

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

Andrew Baum

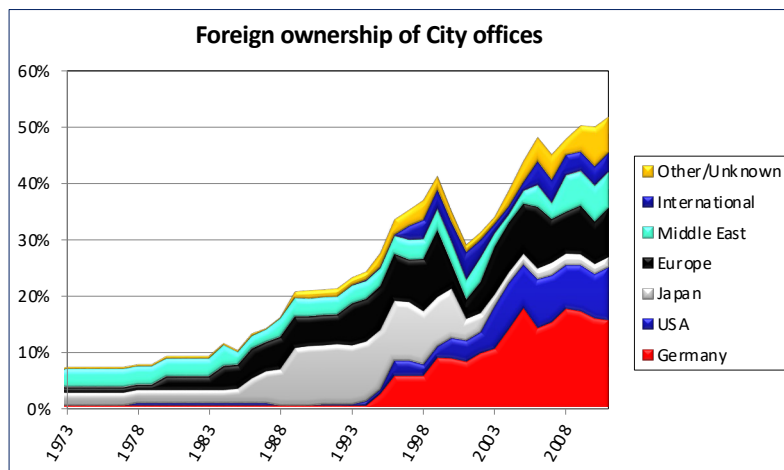
## Chapter Eleven International Real Estate Investment

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1

### Cross-border investing has boomed



Source: Who Owns the City database, University of Cambridge

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2

## Norwegians buy £448m Regent Street stake

- 4 November 2010 | By Kat Baker
- The Crown Estate is to join forces with the managers of the Norwegian Government Pension Fund Global in a new £1.8bn Regent Street partnership
- The Norwegian pension fund will spend £448m to take a 25% stake in Regent's Street in a deal representing a yield of around 4.5%
- The deal marks the first time the Crown Estate has sold a stake in a standing investment and highlights the continued strong appetite from overseas investors for central London property

## The case for international

- Diversification
- Higher returns
- Lack of local product
- Regulation
- Global benchmarks

## The case against international

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- Can you diversify?
- Implementation challenges
  
- Formal barriers
  - Taxation, fees and costs
  
- Informal barriers
  - Currency!

5

## Formal barriers

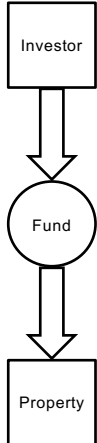
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- Exchange controls
  
- Limits on foreign ownership
  
- Taxation of foreign owners

6

## Tax may arise at three levels

- Asset
  - transfer taxes, tax on rents and gains
- Fund vehicle
  - withholding taxes, tax on distributions and gains
- Investor
  - withholding taxes, tax on distributions and gains



```

graph TD
  Investor[Investor] --> Fund((Fund))
  Fund --> Property[Property]
  
```

The diagram illustrates the flow of capital from an Investor (represented by a box) to a Fund (represented by a circle), and then from the Fund to Property (represented by a box). Arrows indicate the direction of the flow.

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7

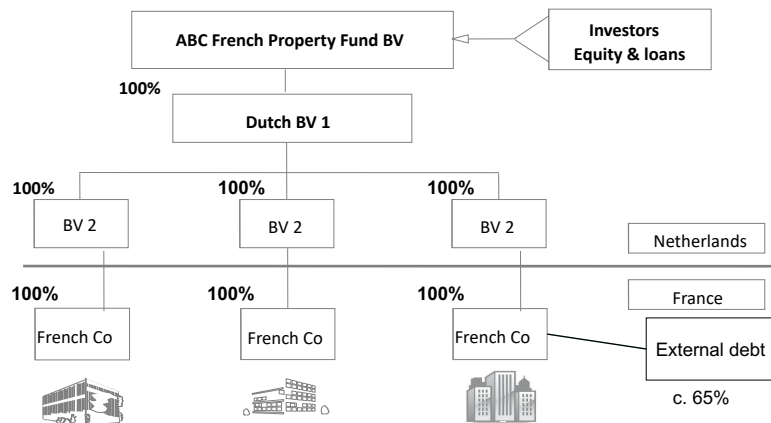
## Tax mitigation

- Pension funds pay no tax at home
- Withholding (income, not capital) taxes often applied on income internationally
- Income may be taxed but capital gains may not be
- Various structures can mitigate tax
  - Using debt to wash out income
  - Using tax treaty networks to minimise withholding taxes
  - Taking advantage of specific reliefs (e.g. REITs in Poland)
  - Using vehicles domiciled in favourable tax regimes (Lux)
  - Dividends and loan note interest taxed differently from rent
  - SPVs to avoid transfer tax and defer tax on gains

