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Investment in office property in the Netherlands

a European perspective



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Foreword:

the Netherlands to the next level

The Netherlands has a lot to offer. Ranking fourth globally in the global competitiveness index 2016-2017 of the World Economic Forum, The Netherlands was even the highest ranked country of the EU in the latest version of the ranking. Furthermore, we are also known to be amongst the most happy countries in the world, ranking seventh globally for the second consecutive time in a survey conducted by the United Nations. However, trends are impacting the way we live and do business globally. In order to respond accurately to major trends, including sustainability, digitalization and urbanization, more may be demanded than just ranking among the top performers in the aforementioned rankings. We strive to build on the Netherlands' future and to help improving the wealth and sustainability for everyone. In order to do so, domestic companies, institutions and our economy need to evolve to the next level. VNO-NCW, MKB Netherlands and LTO Netherlands therefore have started an initiative named NL Next Level in which we present our vision on the future and which includes our extensive investment program in order to retain our position in the global top performing economies.

The Netherlands is facing numerous transitions among others of our significant urban network. The Netherlands can be seen as one Sustainable Urban Delta, offering both an excellent physical and digital infrastructure, an integrated network of cities, a highly educated workforce and plenty of space for both business activity and the natural environment. The business sector works jointly with the national government to further enhance the quality of the unique urban structure present in the country. Furthermore, the business sector introduces new initiatives to align business interests with governmental interests.

The business sector finds itself in the unique position to give direction to changes that are taking place. Institutional real estate investors play a viable role in this process. After all, real estate plays a central role in a variety of social functions. It is proven that investing in real estate contributes to a nation's wealth, the quality of living, shopping and working. Real estate furthermore contributes positively to mobility and the development and operation of car parks and new developments in proximity of public transport hubs. Investing in real estate thus strengthens the quality of the built environment. The challenge for real estate investors for the near future is sustainability. Real estate may be renovated, redeveloped or converted in order to sustain its future value. However, if none of these initiatives offers potential, demolition and new construction in the best locations will help The Netherlands retaining its office competitiveness in an international perspective.

For the future one of the main topics also includes flexibility of real estate. Even though real estate is known to be inflexible, conversion of existing real estate to functions that are demanded by the society and by businesses is important. Besides demanding flexibility from investors, this also demands flexibility from a regulative perspective. The government has the ability to offer more flexibility in regulations such as zoning plans which may help investors to secure the long term value of their real estate investments.

Institutional real estate investors, united in the association of Dutch institutional investors (IVBN), have given the instruction for this study regarding the Dutch office market. The Dutch office market is a highly transparent market. Because of the extensive reporting and the amount of information that is available, the vacancy rate has often been part of discussion. This study shows that, when looked at more extensively and thoroughly, the best office locations (most often those offering a variety of amenities, good accessibility by both public transport and car, as well as offering qualitative office buildings) function strongly in the Netherlands and meet occupier requirements. Moreover, vacancy in these locations is often low while these locations are the most sought after from an investment perspective. With institutional office investors focusing strongly on the best locations and economically dominant regions

of the Netherlands, this part of the investment market is worth having a closer look at.

I hope this study triggers your senses and helps you decide to not only read about the Dutch office market, but also convinces you to come to experience the market in real life. Then also do not hesitate to request more information regarding to any opportunities the Netherlands has to offer from an international perspective.

Hans de Boer

chairman VNO-NCW, also on behalf of MKB NL and LTO NL



Management summary

The Netherlands: a highly transparent and mature office market

The Netherlands, a country in northwest Europe, is considered one of the most mature and transparent office markets in Europe. Even though its historical development weighs on the perception because developments in non-central locations have pushed vacancy levels up in the past, recent market developments have brought a variety of Dutch markets back to investors' attention. Indeed, occupier markets in certain geographies have recovered strongly, whereas yields have sharpened significantly as well. However, with property yield to bond spreads remaining well away from their pre-crisis levels, the Netherlands offers solid investment opportunities in comparison to other major European geographies.

The Dutch market can roughly be characterized by focusing on the four largest cities of the country (or: G4) consisting of Amsterdam, Rotterdam, The Hague and Utrecht, the Randstad conurbation (in which the major four cities are located) and some regionally dominant cities.

Low or negative correlation to major European markets, while offering solid returns

Overall it can be concluded that Dutch office space offers a significant and solid income return to investors. Even though capital growth has proven to be volatile over time and is a typical cyclical performer, capital growth can surely be gained although this depends strongly on timing. Within the geographical focus the four major cities have proven to offer strong total returns, with Amsterdam outperforming all other markets. However, income returns in Rotterdam, The Hague, Utrecht and the rest of the Netherlands have all shown to be higher than in Amsterdam between 1995 and 2015. Dutch office space also provides a low or even negative correlation to some European markets, such as the London or Munich market, which is beneficial for international investors with regard to their risk spread.

Property yields, generally reflecting the perceived risk of geographies, have compressed sharply in Amsterdam, while minor compression has been witnessed in the majority of other geographies in the country. This emphasizes the beneficial pricing of certain markets outside Amsterdam that are now also showing recovery in the occupier sentiment. Moreover, with vacancy rates falling in the most sought after locations of the major hubs of the Netherlands, secondary locations in major geographies are benefitting now as well and slowly seeing vacancy falling too. Next to the improved occupier climate that currently takes place and results from the improving labour market and fast growing - and expanding - tech sector, the Netherlands also faces healthy growth of its labour market over the next decades.

Office employment is forecast to grow in the next decades, supporting demand for office space. However, demand is likely to be influenced by trends such as technological developments, geo politics and the potential reduction of the occupied office space per employee.

Focus on main geographies by institutional investors

The Dutch office stock is widely spread across the country as a result of the historical allowance for developments in nearly all geographies. With 56% of office stock present in the Randstad conurbation, 12% in regional cities and 32% of stock outside of the Randstad and regional cities, the granularity of the market is confirmed. However, from an ownership perspective, IVBN (largest institutional investors in the Netherlands) members are strongly focused on the major geographies of the country. Over 82% of the ownership of IVBN ownership is located in the Randstad conurbation, which represents a significantly larger share than the overall market presence in this area. Only 10% of the ownership of IVBN members is located in regional dominant cities outside the Randstad conurbation whereas 8% of ownership is located in the remainder of the country. Moreover, nearly 54% of ownership of all assets of IVBN members lies in the major four cities of the Netherlands, representing an over allocation compared to the total office stock present in these cities, thus emphasizing the focus of IVBN members on dominant cities.

The major four cities and the remainder of the Randstad conurbation also represent the majority of occupier activity in the country. This emphasizes the importance of geographical focus in the country. Moreover, average rents and the most significant rental growth has appeared in the four major cities of the Netherlands over the past years. Furthermore, average rents in the remainder of the Randstad remain well above the average rents in the remainder of the country, while also recovering more strongly than in the rest of the Netherlands

Strong fundamentals for future performance

Looking ahead, the Dutch office market benefits from strong fundamentals for a resilient future performance. Offering a variety of internationally attractive locations, various office markets in the Randstad conurbation and regional cities may benefit more and more from the increasingly globally oriented office markets. In addition, the economic downturn has led to investors more and more focusing on the building quality.

Examples of these include The Edge in Amsterdam, a new built project which is the most sustainable building in Europe and offers modern technology to its occupiers. Furthermore, high quality buildings in secondary locations have shown to outperform peers in similar locations when offering successfull workplaces. With hospitality in buildings and workplaces increasingly common, the market has adjusted to the new occupier requirements and offer significant momentum for investments now. All in all the office market is transforming and will be much more concentrated around public transport hubs and the building itself is a smart, sustainable and flexible property which offers a high standard service towards its users.



1 Introduction

This paper provides insight in the performance of office investments in both the Netherlands and a variety of European countries, and informs parties on trends and developments in the Dutch office market. This paper is based on both quantitative and qualitative research conducted on the performance of Dutch office real estate and the performance of this asset class in some European countries.

It can be perceived that the Dutch office market is characterized by high level of vacancy throughout. Although, this does not acknowledge the fact that the Dutch office market is a granular market with significant differences that can appear in fairly short distances.

In general, it can be concluded that the Dutch institutional office market is made out of a top 4 city markets, the 'other Randstad locations' and the 'remainder of cities outside of the Randstad conurbation' (with some prime office locations)'. Even within the top 4 city markets (and also elsewhere), there are huge differences. Therefore, if you look at the office locations separately, you can experience the fact that there are many prime office locations, with grade A office buildings offering excellent workplaces. At these locations, vacancy rates are comparatively low, rents are at a substantial higher level and demand for quality office space is still strong, while adding new office space is often difficult. We see major changes in the Dutch office market which are interesting to analyze. When focusing on the top 4 cities and some specific prime office locations, you will discover that Dutch institutional office investments in recent years have done well, with a relatively high take-up, stable and rising rents, substantial lower vacancies and a competitive direct return and even capital growth. The location, the quality of the office building and also the added management involvement by the owner to create value and services for the occupiers, give a rather promising look at these aspects of the Dutch office market.

The purpose of this paper is not only to provide insights in the historical performance of institutional office investments (in the Netherlands), but also to provide guidance to investors that consider investing in the Dutch market by presenting the background information needed to look at the combined effects of location, quality of the office building and the variety of workplaces which are on offer there.

The third chapter of this paper analyzes the performance of (institutional) office investments and compares office investment to a variety of other investment types. Furthermore, the chapter gives insight in the performance of Dutch office space in comparison to some of its European peers, focusing on the performance of MSCI / IPD contributors.

The fourth chapter takes into account the economic and demographic environment in the Netherlands and the expected changes that are likely to impact on the office environment from these perspectives. Furthermore, factors potentially impacting on the future resilience of office space are presented in this chapter.

The fifth chapter will outline the structure of the Dutch office market, both from an occupier perspective and an investor perspective. This chapter serves to provide insight in the market structure, occupier fundamentals as well as to provide some reference to the way in which the Dutch investment market evolved over time. Which cities -and locations- are considered the top cities for office space is also being presented in chapter 5.

The sixth and final chapter will provide insight in the outlook for the office market. Given the trends such as globalisation, urbanisation and technology, the question of which cities and locations can be considered winning office locations and what type of buildings should be offered in these locations. This section will provide insight on the future shape of the Dutch office market and its opportunities.



2 Offices in the investor's portfolio

This chapter focuses on offices in the investor's portfolio and the performance of office space as an investment class in the Netherlands. The Dutch office market, of which the structure will be explained in chapter five, has become of significant importance to both domestic and international investors over the last decades and has shown a fairly stable performance in some areas of the market in the most recent past. However, not all areas of the office market have performed similarly and different investor types have shown different investment strategies resulting in a variety of performances across market segments.

