MARKET TRACKER JUNE 2016

The Nordics – increasing demand from international investors

International investors are developing growing interest in northern European countries as potential investment opportunities. This has led to a stronger need for information about real estate markets in the Nordic countries. This Market Tracker offers insight into these economic regions and provides assistance for risk assessments. After all, in order to invest with success, it's important to understand how operations in those countries function.

Economy in the Eurozone

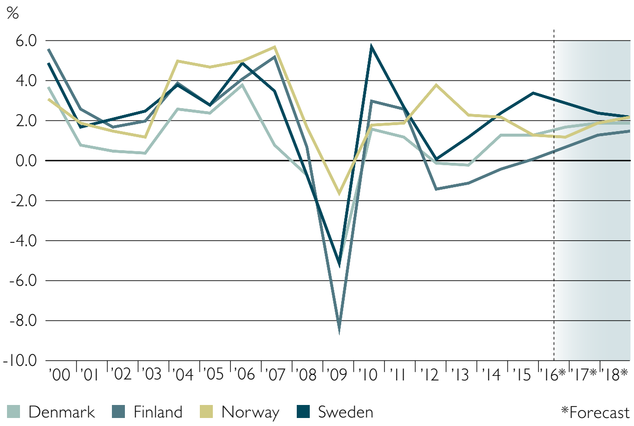
Heading into 2016, the economic growth of the Eurozone is yet slow. However, the recovery is becoming broader-based and more self-sustaining, despite the turbulences in the equity markets earlier this year and the cooling of the Chinese economy. After initially being led by consumer spending in 2014-15, conditions are now right for the rebound in capital investment that should underpin a steady (if unspectacular) recovery in the medium term. GDP growth of 1.8% in 2016 and 1.9% in 2017 is expected. GDP growth in the Euro area slowed down in Q1 2016 to 0.5% and the economy was back in deflation in February. The economy is heavily supported by the ECB and low commodity prices. In the longer term, the region is dependent on a positive exports development for a sustainable recovery – a development that will be hampered by the slow global growth. Growing exports and rebounding domestic demand mean that capacity constraints are emerging in a number of sectors.

The main risk being discussed is naturally the Brexit but also of concern this year will be the fiscal policies of Portugal and Spain, whilst worries over Italy could also materialise. And finally, the challenges created by the refugee issue are only partially solved within the EU 28. A breakup of the political structure remains a possible scenario for this year.

Economy in the Nordic countries

Although the Nordic countries have many things in common a look at the current state of their economies reveals major differences:

FIG. I: GDP GROWTH



Source: Catella Research, IMF

- Growth in **Denmark** is slow and is tracking the broad European mid-field, with consumer spending picking up, fueled by lower unemployment rates.
- **Finland** is also benefitting from European growth, with 2016 on track to be better than 2015, but from a considerably worse starting point than Denmark. Unemployment in Finland will probably not fall until 2017 and thus household purchasing power will remain weak.
- **Sweden** is growing at an internationally and historically fast pace. However, soaring consumption and housing investment are unlikely to continue, so the economy appears set to slow.
- **Norway**, meanwhile, is following its own path, which is largely determined by the price of oil. The tumbling oil price

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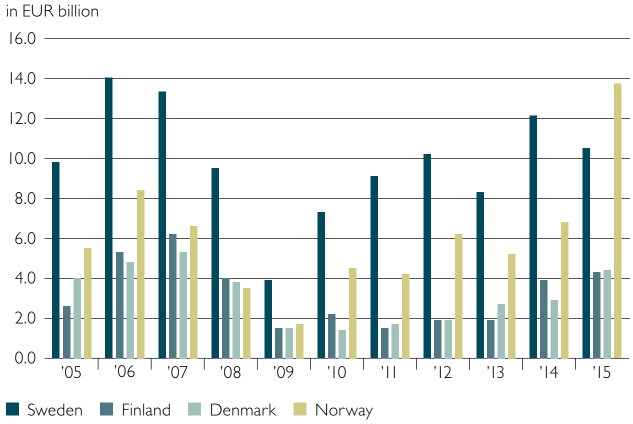
puts additional pressure on the economy and increases the risk of a more serious slowdown. High levels of government consumption and investment growth have so far kept the economy relatively buoyant, with consumers performing well despite a pronounced fall in consumer confidence.

