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Referendum: the real estate industry and the effect of Eu exit vote

To what extent did the EU exit vote affect the financial performance of real estate agencies in the UK?

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Abstract ;

The impact on the financial performance of real estate companies, Savills as the main company and JLL its competitor, during the 23rd June 2016 Brexit referendum was somewhat limited within the real estate industry to cause large consequences on specific services such as investment.

The uncertainty of Brexit has caused large scepticism from customers willing and able carry out real estate transactions.

The financial performance for both companies has been inevitably affected as a result of Brexit such that the short-term damage has been felt, however recoveries have taken place thereafter.

It remains to be seen as to the longer-term effects of Brexit on the real estate industry, especially now that Covid-19 has compounded market conditions further.

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1.0 Introduction

1.1 Brexit

In June 2016, the long-awaited vote on the UK leaving the EU took place, which sent shock waves not only through the country but around the world. Brexit has been the cause of the greatest political event that has sent shockwaves within the UK, and also around the world as the UK has traditionally been viewed as a hub for global trade.

1.2 Brexit on Real Estate

Regarding property ownership, letting and conveyancing in the UK, it has been stated that these areas have been “relatively unaffected by Brexit" (Cairns. A, et al., 2020). The 2016 referendum result, inevitably, has had an impact on confidence within the UK property market; however, this market is still vulnerable to political changes within the UK and around the world.

At this moment in time, concerns surrounding Brexit on the UK property market, as well as most other industries, have been surmounted by the impact caused by Covid-19. Both political events have caused disruption within this industry as well as digitalisation taking over business models (Cairns. A, et al., 2020).

1.3 Thesis

This dissertation is going to conduct an extensive evaluation as to what extent the referendum vote regarding Brexit has had on the financial performance of the well-established UK real estate agency firm Savills. A detailed comparison of one of Savills’ main competitors JLL will also be provided.

Market background within the real estate industry will be given as to the impact on both Savills and JLLs services that they provide including investment, asset management, valuation and research. Subsequently the methodology to be utilised including both quantitative and qualitative sources of information will be given. Following this a literature review will be created that will assess relevant sources pertaining to the effect of both companies with reference to Brexit.

Financial analysis will take place including calculating the financial ratios of both Savills and JLL in order to assess the impact of Brexit on both firms’ performance pre-referendum, during the referendum in June 2016 and post-referendum in the years after. This will provide insight into the deviation of performance before and after this political event.

Furthermore, a SWOT and PESTLE Analysis on Savills and JLL will be designed in order to compare internal and external aspects of each company and therefore determine which firm has adapted better to Brexit.

Finally, findings and results will be drawn together in the conclusion along with recommendations as to how both Savills and JLL should proceed and tailor their business strategy going forward in the years to come, with Brexit still having rippling effects as well as the threat on the business market that Covid-19 has placed.

1.4 Real Estate within the UK

In the UK, the revenue of real estate businesses was £68.3bn as of September 2020. The number of real estate businesses at the same period was 113.2k including 514k employees working in the industry (Statista. 2021).

1.5 Savills Company Background

Savills, a public limited company founded in the UK in 1855 by Alfred Savill, is a global real estate services provider and is listed on the London Stock Exchange (LSE). Savills contains 600 offices across the regions of EMEA, Americas and APAC.

With over 39,000 employees across 70 countries in the world, Savills provides a range of commercial and residential property services such as Valuations Advice, Asset Management, Capital Allowance advice, Building Consultancy, Research and Strategic Projects (Savills. 2008).

1.6 Why do Clients Choose Savills?

Savills is commonly chosen by individuals, businesses and investors due its long-standing experience of over 160 years within the real estate industry. They provide vast specialist knowledge in different services in order for clients to make the best decisions regarding their property needs (Savills. 2017).

1.7 JLL Company Background

Jones Lang LaSalle, or JLL as more commonly referred to, was established in 1997. Its common stock is listed on the New York Stock Exchange (NYSE) (JLL AR, 2019).

JLL specialises in real estate and investment management as well as being a Fortune 500 company. JLL operates in over 80 countries with 93,000 employees as of the end of 2019. Annual revenue equates to $18bn and clients include public-private partnerships as well as governmental firms (JLL AR ,2019)

JLL buys, builds, occupies and invests in different assets including industrial, commercial, residential and hotel real estate. Clients include global businesses, tech start-ups across sectors such as healthcare, banking, energy, manufacturing and technology (JLL AR ,2019).

1.8 Why do Clients Choose JLL?

JLL utilises the most advanced technology in order to produce opportunities and "sustainable real estate solutions for our clients, our people and our communities" (JLL AR ,2019).

JLL Spark is a proptech incentive driven towards transforming the real estate sector through technology-based innovation, which is run by Silicon Valley entrepreneurs with "successful track records building and investing in tech companies" (JLL AR ,2019). JLL Spark investments provide them with the capability of producing creative products and services to real estate owners and operators alike.

1.9 Savills v JLL

Both Savills and JLL offer cross-over services, namely asset management, investment, valuation, research, lettings and buying and rental. The difference, however, as mentioned, JLL's expertise lies in investment management whereas Savills specialises in buying and letting.

JLL is a much larger real estate firm compared to Savills. As illustrated in

Appendix 1, JLL produced an EBITDA of $301.3m at the end 2018 in contrast to Savills' profit before tax of just $34.4m at the end of the same year. Therefore, the scale of the two companies' results is almost a 9:1 ratio in terms of profit before tax.

Literature Review

2.0 Literature review

A literature review will be conducted to provide a critical evaluation of relevant sources, articles and data used in order to collate evidence to answer the question 'To what extent did the EU exit vote affect the financial performance of real estate agencies in the UK?'

Figure 1 - Applied Economics; Ramiah, V et. al, 2016

Table 1. Sectoral reactions in the United Kingdom following Brexit.

Sector	AR	*t*-Sat	CAR2	*t*-Stat	CAR5	*t*-Stat	CAR10	*t*-Stat
Expected reaction								
Alternative energy	−0.42	−0.27	2.40	1.07	1.56	0.43	−1.53	−0.29
Banks	−4.99	−5.66	−7.81	−5.82	−11.90	−5.09	−15.37	−4.59
Chemicals	0.23	0.36	1.11	1.13	0.60	0.36	−0.59	−0.24
Equity investment instrument	−1.11	−3.48	−0.23	−0.50	−0.91	−1.18	−0.41	−0.34
Financial services	−1.94	−5.62	−2.10	−4.13	−2.85	−3.30	−3.06	−2.39
Food producers	−1.36	−2.09	−1.46	−1.55	−0.90	−0.60	1.38	0.59
Life insurance	−4.20	−5.44	−4.69	−4.31	−5.26	−3.18	−8.18	−3.69
Nonlife insurance	−0.40	−0.52	−0.47	−0.43	0.67	0.40	0.49	0.22
Oil and gas producers	2.71	2.45	5.44	3.26	5.13	1.75	3.55	0.81
Software and computer services	−2.69	−4.82	−3.59	−4.39	−2.98	−2.29	−3.19	−1.81
Travel and leisure	−3.16	−6.97	−3.74	−5.87	−3.72	−3.72	−3.64	−2.69
Unexpected reaction								
Aerospace and defence	2.09	2.77	3.95	3.48	4.30	2.24	7.01	2.70
Beverages	1.16	2.15	2.78	3.48	2.16	1.76	3.86	2.17
Construction and materials	−2.92	−5.31	−6.41	−7.70	−8.11	−5.79	−11.06	−5.21
Electronic and electrical equipment	−2.52	−3.93	−2.06	−2.41	−2.30	−1.78	−2.61	−1.63
Forestry and papers	3.82	3.44	5.23	3.21	5.46	1.90	4.52	1.12
General retailers	−2.86	−5.68	−4.67	−5.82	−8.36	−5.96	−10.62	−5.02
Health-care equipment and services	−1.56	−2.62	−0.09	−0.10	0.73	0.57	−0.08	−0.04
Household goods and home construction	−8.20	−9.93	−10.98	−8.63	−14.04	−6.43	−16.81	−5.22
Media	−1.40	−2.38	−2.34	−2.91	−3.04	−2.55	−2.49	−1.59
Real estate investment and services	−3.65	−5.89	−5.27	−5.97	−5.78	−3.94	−9.55	−4.48
Real estate investment trusts	−6.04	−9.74	−8.01	−8.34	−7.63	−4.94	−12.19	−5.26
Support services	−1.62	−2.65	−3.42	−3.80	−5.39	−3.68	−5.94	−2.77
Tobacco	5.19	4.93	5.32	3.42	9.14	3.56	9.13	2.43

AR: Abnormal return; CAR: cumulative abnormal return.