This chapter will start with a comparison of investment sectors and their recent performance. Furthermore, the performance of the MSCI / IPD benchmark will be presented, both on an international, national and regional level. The chapter will be concluded with a summary.

2.1 Real estate remains an interesting investment class

2.1.1 Asset mix in the investors' portfolio

Given the fairly limited options investors have in terms of main asset classes, real estate has become a fundamental part of the investment strategy to many investors worldwide. A typical investment portfolio today consists of bonds, stocks and real estate, with the latter typically representing about 8-15% of the total invested volume in the investors' portfolio.

Within the main assets in the investor's portfolio, differentiation is also possible. In real estate, investors have the possibility to diversify in terms direct or indirect real estate investments whereby the indirect investment gives the opportunity to invest in direct or indirect vehicles.

Furthermore, a split in geographic allocation, type of real estate and quality of real estate can be made. The composition of the MSCI / IPD (real estate) benchmark, which is the most well-known real estate investment benchmark of the Netherlands, is as follows:

Table 2.1 Composition of the MSCI / IPD index in the Netherlands (Annual, December 2015)

	Capital value (Emn)	Capital value (%)	Total objects in composition	Number of funds
Retail	8,654	24.6%	1,097	37
Offices	6,042	17.2%	357	45
Industrial	1,850	5.3%	141	28
Residential	17,856	50.8%	2,353	35
Other	734	2.1%	115	32
Total	35,136	100%	4,063	73

Source: MSCI / IPD (2016)

The total real estate investment market in the Netherlands is estimated to total about € 115 billion. The MSCI / IPD index is estimated to cover just over 30% of the total market. The majority of offices in the Dutch MSCI / IPD benchmark are concentrated in the Randstad conurbation (91%), which emphasizes the strong geographical focus in this benchmark. The coverage of the MSCI / IPD benchmark for offices in the Netherlands however, is less significant than the coverage for residential space.

The lion's share of the office assets of IVBN members are located in the Randstad (75%) while over 40% of the assets is located in one of the major four cities. This emphasizes the focus of core and core+ investors on the economically dominant regions of the country, alike the IPD index.

2.1.2 Office real estate shows strong performance

Indicative for the performance of Dutch office real estate as an investment class is the comparison to other investment categories. The table below outlines the long-term average total returns, risks and sharpe ratios for different asset classes.

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Table 2.2 Comparison of average total returns of different asset classes (1995-2015)

	Total return	Risk (standard deviation)	Sharpe ratio
Liquidity the Netherlands 1)	2.65%	1.8%	-0.61
Dutch office real estate 2)	6.87%	5.6%	0.56
Bonds the Netherlands 3)	3.95%	1.6%	0.15
Stocks the Netherlands 4)	6.90%	19.7%	0.16
Listed real estate EU 5)	7.37%	20.7%	0.18

- 1) 3 month Euro deposits non-financial DNB 1995-2015
- 2) IPD-index total return offices the Netherlands 1995-2015
- 3) Oxford Economics 10-year Government Bond Yield the Netherlands 1995-2015
- 4) MSCI shares the Netherlands 1995-2015
- 5) FTSE EPRA/NAREIT European Union 1995-2005 and Developed Europe 2006-2015

Dutch office space has shown a strong performance in terms of the total returns when compared to other asset classes. Even though a risk (standard deviation) of 5.6% has been witnessed, the Sharpe ratio for Dutch office real estate of 0.56 is the most positive Sharpe ratio of the asset categories surveyed indicating the strong balance between risk and return for real estate between 1995 and 2015.

2.1.3 Dutch real estate shows low correlation with U.S. markets

Reducing risk through diversification is one of the reasons for investors to invest in real estate next to the beneficial Sharpe ratio. Investors ideally search for assets with low correlations while for real estate investments they tend to opt for asset classes with low or negative correlations and a geographical composition of the portfolio with similar characteristics.

When looking at the correlation of Dutch real estate with worldwide geographies, it can be concluded that there is a high correlation between Dutch real estate and the majority of worldwide geographies. The correlation is the lowest with North American real estate (0.52), while its correlation with APAC markets and Europe excluding the UK show the highest positive correlation (0.82).

Table 2.3 Correlations between Dutch real estate and global real estate markets (2006-2015)

	The Netherlands	Eurozone	Europe ex. UK	North America	APAC
The Netherlands	1.00	0.81	0.82	0.52	0.82
Eurozone		1.00	1.00	0.83	0.93
Europe ex. UK			1.00	0.84	0.93
North America				1.00	0.84
APAC					1.00

Source: MSCI / IPD (2016)

When focusing on office real estate and the difference in local geographies, it stands out that domestic markets show different correlations despite these correlations remaining high. Nevertheless, offices in Amsterdam show a correlation of 0.82 to offices in Rotterdam, while the correlation with The Hague and Utrecht comes to 0.84 and 0.86 respectively.

An international comparison however, shows that the performance of local markets in the Netherlands varies quite strongly to London's market, while there is even a negative correlation between Dutch markets and German markets. Italian and Belgian markets on the other hand again show a fairly high correlation to the performance of the main Dutch cities.

Table 2.4 Total return retail property in seven European countries, 2000-2015

	Amsterdam offices	Rotterdam offices	The Hague offices	Utrecht offices	London offices	Paris offices	Munich offices	Milan offices	Brussels offices
Amsterdam offices	1.00	0.82	0.84	0.86	0.27	0.77	0.14	0.67	0.69
Rotterdam offices		1.00	0.98	0.95	0.04	0.64	-0.26	0.87	0.83
The Hague offices			1.00	0.94	0.19	0.73	-0.28	0.79	0.80
Utrecht offices				1.00	0.06	0.62	-0.26	0.88	0.71
London offices					1.00	0.59	-0.08	0.10	0.01
Paris offices						1.00	-0.13	0.58	0.70
Munich offices							1.00	-0.42	-0.04
Milan offices								1.00	0.77
Brussels offices									1.00

Source: MSCI / IPD (2016)

Overall, it can be concluded that the correlation to Munich (as well as other German geographies) of office space in the Dutch cities ranks among the lowest correlations to Munich in major European geographies. The correlation to London remains fairly restricted as well, even though Amsterdam and to a somewhat lesser extend The Hague show some correlation with the London market. Correlations of Dutch office real estate to the Paris and Brussels market are fairly high.

2.2 Office real estate investment performance

2.2.1 IPD shows stable income return of office space

The annual average total return over the past 21 years stands at 6.87%, consisting out of -0.4% capital growth and 7.3% income return on average. Historical data indicate that the total return for office space has historically primarily been driven by solid income returns. Capital growth contributed positively to the total return in nine of the 21 surveyed years. The negative capital growth witnessed over this time period was strongly influenced by both the IT crisis in the early 00's and the global financial crisis between 2007-2012.

Also, the Dutch MSCI / IPD index is known for so-called 'smoothing and lagging' effects as a result of being a 'valuation index' rather than a 'transaction index'. The annual downward effects of external shocks remain fairly restricted compared to Anglo-Saxon countries as a result of this characteristic. However, the effects of such shocks generally last longer than the effects do in the aforementioned countries.

20 Income return ■ Capital growth 15 • Total return 10 Average 21 year total return 0 -5 -10 -15 1995 2000 2005 2010 2015

Figure 2.1 Development of historical IPD performance of office space in the Netherlands

Source: MSCI / IPD (2016)

2.2.2 Amsterdam shows strongest total return

As mentioned in paragraph 3.1.1, the Dutch office market is characterized by strong regional differences. Even within rather short distances significant differences may appear in terms of the attractiveness of the location and thus the appeal it has to both occupiers and investors.

Overall, Amsterdam, Rotterdam, The Hague and Utrecht are considered the four most mature office markets of the country and the most appealing to international and national operating firms. While each of these markets has its own specifics and all have a prime office district of their own, an overall comparison of the performance of these cities as well as for 'the rest of the Netherlands' is displayed below:

	Total return (1995-2015)	Income return (1995-2015)	Capital growth (1995-2015)
Amsterdam	7.8%	6.9%	0.9%
Rotterdam	6.3%	7.0%	-0.7%
The Hague	5.9%	7.4%	-1.4%
Utrecht	6.9%	7.7%	-0.7%
Rest of the Netherlands	5.7%	7.6%	-1.8%

Source: MSCI / IPD (2016)

Amsterdam has shown the highest average total return between 1995 and 2015 at 7.8%, outperforming the other geographies. However, in terms of income return Utrecht has shown the best overall performance, followed by 'Rest of the Netherlands' and The Hague. This is the result of the higher capital values in Amsterdam as well as the difference in vacancy between Amsterdam and Utrecht. Nevertheless, Amsterdam has been the only of the surveyed locations in which capital growth occurred on average between 1995 and 2015. An average capital growth of 0.9% was registered compared to a decreasing capital growth of -1.8% and -1.4% respectively for 'Rest of the Netherlands' and 'The Hague'. This emphasizes the affordability of real estate in today's market.

2.3 Dutch office market shows strong international performance

From an international perspective the Dutch office market proves to be one which provides high and solid income returns over time. Although the income returns have fallen slightly in the most recent annual figures of the MSCI / IPD, the Netherlands remains well ahead of all other major office markets in Western Europe in terms of income return.

2011

2013

2015

Figure 2.2 Development of income returns over time in major office markets in Western Europe

2009

Source: MSCI / IPD (2016)

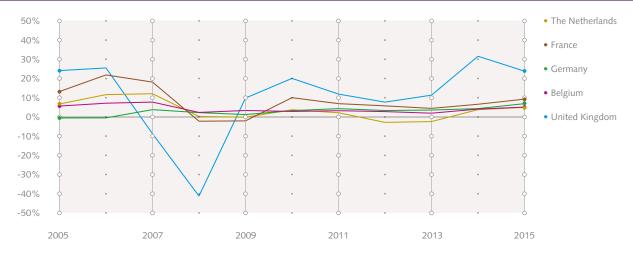
2007

45%

4.0%

2005

Figure 2.3 Development of total returns over time in major office markets in Western Europe



Source: MSCI / IPD (2016)

In terms of total returns for office space the Netherlands performs moderately. Over the previous decade other Western European geographies have shown significantly more volatility in their market performance, although that is partly a result of the market standards. Indeed, the German market hardly shows any volatility due to its valuation practice. In comparison to the UK however, total returns hardly fell in comparison to the remainder of the countries. None of the compared markets however, showed a positive total return comparable to the market in the UK either. Total returns in these markets average at 6.07%, with Germany showing the lowest total return and the UK the highest on average total return.