Just as there are differences in their economic outlooks, interest-rate projections also vary across the Nordic countries. Denmark appears to be on track for a minor unilateral rate hike from its central bank (Denmark's Nationalbank) to slow the fall in the currency reserve, which has dropped back to the level prior to the major currency inflow in the opening months of 2015. Sweden's Riksbank is fighting to prevent inflation expectations becoming fixed at too low a level. Short-term interest rates are negative due to the Riksbank's expansive monetary policy. Lower interest rates are a tool Norway still has available to stimulate the economy if the slowdown in the oil sector makes that necessary – and while rate cuts may not be needed, Norges Bank is ready to act. This will help offset the risk of the low oil price triggering a crisis that includes sharply falling house prices – though falling house prices still constitute a risk to the Norwegian economy.

Real estate market

Commercial transaction volume in the Nordic region resulted in a record year, with a total investment volume reaching approx. EUR 32.8 bn, an increase of 28% compared to the previous year. The investment volume was mainly driven by large cross-border deals as well as large portfolio deals. Denmark, Finland and Norway all saw commercial volumes increase compared to 2014. Sweden, however, is traditionally the largest contributor to the Nordic transaction volume and the year 2015 ended up at EUR 10.5 bn, a decrease of 13% compared to 2014. Norway reached a record year, with an investment volume reaching up to approx. EUR 13.7 bn, which is an increase of 101%. The growth mainly came as cross-border investors took advantage of currency movements to invest at significant discounts as well as due to the sale of three large retail portfolios with a total volume of approx. EUR 2.2 bn to Starwood, Schage Eiendom and Partners Group. In Finland, last year's commercial transaction volume was EUR 4.2 bn, which is the third highest volume ever, and not far from the 2007 record of EUR 6 bn. In addition to the direct real estate transactions contributing to the volume, certain share transactions that reflect international investors' interest towards properties in Finland. Denmark contributed to approx. EUR 4.4 bn which marks an increase of 52% compared to 2014. The main drivers on the market are institutional as well as real estate companies focusing on well-located office properties, above all in Copenhagen's CBD and Harbour submarket. Cross-border activity in Denmark currently amounts to 28% and marks the highest result of the previous three years.

FIG. 2: DIRECT COMMERCIAL PROPERTY INVESTMENT VOLUMES



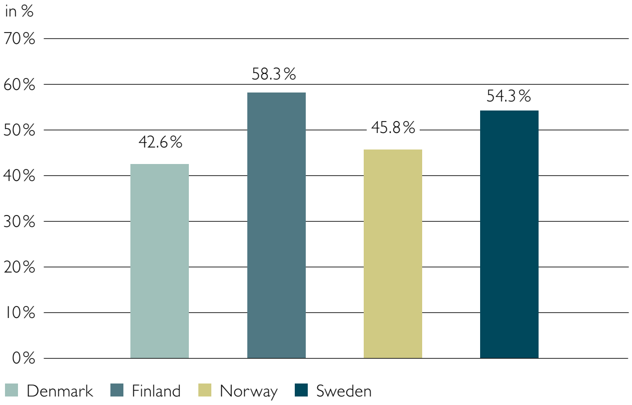
Source: Catella Research, PMA

In 2015, retail volume in the Nordic markets almost doubled to a total of EUR 9.6 bn, mostly driven by large acquisitions in Norway, but Sweden and Finland, too, represent good growth rates. However, office investment dominated in 2015, with a volume of EUR 14.5 bn, representing an increase of 33% compared to the previous year. Nordic office volume fell to EUR 2.2 bn in Q1 2016, down by 51%. The market in 2015 was characterized by an inflow of cross-border capital and was lagging at the beginning of the year.

Despite these facts, we continue to see an increasing interest, resulting in an increasing buying trend, from international investors in 2016.

On average, the foreign investors' share of office and retail investments in the total Nordic region represented 50% in 2015. Finland's and Sweden's share is above average and amounts to 58% respectively 54%. Foreign investors' demand is widening, both in terms of geography and asset type. Office properties are still the preferred asset with higher transaction volume and the majority of foreign investments in 2015 focused on core offices in Helsinki, mainly from Swedish and German investors. In contrast, retail acquisitions mainly took place in Oslo and Copenhagen, led by investors from UK, Switzerland and Germany. In the first quarter of 2016, cross-border investments into the Nordics fell by almost 50%, but nevertheless the trend seems resilient given the significant interest in Nordic real estate, particularly among American, German and British investors. Furthermore, there has been a shift in the trend since November 2015 as listed property companies began to reduce their investment activities and thus may create good investment opportunities for other players like Swedish institutions and international investors.

