



Society of Actuaries in Ireland

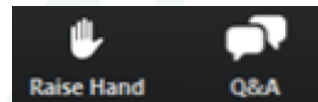
The Future of Real Estate

24th September 2020

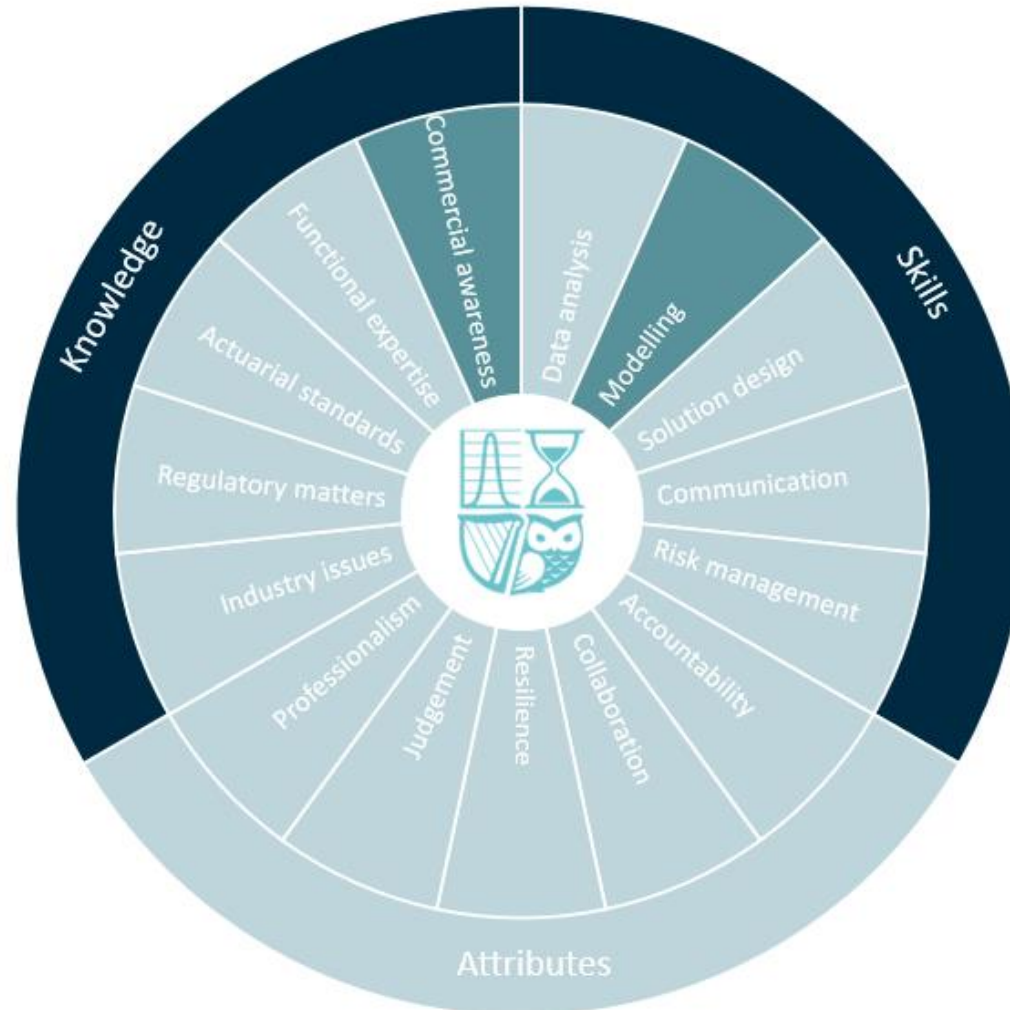
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Questions

Please click on the 'Raise Hand' icon
to ask a question
and
wait to be unmuted
or
Use the Q&A function



Competency wheel



Disclaimer

The views expressed in this presentation are those of the presenter(s) and not necessarily those of the Society of Actuaries in Ireland or their employers.