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8

## The Henderson French property fund, 1998



## Informal barriers

- Currency risk
- Legal and title risk
- Political/economic instability risk
- Cultural and geographical barriers
- Information asymmetry
- Liquidity risk/limits on exit
  - Equity
  - Debt

## Currency: risk

	2002	2003	2004	2005	2006	2007
Euro	-1.4	-0.9	8.0	23.6	9.3	5.2
GBP	16.1	19.1	16.4	7.5	7.3	14.7
USD	5.0	7.1	8.6	20.1	22.0	16.6
JPY	5.2	7.5	11.3	23.4	23.3	9.3
Local	7.1	7.8	11.4	15.5	14.9	11.5

Source: IPD global index returns, 2002-7

Property market returns averaged 11% in local currency; but averaged 7% to an unhedged Eurobloc investor, and 13% to a UK or US investor

## What makes a market attractive?

- Pricing
  - Relative to risk free rates
- Transparency
  - JLL transparency index
- Size and liquidity
  - Can you exit?
- Currency
  - Needs to be stable and hedgeable

## What would make Bulgaria attractive (2017)?

- Pricing
  - Cap rates (7%) are high relative to local bonds (2.5%)
- Transparency
  - Bulgaria is rated a semi transparent market (50/109) but is the top global improver with Serbia
- Size and liquidity
  - Needs to be seen as part of a regional CESEE bloc
- Currency
  - Euro pegged

## Pricing

- Yields relative to bonds
  - Local risk free rate - or Germany?
- Yields relative to the cost of borrowing
  - Cash on cash yields
- Rent growth
  - Economic and demographic growth
  - Big data? Connectivity?
  - Planning controls and limited supply
- Falling cap rates
- $K = RFR + Rp - g + d$

## Interest rate parity

- Interest rate parity is a theory which relates interest rates and exchange rates
- The spot price and the forward or futures price of a currency incorporate any interest rate differentials between the two currencies
- Interest rate differentials and expected currency exchange rate movements are directly related
- Turkey interest rate 14%, US 5%, expected currency movement must be +9% in favour of dollar
- US investor:  $14\% - 9\% = 5\%$  in Turkey, or direct 5% in US
- Turkey investor:  $5\% + 9\% = 14\%$  in US, or direct 14% in Turkey

## Fisher equation

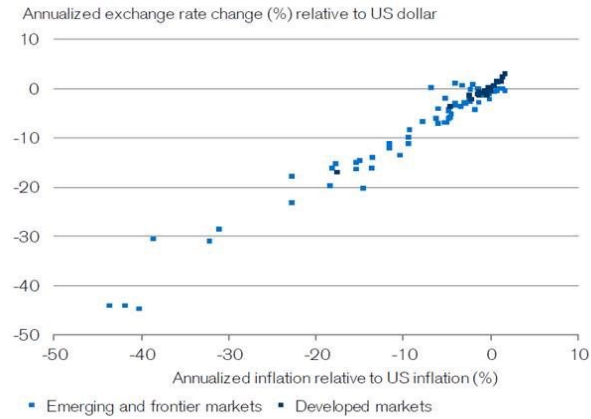
$$R = I + i + RP$$

- Difference in interest rates = difference in expected inflation
- Currency appreciation = difference in interest rates = difference in expected inflation
- A higher inflation currency should depreciate relative to a lower inflation currency – and will have higher interest rates



## Interest rate parity has held, long run

Figure 4: Exchange rates and inflation for 88 countries, 1970–2018

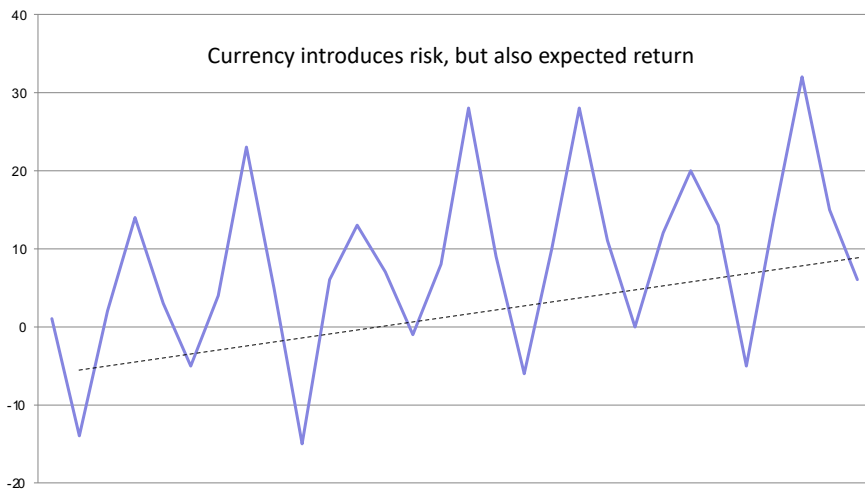


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## Drift and volatility



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## Inflation, interest rates, currencies