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et al., 2016 shows that 'real estate investment and services' and 'real estate

investment trusts' both generated large abnormal losses of -3.65AR and -6.04AR respectively.

Interestingly, the profitability ratios from the financial analysis conducted showed that both Operating Profit margin (OP) and Return on Assets (ROA) for both Savills and JLL increased slightly from 2016 to 2017, which goes against the results presented in this table.

On the other hand, as no statistical methods were utilised in this dissertation in order to calculate the profitability of both Savills and JLL, these results are not completely comparable and as a result, it cannot be said conclusively that abnormal losses did indeed occur shortly after Brexit.

2.0 Financial Ratios - London Business School in Investment Management, 2012 (Lux, N. 2012)

The source that was used to find the relevant financial ratios for the real estate industry was written by Nicole Lux, who is a graduate of London Business School in Investment Management. This academic article goes into great detail on the specific financial analysis of sources of finance such as debt, equity and risk drivers. It also includes financial information regarding companies such as British Land plc, which is useful to compare performance to Savills, also headquartered in London. Although this is a similar company to Savills in some ways, comparisons were not drawn as the main competitor being analysed was US-based rival JLL.

Figure 2 - Real Estate Market in the UK, (Statista 2020)

Credible sources such as Statista have been used in order to collect valuable data regarding the UK real estate sector in general such as the annual turnover in 2019 of real estate businesses in the UK. This provided insight into the general market of the real industry including both residential and commercial areas.

2.1 Further Data - (Savills & JLL Annual Reports 2016 - 2018)

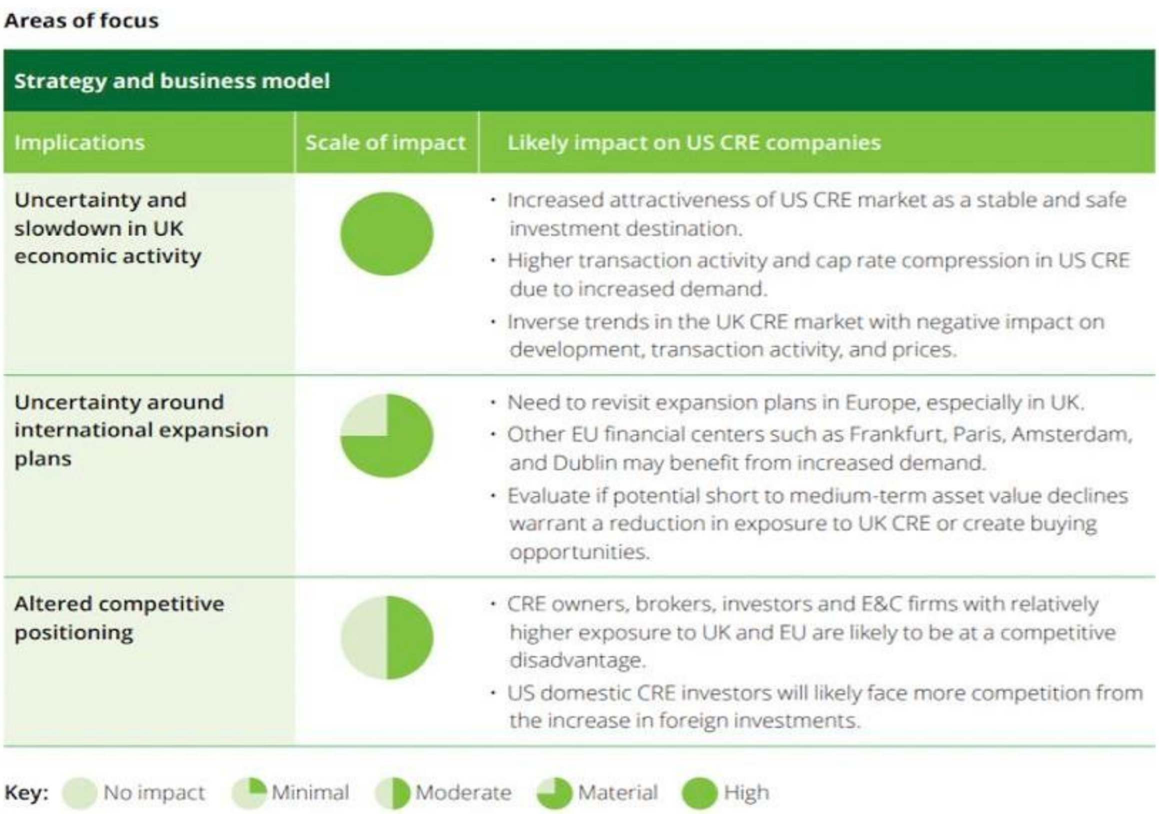
Key relevant data and information regarding the impact of Brexit was found from the Annual Reports in given years 2016 - 2018. Data includes how profit dropped post-referendum from

factors such as business development costs increasing. Global impacts were highlighted as well as the affects in the UK in order to highlight the comparison worldwide. For example, Savills' "residential business in Australia was restructured during the year resulting in reduced revenues but improved profitability" (Savills AR 2017).

2.2 Share Prices - (Yahoo Finance, 2021)

In order to calculate both the EPS and P/E ratios the share prices of both firms were required. The annual reports for both Savills and JLL did not contain the share prices and as a result, Yahoo Finance was utilised to extract this information via calculating the average share prices from 2012 to 2019. This is a reliable alternative to souring the share prices from the annual reports in order to calculate the relevant investment ratios of EPS and P/E.

Figure 3 - Likely Implications on US Commercial Real Estate (CRE) Companies, 2016



Areas of focus

Strategy and business model		
Implications	**Scale of impact**	**Likely impact on US CRE companies**
Uncertainty and slowdown in UK economic activity		• Increased attractiveness of US CRE market as a stable and safe investment destination. • Higher transaction activity and cap rate compression in US CRE due to increased demand. • Inverse trends in the UK CRE market with negative impact on development, transaction activity, and prices.
Uncertainty around international expansion plans		• Need to revisit expansion plans in Europe, especially in UK. • Other EU financial centers such as Frankfurt, Paris, Amsterdam, and Dublin may benefit from increased demand. • Evaluate if potential short to medium-term asset value declines warrant a reduction in exposure to UK CRE or create buying opportunities.
Altered competitive positioning		• CRE owners, brokers, investors and E&C firms with relatively higher exposure to UK and EU are likely to be at a competitive disadvantage. • US domestic CRE investors will likely face more competition from the increase in foreign investments.

Key: No impact Minimal Moderate Material High

This paper from Deloitte, one of the 'Big 4', assesses the impact of Brexit on commercial real estate (CRE) in the US. As JLL is based in the USA, this article presents evidence as to the impact and comparing this with the results found in this paper. This research also incorporates the extent of UK economic activity.

Figure 3 shows that there was a high impact on uncertainty and a slowdown in UK economic activity. The result of this being "attractiveness of the US CRE market as a stable and safe investment destination" (Deloitte US, 2016). As a result, demand increased in activities such as transactions. Although this is the case in general with the US market, findings from our financial analysis showed that JLL has indeed been significantly impacted from the referendum result. However, this article was published on 24th June 2016 meaning that there was not enough time in order to see the real impact on CRE from Brexit. The true effect of Brexit was only visible in at least 6 months after the referendum result; meaning only from 2017 year-beginning onwards can the impact be measured.

2.3 Impact of Brexit on Real Estate Industry in the UK - (BROWN, T., 2018)

The article written by Tony Brown in 2018 from City University Library discusses the impact of Brexit on the real estate industry in the UK. Brown became head of M&G real estate after 28 years of experience in the UK, Europe, North America and Asia (BROWN, T., 2018); as a result, this source is credible indeed. Findings included investment volumes in the UK in 2017 increasing by 10% from 2016.

This aligns with the results obtained in the financial analysis of Savills in terms of investor ratios. Namely the Return on Equity (ROE), Earnings per Share (EPS) and Price-to- Earnings (P/E) ratios all increased slightly from the same period of 2016 to 2017; the only investor ratio to decline was the IC ratio. On the other hand, the opposite was the case with JLL, where ROE, EPS and IC ratios all declined, which contradicts the findings from Brown's articles; the only ratio that increased was the P/E ratio.