2.4 Summary

Investing in Dutch real estate offers investors the opportunity to diversify their investment portfolio. Within the real estate market there are a variety of diversification possibilities. Firstly, an investor can choose to invest directly or indirectly in real estate, with the latter offering the possibility for listed and unlisted investment vehicles. Furthermore it is possible to diversify through different asset classes as well as to different geographies.

When tracking the performance of Dutch real estate investments (through MSCI / IPD performance), the average total return over the past two decades stands at nearly 6.9%, driven by solid income returns. Regionally there are differences between office markets. The most notable difference is that in the most sought after location of the country, Amsterdam, income return on average is the lowest of all surveyed markets while Amsterdam is also the only market in which capital growth occurred on average between 1995 and 2015. The other three large cities, Rotterdam, The Hague and Utrecht offer a higher income return, but the average capital growth between 1995 and 2015 has been negative in these market. A similar trend appears in the 'rest of the Netherlands' category that offers a higher income return than Amsterdam but on average a negative capital growth. Overall, Amsterdam has offered the highest total return over the previous two decades, followed by Utrecht, Rotterdam, The Hague and 'Rest of the Netherlands'.

In a European perspective, the Dutch market stands out for its stable income return over time, while its total return performs stable in comparison to a variety of western European markets.

3 Demand drivers - economic and demographic

The performance of the office market strongly correlates to the development of a domestic economy while it also has a close relation to the composition of the labour force in a country. It is therefore important to understand the economic and demographic development of The Netherlands and to have insight in the forecast of economic growth and the demographic changes that are likely to appear over the next decade. However, also external factors influence the economic situation in the country and the labour market. Therefore, in this chapter some market trends and their potential impact are mentioned.

3.1 The Dutch economy is the fifth largest in the Eurozone

3.1.1 Economic structure: gateway function and knowledge economy

The Dutch economy is the fifth largest in the Eurozone. Recent GDP growth has mainly been driven by rising exports, with the Netherlands as Gateway to Europe being well-placed to benefit from this. The excellent trading position in Europe and globally is reflected by the fact that Dutch exports rank fifth in the world and second in Europe. The surplus on the trade balance of the country is very high with € 55 billion. This reflects the competitiveness of the local economy.

The Netherlands' Gateway function is amplified with the top tier sea- and airports. The Port of Rotterdam is the largest container port in Europe with an annual throughput of over 12 million TUE (twenty-foot equivalent unit). In addition to its connectivity over water, the Netherlands has an extensive and modern railway system and over 2,360 kilometres of highway.

The region's international importance is supported by Schiphol Airport which is the fifth busiest airport in Europe and the 14th busiest airport worldwide, providing immediate access to global markets and welcoming 64 million passengers in the year 2016. The airport plays a vital role in the presence of headquarters in the Netherlands, being located closely to capital city Amsterdam which houses over 2,500 international companies. With 13 companies out of the top 500 largest companies in the world being headquartered in the Netherlands (2015), the country's strong international position is underpinned by ranking 8th globally in terms of countries with the most Global 500 companies.

In addition to its strong position in international trade, the Netherlands is also among the most innovative countries in the world. This position is mainly driven by the mid-sized city of Eindhoven which is the most innovative city in the world based on "patent intensity" - one of the most commonly used metrics for mapping the geography of innovation. More specifically, Eindhoven produced 22.6 patents for every 10,000 residents whereas the number two city in the ranking of the Organization for Economic Co-Operation and Development, San Diego, produced 8.9 patents per 10,000 residents.

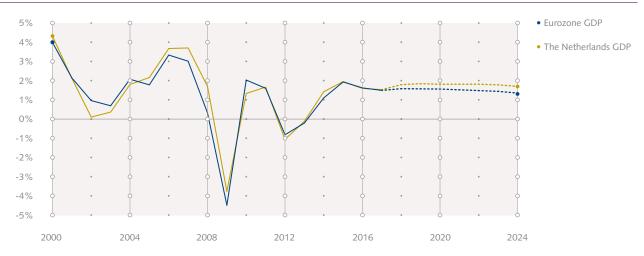
The Netherlands is well-known for being a knowledge economy. The main drivers of economic growth are indeed found in business relating to either the Port of Rotterdam, Schiphol Airport or Eindhoven Brainport. The knowledge intensive economy results in the Netherlands offering a significant amount of high quality Universities. Indeed, 12 of the domestic Universities are ranked in the top of the Academic Ranking of World Universities. This emphasizes the strong knowledge-base and access to talent the Dutch market offers.

3.1.2 GDP growth predominantly driven by consumer spending and investments

According to the latest figures from Oxford Economics GDP growth in 2015 came to 1.9%. Next to exports, GDP was driven by consumer spending and investments. Short term growth prospects stand at 2% and 2.1% for 2016 and 2017 respectively, driven by healthier growth prospects due to side effects of the acceleration of economic growth in the country.

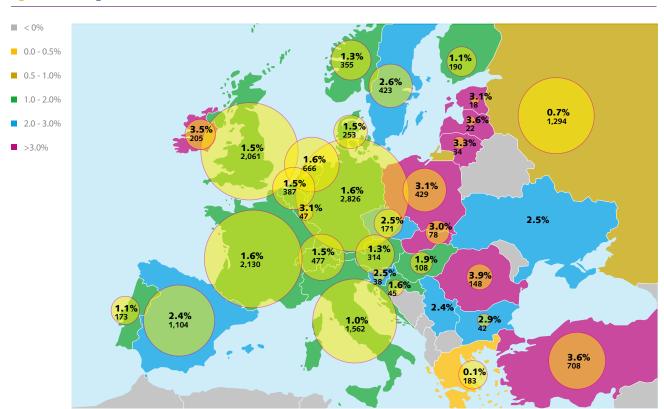
Over the long term, the Netherlands has proven to be a stable economy, the average annual growth rate of GDP came to 1.34% between 2000 and 2015. Steady although modest economic growth is foreseen for the years ahead, with average growth until 2020 standing at 1.7% per annum. Even though the growth rate is lower than during the economically strong years 2004-2007, the Dutch economy is likely to outperform the Eurozone average, emphasizing the strong position of the Dutch economy in the Eurozone.

Figure 3.1 Annual GDP growth 2000-2025



Source: Oxford Economics (2016)

Figure 3.2 GDP growth forecast 2016-2018



Source: Oxford Economics (2016)

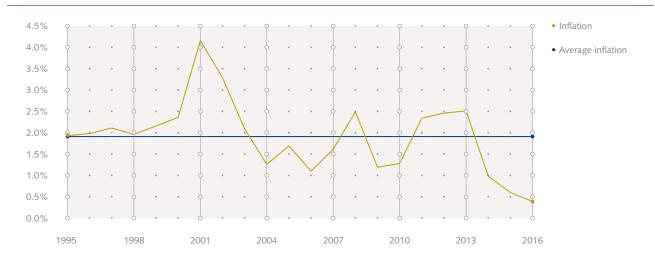
3.1.3 Producer confidence and inflation

The domestic inflation rate strongly depends on the financial markets and international developments such as the oil prices. As a result, inflation varied strongly over the past decades, peaking at 4.2% and currently at record low levels. The average inflation rate between 1995 and 2016 stands at 1.9%. Overall it is expected that the inflation rate will return to a higher level than its present value due to developments in the United States and regarding to OPEC measures to stimulate oil prices.

The inflation rate in the Netherlands is of importance to investors since the typical rental income is annually indexed by the CPI figure. This helps investors in real estate to follow the pace of inflation.

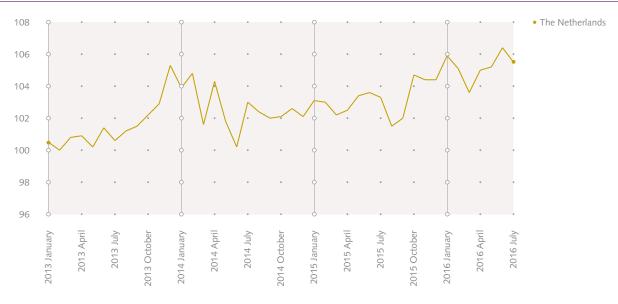
The average daily output generated by the Dutch manufacturing industry performs strongly according to Statistics Netherlands (CBS). Growth is driven by a significant rise of output generated by the 'food' sector, the pharmaceutical industry, the chemical industry and the rubber and plastic products industry.

Figure 3.3 Development of inflation in the Netherlands



Source: CBS and Oxford Economics (2016)

Figure 3.4 Seasonally adjusted average daily manufacturing output



Source: CBS (2016)

3.1.4 Historic low bond yields

The capital market in Europe has experienced a long period of falling bond yields and interest rates. Both have experienced a significant fall since 2008 with a temporary rebound in 2011.

A similar trend has been witnessed in the Netherlands in which the 10 year government bond yield has shown a slightly different trend to the Eurozone average, not rebounding in 2011 and thus falling since 2008.

The development of both bond yields and interest rates in Europe and the Netherlands have led to a rising number of investors seeking for higher yields than government bond yields. As a result, real estate has become more popular with a large group of investors. The stable performance and solid outlook of the economy as well as its real estate market have made the Netherlands a significant target for international investors. Moreover, despite current prime capital values reaching historic high levels, the Netherlands remains favourably priced in comparison to Europe's largest markets and thus both prime and secondary real estate remains on the horizon of international investors.



Figure 3.5 Development of 10 year government bonds and 10 year interest rates in the Eurozone and the Netherlands

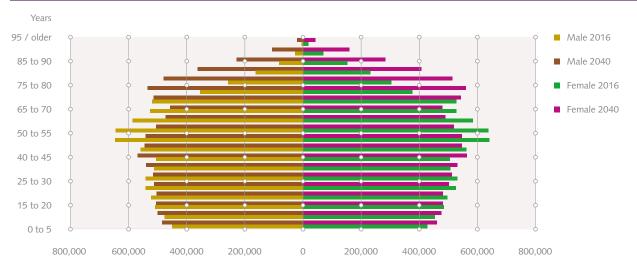
Source: Oxford Economics (2016)

3.2 The Dutch demography

3.2.1 Demographic composition is changing

The Netherlands currently counts just over 17 million inhabitants. The demographic composition has an impact on the labour market. Therefore it is of significant importance to understand where occupier demand is expected to move in the future, impacted by demographics. The most remarkable changes are forecast (CBS, 2016) to evolve in the age classes between 40 and 95 years. For both men and women a somewhat similar trend is expected of shrinking age classes of 40 to 65 years (mostly employed people) while the age classes from 65 years to 95 years and older (mostly retired people) will benefit. Even though this seems logical and in line with health trends that enable people to live longer, it is likely to affect the office market in some way. With the majority of other age classes showing only limited changes to the current composition, it is likely that the total workforce of the Netherlands may shrink in the future, although the recent increase, and expected further increases in the future, of the pension age will help keeping up the labour force.