What we will cover in this session



Real estate as an investment asset class

Assessing tenant credit quality –
current and future approaches

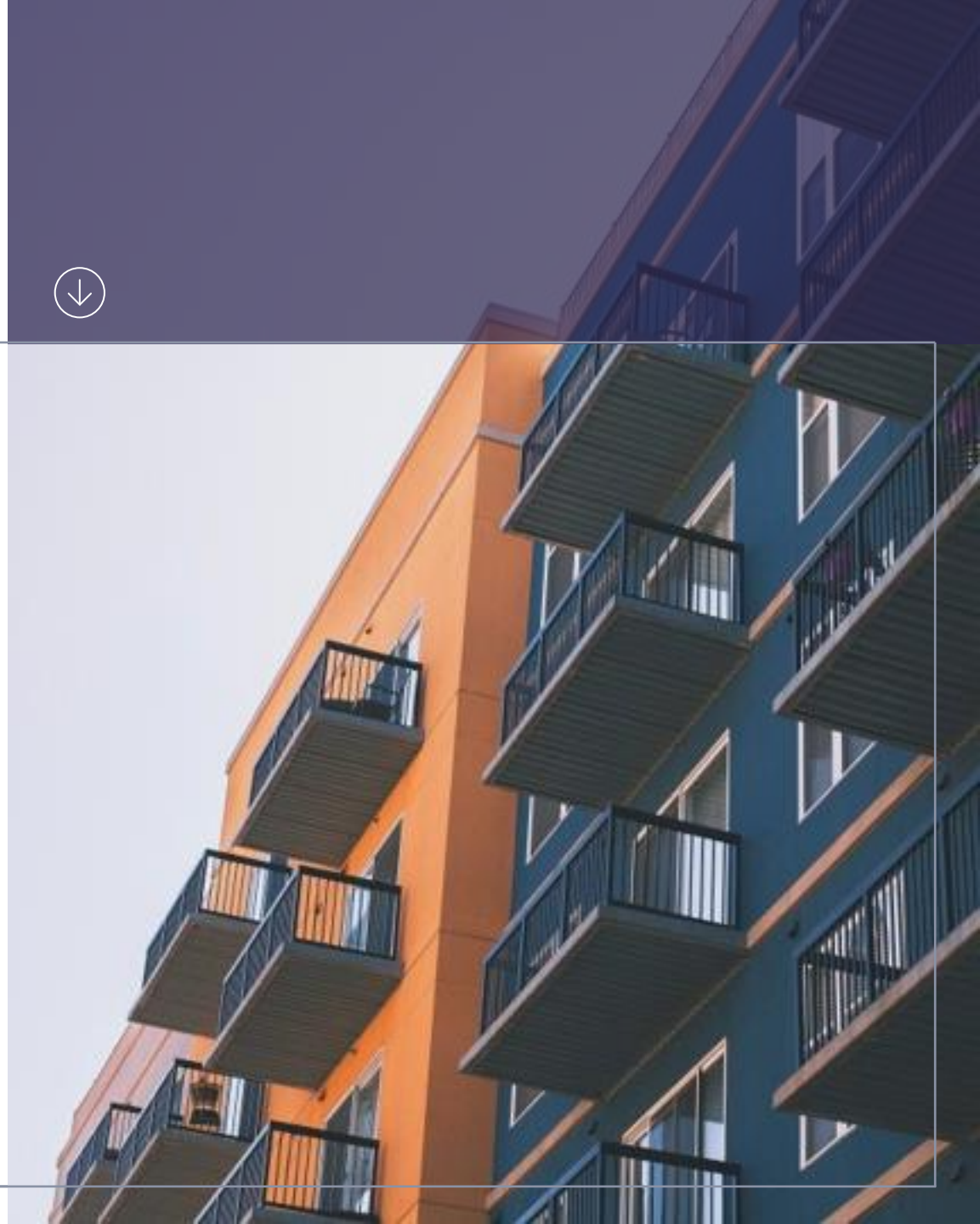
How to interpret company credit reports

Creating derivative high value CRE specific data sets from
company credit reports

Application of tenant credit data to CRE investment markets

Why there is a growing demand for CRE tenant income data

Conclusions



Role of real estate in a multi-asset portfolio

- Diversification due to its generally low correlation
- High and stable income
- Lower volatility relative to other assets
- Potential for capital growth
- Competitive risk-adjusted returns
- Protection against inflation
- Liability-matching

Different sectors within real estate

The real estate investment market comprises a wide range of property types

Traditional

- Offices
- Shops
- Warehouses



Alternative

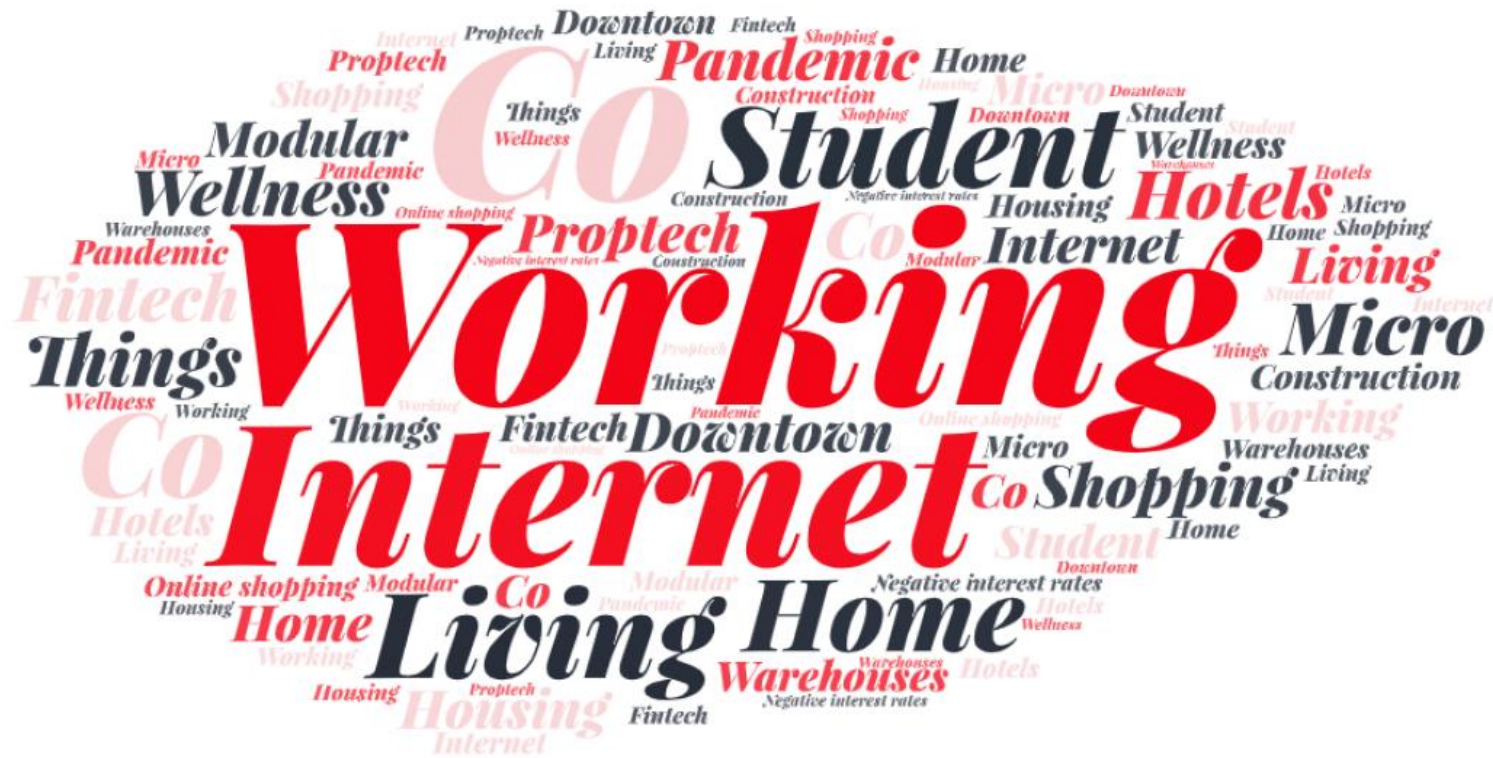
- Hotels
- Student housing
- Private rented sector