2.4 Impact on Investment in Real Estate in the UK - (Evans J.2019), Financial Times.

Moreover, research from the Financial Times explains that investment dropped by 37% from 2018 to the first half 2019 with regards to central London offices, which was considered "one of the UK's healthier property markets" (Evans J. 2019). Although this is a niche area, findings with regards to Savills, a company headquartered in London, contradicts with this.

Investment ratios including ROE, EPS and P/E ratios all increased; however, this is across the whole company's services and not specifically for investment. IC was the only ratio to concur with the results of the FT article. With reference to JLL investment ratios, most ratios

concur with the FT findings including the ROE, EPS and IC ratios all dropping apart from the P/E ratio slightly increasing.

Although these two articles present opposing findings of investment increasing from 2016 to 2017 and then decreasing from 2018 to 2019, there are different patterns and trends between the two sources with reference to Savills and JLL. However, as these two sources address different areas of investment as mentioned, the findings between them are not directly comparable and should be only used as a general trend with regards to investment.

However, both articles relate to findings after the referendum year in 2016 and so are viable in the sense that the impact of Brexit on the real estate market can be seen.

2.5 Financial Ratios: 2012 - 2019

Although financial ratios were calculated from a range of 2012 to 2019 including critical years 2015, 2016, and 2017, which is associated with pre-referendum, during referendum and post-referendum, specific data was missing in order to compare the ratios of both Savills and JLL to real estate industry averages. This range covers wide-ranging data in order to see a broad reflection of the impact of the Brexit result for both Savills and JLL.

This is an important analysis that needs to be conducted in order to contrast both real estate agencies across other companies in the same sector. This is to provide a measure of their respective financial performances to illustrate if they have performed to a higher or lower standard than expected.

Additionally, data was only available up to month-end June 2020. This means the data is not totally up-to-date as of today in order to see how both companies' financial performance has adapted since this time period (Savills Half-Year AR. 2020).

2.6 Statistical Analysis Methods

Statistical analysis methods have been used in order to evaluate real estate companies including finding figures such as standard deviations, coefficient regressions, probability and hypothesis tests including chi squared. Perhaps if there was more time and resources provided, further analysis such as hypothesis testing of the relationships between firm size and age with financial performance would have been carried out (Deitiana. T, et all, 2015).

Additionally, there are other financial ratios that were not calculated to assess the performance of both Savills and JLL. Core areas such as profitability, liquidity, solvency and investor were focussed on as these are the most relevant to assessing these real estate agencies for our needs.

2.7 Emerging Trends in Real Estate - PwC

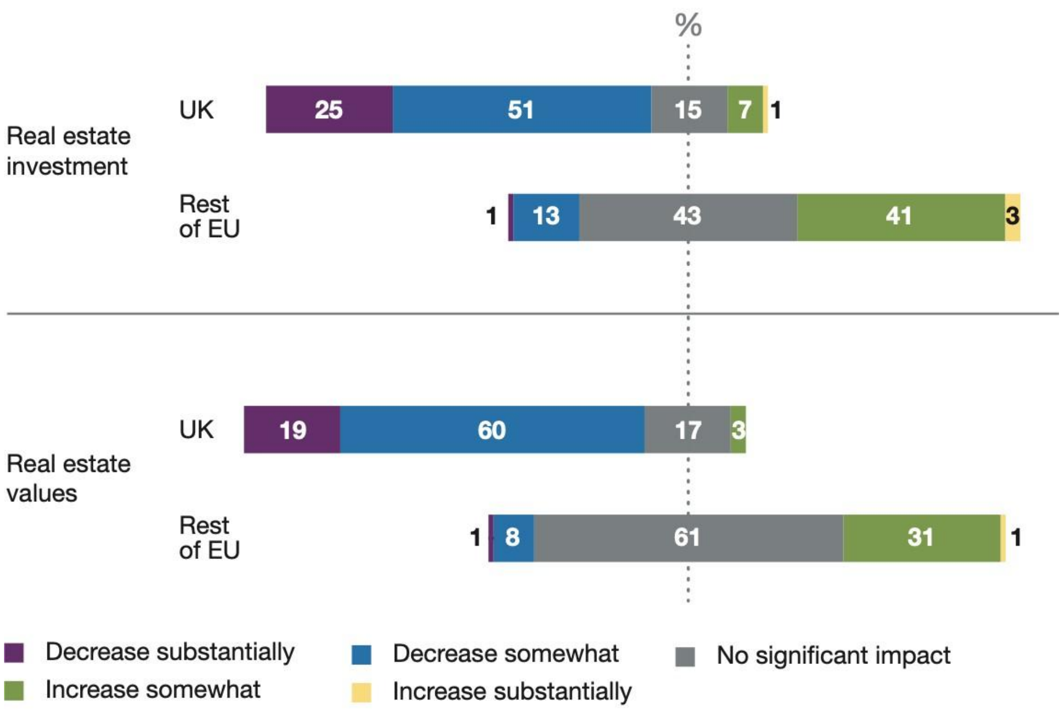
The article written by PwC in 2020 'Emerging Trends in Real Estate' discusses the impact that Brexit has had on real estate in the UK as well as other countries within the EU. Even with this political event, property leaders within Europe still see real estate to be a worthwhile investment asset class (PwC, 2020).

"With interest rates set to stay lower for longer and bond yields in many European countries in negative territory, real estate income retains its broad appeal to investors" (PwC, 2020). This is another reason as to why investing in real estate was appealing for investors at this time. Target returns are not guaranteed; however, all investors face the same issue.

Although this article is fairly recent it discounts the effect of Covid-19 as since then, this global crisis has changed the face of many sectors; some on a permanent basis.

Figure 4 (PWC, 2020).

Figure 2-3 **Impact of Brexit on real estate in 2020**



Source: *Emerging Trends Europe* survey 2020

Figure 2-3 (4) demonstrates the impact of Brexit on real estate in 2020 with regards to the UK as well as the rest of countries within the EU. Exactly one quarter of real estate investment in the UK decreased substantially and just over half decreased somewhat at 51%. Other countries in the EU were less affected as 43% reduced somewhat as well as a large proportion of 41% increasing in real estate investment. This clearly shows how the UK took a large blow as a result of Brexit, especially within the investment sector. In terms of real estate values, the UK again was largely impacted with 60% decreasing somewhat, compared to other European countries in which 61% incurred no significant impact. As with investment, there was an increase in values in countries in the EU at 31%.

This figure is sourced from another one of the 'big four', PwC's report on 'Emerging Trends in Real Estate' (PwC, 2020). As this figure compares the impact of the UK to the rest of the EU, clear contrasts can be drawn with reference to an accurate measure of the impact.

Furthermore, as this data represents 2020, enough time has passed since the 2016 referendum in order to see how the UK has been affected due to this once in a lifetime political event. Additionally, this provides further empirical evidence as to how Savills has been affected by Brexit. As shown in the financial analysis conducted, investment ratios followed the same trend from 2017 to 2018. Ratios included ROE, EPS, IC and P/E ratio and all decreased by 20%, 5.5%, 41% and 0.6% respectively. This data further correlates to other examples such as investment in central London offices falling by 37% from FT article by (Evans J.2019).

Overall, extensive literature from a variety of sources has been used in order to locate evidence as to the impact of Brexit on real estate agencies in the UK including Savills and its competitor from across the pond, JLL. Literature has come from a variety of credible sources including scholarly articles. Relations, trends and patterns between the literature and other sections such as the financial analysis have been drawn to build a comprehensive picture as to Savills' current position.

Market Background

3.0 Context

Business leaders and politicians have pointed out the uncertainty posed by Brexit as to how industries in the UK will be affected as a result including the real estate sector. As expected, Rightmove claimed that "pre-Brexit buying spree with agreed sales up by 6.1% year on year" (Leaders.co.uk, 2019). Savills has stated that within this uncertainty, "property remains a fundamentally safe asset class, giving strong income returns and in many cases is a refuge for capital preservation in the longer term" (Oakley, M. Cook. L, 2016). This implies that the property industry is one of the few industries that was forecasted to remain resolute in the wake of this historic event.