Figure 3.6 2016 and 2040 composition of the Dutch demography

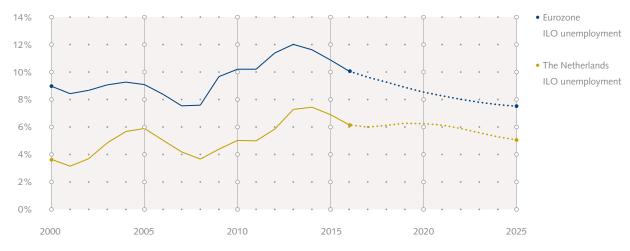


Source: CBS and Primos (2016)

3.2.2 Strong labour market and international perspective

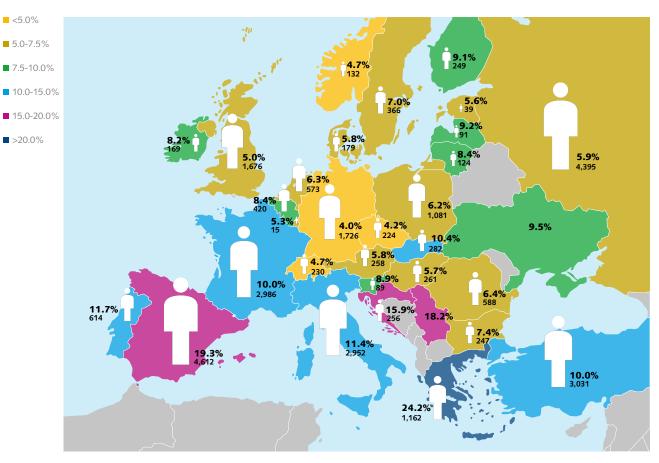
According to Oxford Economics data, just over 8.9 million people are employed in various sectors in the Netherlands. The Netherlands' unemployment rate has historically been low, indicating the healthy employment base in the country. When comparing the Eurozone ILO unemployment to the Dutch figure, the Netherlands' remains 443 bps below the Eurozone average between 2000 and 2016. The foreseen average ILO unemployment for the Netherlands, 6.15%, remains among the lowest in Europe.

Figure 3.7 Development of the ILO unemployment rate in the Eurozone and the Netherlands



Source: Oxford Economics (2016)

Figure 3.8 Unemployment rate mid-2016



Source: Oxford Economics (2016)

In terms of office employment, the sectors Administrative & support functions, Information and communication, Financial services & insurance activities and Public administration & defence are considered the main sectors for office employment. In 2016, an estimated total of nearly 2.4 million people were employed in offices across various sectors, with the top three sectors accounting for nearly 70% of total office related employment according to Oxford Economics.

Total office employment is forecast to grow by 4.5% until 2020, while growth of 9.5% is foreseen in the number of employed people with office related jobs until 2025, which results in nearly 2.6 million people being employed in office related employment. Office related employment growth will be particularly driven by growth in the administrative & support activities sector which is forecast to grow by 7.6% and 15.4% respectively up to 2020 and 2025. The information and communication sector will also be an important driver towards 2020, accounting for over 260,000 people with office related jobs.

1,400,000 10% 2016 7.6% 2020 1.200.000 8% 5.6% Growth 1.000.000 6% 800.000 2.4% 600 000 2% 0.3% 400,000 0% -3.3% 200.000 0 Information & Public Wholesale & Real estate Administrative Financial communication & support & insurance administration retail trade activities

& defence

Figure 3.9 Estimated office employment growth in the Netherlands (in the largest office employment sectors)

Source: JLL based on Oxford Economics (2016)

activities

3.3 External factors impacting on the long term office environment

activities

3.3.1 Technological developments could have negative impact on office employment

Technological developments including, but not restricted to, robotics, 3D printing, self-driving cars and augmented reality are likely to influence the labour market of the future. Even though it is difficult to predict the impact of these developments, the majority of the aforementioned trends is likely to increase the effectiveness of employees and thus may weigh on the demand for office space. Indeed, while robotics may reduce the demand for labour in the 'making' industries rather than in the office environment, one may include self-learning algorithms in the robotics topic too. These algorithms may be able to take over work from office employees given their ability to analyze large amounts of data quickly and process these data too.

3D printing on the other hand may have different influence on the labour market, since this may stimulate local production and thus impact positively on the number of office related jobs. Self-driving cars offer the ability to use travel time more efficiently since drivers then will have the ability to work from their cars. Augmented reality on the other hand may provide a boost to 'working from home' given the more realistic and real-time connection one can make with co-workers and colleagues while being at different places.

All in all, technological developments will proceed and at this time it is important to be aware of potential impacts rather than counting on a 'worst case scenario' for office employment.

3.3.2 Geopolitical risk is increasing

Hardening politics are both occurring on a global level as well as at a local level. These geopolitics are currently strongly impacting on the perception of certain occupier- and investment markets and likely to remain an important factor in the future too. The most recent significant shock has been the Brexit vote by the UK. While it is difficult to predict potential effects on office employment, one may argue that occupiers will leave the UK in favour of other geographies. If the Netherlands will be able to be among the countries that benefit from a potential leave is again questionable, but even if only a minor share of UK based companies are set for a departure to the Netherlands, office employment will be impacted positively.

Any future events regarding to geopolitics may include the outcome of elections, the decision of the EU regarding international treaties such as CETA and TTIP and the ongoing turmoil in parts of the world. All of the aforementioned events will impact the labourand office employment sector, although the effects of all of these are difficult to predict. Therefore, for the impact of these it probably is again best to be aware rather than 'take action' on any of these factors.

3.3.3 Occupied space per employee

Over the last years it has been a trend to reduce the average working space per employee when either renegotiating existing contract terms or relocating to a new building. However, statistical evidence supporting this trend is still limited due to the number of redundancies made over the same period, thus leading to a higher number of occupied space per employee with certain businesses. Nevertheless, it seems inevitable that occupiers reduce their space ratios from an average of nearly 20 sq m per employee to average at about 12-15 sq m per employee, as per the market in London. This is already witnessed in recently agreed contracts, although statistics have not shown any sign of a reduction of the average space per employee thus far.

On the other hand a more recent trend suggests that employers are increasingly looking to attract talent and one of the methods they have found to be successfully is to offer larger workplaces for the best talents. Even though this has only been witnessed in a limited number of branches, it may as well be the opposite trend of the aforementioned shrinkage of space per employee.

Given the two impacts on the occupied space per employee it is likely that the average space per employee will change compared to what has been common for years. In this respect the Netherlands is a frontrunner within Europe. Whether this results in the average space shrinking to 12 sq m per employee, or employers offering slightly more workspace is yet undetermined. However, given the space per employee that is common in for example Germany (24 sq m on average), the scenario of only 12 sq m per employee in the Netherlands, comparable to the London average, seems rather unlikely. The most likely outcome of recent events is that the average space per employee will settle at an average of 12-15 sq m per employee in the medium term.

3.4 Summary

The Dutch economy is the fifth largest economy of the Eurozone and is well-known for its relatively stable economic growth. Driven by exports, investment and consumer spending, the economy ranks among the best performing in Europe and its growth is forecast to remain at a fairly stable rate of 1.7% per annum until 2020.

The demographic composition of the country will change over the coming decades, although this will happen gradually. Over the long run the number of elderly people in the Netherlands will increase due to a higher life expectancy. As a result, the pension age will increase gradually as well, keeping a larger proportion of the Dutch people in the labour force. Nevertheless, with a shrinking number of people in age classes from 40 to 65 years, the labour force may eventually shrink in the long term.

The labour force and office related employment on the other hand are expected to evolve positively over the next period. With unemployment forecast to decline a growing number of people will be employed. Moreover, the majority of office related employment sectors is forecast to show growth in the number of employed people in the sector until 2020, emphasizing the healthy climate for office employment in the country.

External factors influencing the office environment however, may induce different scenarios. However, the impact of trends such as technological developments, geopolitics or the average working space per employee are uncertain. Therefore it is important to understand which factors may be of interest to the office environment in the (near) future and to monitor these, rather than to speculate on the potential effects these may or may not have on the office environment.



4 The Dutch office market

Commercial office real estate accounts for a large portion of a nation's wealth and provides a working environment for employees in service industries. To understand the sector as an investment class, it is important to understand the various trends within the office market and the factors of influence. This chapter therefore specifically focuses on the fundamentals of the Dutch office market, including the occupier and investment market, the difference in quality between local markets and the legislation.

4.1 Fundamentals of the office market

4.1.1 Dutch office market has a granular structure

The Netherlands is one of the more mature office markets in Europe. Its office stock is estimated at approximately 54.2 million sq m and the market is characterized by its high density of offices. As a result, significant locational differences appear within relatively short distances.

The domestic office market has historically only had limited geographical focus in terms of occupancy. However, over the last years, driven by the economic downturn, occupiers have shown a geographical re-focus and have increasingly focused on the major markets of the country. As a result, today's office market is characterized by a top four major markets (Amsterdam, Rotterdam, The Hague and Utrecht) and a range of regional dominant cities at which the majority of both international and national occupiers focus.

The office stock in the Netherlands grew strongly since 1990 with 71%. This was due to the flourishing economy in the 1990s, which boosted office employment to grow at a faster pace. Increasing demand and decreasing supply resulted in a scarcity of office space. New developments were initiated and were specifically focused on satellite-cities within the Randstad conurbation. This growth continued until the time of the dot-com bubble. GDP growth, together with the rise of the IT sector, led to a strong demand for office space. IT companies often leased twice as much office space than they actually needed for growth purposes. After the burst of the dot-com bubble this extra space was not taken into use.

Millions 60 Office stock 50 40 30 10 0 1995 1998 2001 2004 2007 2010 2013 2016 F

Figure 4.1 Total Dutch office stock development (sq m)

Source: JLL (2016)

As a result of the historical development the Dutch market is rather densely structured compared to other European markets, while it is also widely spread across the country. Given its history of decentralization many large and small municipalities have their own or multiple office parks. Nevertheless, the Randstad conurbation (including the major 4 cities) has a total office stock of 31 million sq m and ranks among the largest office markets of Europe. Moreover, when combining the four largest cities (G4) because of the close proximity in which these are located, an office market of 16.3 million sq m appears, comparable in size to Berlin and Madrid.