Occupier requirements are always in a constant state of flux

Winds of change

Real estate markets are facing a wide range of challenges



“

The value of your real estate investment is ultimately determined by the level, duration and quality of the rental income paid by your tenants.

”

Andrew Baum.

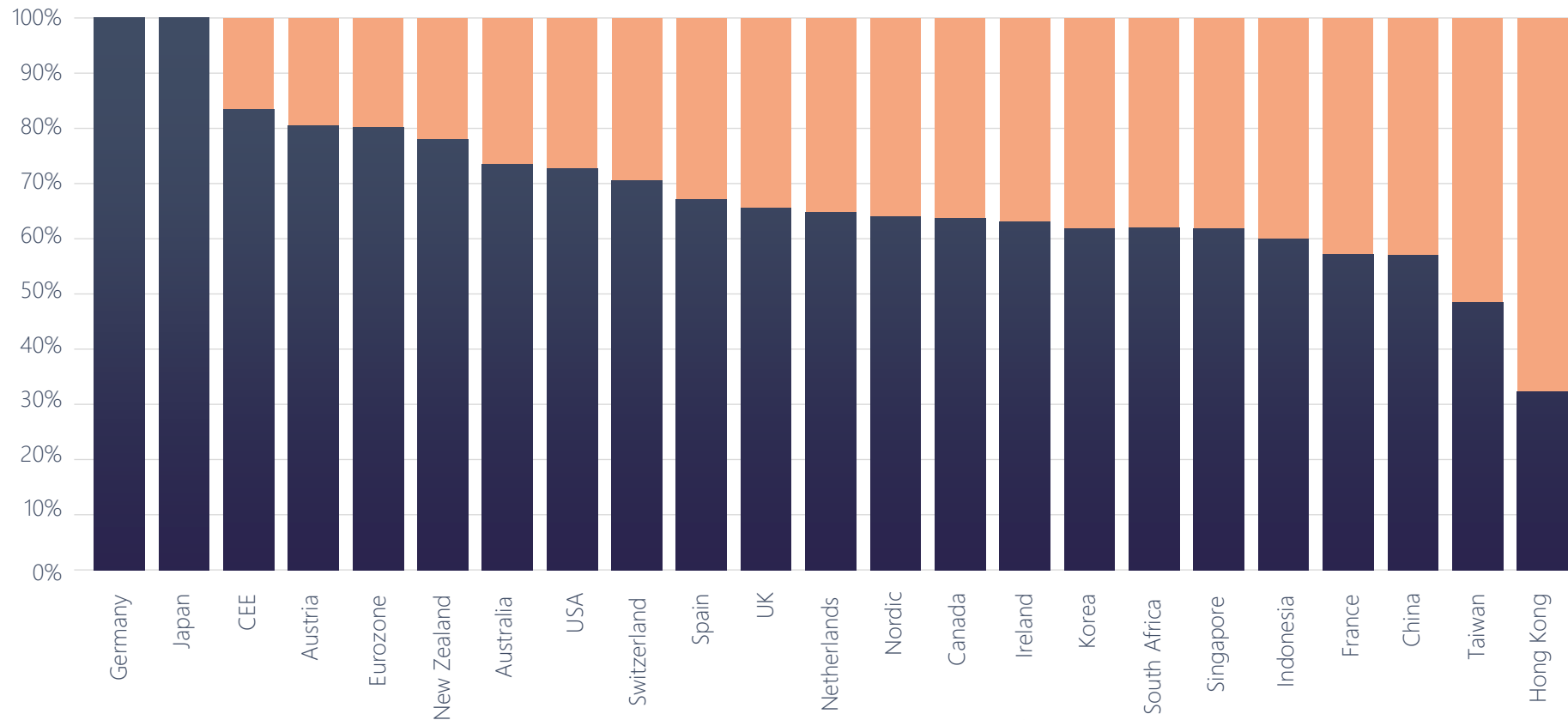
Professor of Practice, SAID Business School, University of Oxford