The pricing uncertainty and political instability caused by Brexit meant that predictions for lower UK transaction volumes within the real estate sector took place. "Many investors and lenders will freeze new investment or lending transactions" (Linklaters, 2016). Furthermore, London's office sector compared to others was viewed to be at high risk, estimating a "drop in asset values of around 10%". UK inflation was expected to increase due to Brexit and as a result, investors were hedging against this. "Property is traditionally seen as a good hedge against inflation" (Linklaters, 2016).

3.1 Savills services (APPENDIX 02) (Savills Services, 2021).

Savills offers a wide range of property services ranging from investment advice, valuation and, sale and lettings to asset management. Appendix 02 illustrates all the services Savills have.

Both companies Savills and JLL, as competitors, offer similar services within real estate of Asset Management, Research, Development Investment and others. How Brexit has impacted each of these companies' services will be analysed.

3.2 Overall Impact on Savills' services of Brexit

Overall, Brexit has certainly impacted Savills and the services it provides. Estate agency

Savills "reported 3% drop in pre-tax profit in the first half" (Evans. J 2016). commercial

property transactions fell overall during this referendum period. Although this is the case,

Savills performed better during the referendum period than its competitors, who are "more

focussed on the UK residential." (Evans. J ,2016). Countrywide reported a 25 per cent drop in profits, while Foxtons' net profits were down 42 per cent in the first half" (Evans. J ,2016). This shows that

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Savills adapted and responded more optimally compared to large UK competitors and therefore implemented successful preparations ahead of the vote.

Moreover, pre-referendum, land market activity was stable and urban land values were growing faster than greenfield land. "Savills land index showed that urban development land increased by 1.3% in the second quarter, up from 1% in the first quarter bringing annual growth to 4.1%" (Greenwood, L. 2016). Just ahead of the referendum vote on 23rd June 2016, Savills developed its investment management service during the year "with the acquisition of Germany's SEB Asset Management". (FT.com, 2016). This inturn generated more than double of Savills' assets to reach €17.1bn.

Pre-referendum, retail property was expected to be impacted by short-term consumer confidence issues as the referendum date in June approached. Again, in terms of the short- term, a fall in UK investment activity was predicted as investors did not commit to the "UK until there is more clarity on our position in Europe" (Bailey. L, et All., 2016).

Between the years of 2016 and 2019 there were "record levels of office leasing activity, better than expected levels of housing turnover and weak agricultural land turnover" (Norton. E, Sparrow. J, 2020). It was stated that the retail sector was hit hard compared to others in the property market in recent years (Norton. E, Sparrow. J, 2020). Post- referendum, national house price growth has declined majorly, agricultural land values, that were at optimum levels in 2015, have fallen by 2% more and commercial investors have become more selective in the industries and individual assets they need as well as sectors.

Opportunities regarding 2020 and beyond refer to greater office development, however demand was forecasted to outstrip the speed of development. Furthermore, prices of the highest value residential properties in Central London decreased by a significant value of 20.4% in the five years preceding 2020. With regards to the future, hybrid retail parks, due to recent price drops, low rents, abundant car parking space and low vacancy rates, makes this an attractive proposition going forward (Norton. E, Sparrow. J, 2020).

Commercial

One of the more resilient markets since the referendum but before the actual Brexit date of 31st January 2020 has been the central London office market. Serviced office providers as well as TMT (Technology, Media & Telecom) has helped this, and demand is predicted to remain. However, "vacancy rates are low, and the forward pipeline is right" (Norton. E, Sparrow. J, 2020). Rental growth has been restricted by landlord caution, but this is likely to increase going forward until 2024.

As some years have passed since the Brexit referendum date in mid-2016 and indeed the actual leaving date in early 2020, uncertainty has reduced leading to a higher number of buyers in the market, "but it will not result in a similar increase in sellers". Refinancing is set to stay inexpensive and "alternative homes for any equity raised from sales will be challenging to find" (Norton. E, Sparrow.

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J, 2020). Prices are certainly set to increase in the most in-demand areas of the market.

Residential

There is an infrastructure uplift from investors with house price growth constrained as 2020 was the year that the future of the ambitions HS2 (High Speed 2) project was to be determined, however due to Brexit this has caused some delay (Article 1). Other infrastructure also includes the "Oxford-Cambridge Arc, Midlands Rail Hub and Northern Powerhouse Rail" (Norton. E, Sparrow. J, 2020).

Rural

Savills reported that greater than "50% land sales over 500 acres went to overseas buyers" (Norton. E, Sparrow. J, 2020). in 2019. Even with the pound fluctuating as much as it has in recent years since the referendum result, demand has still been high.

Rural connectivity has remained an obstacle for the UK, which aims to upgrade older as opposed to building new infrastructure. "Localised energy networks, full rural broadband and mobile signal, and functioning rural public transport" (Norton. E, Sparrow. J, 2020). enables higher revenue growth in rural areas. However, as a result of the referendum, rural connectivity has been slower than anticipated but as demand has remained, this area has not been impacted heavily.

3.3 JLL services: APPENDIX 03 (JLL Services 2021).

Jones Lang LaSalle offers support across all the core industry sectors, and many services related to real estate such as investment valuation, sale and rent. Appendix 03 summaries and explains all services JLL have.

3.4 Impact of Brexit on JLLs Services

In addition to Savills, JLL, as one of their main real estate competitors, have also been impacted by the referendum vote in June 2016. Some key services have been badly hit such as Investment, Financial Services, Valuation, and Buying & Lettings. The UK economy has struggled since this disastrous referendum and uncertainty about the future has been a large part of this for many firms in general as well as real estate firms Savills and JLL.

JLL is no exception to avoiding the negative consequences of Brexit. In fact, the real estate firm experienced a 30% decrease in UK transactions during the first quarter of 2016, a few months even before the vote. Additionally, 45% of investors were predicted to be swayed away from buying or selling transaction decisions until after the referendum took place (Loh. M 2016). This demonstrates the far-reaching impact of this momentous political event even before it took place due to the scepticism surrounding it.

Research from Deloitte post-referendum has indicated that, somewhat surprisingly, Brexit is likely to have a positive impact on the US commercial real estate (CRE) sector, which includes firms such as JLL. "CRE firms with limited to no exposure to the UK are likely to benefit from increased investments, higher transaction activity, and a resultant rise in property prices" (Deloitte 2016).

On the other hand, CRE firms such as JLL with existing exposure to the UK market have been predicted to experience some volatility within the short-to-medium term. It was seen that there would be easing pressure on demand and prices within the UK property market, which would lead to negative effects on both development and transactions. Furthermore, uncertainty about the future demand for different types of real estate was forecasted to lower rental rates, thereby decreasing value.

Post-referendum and Brexit there is still likely to be continued uncertainty regarding demand for both UK and US real estate firms including both Savills and JLL and as a result, "reduced appetite for long-term investment and development (Brown. D, Bullock. G, Mclaren, M. 2017).

Methodology

4.0 Method

This dissertation will be conducted using a case study along with secondary research including financial performance analysis based on ratios as well as business performance analysis tools including SWOT Analysis, and PESTLE Analysis.

4.1 Why Case Study as a Methodology?

Case studies are detailed evaluation of topics via several sources of information (Yin, R ,1994). They enable the comparison of different companies and in this case, it is a useful methodology in order to see the impact of the June 2016 Brexit result on two different real estate agencies; Savills based in the UK (Savills ,2008), and JLL based in the USA (JLL ,2021). Case studies also allow the exploratory analysis of events in order to see in depth the outcome of them (Yin. R ,1994).

A case study as the chosen method was chosen over other comparative methods such as experiments, archival analysis and history as it does not require the control of behavioural events, whereas methodologies such as experiments do, which is a time-consuming process. Case studies also focus on contemporary events (Yin. R ,1994).

Case studies, however, only focus on the questions of 'how' and 'why' in contrast to other methods such as archival analysis, which focuses on 'who', 'what', 'where', 'how many' and 'how much' (Yin, R .1994). Furthermore, case studies are not necessarily the most accurate research methodology for scientific generalisation purposes (reference). They can also sometimes lack rigour and not be detailed enough in order to draw reliable conclusions as well as taking some time to undertake (Yin. R ,1994).

4.2 Sampling

A sample of the two agencies Savills and JLL will be taken from the population of the real estate industry in order to see the impact of the UKs exit from the EU vote on the financial performance of these respective companies. A sample has the benefits of gathering data that is representative of the wider population as well as the real estate sector (Byrne, M. 2001).