Also, the Randstad has a population of about 8 million inhabitants making it one of the largest urban areas of Europe comparable to Milan and the London metropolitan area. The proximity of the four cities is emphasized by a car or public transport travel time of approximately 30-45 minutes between Amsterdam and the other three cities.

Figure 4.2 Largest office markets - Europe (sq m)

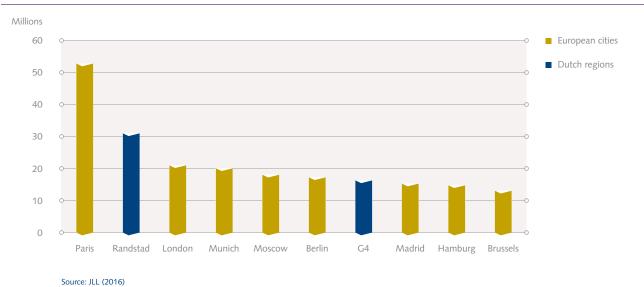
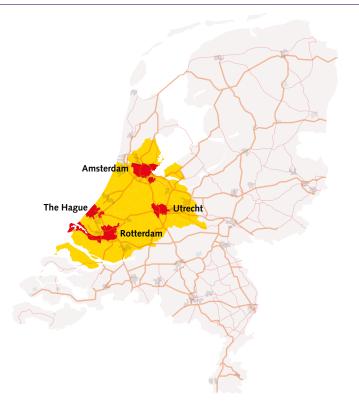


Figure 4.3 Map: main cities (G4 in red) of the Netherlands and the 'Randstad' conurbation (transparent yellow)



Source: JLL (2016)

Given the granularity of the Dutch office market there are strong local differences. The characteristics of the location have a major impact on the specific market dynamics between multifunctional ring locations (locations with many facilities and good accessibility by public transport and car), city (station) locations and other location types. The location types are as follows:

Figure 4.4 Internet use and share e-commerce in total retail turnover, 2015

Location Type ¹⁾	Public transport accessibility	Car accessibility	Amenities
Metropolitan central station	8	8	•
Metropolitan central location			
Metropolitan ring road mono-functional			
Metropolitan ring road multi-functional			
Suburban central location			
Suburban mono-functional			

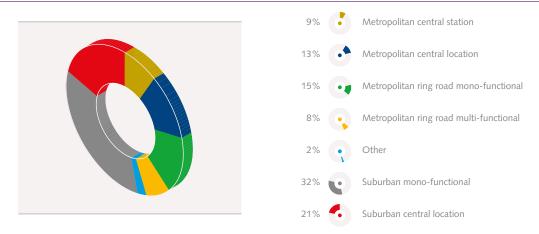
Source: JLL (2016)

Since 1990 the strongest growth of office stock was witnessed in suburban monofunctional locations. These locations grew by more than 125%. This was the direct result of development potential in these smaller cities and the relatively expensive inner city locations in urban areas. For example, the city of Zoetermeer was developed during this time, as a result of a tightening market in The Hague. The philosophy behind the mono-functional locations was the strong confidence in a separation of functions. Office parks were designed solely for working.

Based on current stock, suburban mono-functional locations remain the largest locations (32%) follow by suburban central locations. Combined suburban locations account for 53% of total stock.

^{*)} Metropolitan = municipality >200,000 inhabitants Suburban = other municipalities

Figure 4.5 Annual investment in real estate in the Netherlands, 1995-2015



Source: JLL (2016) Note: based on the research of the 50 largest municipalities in terms of office stock

4.1.2 Majority of offices is concentrated in the major geographies

From an investor perspective, the granularity of the Dutch office market is one of the most prominent barriers to entry in the Dutch market. The granularly of the Dutch real estate market is caused by the Dutch planning regime which allows local municipalities to develop their own local zoning plans.

Even though each municipality does have some kind of office stock, the majority of offices is concentrated in the major geographies. Indeed, 33% of the domestic office stock can be found in the four largest markets of the country (Amsterdam, Rotterdam, The Hague and Utrecht) while the office market in the Randstad conurbation accounts for some 57% of the total office stock of the Netherlands.

100% Other Netherlands Legend Stock 2016 (sq m) 90% Other Randstad < 320.000 80% 43% 320,000 - 997,000 70% 997,000 - 2.4 million 60% > 2.4 million 50% 24% 40% 30%

Figure 4.6 Distribution of office stock in the Netherlands and distribution of office stock per geography

Source: JLL (2016)

Stock

33%

20%

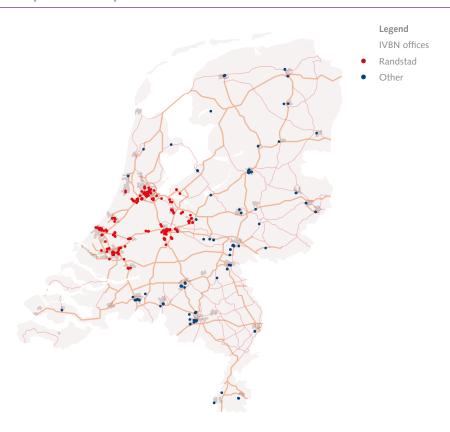
10% 0%

4.1.3 Ownership of IVBN members predominantly Randstad orientated

The IVBN (Association of Institutional Property Investors in the Netherlands) is an association in which nearly all Dutch institutional property investors are represented. To indicate how the ownership of the IVBN members equates to the domestic market structure, the ownership of the IVBN members has been surveyed for this paper.

Over 50% of the ownership is concentrated in the G4, indicating that the IVBN members are over represented in these geographies compared to the distribution of the Dutch office stock. These investors have a presence of over 80% in the Randstad conurbation, emphasizing their strong focus on the economically most dominant region of the country. Indeed, only 56% of the domestic stock can be found in the Randstad conurbation which underpins the geographic focus of IVBN investors on the Randstad region given their 82% presence there.

Figure 4.7 Map: IVBN ownership Randstad vs. other



Ownership of IVBN members to the main office regions of the Netherlands

Region	Percentage IVBN ownership	Total market
G4	54%	33%
Randstad (including G4)	82%	56%
Regional dominant cities outside Randstad	10%	12%
Rest of the country	8%	32%

Source: IVBN/JLL (2016)

Approximately 18% of the ownership lies outside of the Randstad conurbation. The largest proportion of this can be found in regional dominant cities such as Eindhoven, Den Bosch, Zwolle, Groningen or Maastricht. Outside of these regional dominant cities hardly any possession (only 8%) can be found for the IVBN members, emphasizing the national distribution of their possession.

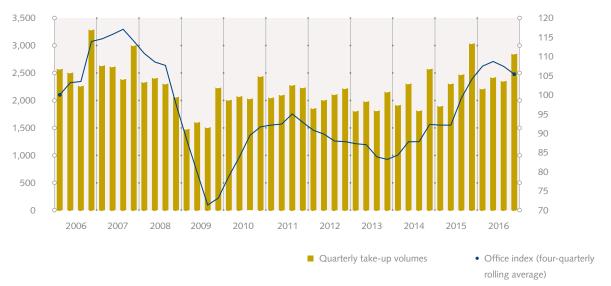
4.2 Office occupier market

4.2.1 Demand for office space slightly increases

In 2015 occupier activity on the continent accelerated on the back of a Eurozone upturn, with a largely positive outlook for the global economy. The positive momentum built through the year and supports the view that most continental office markets have now entered the upward part of the cycle with regards to the occupational fundamentals. European demand was boosted by the strong performance of some of the larger office markets.

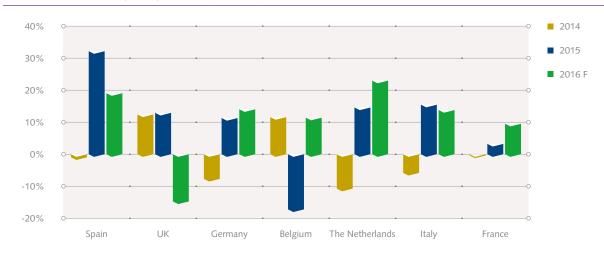
The Netherlands has performed strongly in the recent past, outperforming the 5 year average take-up. This underpins the robust recent performance of the market, even though levels seen in 2006 and 2007 are no longer achievable. The latter is the result of the significant amount of pre-lettings that contributed to the take-up figures then, whereas the market nowadays shows hardly any pre-lettings due to the limited number of developments. The performance between 2013 and 2015 clearly portrays the late cyclical nature of the recovery in the Dutch office market compared to other European countries. 2015 was the first strong year in this recovery trajectory with the outlook for the next 2-3 years indicating a continuation of this trend.

Figure 4.8 Western Europe - take-up (weighted Index) ('000 sq m)



Source: JLL EMEA Research (2016)

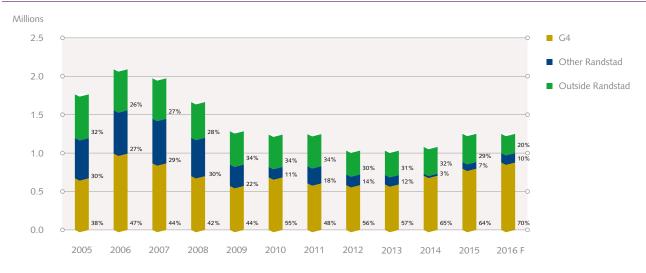
Figure 4.9 Office take-up (compared to 5-year average)



Source: JLL EMEA Research (2016)

In relation to the deterioration of Dutch economy, just after the millennium and the burst of the dot-com bubble, take-up in the Dutch office market started to decline. After a relative short period of economic growth (2003-2007) where office take-up grew towards a historic high level in 2006 (2.1 million sq m), the financial crisis (2007-2012) put a hold to further growth and as a result take-up of office space started to decline.





Source: JLL (2016)

In 2013, the stabilization of the Dutch economy led to a similar stablization of the office occupier market. This positive momentum in the office occupier market comes after a period where macroeconomic developments, such as the financial crisis, and changes in business strategy, including lower usage of space per FTE, consolidation and cost savings, resulted in a decline in take-up volumes.

The Dutch office market showed further improvement and take-up volumes grew by 5% and 16% respectively in 2014 and 2015. A large part (71%) of this increase occurred within the Randstad region.

Professional, scientific and technical activities sectors driving occupier demand

The professional, scientific and technical activities sectors has been driving demand in the Netherlands over the last ten years. Over 20% of take-up activity relates to this sector. Over 10% of activity comes from the Information and Communication sector whereas Public Administration and Financial and Insurance Activities both also accounted for approximately 10% of demand between 2006 and the first half of 2016.