Sources of risk & return

Markets offer a different income/capital return profile

% of Total Return from Income Return & Capital Growth —1985 to 2018*



Western European & Anglo markets = expect more bond style investment returns

Asia Pacific & Emerging Markets = expect more equity style investment returns

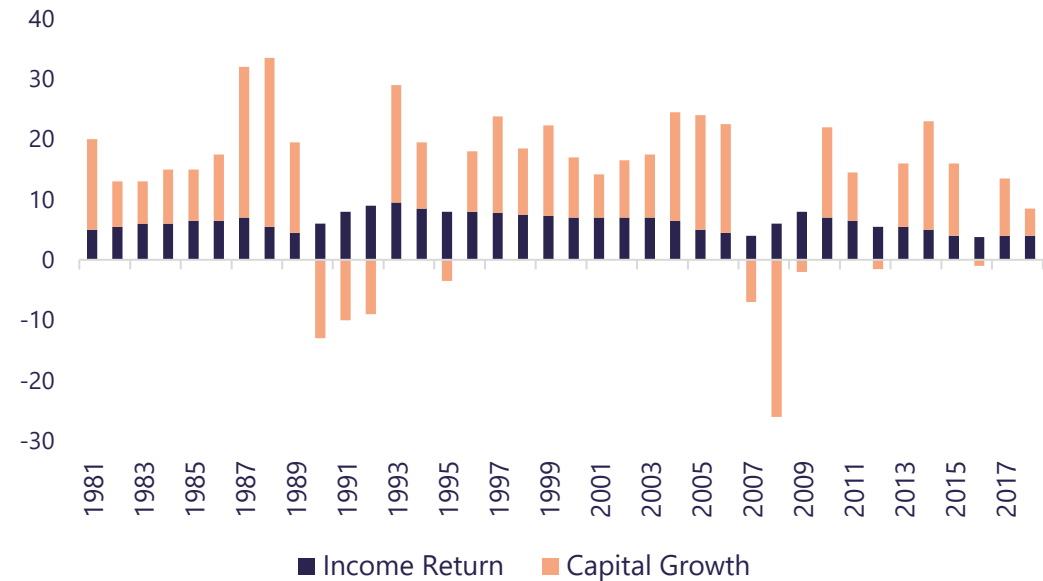
Income Return
Capital Growth

Source: Fidelity International, MSCI/IPD 2019
* Length of long term coverage varies by country

Sources of risk & return

Structure of long term institutional investment performance

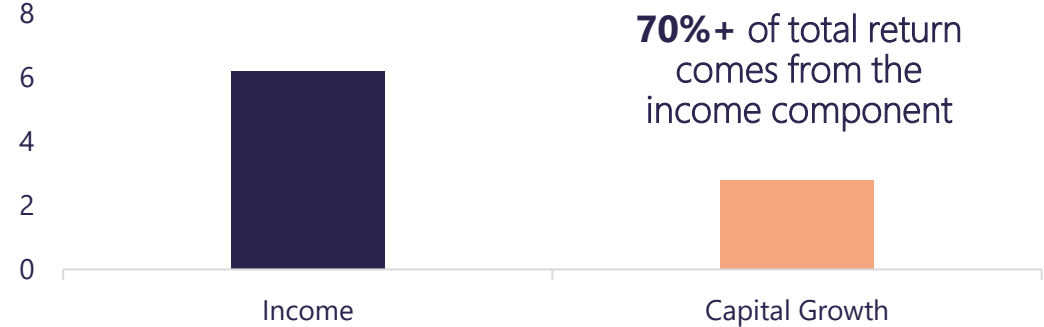
MSCI UK Annual Index — Components of Performance
All Property Total Returns 1981 to 2018 - % pa



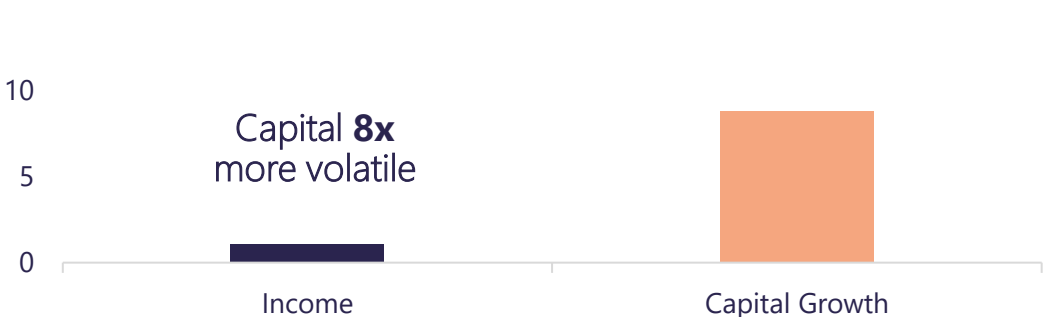
Investors show a repeated tendency to anchor to capital returns instead of income returns despite the fact that over time income returns make a greater and more stable proportion of the total returns...

Source: Fidelity International, MSCI/IPD 2019

MSCI UK Annual Index — Long Term Performance
Income Return vs. Capital Growth 1981 to 2018 - % pa



MSCI UK Annual Index — Volatility of long term performance
Income Return vs. Capital Growth 1981 to 2018 - % pa



Implications for investors in a low growth market

“

In the absence of capital growth, commercial real estate becomes a fixed income style investment with a floating capital opportunity attached

”

“

Under these conditions there is an even greater need to understand the occupier, their business environment and their specific requirements

”



An income driven approach to CRE investment

A simple set of objectives

Minimise risk and maximise returns by pricing the risk to your income stream more effectively:

Focus on the ability of your tenant(s) to meet current AND future rental commitments



Quantify the probability of loss with figures NOT labels



Give income research equal weighting alongside the analysis of market and lease risks in your investment due diligence and portfolio investment management process



Credit Reference Agencies (CRAs) & tenant credit data

The primary source of tenant credit information remains the credit report



Full of great information BUT delivered as a PDF report and missing key data sets for CRE investors:

