To protect the value of sterling, interest rates were raised - from 10 to 12 per cent on 'Black Wednesday', with 15% proposed for the next day
- That evening, the UK decided to quit the ERM
- Sterling was set to slide in value, and gilt and interest rates were set to fall (the 20 year gilt was at 8.4%)
- Canary Wharf went bust, the Sunday newspapers were full of 'negative equity', and there were no office tenants or deals



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Why the UK won't join the Euro - yet



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Sterling/\$, 1985-1993 – Black Wednesday



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December 1992

- DTZ valued the building at £15m using a cap rate of 10%
- This was a conventional valuation of an over-rented property
- There were few, if any, comparables



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Valuation: December 1992

Term:		
Rent passing	£1,650,000	
PV pa, 23 years @ 10.00%	8.8832	
Capital value		£14,657,310
Reversion:		
ERV @£22.50 psf	£855,000	
PV pa, perp @ 10.00%	10	
PV, 23 years@ 10.00%	0.1117	
Capital value		£955,035
Valuation		£15,612,345
Less costs @ 4.5%: net valuation say		£15,000,000

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January 1993

- What price did it sell for?
- Given a gilt yield of 8.4%, what would you have paid?
- Why?



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Appraisal 1: summary

- Cash flow: £1,650,000
- Term: 23 years
- Long gilt: 8.4%
- Risk premium: ?%
- Required return: ?%
- Value: £?m



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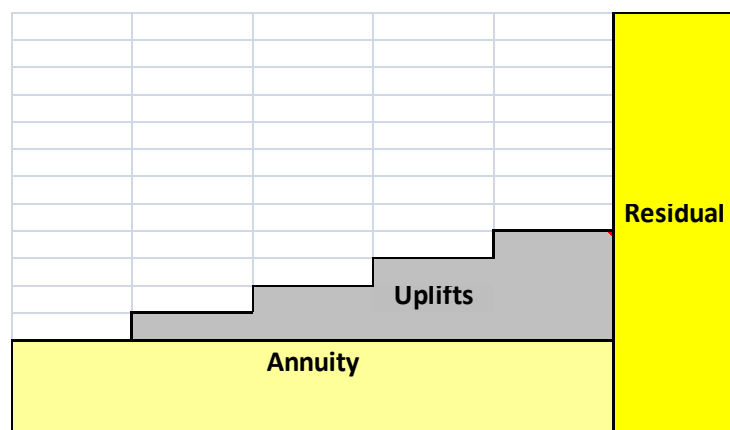
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Appraisal: detailed

- Contracted lease rent: annuity
- Possible uplifts in rent
- Residual value

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The cash flow



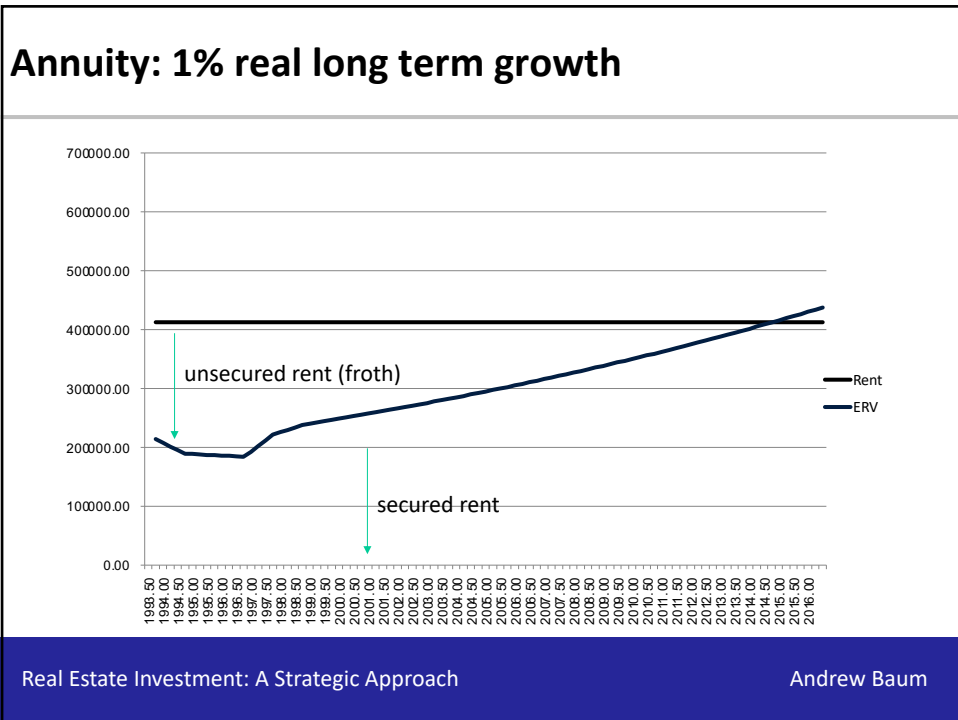
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The annuity: how secure?