- In practice interest rates, expected inflation rates and currency exchange rate movements may not be related in the short term
- For example, in 'carry trades' investors successfully borrow low-yielding and lend/invest in high-yielding currencies and assets
- This is effective in periods of global financial and exchange rate stability
- Carry trade may *increase* value of higher interest rate currencies – in the short run

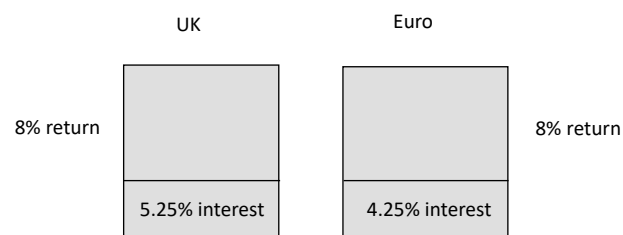
## What decision rule should we use?

- Look for high nominal returns in local currency?
  - Subject to currency drift
  - Subject to currency risk unless hedged
  - Market risk needs to be accounted for
  - May be appropriate for risk-seeking Type B funds
- Look for high 'excess returns' in local currency?
  - We have to estimate the required risk premium (RP)
  - We then maximise the excess return:  $IRR - RFR - RP$
  - Adjusts for market risk
  - Takes out currency effect
  - Appropriate for Type A investors

## Should we hedge?

- Invest unhedged
  - Random walk?
- Use local debt
  - Loan and property value both denominated in local currency
  - 70% debt is a 70% capital value hedge
  - But introduces leverage (and Turkish rates are high)
- Use a currency overlay
  - Focus on real estate returns
- Hedge the equity
  - Use currency futures
  - Get paid for reducing risk?

## Currency hedging



- Interest rate difference means inflation expectations different; lower inflation expectation means Euro is expected to appreciate
- Interest rate parity means selling Euro forward for £ earns an annual payment equal to the interest rate difference, i.e. 1%

## Turkey or Belgium?

- Turkey shopping centre cap rate 12%
- Expected Turkey IRR 20%
- Cost of debt Turkey 14%
  
- Belgium shopping centre cap rate 8%
- Expected Belgium IRR 10%
- Cost of debt in Belgium 5%
  
- Which asset should a Euro-denominated fund buy?
- Who is the natural buyer of the Turkey asset?

## An initial view

- Highest local IRR is in Turkey
  
- A good idea?

## A good idea?

- How much extra return is needed to compensate for Turkey real estate risk?
- Or Turkey currency risk?
- What is the Euro expected return?

## Turkish asset: unleveraged IRR

Year	0	1	2	3	4	5
NOI	1000.00	120.00	129.60	139.97	151.17	163.26
Exit						1469.33
Cash flow	1000.00	120.00	129.60	139.97	151.17	1632.59
IRR						20.0%

## Interest rate parity

- The cost of hedging / expected currency movement is equal to the interest rate differential
- $14\% - 5\% = 9\%$
- Hedged Turkey return in Euros =  $20\% - 9\% = 11\%$
- Unhedged, the expected return is the same - but riskier
- Is 1% enough risk premium to compensate?

## Turkish asset: unleveraged Euro return

Year	0	1	2	3	4	5
NOI	1000.00	110.09	109.08	108.08	107.09	106.11
Exit						954.96
Cash flow	1000.00	110.09	109.08	108.08	107.09	1061.07
IRR						10.09%

## Leverage?

- Should we use leverage?
- From Euro or Turkish banks?

## Return on leveraged equity

*Return on leveraged equity > return on unleveraged equity*

*when*

*Return on unleveraged equity > interest rate on debt*

## Turkey: leveraged IRR, local debt/buyer

Year	0	1	2	3	4	5
Cash flow	-400.00	120.00	129.60	139.97	151.17	1032.59
Interest		84.00	84.00	84.00	84.00	84.00
Net cash flow	-400.00	36.00	45.60	55.97	67.17	948.59
IRR						26.77%

## A good idea?

- How much extra return is needed to compensate for leverage risk?
- And should we borrow Turkish Lira at 14% or Euros at 5%?