- No long term forecast showing % probability of failure
- No standardised international scoring system for risk
- Risk measures not comparable with other investment assets
- No ability to aggregate risk data at asset and portfolio level
- No ability to segment and analyse portfolios
- No ability to calculate risk across corporate family

How to interpret a company credit report

The primary source of tenant credit information remains the company credit report

Comprehensive Report

Report viewed 19 Dec 2019
Subscriber Number 980-32299
Your Reference Portfolio Manager

Identification & Summary

SPORTSDIRECT.COM RETAIL LIMITED

Risk Evaluation	
D&B Rating	5A 2
D&B Risk Indicator	1 2 3 4 -
D&B Failure Score	70
D&B Delinquency Score	79
Days Beyond Terms	21
D&B Maximum Credit	£16,500,000
Legal Events	
Number of Court Judgments	0
Value of all Court Judgments	0
Number of Mortgages and Charges	5
Associations	
Parent Company	Yes
Number of Principals	3
Financial Summary	
Latest Accounts Date	28 Apr 2019
Tangible Net Worth	£1,374,728,000
Turnover	£2,187,760,000

Identification	
Trading Style	SPORTS DIRECT.
Main Trading Address	Unit A, Brook Park East Meadow Lane, Shirebrook MANSFIELD Nottinghamshire NG20 8RY UNITED KINGDOM
Telephone Number	03443325292
D-U-N-S® Number	42-441-8663
Registered Number	03406347
Web Address	www.sportsdirect.com
Email	cs@sportsdirect.com
Registered Address	UNIT A BROOK PARK EAST SHIREBROOK NG20 8RY UNITED KINGDOM
Line of Business (UK SIC 2007)	Other retail sale of new goods in specialised stores (not commercial art galleries and opticians) (47789)

D&B Risk Assessment

D&B Rating	5A 2
Financial Strength	5A (based on tangible net worth) £1,374,728,000
Risk Indicator	2 Represents a lower than average risk of business failure.

D&B Maximum Credit	£16,500,000
Recommended credit exposure at any given time.	
The D&B Maximum Credit is calculated using the D&B Failure Score, business size and primary industry sector.	



Users **currently** focus on:

- Credit rating
- P&L/Balance Sheet



Users **should** pay more attention to:

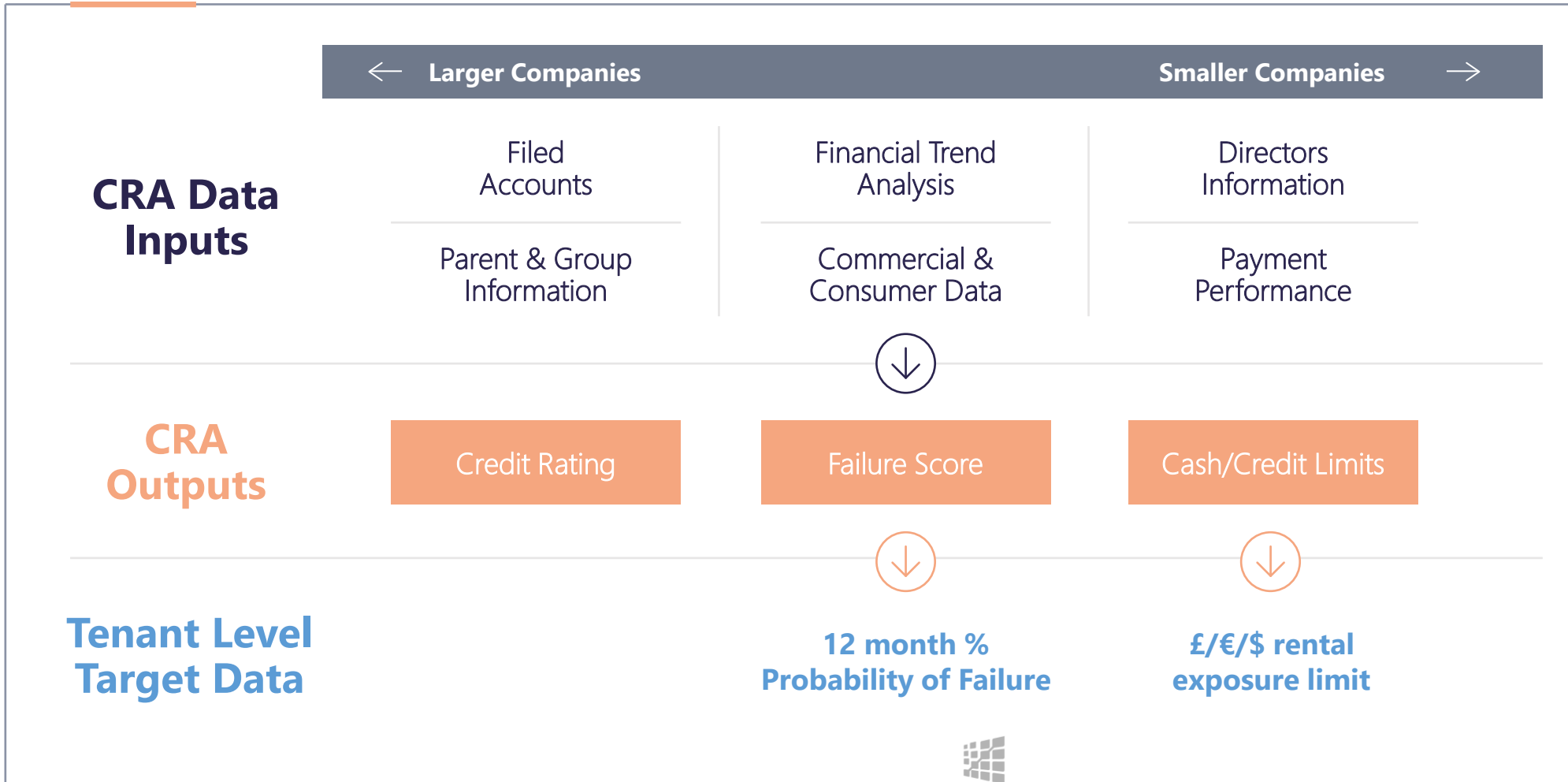
- Failure score
- Identification & ref numbers (D-U-N-S Number)

Who is my tenant?