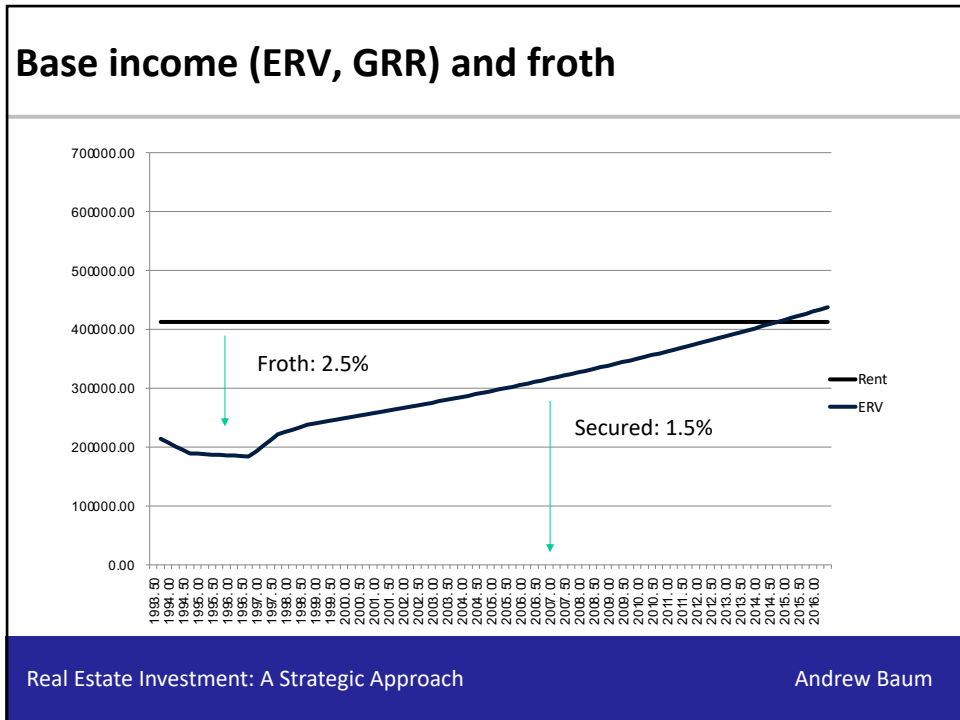
- Rent supported by market rents
- 'Froth' unsupported by market rents

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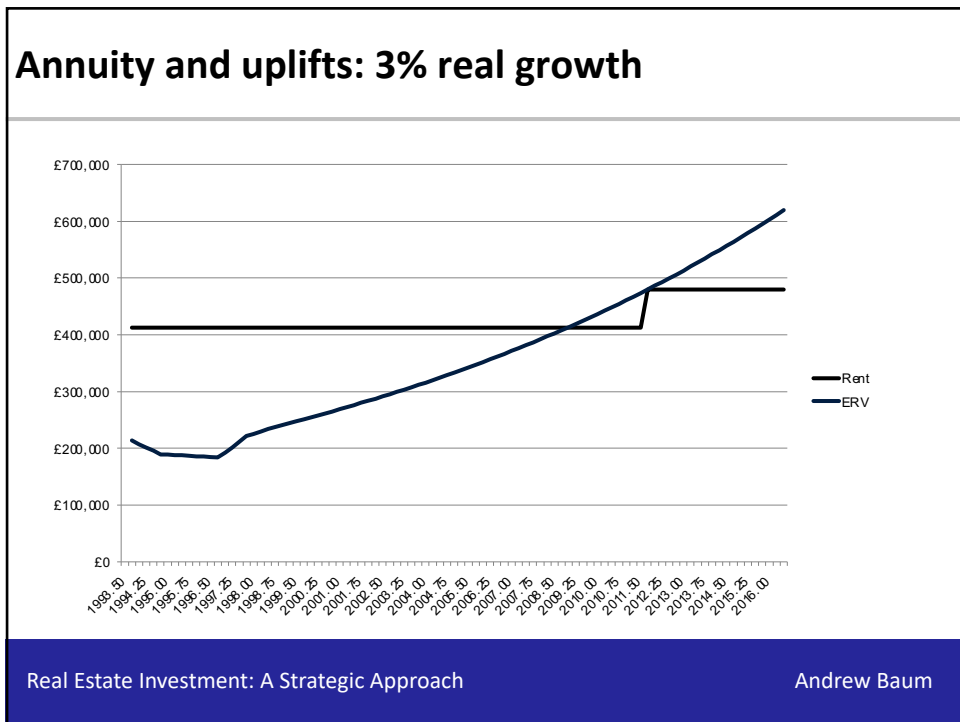
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Uplifts

- Would you give these away?
- Why do they have value?
- How can you assess a price?