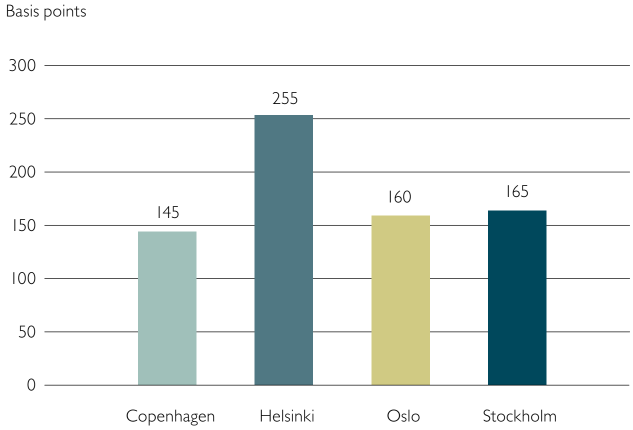
FIG. 3: FOREIGN SHARE OF TOTAL INVESTMENT VOLUME IN NORDIC COUNTRIES IN 2015, OFFICE AND RETAIL PROPERTIES



Source: Catella Research, RCA

Due to increased demand from international investors and favourable financing costs, 2016, too, witnessed downward pressure on office prime yields across the region. In Sweden prime yields in the key office cities are very close to all-time lows and even contracting. Competition will remain fierce in the core office sector and the subsequently narrowing prime yields could push investors towards the 2nd and 3rd-tier markets, or towards value-add or opportunistic investments. CBD pricing remains at or close to all-time lows, the lack of assets for sale and the weight of money waiting to be deployed could lead to additional yield compression in 2016. We are expecting yield levels to remain stable in the inner cities. However, we may see a further decline in yields in other submarkets and secondary locations as investors look outwards and broaden their investment horizons. Prime yields in Copenhagen and Oslo are contracting almost identically. Office properties in Copenhagen, especially in the prime segment, offer appealing risk-adjusted returns compared to the more liquid asset classes. Currently, the more secondary office locations are starting to attract some investment in short-lease office properties. Demand for secondary office space has been fueled by the favourable outlook for the Danish economy and employment growth, although the yield compression in the prime market may also redirect some demand into the secondary market. Prime yields in Copenhagen City are expected to decrease slightly in 2016. While most of the demand is focused on the core areas of Oslo, 2nd-tier cities are increasingly on the investor spectrum. Nevertheless, investor interest for core will remain strong and thus prime yields will decrease further in 2016, similar to the development in Copenhagen. A spill-over effect from the yield compression in the prime market is expected to create more dynamic market conditions for the secondary markets during 2016. Momentum in the investment market in Helsinki has also picked up, with the CBD prime yield compressing by 25 bps to 4.70% during 2015. Due to the limited supply of core assets, investors have broadened their scope, and yields on core plus properties have also decreased slightly. In the short to medium term, prime yields are expected to come under downward pressure, falling by another 20bps in 2016. There could be some interesting opportunities arising in the secondary Helsinki markets for those investors seeking active asset management opportunities.

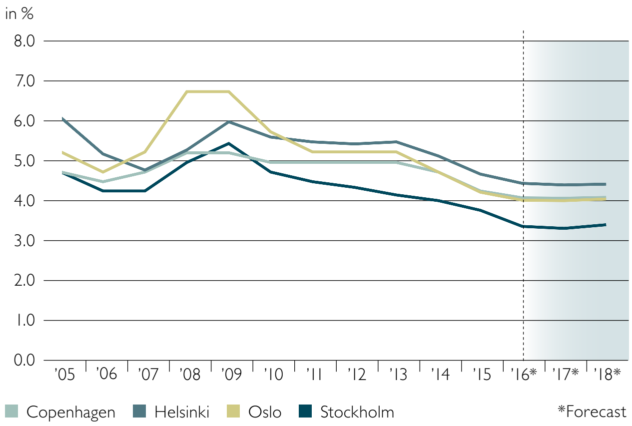
FIG. 4: OFFICE YIELD SPREAD – CBD VS. CITY FRINGE*