What is the % probability they will default?

How a company credit report works

CRA's use a live scorecard system linked to a single company ID



Quantifying the probability of tenant default

Forecasting a 12 month % probability of business failure

Tenant Level Target Data

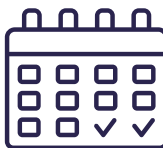
12 month %
Probability of Failure

£/€//\$ rental
exposure limit

Additional analysis of the 12 Month % Probability of Failure can yield significant benefits for CRE professionals, investors and lenders:



Long term forecast of default from 1 to 10 years into the future



Mapping 12 Month % Probability of Failure to equivalent corporate bond default rates



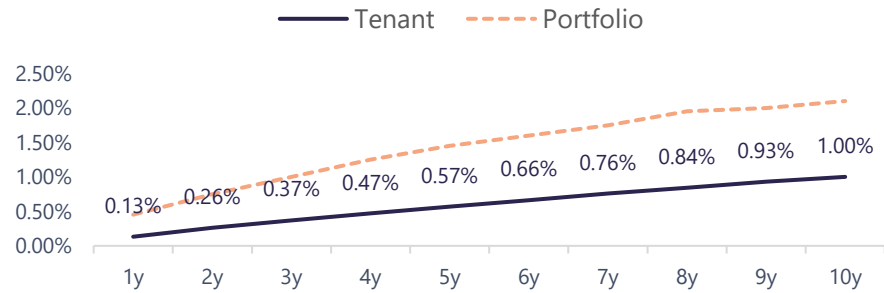
Allows global standardisation of failure scores

These data sets can be widely applied across the CRE investment industry

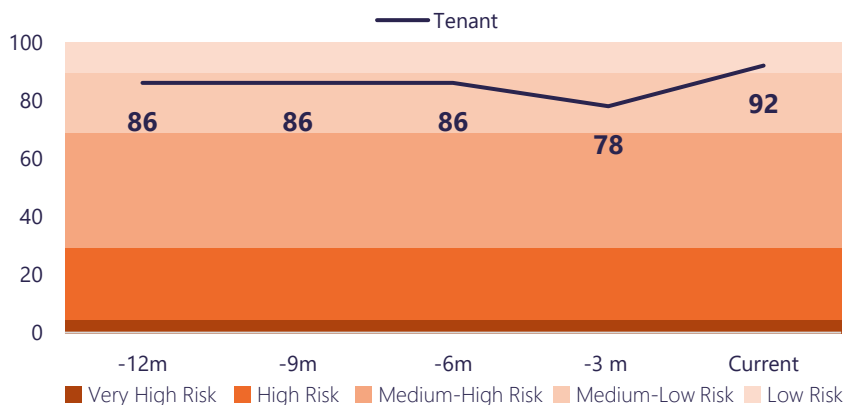
Applications in CRE markets – TENANT & LEASE LEVEL

Risk rating individual cashflows using 12 month % probability of default

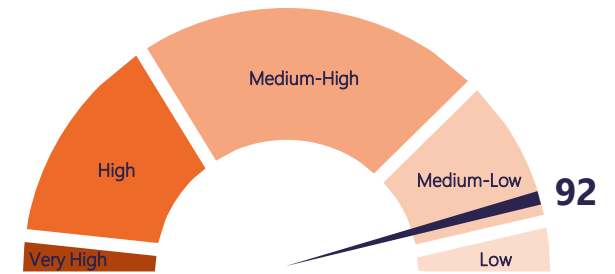
Probability of Failure - Projected



INCANS Global Score - History



INCANS Risk Assessment



Scores and Ratings

INCANS Global Score	92
Equivalent Bond Rating	BBB+
Max Credit Recommendation	€ 1,500,0
Rent Affordability	14.05%

Probability of Failure

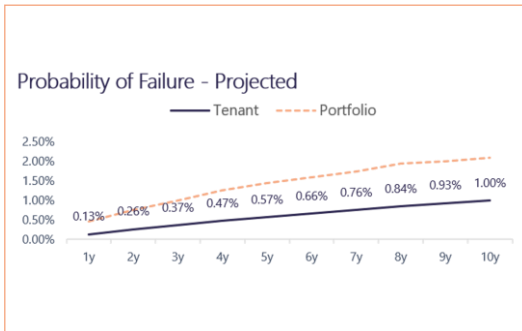
1 Year	0.13%
5 Year	0.57%
10 Year	1.00%



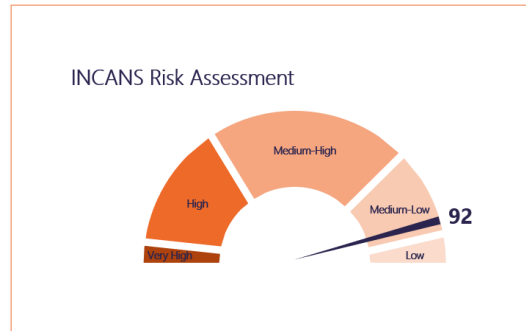
Applications in CRE markets – PROPERTY LEVEL