- Clue: \rightarrow

$$d_1 = \frac{\ln\left(\frac{S}{K}\right) + \left(r + \frac{s^2}{2}\right)t}{s \cdot \sqrt{t}}$$

$$d_2 = d_1 - s \cdot \sqrt{t}$$

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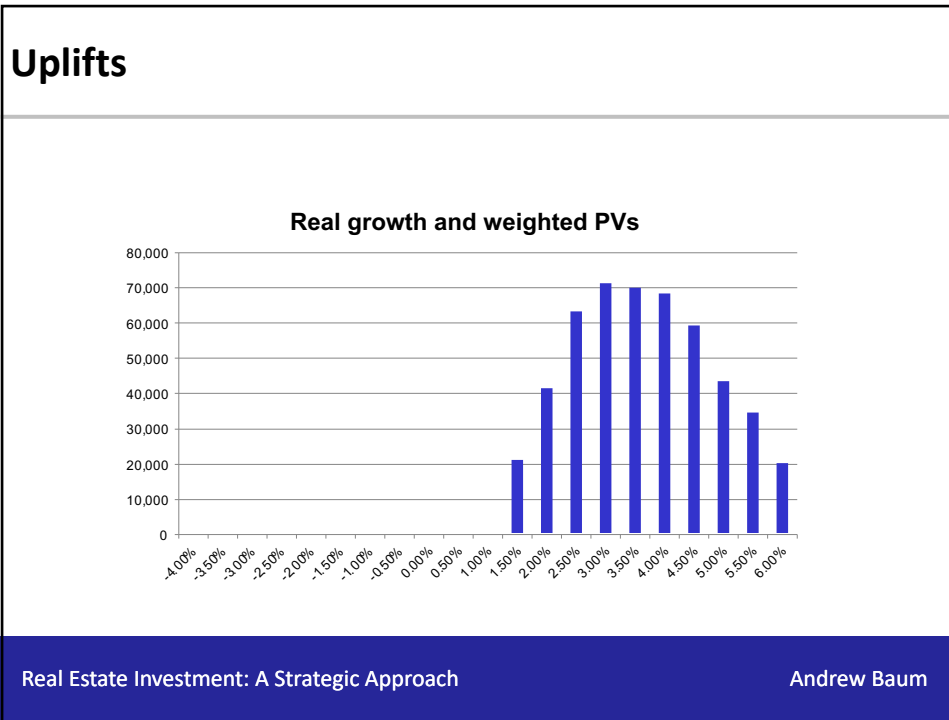
Uplifts: option value

Real growth	PV	Probability	Weighted
-4.00%	£0	0.50%	£0
-3.50%	£0	1.00%	£0
-3.00%	£0	1.50%	£0
-2.50%	£0	2.50%	£0
-2.00%	£0	3.50%	£0
-1.50%	£0	4.50%	£0
-1.00%	£0	6.00%	£0
-0.50%	£0	7.50%	£0
0.00%	£0	8.00%	£0
0.50%	£0	9.00%	£0
1.00%	£0	12.00%	£0
1.50%	£235,379	9.00%	£21,184
2.00%	£519,540	8.00%	£41,563
2.50%	£844,658	7.50%	£63,349
3.00%	£1,190,350	6.00%	£71,421
3.50%	£1,559,287	4.50%	£70,168
4.00%	£1,954,079	3.50%	£68,393
4.50%	£2,377,309	2.50%	£59,433
5.00%	£2,899,137	1.50%	£43,487
5.50%	£3,465,536	1.00%	£34,655
6.00%	£4,071,143	0.50%	£20,356
		100.00%	£494,009

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- ## Residual value
- Bare site less demolition costs?
 - Refurbishment?
 - ERV/cap rate?
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Residual value