Information and Communication has shown to be fairly volatile in terms of its performance, but has gained momentum over the recent past. Most recently demand in the Netherlands has indeed been strongly been driven by this sector.





Source: JLL (2016)

(Outer ring refers to the year 2013-2016, inner ring to period 2006-2016)

Occupier demand evolves more around hospitality

Providing an attractive and efficient workplace is becoming an increasingly important aspect for corporates. An attractive office environment often involves boosting staff satisfaction and productivity, the physical building and the workplace and also increasingly important is the attractiveness of the actual office location. Increased travel times due to congestion, employees' growing requirements for a lively and often mixed use work location and the focus on sustainability have led to a changing demand for the location and quality of the workplace.

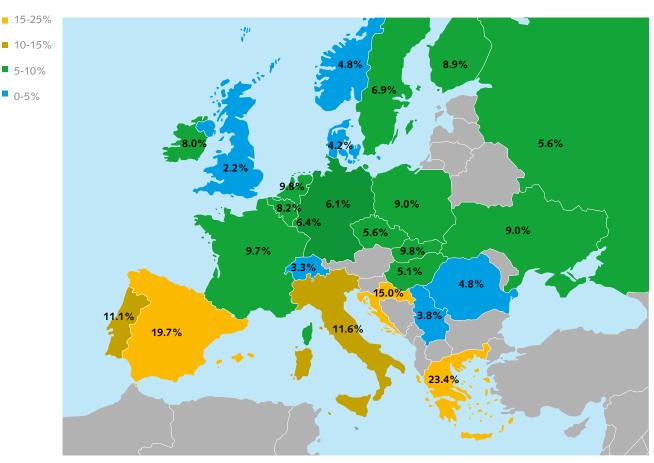
In addition to location, the quality of the building itself has become more important. Annually, 40% of all take-up is for grade A properties. This reflects take-up in both prime and secondary locations. In secondary locations, it is likely that demand for these assets will be even higher due to the relative affordability of high quality space in such locations.

Service and hospitality have gained in importance in recent years. From an investor perspective, the ability to stand out, in an office location with limited amenities, it is essential to attract new occupiers. In such a market, service and hospitality are the key differentiators. Improved office models such as HNK (Het Nieuwe Kantoor) from NSI and Merin's new office concepts (boutique and small offices) have shown to benefit from this trend.

4.2.2 Availability of office space relatively high

The increase in leasing activity in 2015 had a strong impact on vacancy rates in Western European cities in particular, including Dublin (-420bp), Dusseldorf (-210bp) and Stockholm (-200bp). In 2016 a variety of cities with among others Amsterdam followed with vacancy decreasing by over 500 bp compared to the start of 2015.

Figure 4.12 Office vacancy rates across Europe's main cities

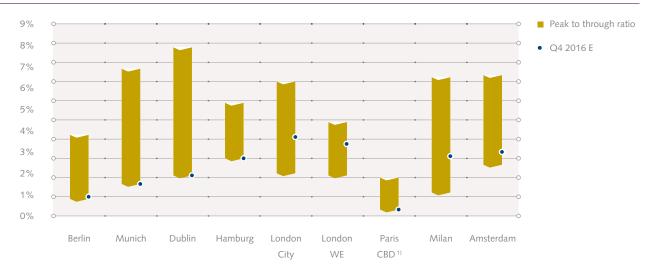


Source: JLL (2016)

While in many cities overall vacancy is likely to stay above pre-crisis levels in the short term, this often hides more significant space constraints, with CBD and grade A vacancy rates (often in a variety of submarkets) considerably lower. The lack of quality space is unlikely to be resolved in the short term with a limited speculative pipeline reported in almost every market.

Amsterdam shows a very similar picture to large parts of Europe, with prime space in the best locations tightening fast. Vacancy dropped significantly from over 15% in 2015 to only 9.8% in 2016. In addition, the A grade vacancy rate dropped by 80bp in 2015 to 4.2% was estimated at around 3% at the end of 2016, standing just above the bottom of the 10-year peak to trough ratio. This tightness of the A grade part of the market is often distributed across many submarkets.'

Figure 4.13 Grade A vacancy - 10 year peak to trough ratio



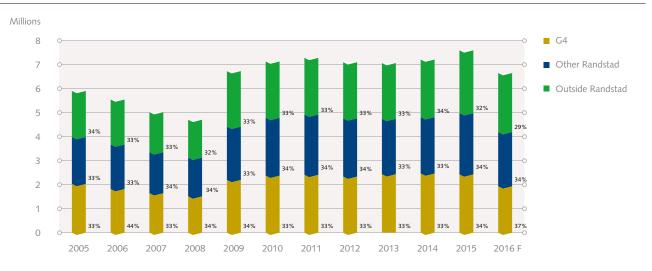
Source: JLL (2016)

1) Refers to new supply

Netherlands - general supply at a relatively high level - but shortage of grade A properties

In a European context, the Dutch office market features relatively high overall vacancy. Although some vacancy is required to react on the dynamics of the market, a healthy vacancy rate should stand at about 5% to 7% of the stock (Besselaar, 2011). Today's vacancy adds up to about 6.7 million sq m, which represents about 13% of the total office stock in the country. Differences are however significant across various regions and office locations of the country as displayed before.

Figure 4.14 Development of office supply (sq m)



Source: JLL (2016)

Office supply in square meters predominantly focuses on the larger office markets. Although highest vacancy rates can be found in satellite cities in the Randstad area. Suburban cities such as for example Nieuwegein, Leidschendam-Voorburg and Rijswijk still face vacancy rates higher than 30%. These satellite markets became of interest during the 1980s and 1990s and after the burst of the dot-com bubble occupiers moved their focus towards more urban and multifunctional areas.

Supply/demand ratios for grade A-B-C and for location types

The supply/take-up ratio is one of the important indicators for office market performance. An analysis of the supply/take-up ratio shows that grade (quality of space) is an important factor for office market strength.

A grade buildings have a lower supply/take-up ratio which indicates a more balanced ratio between supply and demand. In 2016 supply/take-up ratio for A grade properties was estimated at 2.5 which means that market conditions for these buildings are approximately four times better than for C grade buildings that have an average ratio of 10.

Figure 4.15 Supply/take-up ratio by grade (21 largest cities)

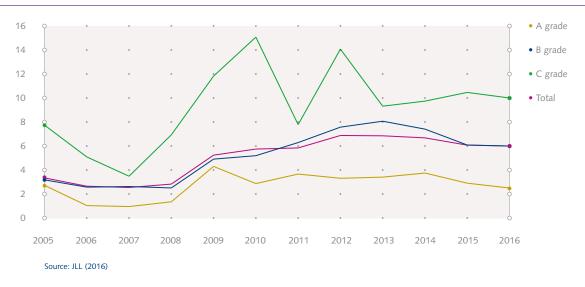
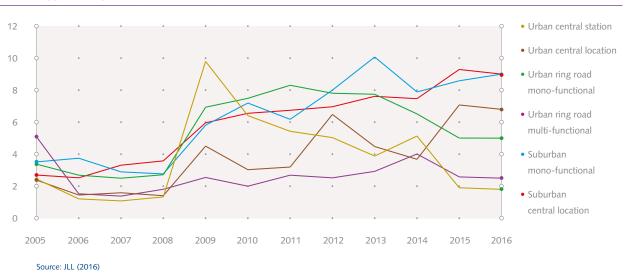
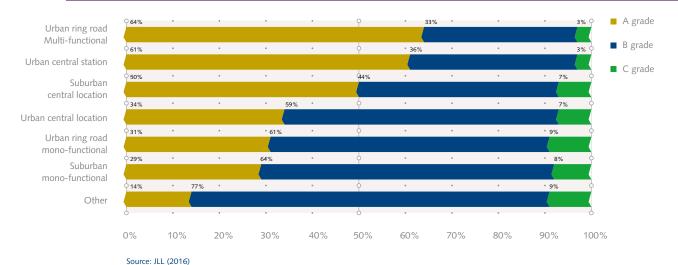


Figure 4.16 Supply/take-up ratio by location (50 largest cities)



Similar analyses can be made based on location type. This analysis shows that urban locations which offer plenty amenities i.e. Urban Central Station and Urban Ring Multifunctional locations, have a lower than average ratio of 1.9 and 2.6 respectively for 2015. Suburban locations show a widening trends since 2008. This indicates that these markets do not have a healthy balance between supply and take-up. Either the market faces oversupply and/or subdued demand for space.

Figure 4.17 Office market take-up by location type and grade



Office rents major cities increasing since 2014

Office rents historically varied widely, with the G4 showing the highest rents of the country, followed by other cities in the Randstad. While rents in the G4 showed volatility during the economic downturn, recent figures indicate that rents have been rising since 2013, currently standing at over € 190 per sq m per year on average which is the highest registered since 2005.

The remainder of the Randstad as well as the rest of the Netherlands have shown a decreasing trend in rental levels since 2009 largely as a result of the economic downturn, but have since 2015 shown a minor recovery in rental levels. This indicates that the gap with the G4 cities has grown, similarly to the occupational markets in these geographies. Nevertheless, the recent pick up in rental levels is likely to continue on the back of the improving occupier markets. See figure 5.19.

The first signs of recovery differ per location type. Rental decline in urban cities stabilised during 2013 and started to increase during 2014, while smaller cites saw a similar trend in 2014 and 2015 respectively. As occupier demand is more focussed on the quality of the office building, there is also a strong distinction in rental growth between the quality of office space. While the rent index for A grade office space has been less volatile and is already showing signs of growth, C grade properties are showing signs of further deterioration (See figure 5.20). This trend is being emphasized by occupier preferences, a tenant preferably leases space in a modern (A grade building).

Figure 4.18 Average rent development office market (sq m)



Figure 4.19 Average rent development office market (sq m)



4.3 Office investment market

4.3.1 Office investment market contributes to 20% of total investment volume

Dutch investment volumes have been quite volatile over the last decade. A new all-time record was achieved in 2007 when approximately € 11.5 billion of investments transactions in commercial real estate were registered. Offices were accountable for 61% of the total investment volume then. A variety of portfolio transactions contributed strongly (approx. 20%) to the total investment volume.

Due to the financial crisis, which started in 2008, the investment volume in the Dutch property started to decrease to \le 9.2 billion in 2008. After several subdued years, where investment volumes fluctuated around \le 5 billion per annum, the investment market showed a slight recovery in 2013 a 21% increase compared to 2012.