4.3 Why Savills as the Main Company & JLL as a Competitor?

Savills is a well-established UK-based company, headquartered in London, which is listed on the London Stock Exchange. Unlike Knight Frank LLP, one of Savills' main rivals, Savills displays their financial reports publicly (Knight Frank, 20201) and therefore analysis and the interpretation of their financial performance through analysis can be undertaken. Savills also operates in EMEA, APAC and the Americas (Savills ,2008).

This cohort of companies have been selected given their similarities in terms of size but also because of the differences in primary business focus - for example, JLL has a stronger investment division and focus than Savills. Furthermore, these companies followed similar but not identical performance trajectories during the referendum vote.

JLL, also founded in the UK, but based in the USA was chosen as a primary competitor for Savills as it has similar performance standards, offering similar services such as valuations advice, strategic projects, landlord and tenant representation and asset management (JLL AR ,2019). Therefore, financial comparisons can be drawn as to see clearly which firm has been impacted more severely as a result of the 2016 referendum result.

As there is significant research regarding to what extent Savills has been affected by the referendum result, it is most useful to evaluate this firm and see how it has adapted to these challenging circumstances.

4.4 Primary Research

Primary research was not carried out due to the information already provided from extensive research within the Annual Reports of Savills and JLL which has been formulated by real estate professionals of these respective companies.

4.5 Secondary Research

The secondary research will be based on reviewing existing literature on the referendum situation with regards to real estate companies Savills and JLL. This literature is expected to be sourced mainly through online resources such as Google Scholar, JStor. In addition, analyst reports will be searched for through the annual reports of both companies Savills and JLL of the following years starting from 2012 to 2019. The use of the City University of London library is anticipated to be minimal given uncontrollable factors. From the aforementioned literature, this project will aim to assess both the qualitative and quantitative elements: financial data that is found to be reliable will be incorporated as part of the financial analysis.

4.6 Why these Financial Ratios?

A variety of different financial ratios will be used including profitability, investor, liquidity and solvency ratios in order to have a balance of a variety of financial metrics that indicate the financial performance of agencies Savills and JLL.

4.7 Current Ratio (CR)

The CR will be used as it is a sufficient indicator as to how both Savills and JLL are managing to pay their current liabilities and debts with their available current assets. The CR is useful as it determines the short-term financial strength of both agencies and therefore which company is more financially healthy (Lux. N ,2012).

4.8 Acid-Test Ratio

The acid-test ratio is a commonly used ratio; however, it was not deemed necessary in this case as both agencies are service organisations and therefore inventory is not relevant (Lux. N ,2012).

4.9 Cash Ratio

The cash ratio determines how easily companies can repay their short-term debts and current liabilities with their available cash (Lux. N ,2012). From calculating both Savills and JLLs Cash Ratio, it can be stated which company is better placed for growth in the future.

4.2.1 Debt-to-Equity (D/E) Ratio

This is a key ratio that measures how companies are financed with total debt compared to total equity. Whichever firm of Savills and JLL is more heavily debt financed imply the riskier entity, therefore this ratio is helpful to determine this. This ratio can also be used to examine which of the firms has a lower Weighted Average Cost of Capital (WACC) and therefore a healthier financial position (Archibus, 2016).

4.2.2 Operating Profit Ratio

Operating profit is a primary ratio used as a key financial performance indicator (Zhiping, N.
,2014). This ratio will be utilised in order to see the fluctuation of both companies' Savills and JLL financial yearly profit-after-tax from 2012 to 2019 to analyse which firm has the higher bottom line post-referendum in 2016 and therefore which firm had adapted better. This ratio will also analyse which organisation has managed to control their operating costs more optimally and therefore gain a greater net margin. Subsequently, the impact of the referendum on net margins can also be seen.

4.2.3 Return on Assets (ROA)

ROA illustrates how profitable companies are in relation to total assets invested. This profitability ratio was used in order to see which company of Savills and JLL made better use of their resources and assets. ROA is particularly useful in this case as both companies are service based. ROA will also enable viewing into how both agencies performed against their business objectives (Archibus, 2016).

Post-referendum, it will be helpful to gauge which of the agencies was able to invest in more assets and efficiently make use of its resources.

4.2.4 Return of Equity (ROE)

ROE measures the ability of a firm to manage the capital that has been raised through shareholders and other means. ROE was used in this case in order for investors to clearly see which company of Savills and JLL would provide a higher return on their investment.

The ROE can be an indicator as to how the percentage return of shareholders will change post-referendum (Lux. N ,2012).

4.2.5 Earnings per Share (EPS)

Although the two companies' EPS are in different currencies, we will still calculate them as they are going to be used to calculate price to earnings ratio

Savills, being a British company has pounds as its currency and JLL, being an American company uses dollars. Therefore, comparing their EPS is not ideally comparable. However, the EPS will be used in this case as it is the basis for calculating P/E ratio.

Post-referendum, it is likely that the net profit of both companies will fluctuate and as such they will potentially be forced to issue or retract shares accordingly in order to generate the required equity capital to compensate for projected loss or gain.

4.2.6 Interest Coverage (IC) Ratio

The IC ratio will be used in the case of comparing Savills with JLL in order to see which company performs better in terms of the amount of times they can cover their interest payments in accordance with their respective operating profit.

Post-referendum, the interest payments of both firms is again likely to differ due to changing market conditions of Brexit and as a result, it is unknown as to which company will come out on top in terms of being better placed to meet their interest payment requirements.

4.2.7 Price-to-Earnings (P/E) Ratio

The P/E will be used to value which of the two agencies of Savills and JLL is valued higher and therefore which is more attractive to potential investors. It will be the case that these firms are potentially overvalued or undervalued. As mentioned, the EPS ratio will be used in formulating the P/E ratio in its denominator.

The share price of both companies will inevitably fluctable as a result of the Brexit decision to leave the UK as this is a major economic event with large consequences. Therefore, whichever firm is more flexible and adapts better to these changing circumstances will be better suited to perform at a higher level.

4.2.8 Why SWOT Analysis?

The internal strengths, weaknesses as well as the external opportunities and threats of both Savills and JLL will be analysed in order to examine their performance and what can be improved upon in order to enhance productivity. Overall, this analysis will provide detailed understanding into how the two agencies operate and develop business goals to achieve in the future.

4.2.9 Why PESTLE Analysis?

The political, economic, social, technological, legal and environmental aspects of each agency will be explored in order to see how each area is impacted by these firms. This analysis framework will enable both organisations to predict future business threats and minimise risk as well as capitalising on further opportunities for development.

All of these research methodologies will provide a greater picture as to the impact that the 2016 referendum result had on both Savills and JLL. As five different research methods are going to understand the extent to which both companies have been impacted, there will be a vast array of evidence to support these findings.

5.0 Financial Analysis Performance (Appendix 04 for all the calculations)

5.1 Savills Financial Analysis

This financial analysis for Savills will incorporate years pre-referendum, during referendum and post-referendum from a time period between 2012 and 2019. However, immediate years either side including referendum year 2015, 2016 and 2017 (critical years) will be more specifically focussed on as to the reasons why certain trends took place.

	SAVILLS							
	2012	2013	2014	2015	2016	2017	2018	2019
Current ratio	1.21	1.22	1.07	1.09	1.04	0.95	1.13	1.09
Cash ratio	0.35	0.41	0.36	0.35	0.35	0.28	0.33	0.29
Debt and equity ratio	0.24	0.15	0.21	0.31	0.28	0.19	0.43	0.84
Net profit ratio	5.80%	7.01%	7.28%	7.1%	6.41%	6.49%	5.71%	5.99%
Return on assets ratio	8.49%	10.38 %	9.32%	9.16%	8.08%	8.17%	7.19%	7.01%
Return on equity ratio	16.64 %	18.98 %	18.98%	17.78%	16.63%	18.36%	15.28%	16.61%
Earnings per share	29p	38p	46p	47p	48p	57p	54p	58p
Interest coverage ratio	52	35.27	34.13	70.15	38.62	25.31	15.01	6.31
P/E ratio	11.39	13.54	12.12	16.56	13.44	14.99	14.89	15.86

Current Ratio (CR)

The CR pre-referendum initially was fairly high at 1.21 and 1.22 in the years 2012 and 2013 respectively. However, this then dropped in the subsequent years of 2014 and 2015 to 1.07 and 1.09. During the referendum the CR only decreased by a small amount compared to the last two years pre-referendum, implying that this ratio was already falling. Within the year of 2016 during the referendum the CR was dropped further slightly to 1.04.