* Based on data of Q2 2016

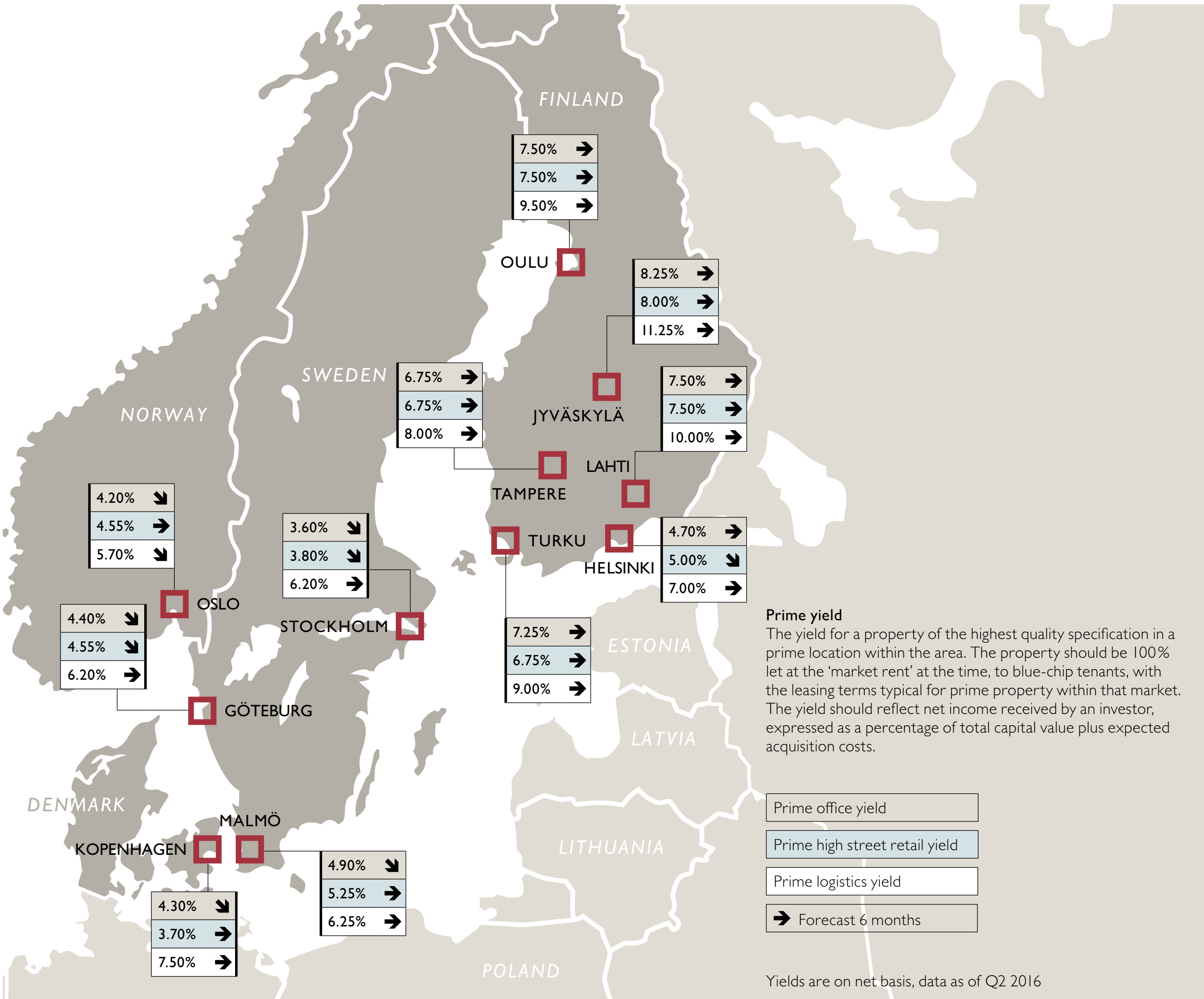
Source: Catella Research

FIG. 5: OFFICE PRIME YIELDS



Source: Catella Research

FIG. 6: MAP OF NORDIC PRIME YIELDS 2016



Source: Catella Research

TAB. 1: NORDIC KEY MARKETS OVERVIEW 2016*

Market	Prime office rent EUR/sqm/ month	10yr average EUR/sqm/ month	Prime yield office %	10yr average %	Office Take-up in thsd. sqm	10yr average in thsd. sqm	Office vacancy rate in %	10yr average in %	Office completion in thsd. sqm	10yr average in thsd. sqm
Copenhagen	19.70	18.50	4.11	4.87	285	218	10.2	7.9	114	107
Helsinki	31.50	29.00	4.70	5.33	-	-	10.8	9.4	67	47
Oslo	31.90	29.70	4.05	5.40	-	-	8.1	6.8	100	153
Stockholm	41.80	36.50	3.40	4.47	330	394	8.8	10.9	204	106

* Figures based on forecast data for end of 2016

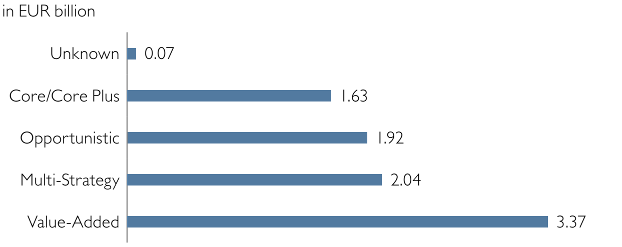
Source: Catella Research

Investment Market

Germany, France and the UK consistently rank as preferred locations for investments into Europe. This is highly reflective of the size, maturity and transparency of these markets which enable investors to access the markets more easily for the risk-adjusted returns they seek. Real estate funds' first choice for investment is Germany and the UK. France is in third place, followed by the Netherlands on the list of the most popular places for funds. The next four countries in descending order of preference are Sweden, Belgium, Denmark and Finland. In 2016, most investors preferred the office sector, followed by retail, industrial/logistics and residential.