The recovery of the Dutch investment market in 2013 was driven by the entry of international investors new to the Dutch market. Anglo-American investors in particular entered the Dutch market because of attractive market conditions and pricing. They either focused on large-scale portfolio transactions within the office and logistic sectors in order to acquire a platform in the market, or they bought single-asset hotels to add to their existing portfolio. This trend accelerated in 2014 and 2015 with 2015 investment volume surpasses historic peak volumes.

New sources of capital entered the Dutch real estate investment market in recent years. Among others Asian investors made their first direct investment in Dutch real estate. Supported by new sources of capital, but also Dutch institutional capital, the total investment volume in the Netherlands amounted to approximately € 11.6 billion in 2015, a new record. 2016's investment volume has come to € 12.5 billion, which has set a new record high.

Increased investment activity was driven by low interest rates and compared to other European countries relative attractive pricing. In addition, occupier markets, as described in paragraph 5.1 start to recover as well. The recovery of investment volumes was predominantly driven by offices and residential.

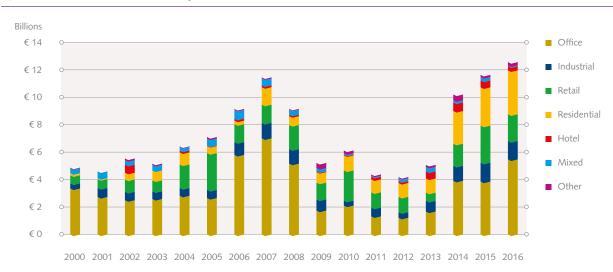


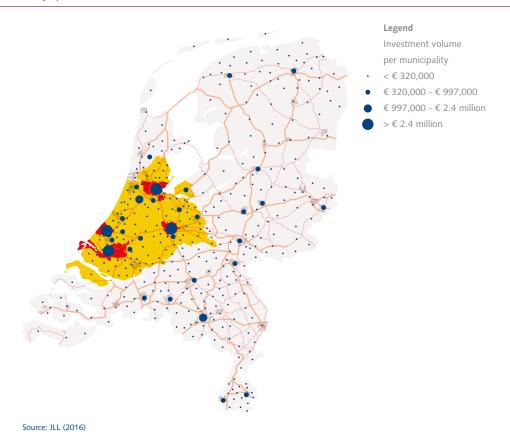
Figure 4.20 Dutch investment volume by sector (2000-2016)

Source: JLL (2016)

Office investment activity generally accounts for, on average, 40% of total investment activity (2006-2015). In 2014, office investment volume doubled and amounted to € 3.9 billion. Due to the low interest rate environment and the expected recovery of the Dutch economy, foreign real estate investors entered the market or expanded their presence. In 2015, total office investments amounted to € 3.84 billion, a figure which increased to its highest level since 2008 in 2016 with over € 4.5 of office investments registered in 2016.

4.3.2 Major cities accountable for lion share of the investment volume

Compared to a decade ago, when office investment activity was widely spread throughout the Netherlands, current activity (2014-2016 Q3) is more focused on four biggest cities (G4). Since 2006 office investments in the G4 were accountable for 45% of total investment activity. 28% related to nationwide portfolio deals and the rest related to locations outside the G4.



4.3.3 Attractiveness Dutch office market attracts new investor types

Dutch capital

Traditionally, on the buy side, Dutch office investments are dominated by domestic capital, predominantly funded through Dutch institutional investors. On average, over the previous ten years (2005-2014) approximately 51% of all office investments were funded with domestic capital. Since 2010, the share of domestic capital decreased slightly as Dutch investors changed their focus towards residential and retail. Simultaneously, purchasers became more diversified as new private equity investors, who raise their capital on a global scale, entered the Dutch market. German funds also continued to play a vital role in securing core assets in the main central business districts. Consequently, the share of Dutch capital accounted for just 29% in 2013, while German and global investors accounted for 29% and 18% respectively.

On the vendor side, Dutch players also have a dominant market share. Over the past ten years (2005-2014) their average annual share amounted to almost 75%. This relatively high share on the vendor side can be explained by rejuvenation strategies by most institutional and private investors.

In 2015 and the first half of 2016 the share of Dutch capital active on the buy side is 30% and 16.5% respectively. Purchasers behind domestic capital remain institutional and private investors.

German capital

Disposals by German funds have mainly been driven by the phased liquidation of openended funds. The liquidation of funds has given rise to an increasing supply of (highquality) property on the market, inside and outside the Randstad in the Netherlands. While this has presented opportunities for investors, it has also exerted downward pressure on property values. This was due to the relatively high supply of property in relation to limited demand in the market. As market fundamentals started to show slight improvements, this resulted in vendor price expectations and property valuations being more aligned. This eases the case for German funds to go forward with the liquidation of certain funds. During 2014 and 2015, German investors accounted for 27% and 17% respectively on the vendor side. In the coming years, German open-ended funds will continue to act as sellers in the Dutch market.

Figure 4.22 Investor source

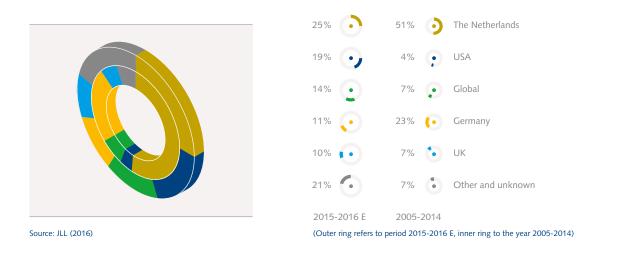
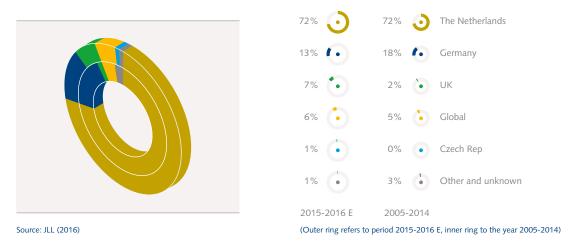


Figure 4.23 Vendor source



Over the course of the last ten years, more foreign capital entered the Dutch market. Historically, foreign capital was dominated by German funds, however the spectrum of buyers in the Netherlands is nowadays much more diverse. Currently, global capital (i.e. private equity buyers) is most dominant in transactions in the Dutch real estate market.

Private equity funds' entry

In addition, due to the deteriorating market conditions in 2012 and 2013, the Dutch office property investment market witnessed an increasing number of sales (with a substantial discount) to private equity funds. Either the vendor changed its strategy and was not willing to invest capex to obtain and/or add value to the asset/portfolio, or the vendor was in a distressed situation. Private equity has remained active in the Dutch market; even now the market is showing strong signs of improvement. Over the last 1.5 years private equity have moved slightly to the vendor-side as yields on office properties reached a historic low.

4.3.4 Pricing Dutch office space relatively attractive in European comparison

The continued interest in prime long-leased office properties resulted in a tightening of prime net initial yields in 2010 for office space within the five major cities. This downward pressure lasted until the second half of 2011, when the Dutch property office market showed signs of weakness. In 2011 and 2012, during the Eurozone downturn, the Dutch prime net initial yields moved out and made office real estate relatively attractive in the context of Europe. As the market started to recover in 2013, yields remained stable for a short period of time. Already by the end of 2013, investor demand for prime properties in the Amsterdam office market picked up and yields showed a slight contraction (-10 basis points) during the fourth quarter.

During the course of 2014 and 2015, interest in the Dutch office market increased even further. With new sources of capital entering the market, competition for core and noncore assets started to increase. On the back of increased competition and decreasing bond yields, property investments in the Netherlands gained interest. Prime office yields in Amsterdam showed a further contraction of 30 basis points in 2014 and an additional 45 basis points in 2015. The current prime net initial yield for Amsterdam is 4.25%. This yield is comparable with the lowest level recorded in the past 20 years. With current outstanding investments in the market, it is expected that the prime yield in Amsterdam will show a further contraction during the course of 2016.

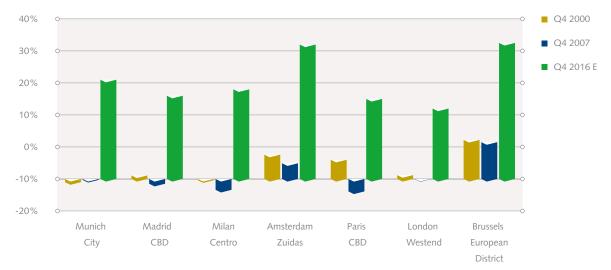
Other large cities in the G4 such as Rotterdam, The Hague and Utrecht are always lagging slightly behind Amsterdam. During a recovery period, investors tend to target Amsterdam first. Where prime yields in Amsterdam already showed contraction in the fourth quarter of 2013, prime yields in Rotterdam, The Hague and Utrecht remained stable during 2013 and 2014. In 2015, the cities followed in the footsteps of Amsterdam with a first prime yield contraction of 10 to 25 basis points.



Figure 4.24 Development of prime net initial office yields (NIY)

Despite the yield compression witnessed since 2014 in several domestic markets, the Netherlands remains among the most attractive European office markets to invest in given the significant spread to the 10 year government bond yield. Even though the Government Bond Yields perform more volatile than property yields, the spread at the end of Q2 stood at 466 basis points compared to some 50 basis points spread in 2007. This marks the relative affordability of prime Dutch office space, with regional offices being even more favourably priced. Moreover, given the significant spread in relation to - for example 2000 and 2007 - it is expected that bond yields can rise over the next months without impacting strongly on property yields.

Figure 4.25 Major European office market yields spreads to 10 year govt bond yield



Source: JLL, Oxford Economics (2016)

4.4 Legislation

4.4.1 General

Spatial planning system

National, provincial, and basic municipal government plans were all replaced by structural visions (Structurvisie). Structural visions, which are related to strategic policies, set forth the basic principles of spatial policies, as well as the mode of execution of the policies. Unlike before, the national and provincial structural visions are internal guidelines and are not binding on lower level governments.

Land use and zoning (bestemmingsplan)

While the municipalities have always devised the land use zoning plans for non-developed areas, the new Law required that they devise and update zoning plans for all areas. The Law permits the municipalities to devise plans without provincial approval, but the law enables the provinces and the national government to devise an adaptation plan (Inpassingsplan) with respect to land use zoning that affect their respective interests.

4.4.2 Ladder voor duurzame verstedelijking

The 'Ladder voor duurzame verstedelijking' (sustainable urbanization) obliged governments to make careful decisions in the process of new urban developments in a zoning plan. The goal is a sustainable and effective use of space and therefore preventing (unacceptable) vacancy and unnecessary developments in natural areas. The Ladder is thus an important tool for good planning.