The CR fell significantly the following year directly after the referendum result with a value of just 0.95, however this then regained stability as in the earlier years pre-referendum back up to 1.13 and 1.09. The CRs ideal position is to be greater than the value of 1 as current asset should be greater than current liabilities and therefore Brexit has not affected Savills' CR too adversely post-referendum.

The reasoning behind why the Savills' CR has been declining during the surrounding years of the referendum in 2016 can be largely attributed to current assets including cash and cash equivalents decreasing from £223.6m in 2016 to £208.8m in 2017. On the other hand, trade and other receivables has increased greatly from £419.4 to £490.6m within the same years, however as cash is the primary asset in any firm due to being the most liquid asset, cash therefore has greater impact on this trend.

Reasons for why cash decreased from 2016 to 2017 by 7% is due to acquiring Aguirre Newman on 29th December 2017 for an initial purchase price of €42m (Savills AR, 2017). Additionally, acquisition activity involved former partners Studley with a final payment of $67.4m (Savills AR, 2017).

Cash Ratio

The Cash Ratio follows a very similar trend to the Current Ratio. Both of these ratios are liquidity ratios; hence this is likely the reason why. This is further evidence to show that Brexit has negatively impacted Savills as this means that the real estate agency has less cash in order to cover its short-term debts.

The reason why the Cash Ratio follows a similar trajectory to the Current Ratio is due to borrowings increasing dramatically from £35.8m in 2016 to £110.1m in 2017, which is a substantial rise in both short-term and long-terms borrowings, implying that Savills increasingly relied on debt to finance their expenses.

Following on from this, trade and other payables rose from £550.2m to £592.7m for the same years. An interesting observation is that trade and other payables significantly increased from 2015 to 2016 with a 21% increase.

Reasons for why borrowings increased significantly from 2016 to 2017 is attributed to the fact that £106m was drawn under the Group's multi-currency revolving credit facility, also known as RCF. Due to the uncertainty and scepticism surrounding Brexit, additional borrowings were required in order to provide leverage as to being covered in the case of emergency losses of funds (Savills AR, 2016).

Debt-to-Equity (D/E) Ratio

The Debt-to-Equity ratio has a very interesting trend of being low pre-referendum as well as in 2016 during the referendum year at 0.28. However, this ratio vastly increased to 0.43 and

0.84 in 2018 and 2019 respectively, meaning that the result of the Brexit referendum badly affected Savills in that their reliance on debt and borrowings was increased. This means there is higher debt associated with Savills as interest being incurred is greater.

The D/E ratio followed a trend of declining during the critical years as the retained earnings for Savills increased from £195.8m to £247.2 from 2016 to 2017, which means Savills was in a financially healthy position with regards to their sources of finance in 2017. As Savills relied less on debt during these critical years, their risk level dropped.

Even though retained earnings marginally dropped from £207.8m in 2015 to £195.8m in 2016, the D/E ratio decrease was only 10% lower overall from 2015 to 2016 compared to a fall of 32% from 2016 to 2017.

Reasons for why retained earnings increased from 2016 to 2017 is related to the net effect of the government imposing restrictions on second home ownership, resulting in a 94% increase in underlying profit (Savills AR, 2016). This increase in retained earnings increased equity within Savills and therefore decreased the amount debt they used as a source of finance, hence the large drop in D/E ratio of 32% from 2016 to 2017.

Operating Profit Ratio

The Operating Profit margin further supports the reality that Savills has been negatively impacted due to Brexit, with their margin being higher pre-referendum than during the referendum at 6.41%. This then decreased more post-referendum to 5.99% in 2019.

The Operating Profit margin within the critical years decreased from 7.1% in 2015 to 6.41% in 2016 during the referendum year. However, there was a slight recovery in 2017 with the margin at 6.49%. This is largely due to revenue from UK commercial transactions increasing by

18%. Furthermore, commercial leasing and investments markets performed better than expected in 2017 due to stakeholders attaining a more realistic view of "how and where Brexit-related risks might fall (Savills AR, 2017).

Operating expenses such as employee benefit expenses increased from £858.1m in 2015 to £953.5m in 2016, whilst operating profit for both of these years remained virtually stable. A large part of why this margin increased again post-referendum is because operating profit rose by 12%.

Return on Assets (ROA)

The ROA follows a very similar trend, as expected to the Operating Profit margin. This again is due to the fact that these ratios exist in the same category of profitability ratios.

The ROA within the critical years followed a very similar pattern to that of the other profitability ratio in OP margin in that there was a decrease from £9.16m in 2015 to £8.08m in 2016 and then a recovery to £8.17m in 2017. Key reasons behind this bounce back are due to net profit increasing 20% from 2016 to 2017. Causes for this initial drop from 2015 to 2016 in ROA relates to increases in both non-current assets in the form of goodwill and non- current receivables. These increases were 15% and a whopping 241% respectively.

Underlying causes for this increase in assets was derived from an increase in tangible assets, receivables and cash balances, which stemmed from Savills' trading performance, the impact from acquisitions and pound sterling weakness against other major currencies (Savills AR, 2017).

Return on Equity (ROE)

The ROE ratio follows a slightly different trend to both the other profitability ratios in that it is 18.9% in both 2013 and 2014; this then drops to 16.6% during referendum. However, bounces back to 18.3% in 2017 and then continues to fluctuate thereafter increasing and decreasing. This slight recovery can be attributed to the average interest rate increasing for the year-end 31st December 2016, with all other variables being constant.

The ROE decreased in the critical years from 2015 at 17.78 to 2016 at 16.63, however again there is recovery to 18.36% in 2017. Causes for this drop in ROE from 2015 to 2016 is due to a very large increase in reserves of 165%, which means although Savills had greater access to capital reserves, this was a disproportionate relation to their net income. These reserves then dipped slightly by 5.27% from 2016 to 2017, hence why there was a slight recovery in ROE.

Earnings Per Share (EPS)

The EPS for Savills was increasing consistently pre-referendum by 31% from 2012 to 2013 followed by 21% from 2013 to 2014. During the referendum year 2016 the share price was at 48p, which rose by a further 19% going into 2017 and then stabilised for the ongoing years.

The EPS increased slightly by 4% from the initial part of the critical years from 2015 to 2016; causes for EPS to increase was a result of Savills' acquisition and restructuring costs (Savills AR, 2017).

Moreover, the EPS rose significantly by almost 20% from 2016 to 2017. Reasons for this large increase is due to profit after tax increasing by 20% for the same period; during this time the number of shares for Savills rose only by 1.5%, which further reasoning as to why this trend existed.

Interest Coverage (IC) Ratio

The Interest Coverage ratio clearly shows how much of an effect Brexit has had on Savills for the worse. The ratio begins at a healthy value of 52 in 2012 and 70.1 in 2015. However, this dramatically drops to a low value of 38.6 during the referendum and then dangerously low values of 25.31, 15.01 and 6.31 in 2017, 2018 and 2019 respectively post referendum.

The IC ratio followed a trend during the critical years of decreasing, firstly from a 45% dip in 2015 to in 2016, followed by a 34% drop from 2016 to 2017. Underlying reasons behind this pattern is simply due to interest expenses increasing year-on-year during the critical years from £1.3m in 2015 to £2.4m in 2016 and then increasing further to £4.1m in 2017. As well as this, underlying profit decreased by 10% in the same period due to additional costs in investment. Other reasons encompass a decrease in disposal activity from “liquidating DEB German Open Ended Funds caused revenue to decrease by 8%” (Savills AR, 2017).

Brexit has caused investment in other European countries with strong performances in investment and leasing/tenant including Germany, Netherlands, Spain, Poland and Italy (Savills AR, 2017).

Price-to-Earnings (P/E) Ratio

The P/E ratio for Savills showed high volatility throughout this time period as there were fluctuations within every time frame. The pattern seen is one of initially increasing and then decreasing, with the same cycle repeated thereafter. This is a rare trend to be seen in terms of financial analysis as firms aim to be as consistent as possible in order to make accurate estimates of figures in the future.