Since 2012 there have been 20 European funds actively marketing and targeting the Nordic countries with a total fund size of approx. EUR 9.03 bn. The majority of these vehicles are closed-ended funds (75%) with high target volumes. Most of these funds are targeting value-added and opportunistic investments, whereas core funds are targeting approx. EUR 1,63 bn. The smaller volume of core funds also refers to current market situation in the Nordic countries, with rare core products in A-markets and more and more capital targeting value-added and opportunistic investments in 2nd-tier locations. Currently 46% (4.12 EUR bn) of maximum fund size of the past five years is invested.

FIG. 7: TARGET FUND ACTIVITY IN THE NORDICS BY INVESTMENT STYLE, PAST 5 YEARS



Source: Catella Research, IREI

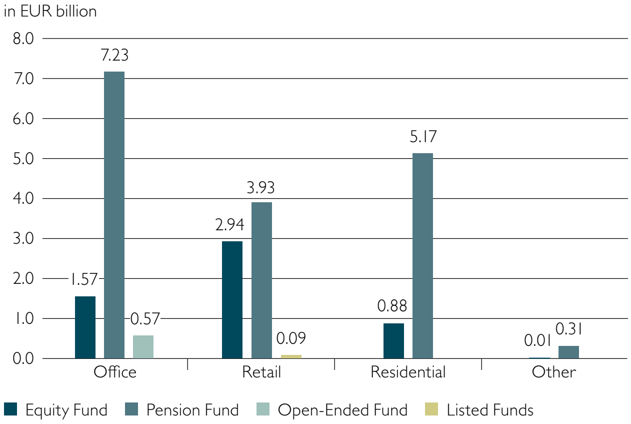
TAB. 2: TOP 5 FUNDS WITH NORDIC MARKET FOCUS, (PAST 5 YEARS, BY FUNDS' SIZE)

Fund Name	Fund Investment Type	Product Type	Maximum Fund Size (EURm)	Total Capital Raised (EURm)
Meyer Bergman European Retail Partners III	Direct Properties/Equity	Closed-end Fund	1,250	320
Madison International Real Estate Liquidity Fund VI	Direct Properties/Equity	Closed-end Fund	1,201	1,035
Patron Capital V, LP	Direct Properties/Equity	Closed-end Fund	1,100	735
Europa Fund V	Debt,Direct Properties/Equity	Closed-end Fund	1,000	362
ASR REIM Mobility Fund	Secondary Fund;Securities, Direct Properties/Equity	Closed-end Fund, Co-Investment Program	750	–

Source: Catella Research, IREI

Regarding investment activity by different types of funds in the past five years, pension funds are the most active players in the Nordic countries with strong focus on office properties. Even residential investments could increase during the past five years due to strong acquisitions of Sweden-based pension funds. In contrast, retail assets register strong investment volumes by Swedish as well as UK equity funds. European-based open-ended funds only invested EUR 570 million in Swedish office properties.