Risk rate/score assets by aggregating multiple cashflows from tenant level

Asset Future Default

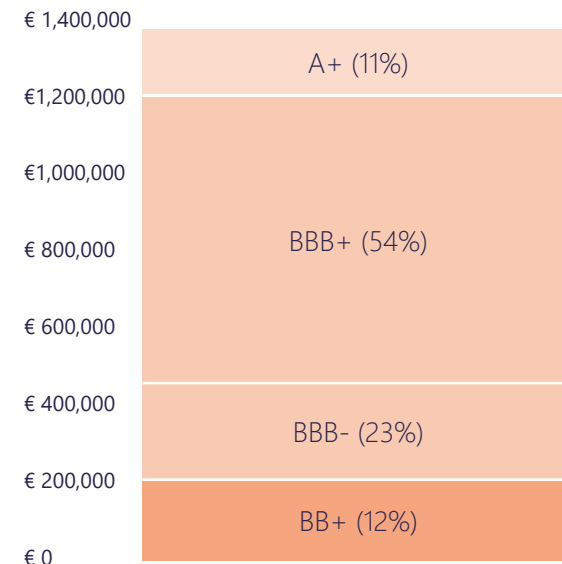


Global Asset Score

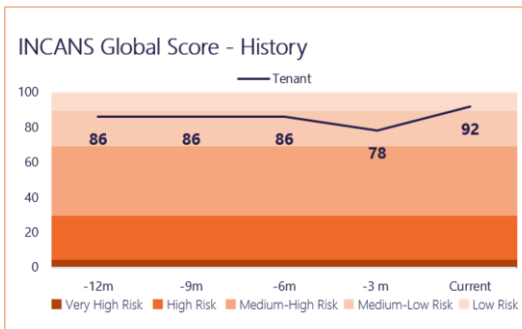


Asset Income Stream Tranches

Rent by Equivalent Bond Rating and Risk Band



Asset Score History



Asset Level Credit Limit + Equivalent Bond

Scores and Ratings	
INCANS Global Score	92
Equivalent Bond Rating	BBB+
Max Credit Recommendation	€ 1,500,0
Rent Affordability	14.05%
Probability of Failure	
1 Year	0.13%
5 Year	0.57%
10 Year	1.00%



Very High Risk High Risk Medium-High Risk Medium-Low Risk Low Risk

Asset due diligence & rating

Accurately price fix income component

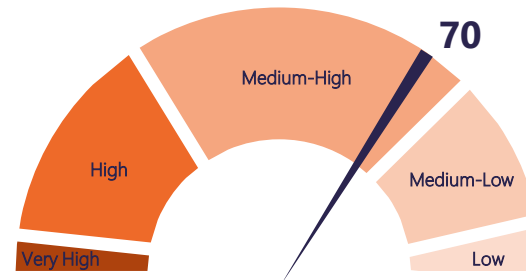
Applications in CRE markets – FUND/PORTFOLIO LEVEL

Risk rate/score funds & portfolios by aggregating multiple cashflows from tenants/assets

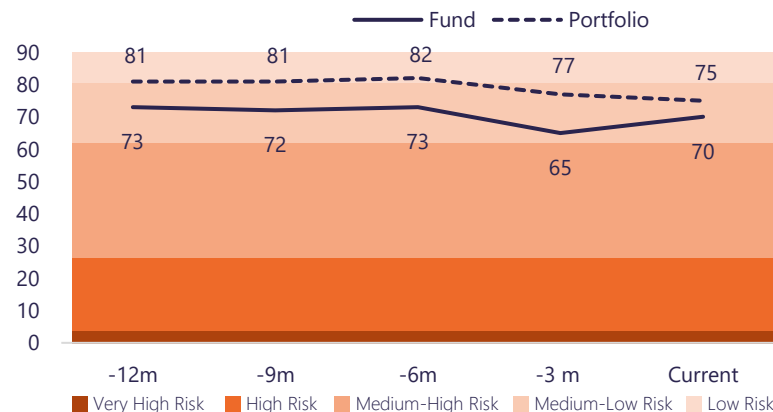
- Portfolio analysis, simulation modelling and attribution analysis
- Monitoring “live” tenant risk
- Develop future strategies focused on business sectors, tenant type, income quality etc

Identification	
Fund Name	Test Fund 2
Fund Rent	€ 3,560,329
Fund ERV	€ 3.750,138
Scores and Ratings	
INCANS Global Score	70
Equivalent Bond Rating	BB+
Weighted Country Percentile	73/100
Max Credit Recommendation	€ 92,586,839
Rent Affordability	93.90%
Weighted Probability of Failure	
1 Year	0.46%
5 Year	1.61%
10 Year	2.35%