- Bare site less demolition costs?
 - From comparable sales, say £100m per hectare (100,000 sq ft)
 - Plot coverage 150%, four storeys, 38,000 sq ft
 - Site = say 25,000 sq ft, £25m less say £2m demolition = £23m
- Refurbishment?
 - Say £50psf/.06 = £32m less £200 psf = £8m = £24m
- ERV/cap rate?
 - Say £40psf/.07 = £1.6m/.07 = £23m
- Residual value in 2016 say £23m – present value @ 11.4% = £1.5m

Appraisal 2: summary

Long gilt:	8.4%
Risk premium:	2.0%
Required return:	10.4%
Annuity value:	£15.4m
(ERV £9.8m, froth £5.6m)	
Uplifts:	£0.5m
Residual value:	£1.5m
Total value:	£17.4m

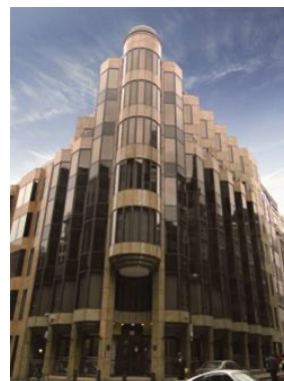


The discount rate

- Discount rate = RFR + risk premium
- What factors drive the risk premium?
 - Illiquidity
 - Default risk
 - Uncertainty of rental growth
- ERV and froth (including uplifts)
 - ERV discounted at 1.5% Rp
 - Froth discounted at 2.5% Rp
- Residual
 - Discounted at 3% Rp

The outcome

- The property was bought by a German fund for £18m



The German view: five key points

- The local risk free rate is lower so the discount rate, all things being equal, could be lower than a UK buyer's
- The cash flow is effectively fixed for 23 years – there is no uncertainty concerning the annuity (in £)
- The default risk is immaterial
- The buyer has a long term perspective – illiquidity is unimportant
- The currency looks as if it has fallen a long way already
- Germany is a low return market, so this asset might add a lot to the fund's returns
- UK property – this is a new building in the City - looks cheap compared to recent prices, especially after the £ collapse (roughly half the 1990 value in DM)

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Appraisal 3: the German view

Long bund:	6.9%
Risk premium:	2.0%
Required return:	8.9%
Annuity value:	£17m
(ERV £11m, froth £6m)	
Uplifts:	£0.5m
Residual value:	£2m
Total value:	£19.5m



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Sterling/DM, 1992-2001



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March 2001

- There are now 15 years remaining on the lease
- The ERV is now £40psf
- The long gilt sells on a 5% yield
- Market cap rate is around 6.5%
- What is the property now worth?



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Appraisal 4: March 2001

Long gilt:	5%
Risk premium:	2.0%
Required return:	7%
Annuity value:	£16.6m
(ERV £16m, froth £0.6m)	
Uplifts:	£?m
Residual value:	£8.5m
Total value:	£26.1m
(£25.5m net of costs)	



The German holding period return

- Property bought for £18m
- Property sold early 2001 for £25.5m with 15 years remaining; ERV now £40psf
- Running yield 8.8% (Germany income returns 4-5%)
- IRR 12% in local currency – for a very low risk asset
- IRR 16% in DM
- ERV in 2003: £25psf?



Performance 1993-2001 (£)				
Year	Capital	Costs	Rent	Total
1993	-18000000	-720000		-18720000
1994			1650000	1650000
1995			1650000	1650000
1996			1650000	1650000
1997			1650000	1650000
1998			1650000	1650000
1999			1650000	1650000
2000	25500000	-510000	1650000	26640000
			IRR	12.1%
			Running	8.8%

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Performance 1993-2001 (DM)		
Total	DM/£	DM
-18720000	2.4	-44928000
1650000	2.4	3960000
1650000	2.2	3630000
1650000	2.2	3630000
1650000	3	4950000
1650000	2.8	4620000
1650000	3	4950000
26640000	3.2	85248000
12.1%		16.3%

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March 2006

- The same property is now on the market again. The 2001 buyer is making the most of recent price rises and cashing in
- Rental values have recovered, but not to their 2001 level (now £35 psf) but the property is 15 years old with exactly 10 years to run on its lease
- The lawyers are expanding and are looking at other properties but remain liable for the rent
- The 10 year gilt now sells on a 4% yield
- What is it now worth?



March 2006

- Bidders include three sub-groups
 - A German open-ended fund
 - Risk free rate advantage?
 - Germany and its relative attractions
 - UK property cheap?
 - Currency advantage?
 - A private equity (opportunity) fund
 - Options?
 - A UK pension fund
- What price will be paid?
- What strategy might the buyer pursue?