The critical years for EPS showed a trend of initially decreasing significantly from 2015 to 2016 with a drop of 19%; this however recovered from 2016 to 2017 at a rate of increase of 11.5%. Underlying causes for these percentage changes is due to a share price fall of 17% from 2015 to 2016 and then a share price bounce back of 32.5% from 2016 to 2017.

5.2 JLL Financial Analysis

This financial analysis for JLL will incorporate years pre-referendum, during referendum and post-referendum from a time period between 2012 and 2019. However, immediate years either side including referendum year 2015, 2016 and 2017 (critical years) will be more specifically focussed on as to the reasons why certain trends took place.

	JLL							
	2012	2013	2014	2015	2016	2017	2018	2019
Current ratio	0.91	1.04	1.03	1.06	1.11	1.04	1.09	1.06
Cash ratio	0.09	0.09	0.12	0.087	0.087	0.083	0.10	0.08
Debt and equity ratio	0.37	0.34	0.25	0.36	0.65	0.46	0.41	0.57
Net profit ratio	7.36%	8.26%	8.57%	8.88%	6.47%	6.77%	4.33%	3.98%
Return on assets ratio	6.65%	8.02%	9.17%	8.54%	5.77%	6.69%	7.05%	5.23%
Return on equity ratio	10.66 %	12.47 %	16.10%	16.41%	11.88%	7.84%	13.16%	10.33%
Earnings per share	$4.74	$6.15	$8.65	$9.90	$7.39	$5.67	$10.78	$10.43
Interest coverage ratio	8.22	10.63	16.44	18.83	9.72	9.55	13.83	12.68
P/E ratio	15.84	15.01	14.66	15.97	14.27	22.34	14.15	14.45

Current Ratio (CR)

The CR has generally stayed consistent throughout the years pre-referendum, during referendum and post referendum. The CR of 0.91 for 2012 was an outlier compared the following years, which all had a CR greater than the value 1 meaning that these years were favourable in terms of assets in comparison to liabilities for JLL.

The trend within the critical years is initially rising from 1.06 to 1.11 from 2015 to 2016 and then diverts course and declines to 1.04 post-referendum in 2017. One of the main causes for this is due to cash and cash equivalents increasing substantially from 2015 to 2016 by 19.3% and then only a small increase of 3.7% from 2016 to 2017. The large increase from 2015 to 2016 is attributed to net cash from financing activities increasing 43%. “The change was driven by $405.2million year-over-year increase in net borrowings under the Facility” (JLL AR, 2016). Further causes include an increase in cash flows from investing activities in order to fund the 28 business acquisitions that took place in 2016, an increase in technology investments and leasehold improvements.

Another reason why this trend occurred during the critical years is because of a significant increase in warehouse receivables of 126% from 2015 to 2016, followed by a decrease of 47% from 2016 to 2017.

Cash Ratio

The Cash Ratio follows a similar pattern as the Current Ratio in that there is consistency among the results for the years spanning from 2012 to 2019. This aligns with the fact that both ratios are liquidity ratios. This means that JLLs ability to cover their current liabilities is poor meaning that this poses a high risk to the company.

Somewhat surprisingly, the cash ratio during the critical years remains mostly consistent. This is attributed to account payables and accrued liabilities increasing from 2015 to 2016 at the exact same rate as cash increased for the same year, which was approximately 19%.

Current liabilities increased from this time period due to an increase in short-term borrowings; namely capital lease obligations, overdrawn bank accounts and local overdraft facilities (JLL AR, 2016).

Debt-to-Equity (D/E) Ratio

The D/E ratio for JLL remained consistent pre-referendum with an average of 0.33 from 2012 to 2015. However, during the referendum year of 2016 this increased significantly to

0.65 and post-referendum this continued to remain higher than pre-referendum with an average of 0.48 from 2017 to 2019. This means that JLL had to increasingly rely on debt and borrowings in order to fund their operations within this time period, which increased the risk within the company.

The D/E ratio for JLL increases significantly from 0.36 in 2015 to 0.65 in 2016 and then takes a U-turn of falling to 0.46. This is associated with the debt issuance costs of firstly increasing by a huge 278% from 2015 to 2016 and subsequently a drop of 101% from 2016 to 2017. The large increase in D/E ratio from 2015 to 2016 is also attributed to an increase in outstanding borrowings by 263% under the Facility, excluding debt issuance costs (JLL AR, 2016).

An interesting observation is that there is a similar correlation in proportion of debt issuance costs to comprehensive losses within equity during these critical years. The ratios for both are somewhat similar with all things considered at 100:36 and 100:59 respectively, which shows that there is a slight deviation but not far too off.

	Workings		
D/E Ratio	**2015:** 0.36	**2016**: 0.65	**Final Ratio**
Debt Issuance:	Up 278% from 2015 to 2016: Down 101% from 2016 to 2017	Therefore Up 100% from 2015 to 2016: Down 36% from 2016 to 2017	100:36
Comprehensive Loss:	Up 64% from 2015 to 2016: Down 38% from 2016 to 2017	Therefore Up 100% from 2015 to 2016: Down 59% from 2016 to 2017	100:59

Operating Profit Margin

The Operating Profit margin begins to be healthy pre-referendum with an average of 8.27% from the years between 2012 and 2015. This then dropped to a value of just 6.47% during the referendum and then subsequently continued to fall during the post-referendum years from 2017 to 2019 with an average of 5.03%.

These results therefore mean that JLL have been increasingly less able to make a financially healthy bottom-line figure in the last few years; caused by this referendum result of the UK to leave the EU.

The operating ratio trend is initially decreasing to a fairly large extent from 8.88% in 2015 to 6.47% in 2016 and then recovers to 6.77% in 2017. The underlying reasons behind this fall in EBITDA was due to further expenditure in data, technology and people; however, this was somewhat offset by earnings from recent acquisitions. There was also a decline in “capital markets transaction volumes” as well as further contract expenses incurred due to the wind-down of operations in a non-core market (JLL AR, 2016).

The primary cause for this pattern within these critical years is the operating profit falling by 16.83% from 2015 to 2016 and then recovering to 21.9% the following period from 2016 to

2017.

Return on Assets (ROA)

Initially, the ROA follows a similar trend to the Operating Profit margin pre-referendum with fairly healthy figures at an average of 8.01% from 2012 to 2015. However, this then drops majorly during the referendum year of 2016 to 5.77%. This large downfall is stemmed largely from a 75% drop in cash flows from 2015 to 2016, which is the result of a rise in working capital required to support JLLs revenue growth. Other reasons were due to an “increase in incentive compensation payments made in 2016 compared with 2015” (JLL Annual Report, 2016).

Good news for JLL follows the referendum in that the ROA bounces back to healthier levels at 6.69%, 7.05% and 5.23% in 2017, 2018 and 2019 respectively. This therefore

means that Brexit was not as harsh on JLL with regards to their profit based on their total assets in comparison to their Operating Profit margin.

The ROA for JLL follows a similar pattern to that of the OP, which is expected as they are both profitability ratios in that in 2015 the ROA was 8.54%, dropping largely to 5.77% with a slight bounce back to 6.69% in 2017. Underlying reasons for this large drop in ROA from 2015 to 2016 is due to net profit falling by ¼. Evidence to support the recovery from 2016 to 2017 lies in trade receivables and goodwill rising by 13.2% and 5% respectively.

Therefore, both current and noncurrent assets were both rising within this time frame.

Return on Equity (ROE)

The ROE trend increases pre-referendum from 2012 to 2015 at 10.66% and 16.41% respectively and this then falls heavily to 11.88% during the referendum year of 2016. The ROE then drops even further to an unhealthy value of 7.84%. However, this then bounces back to 13.16% in 2018 but this then falls again to 10.33% in 2019.

Brexit is likely the main cause for why ratios such as ROE are dropping immediately after the referendum year 2016. These financial ratios then have time to recover two or more years later post this referendum. The cause for the ROE being much lower in 2017 is due to profit-after-tax being only $257.3m compared to $491.7m and $537.9m in 2018 and 2019 respectively.

ROE for JLL is decreasing year-on-year within the critical years consistently with it being

16.41 in 2015 followed by 11.88 and lastly 7.84 in 2017. As mentioned, with regards to ROA, the profit-after-tax for JLL is consistently declining within this timeframe. Another

factor for why this trend exists is due to the retained earnings within JLL's equity increasing

year-on-year. From 2015 to 2016 the increase was 14.4% and 9.5% from 2016 to 2017. Retained earnings increased due to consolidated revenue increasing by 17% from 2015 to 2016. This was "driven by a weakening of the British pound sterling against the U.S. dollar" (JLL AR, 2016). However, this was partially offset by a strengthening of both the Australian dollar and Japanese Yen against the U.S. dollar (JLL Annual Report, 2016).