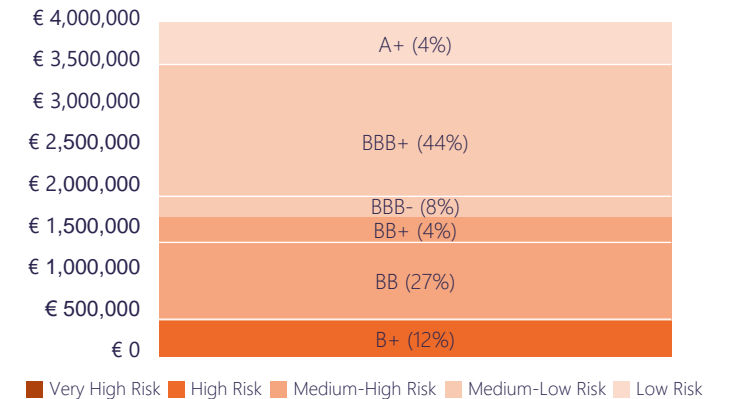
INCANS Risk Assessment



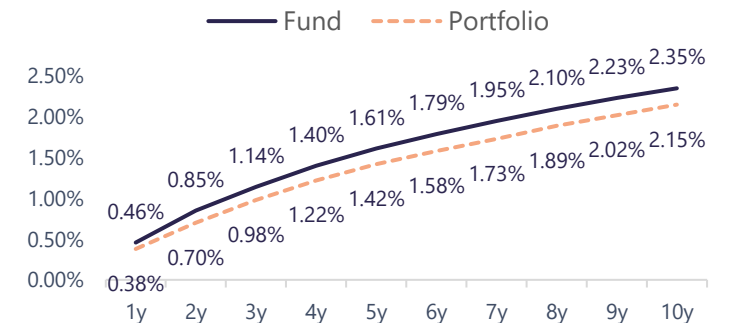
Weighted INCANS Global Score - History



Rent by Equivalent Bond Rating and Risk Band



Weighted Probability of Failure - Projected



So why is this kind of analysis so important?

The real estate industry is facing a new set of operational & market challenges

GREATER DEMAND FOR TRANSPARENCY regulators, compliance & investors



FUTURE INVESTMENT PERFORMANCE
income return rather than capital growth



DEMAND FOR INCOME
ageing population



IMPROVED ANALYTICS
more accurately price risk



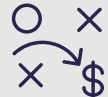
BEST PRACTICE
data management



ESG
sanctions lists
green Issues



GLOBALISATION & FINANCIALISATION
growth of cross border capital flows and



MULTI ASSET INVESTMENT STRATEGIES
compare CRE income quality with other asset classes

Who *should* be using this kind of analysis?

All these businesses need accurately price tenant income default risk



Real Estate Professionals



CRE Investors



CRE Lenders

Investment brokers
Letting agents
Auctioneers
Valuers/appraisers
Lawyers

Asset managers
Pension schemes
Insurance companies
REIT's
Property companies
Private equity funds

Family offices
HNWI's
Trusts
Charities
Local government
Central government

Retail banks
Investment banks
Debt funds
Securitised debt vehicles
Crowd funding

Conclusions

“
**Make better
informed
data driven
investment,
letting and
lending
decisions**
”

Real estate as an investment asset class

- Investors focused on fixed income qualities of commercial real estate
- Income return typically accounts for 65-70% of long-term total return on MSCI

Assessing tenant/asset credit quality

- Focus on the probability of failure NOT the credit rating
- Apply numbers in your decision making NOT subjective labels

Quantifying the probability of tenant failure

- Calculate long term probability of failure
- Map and compare risk with other debt instruments
- Express risk of loss in cash terms

Bring CRE investment markets into line with other investment asset classes

Contact details

Matthew Richardson

Chief Executive Officer
Income Analytics Limited

Telephone House
69-77 Paul Street
Shoreditch
London EC2A 4NW

E: matthew.richardson@incans.com
T: +44 (0) [203 633 8732](tel:2036338732)
M: +44 (0) [7545 072491](tel:7545072491)
W: www.incans.com



Matthew Richardson

Co-Founder & Chief Executive Officer



Biography

Matthew Richardson is the Co-Founder & Chief Executive Officer at Income Analytics Ltd. He has more than 30 years experience of working in the European, US and Asian property markets.

Matt was previously Director of Research - European Real Estate, at Fidelity International in London. He joined Fidelity in March 2007 and was responsible for establishing the award winning research, strategy and risk management processes for their European real estate funds. Prior to joining Fidelity, he was Head of Property Finance at Experian Business Strategies in the UK. Between 2000 and 2003, he was Executive Director at Freeman Publishing Inc, delivering business information solutions to the property sector.

Between 1996 and 2000, Mr Richardson was founder and Managing Director at Property

Market Intelligence Limited in Hong Kong. Prior to that, he held a variety of roles, including Director Asia Operations at Dow Jones Teleres; Regional Research Director - Asia Pacific at Brooke Hillier Parker (now CBRE); Manager, Central London Research Team at Hillier Parker (now CBRE) and Senior Analyst at MSCI IPD in the UK.

Matt is a visiting lecturer at Oxford Brookes University in the UK and has also lectured at the London Business School, Maastricht University, London School of Economics, UCL and Cambridge University in recent years. He is a regular speaker and panellist at industry events.

Born in 1966, Mr Richardson was educated at Launceston College, Cornwall and the University of Leicester where he graduated with a BA (Hons) in Economic History.

Stephen Ryan

Client Manager -
Ireland



Biography

Stephen Ryan represents Income Analytics in Ireland.

Stephen Ryan has worked in the real estate and wider financial services industry since 1988.

Before founding his own company in 2019 (www.sryaninvest.com), he worked with INREV in Amsterdam, concentrating on research and due diligence. INREV is a pan-European trade association representing investors in real estate.

In addition to their roles in Income Analytics, Matt and Stephen have worked together on research projects since 2013 and they are both part of the Didobi research team (www.didobi.com).

Prior to INREV, Stephen was an investment consultant in Mercer where he advised institutional investors on real estate and on defined contribution investments.

Stephen previously worked on product development in two of Ireland's largest fund managers, Irish Life Investment Managers and State Street Global Advisors, where Stephen designed the first US real estate fund of funds in Europe.

He has also worked in financial services in Spain and Norway.

Stephen served for many years on the defined contribution committee of the Irish Association of Pension Funds (IAPF).



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