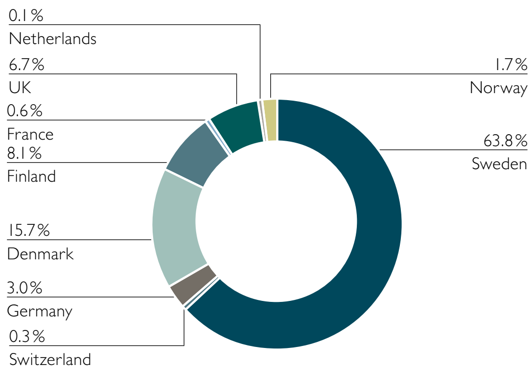
FIG. 8: TRANSACTION VOLUMES OF EUROPEAN TYPES OF FUNDS IN THE NORDICS, PAST 5 YEARS



Source: Catella Research, RCA

In general, 89% of invested capital in the Nordic countries is based on domestic markets (Sweden, Denmark, Norway, Finland) with a high share of Swedish capital. Investment volume of Norwegian funds has only amounted to EUR 383.5 m in the past five years and mainly focuses on office properties. The UK and Germany are the countries with the largest share of foreign fund capital in the Nordic countries. Unlike the Norwegian and German funds, UK-based funds, especially Equity funds, strongly invested in retail properties. Thus, lacking core office properties also contribute to higher investment volumes in retail assets.

FIG. 9: ORIGIN OF EUROPEAN FUNDS INVESTED IN THE NORDICS, PAST 5 YEARS*



* Office, retail and residential volumes

Source: Catella Research, RCA

Investment implications/asset allocation

The Northern European property market is increasingly featuring in the pan-European real estate portfolios of institutional investors. Compared with other European countries, the economic transparency and prosperity of these markets makes them a popular option. Finland is the only country in the region which recently had to cope with an economic re-adjustment, but it is now getting itself back on track for long-term growth. In Norway and Denmark, growth levels are predicted to remain substantially above the EU average for a considerable length of time. Sweden and Finland are expected to perform slightly below the EU average.

Regarding potential for diversification, Catella Research has calculated the relevant correlation coefficient based on the total returns for office space at selected locations around Europe.

TAB. 3: CORRELATION COEFFICIENT

	Copenhagen	Helsinki	Oslo	Stockholm
Brussels	0.35	0.26	0.30	0.34
Prague	0.55	0.62	0.74	0.37
Copenhagen	1.00	0.46	0.57	0.42
Helsinki	0.46	1.00	0.59	0.79
Paris	0.61	0.55	0.70	0.66
Berlin	-0.13	-0.08	0.03	0.19
Cologne	0.02	-0.33	0.26	-0.18
Dusseldorf	0.06	-0.17	0.37	-0.21
Frankfurt	0.30	0.23	0.58	0.24
Munich	0.30	0.32	0.54	0.42
Stuttgart	0.21	0.02	0.39	0.09
Oslo	0.57	0.59	1.00	0.48
Warsaw	0.20	0.01	0.61	-0.14
Lisbon	0.18	0.09	0.25	0.39
Madrid	0.74	0.43	0.53	0.52
Stockholm	0.42	0.79	0.48	1.00
London	0.49	0.72	0.64	0.69
European Office Market	**0.58**	**0.57**	**0.77**	**0.66**