### Turkish asset: IRR, local debt, Euro buyer

Year	0	1	2	3	4	5
Cash flow	-400.00	110.09	109.08	108.08	107.09	636.01
Interest		77.06	70.70	64.86	59.51	54.59
Net cash flow	-400.00	33.03	38.38	43.22	47.58	581.42
IRR						15.16%

### Turkish asset: IRR, Euro debt, Euro buyer

Year	0	1	2	3	4	5
Cash flow	-400.00	110.09	109.08	108.08	107.09	461.07
Interest		30.00	30.00	30.00	30.00	30.00
Net cash flow	-400.00	80.09	79.08	78.08	77.09	431.07
IRR						18.03%

## We need to model the risk

- Euro investment in Brussels and Turkey v Turkish investment in Turkey
- Base case
  - IRR 10% Euro and 20% Turkey
  - Exit yield is the going-in cap rate
  - Expected currency movement 9% against lira
- 7 scenarios for 4 local deals
  - Exit yield moves relative to current cap rate -3% to + 3% in 1% steps
- 35 scenarios for 3 cross-border deals
  - As above, plus
  - Currency depreciation -9%, 0%, 9%, 18%, 27%

## What is the risk?

	1	2	3	4	5	6	7
Average return	<b>20.34</b>	11.94	<b>27.18</b>	4.02	1.05	<b>10.18</b>	<b>15.07</b>
SD	<b>3.02</b>	13.75	<b>5.70</b>	48.58	56.08	<b>4.96</b>	<b>8.53</b>
CV nominal	<b>6.74</b>	0.87	<b>4.77</b>	0.08	0.02	<b>2.05</b>	<b>1.77</b>
Max	<b>25.24</b>	37.62	<b>36.17</b>	60.04	64.47	<b>18.81</b>	<b>29.25</b>
Min	<b>16.29</b>	-8.43	<b>19.25</b>	-100	-100	<b>4.73</b>	<b>5.45</b>

- 1: **Unleveraged, Turkey, local buyer**  
 2: Unleveraged, Turkey, Euro buyer  
 3: **Leveraged, Turkey, local buyer**  
 4: Leveraged, Turkey, Euro buyer (local debt)  
 5: Leveraged, Turkey, Euro buyer (carry trade)  
 6: **Unleveraged, Brussels, Euro buyer**  
 7: **Leveraged, Brussels, Euro buyer**

## Conclusions

- The highest returns are available in Turkey
- The highest mean return strategy is for a local to invest in Turkey asset, leveraged, using local debt
- The highest (and lowest, therefore riskiest) potential return strategy is for Dutch investor to invest in Turkey asset, leveraged, using Euro debt (-70%, +117%) – this is the worst risk-adjusted return
- The lowest risk strategy – and the best risk-adjusted return - is to invest in domestic assets, unleveraged

## Conclusions

- Deals are more efficient for domestic buyers
- Leverage damages risk-adjusted returns
- Using leverage in a foreign market adds huge risk
  - Using local leverage reduces (halves) the equity capital subject to currency risk - but the use of 50% leverage more than doubles the risk of the remaining equity!
  - Using non-local leverage (the carry trade) is likely to damage return and increase risk

### A return comparison

€100m shopping centre with 50% leverage			£100m shopping centre with 50% leverage		
	€m	Return on equity		£m	Return on equity
Net rental income	5.5		Net rental income	5.0	
Management fees	(0.5)		Management fees	(0.2)	
Interest	<u>(2.6)</u>		Interest	<u>(3.1)</u>	
Net income	2.4	4.8%	Net income	1.7	3.4%
Capital growth	2.5		Capital growth	2.0	
Tax leakage	<u>(0.3)</u>		Tax leakage	<u>0.0</u>	
Total return	<u>4.6</u>	<u>9.2%</u>	<b>Total return</b>	<b><u>3.7</u></b>	<b><u>7.4%</u></b>
Hedging return		1.0%			
<b>Total return incl hedge</b>		<b><u>10.2%</u></b>			

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39

### Risk?

Shopping centre, France		Shopping centre, UK	
Cash on cash yield	4.8%	Net rental income	3.4%
Capital growth	2.5%	Capital growth	2.0%
Leverage, costs	1.9%	Leverage, costs	2.0%
Hedging effect	1.0%		
<b>Total return</b>	<b>10.2%</b>	<b>Total return</b>	<b>7.4%</b>

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40