4.4.3 Kantorenconvenant

A five-year covenant was signed on 27th of June 2012 between local and provincial government, national government, investors, developers, office occupiers and real estate financiers. It was agreed in the covenant that parties in each office region would formulate a vision and objectives for existing office stock, new developments and the use of regional reprogramming.



5 Outlook

The office environment is constantly changing, especially during the last decade. From an occupier perspective, the office was traditionally a room or other area where administrative work was undertaken - preferably at minimum cost. The role of the office is now a key differentiator in, for example, attracting and retaining talent and promoting brands.

As a result, companies are increasingly embracing employees' expectations for technology-enabled ways of working and adapting their workplace strategies accordingly. An innovative design, focused on flexibility, hospitality and interaction, in a well-connected location can boost employee engagement and attract the desired talent. Driven by these changes on both the occupier and employee side, the office has taken on a different personality. For employees, it has moved from a place where we have to go to work to a place where we want to go to work. Due to these changes, the office market is moving towards the hospitality market. The office market will increasingly see concepts where office, retail and hospitality are successfully combined.

In order to create a successful office environment which offers future-proof real estate, location, property and use form a united entity. Each of these three different elements face their own challenges and opportunities.

Location

Cobsolescence

Object

Object

Figure 5.1 The key to future-proof real estate

Source: FGH Vastgoedbericht 2015

Winning cities and locations:

there is more than location, location, location

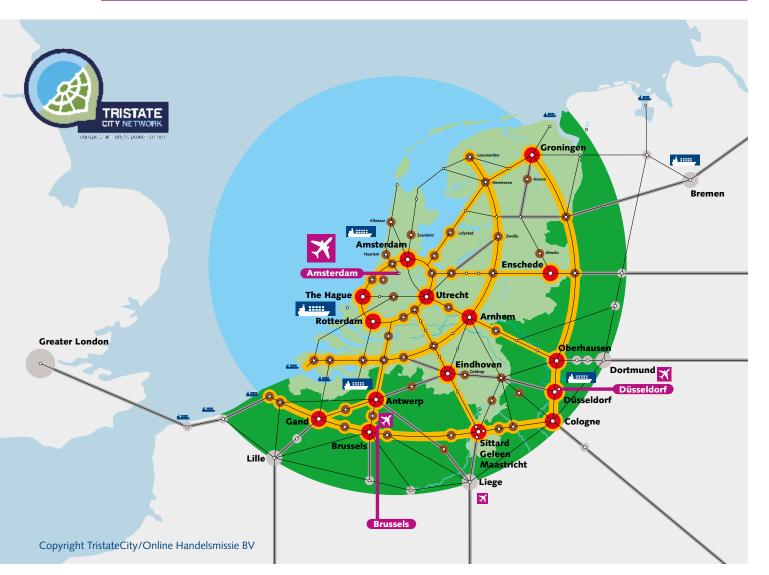
The current cycle of globalization, urbanization and technological advancement is leading to a shake-up of the global urban hierarchy and creating sweeping changes to the geography of commercial real estate opportunity. In this new era of city competition, success is no longer purely about size or inherited attributes, but revolves around innovation, livability and a city's ability to transform and adapt to a constantly changing socio-economic landscape.

For the Netherlands the question remains in what way Dutch cities will compete on a regional and/or global scale. In addition, the Netherlands, especially the Randstad conurbation has a lot to offer.

The Tristate City Network model (see figure 5.2) shows the competitiveness of the wider region. According to Tristate City the region offers:

- Europe's number 1 urban power centre with 30 million people;
- World class international institutions such as: European Union, United Nations, Nato and European Space Agency;
- 8 International airports such as: Schiphol airport, Eindhoven airport, Flughafen Düsseldorf, Brussels airport and Rotterdam-The Hague airport;
- World/European headquarters from: Shell, Philips, Akzo Nobel, Tesla and among others SAP;
- Top universities such as University Leiden, Erasmus University, Utrecht University and the University of Amsterdam.

Figure 5.2 TristateCity Network (Holland, Flanders, Rhine/Ruhr)



Source: tristatecity.nl

Within the Tristate City Network collaborations and clustering of occupiers will arise which provide the Netherlands with the ability to boost various sectors. There is an increasing share of demand focussing on public transport hubs in the Randstad which offer excellent accessibility by car and public transport preferably via an intercity train connection. These public transport hubs offer excellent connectivity in addition to the right level of amenities and a mix of functions in the area.

Winning office buildings: how to stand out in a full crowd?

The perfect office building is located, as mentioned before, in or close to a public transport hub with plenty amenities in the direct vicinity and a mix of different functions in the area. But what about the office itself? Offices will become places of collaboration and connection because culturally we need touch points as we want to be socially connected. Space will be flexible and divided into flexible work zones with no fixed seating and no offices for managers.

Technology has facilitated the desired flexibility and this has given rise to a greater desire for new types of space, which is already translating into new lease structures. Workspace will become increasingly polarized as a market of extremes emerges.

At one end of the spectrum, investors will target a new class of 'platinum prime' space; grade A, top tier location (public transport hubs in the G4) space designed to suit the behemoths of the new business world. This space will become increasingly scarce, which will make it the least volatile corner of the market. This will underpin prices. Platinum prime space will provide stable, long term yield for the more risk-averse investors.

At the other end of the spectrum, a growing cohort of super-dynamic assets will offer investors capital growth opportunities. This space-flexible, modular and built to suit fluctuating business cycles and erratic growth paths among an increasing number of dynamic start-ups - will require a greater understanding of the building and the behavior of the businesses within it, in order to generate income and manage risk.

Between these extremes, a new asset class will emerge to bridge the gap between institutional leasing and co working. Designed for dynamic businesses. This segment will often be facilitated through partnerships, which will marry equity with the expertise to actively manage what will become an increasingly fluid use of space. An example is the current relative new concept HNK of NSI.

In both types of space hospitality is redefining office space. Increasingly it is a way to stand out from the overcrowded market. Exceptional customer service, like the kind found in the best hotels, is one element that keeps tenants renewing and/or interested in the building. Other elements which are becoming increasingly important are sustainability and technology (smart buildings). With recent developments around smart buildings sustainability is nowadays fully integrated into the building design. World class example is The Edge in Amsterdam. The Edge is the smartest and greenest building in the world, according to British sustainability rating agency BREEAM, which gave it the highest sustainability score ever awarded: 98.4%.

Winning workplace: it's all about the user experience

A smart and green building which stands out in the crowd located within a public transport hub, is it enough from an occupier perspective to attract talent?

In the last five years the workplace has gone through significant change, with the traditional office model becoming redundant to many organizations. Mobility and technology are evolving at such a rapid rate that new workplace models are moving from the periphery into core corporate real estate strategy. Activity based working (ABW) was considered pioneering 10 years ago, yet today is the current model of choice.

Creating the workplace is only half of the equation, curating the space for an engaging workplace experience is just as important.

Organizations cannot afford anymore to think of their space as being static. Once a workplace has been delivered, an organization needs to monitor how the space is being used, not only from an utilization perspective, but also from a behavioral perspective. Intelligent (smart) buildings today allow for real time feedback from occupiers on how the space meets their needs. An organization should and will use the data to modify, re-organise and fine tune the space to keep it relevant to the behavioral profile of the occupants.

All in all the office market is transforming and will be much more concentrated around public transport hubs and the building itself is a smart, sustainable and flexible property which offers a high standard service towards its users.



Appendix: definitions

Office

Office stock represents the total amount of completed office space in buildings mainly used for office purposes within a market that is capable of occupation regardless of the type of ownership or type of building quality, as at the survey date (normally at the end of each quarter period).

Stock includes both commercial and public sector offices, purposebuilt offices, offices that have been structurally converted from other uses and independent offices that are part of mixed-use development. It excludes, however, ancillary offices within property that is predominantly used for non-office purposes, e.g. retail, distribution/warehousing or industrial uses

Prime rent

Represents the top open-market rent that could be expected for a notional office unit of the highest quality and specification in the best location in a market, as at the survey date (normally at the end of each quarter period).

The Prime Rent reflects an occupational lease that is standard for the local market. It is a face rent that does not reflect the financial impact of tenant incentives, and excludes service charges and local taxes. It represents JLL's market view and is based on an analysis/review of actual transactions for prime office space, excluding any unrepresentative deals. Where an insufficient number of deals have been made for prime office space, an assessment of rental value is provided by reference to transactions generally in that market adjusted accordingly to equate to prime.

Average rent

Represents the average mean value of all known face rents achieved on leasing transactions completed within a market during the survey period (normally calculated annually, or quarterly on a 12 month rolling basis). It excludes any unrepresentative deals.

Prime Yield

Represents the best (i.e. lowest) "rack-rented" yield estimated to be achievable for a notional office property of the highest quality and specification in the best location in a market, as at the survey date (normally at the end of each quarter period). The property should be let at the prevailing market rent to a first class tenant with an occupational lease that is standard for the local market. The prime initial net yield is quoted, i.e., the initial net income at the date of purchase, expressed as a percentage of the total purchase price, which includes acquisition costs and transfer taxes.

The Prime Yield represents JLL's "market view", based on a combination of market evidence where available and a survey of expert opinion.

Take-up (demand)

Take-up represents floorspace acquired within a market for occupation during the survey period (normally three-monthly). A unit is registered as taken-up when a legally-binding agreement to acquire the unit has been completed. Take-up includes floorspace leased and sold for occupation, and the pre-lettings of floorspace in course of development or prior to the start of construction.

Take-up quality (grade)

Take-up grade A: Represents take-up of floorspace in buildings with rents that are above average for the area. These buildings should have high quality standard finishes, state-of-the-art-systems and good accessibility.

Take-up grade B: Represents take-up of floorspace in buildings with rents in the average range of rents for the area. Building finishes are fair to good for the area and systems are adequate, but the building can no longer compete with grade A at the same price.

Take-up grade C: Represents take-up of floorspace in buildings with functional space at rents below the average for the area.

Vacancy rate

The Vacancy Rate represents office floorspace which is currently offered and-or available within six months, inclusive sub-lettings, in all completed buildings within a market as at the survey date (normally at the end of each quarter period), expressed as a percentage of the total stock.

Vacancy rate quality

Grade A Vacancy Rate: Represents grade A vacancy as a percentage of the total stock.

Grade B Vacancy Rate: Represents grade B vacancy as a percentage of the total stock.

Grade C Vacancy Rate: Represents grade C vacancy as a percentage of the total stock.





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