Earnings per Share (EPS)

EPS, being an investor ratio, follows a very similar trend to ROE for JLL in that it is growing from 2012 to 2015 pre-referendum at $4.74, $6.15, $8.65, $9.90, however this then drops to

$7.39 in 2016. Reasons for this fall in 2016 is related to a year-on-year drop in revenue and therefore profitability, a fall in capital markets and leasing volumes as well as further investments in data and technology. (JLL Annual Report, 2016).

Again 2017 proved to be a particularly poor year for JLL with the EPS at $5.67, but this figure then regained its growth in 2018 and 2019 respectively with EPS value of $10.78 and

$10.43.

One of the main reasons for low value in 2017 is again likely to be attributed to JLL producing a low profit-after-tax year. The number of shares issued during the referendum in 2016 as well as post-referendum in 2017 and 2018 were all similar around an approximate value of 45,000,000. Therefore, there is further evidence that 2017 was a poor year financially primarily due to the profit-after-tax being low at $257.3m.

The EPS for JLL follows a similar trend to the ROE in that it is consistently decreasing on a yearly basis within these

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critical years. The EPS began at $9.9 in 2015 and then fell to

$7.39 and finally ended up at $5.67. Reasons for this include the net profit continuously falling as well as the number of shares year-on-year incrementally increasing. This follows a very similar trend to that of the ROE and this is somewhat expected as they are both investor ratios.

Interest Coverage (IC) Ratio

The IC ratio follows a similar but slightly different trend to the other investor ratios mentioned above in that there is an increase from 8.22 in 2012 to 18.83 in 2015, however this then reduces largely to 9.72 in 2016 during the year of the referendum. Interestingly, the immediate year post-referendum in 2017 records a similar value to that recorded in 2016 of 9.55.

The IC ratio for JLL then proceeds to rise again to more healthy values of 13.83 in 2018 and

12.68 in 2019 respectively. The same reasons apply with regards as with the other investor ratios for, why 2016 was a bad year for JLL in terms of the number of times they can cover their interest payments with their available earnings.

The operating profit in 2016 for JLL was only £440.6m compared to £529.8m in 2017 and

£706.9m in 2018 respectively. Additionally, the interest expense for JLL in 2015 pre- referendum year was 28.12 in 2015 and 28.1 in 2017 post-referendum. However, during the referendum year of 2016 this value was significantly higher at 45.3. There was an increase in interest rates in the USA towards the end of 2016; this was not only caused by the uncertainty of Brexit but was also the results of the US presidential election. This was predicted to "result in a slowdown in real estate transactions especially to the extent the

trend continues" (JLL AR, 2016).

The IC ratio almost halved from 18.83 in 2015 to 9.72 in 2016; however only dropped ever- so-slightly to 9.55 in 2017. This is due to interest expenses for JLL increasing largely from 2015 to 2016 at 61% and then 24.1% in 2017, which was largely due to the vote for the UK to leave the EU; as a result of this there was a "slowdown in real estate transactions" (JLL Annual Report, 2016).

Price-to-Earnings (P/E) Ratio

The P/E ratio for JLL remained mostly stable and consistent from 2012 to 2015 with an average of 15.37. This then dropped again in 2016 to a value of 14.27 in 2016 during the referendum year. Very interestingly, 2017 illustrated an EPS much higher at 22.34 and then the EPS returned to more normal values of 14.15 and 14.45 in 2018 and 2019 respectively.

The anomaly in 2017 is not associated with the average share price of JLL as the value of

$126.66 does not differ significantly compared to other surrounding years, with a share price of $105.88 in 2016 and $152.58 in 2018. Therefore, the deviation is caused by the EPS value, which itself is known to have fluctuated due to the net profit figure. The P/E ratio drops slightly from 15.97 in 2015 to 14.27 in referendum year 2016. This can be highly attributed to the diluted weighted average share price dropping by 28% during this period.

The uncertainty cloud residing over real estate companies was to a large extent the result of the referendum vote for the UK to leave the EU.

There is then a large bounce back the following year at 22.34. Fundamental reasons include JLLs share price decreased by ½ from 2015 to 2016 and then increased by □. Additionally, the EPS decreased by 23.3% from 2016 to 2017, which is further evidence to substantiate the large recovery in P/E ratio for this given period.

6.0 EXTERNAL ENVIRONMENT ANALYSIS (SWOT & PESTLE) – Appendix 5 - 6

The tools that were utilised in this paper to conduct the external environment analysis including SWOT and PESTLE analysis is to have a clear idea as to how these two companies operated post referendum year in 2016.

The SWOT analysis as seen in Appendix (5) was designed to analyse both company's internal strengths and weaknesses as well as external opportunities and threats of which have been influenced as a result of Brexit. The PESTLE analysis (Appendix 6) was created with regards to the real estate industry as a whole in terms of political, economic, social, technological, legal and environmental factors.

7.0 Conclusion & Recommendations

After conducting detailed financial analyses on both real estate companies Savills and JLL, it can be stated with conclusive evidence that the referendum vote for the UK to leave the EU had widespread effects on the firms' financial performance and services that they operate. Savills, being a UK based company, has inevitably been impacted as a result of this political event. Savills' financial performance has taken a hit, especially in areas such as EBIT. They have become heavily dependent on debt as a source of finance, which means their risk level has risen in recent years, compared to pre-referendum where they were using more equity in order to raise funds. Additionally, Savills' ability to cover their interest has become more vulnerable, which again has raised their risk level.

On the other hand, JLL, being based in the USA has also been affected, but to a lesser extent than Savills. Profitability has dropped to dangerously low levels for JLL, which is worrying as it means the company has got low leverage in terms of covering debt payments and investing in potential new projects. Based on the literature within this paper, it was found that the appeal for investing in real estate within the UK lost momentum and as a result other markets became more attractive such as the US, where demand increased. Additionally, other European countries such as Pairs, Amsterdam, Frankfurt and Dublin have seen greater demand and have captured some of the market for real estate due to Brexit. It has been the view that commercial real estate investors and owners with more exposure to the UK and EU are likely to be at a competitive disadvantage (Deloitte, 2016).

Further research from Deloitte suggested that there were some positive predictions regarding the impact of Brexit on the real estate industry, namely within the US Commercial Real Estate (CRE) sector. Organisations with not much exposure to the UK were estimated to benefit from greater investments, transaction activity and an increase in property prices (Deloitte, 2016).

Short-term impacts immediately after the referendum vote on June 23rd, 2016 in the latter half of the year as well as 2017 included falls in financial performance of both companies followed by a recovery from 2018 onwards. Specifically, the sector that was most affected appeared to be investment activity due to the uncertainty surrounding future outcomes. The longer-term impacts 5-10 years post-Brexit on the real estate industry is still yet to be seen and it is predicted that there will continue to be rippling effects seen for the foreseeable future.

The SWOT and PESTLE analyses conducted illustrated both the internal and external impacts on Savills and JLL in which the prime factors include new product development, threats from competition, changes in consumer behaviour and the fact that demand can be seasonal, interest and inflation rates, GDPR and climate change. Brexit has triggered a slowdown in operations such as new technology development and the success of companies is derived from how well they adapt to this event.

7.1 Recommendations

Going forward, other European regions have become more desirable in terms of the real estate industry such as Berlin, Munich, Madrid and Paris, which are all regions that figured in the top 10 for real estate prospects in 2020; that latter of which was ranked first (PwC, 2020). London is still ranked number 4 and as such Savills and JLL should look to continue to function within the UK where existing operations are in place. However, the UK is looking increasingly less attractive with “lower expectations for the UK’s smaller, regional cities (PwC, 2020).

Both agencies should continue to implement new technologies within their services and put in place the necessary measures to combat the threat of Covid-19 that is still lingering for the foreseeable future. As well as this, Savills and JLL should continue to look for ways to gain competitive advantages over their respective rivals. A political event as drastic as Brexit is unlikely to happen again anytime soon, however both firms should learn from the impacts that the referendum vote had on their organisation to be better prepared in the future.

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