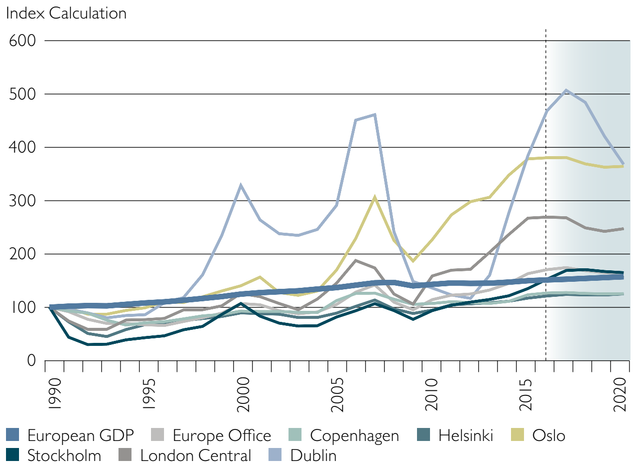
Source: Catella Research

Many markets offer clear potential for portfolio diversification. Copenhagen and Helsinki, for example, display a correlation that is slightly negative, as does Berlin. Stockholm's correlation is below the level identified for the German cities of Cologne, Dusseldorf and Warsaw. Correlations between the Nordic countries' markets are substantial. Against this backdrop, combining a Nordic segment with a German office property segment could be a successful strategy for anyone interested in risk diversification.

Across Europe, markets clearly diverge from each other with regard to volatility (standard deviation). This becomes evident when studying the index development of cap values for a selected cohort of countries.

Looking at the chart below, it is evident that Dublin and London have tremendously high volatility levels. Similarly, the Oslo market is also subject to elevated volatility. It is also interesting to see how Europe's office property sector lies slightly above the continent's economic development trend. Helsinki and Copenhagen fall below this figure.

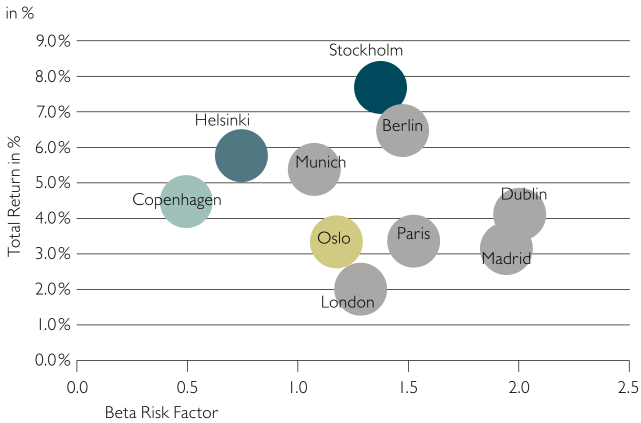
FIG. 10: PRIME MARKET CAPITAL VALUES



Source: Catella Research, PMA

The following can be stated regarding the returns analysis: The total return (without amortisation and capital costs) is factored in when calculating the yield. When assessing the risk-related situation, Catella Research has explicitly included the total market risk for the entire European office property market in order to incorporate what is known as the beta factor, i.e. the coefficient generated when comparing the covariance of a specific single investment with the total market and market variance.

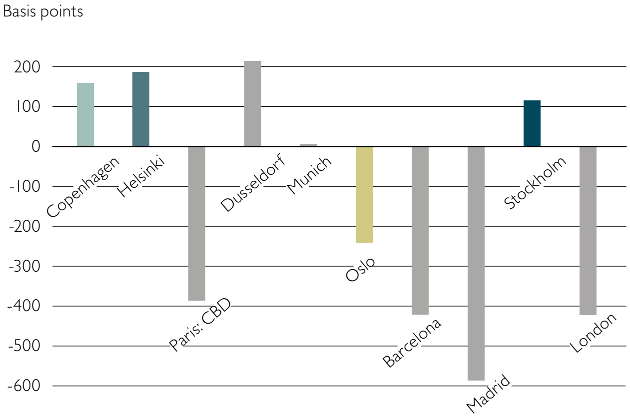
FIG. 11: RISK RETURN PROFILE (TOTAL RETURN VS. BETA RISK FACTOR)



Source: Catella Research

Of the upward of 40 markets studied, 17 lie above the market risk. Dublin displays the highest risk with a beta factor of 2.0. Places two to four are occupied by Madrid (1.94), Paris (1.72), Barcelona (1.67) and Moscow (1.67). Stockholm (1.37) and Oslo (1.17) come in at slightly higher than the overall market risk. Helsinki (0.74) and above all Copenhagen (0.49) are considerably below 1, which means their risks are lower than the market as a whole. Compared with the risks, Helsinki and Copenhagen represent extremely attractive prospects for anticipated total returns. Applying the evaluation model as per the capital pricing model (CAPM), it should be possible to generate substantial average excess returns over the coming five years. Returns for Helsinki (186 bp), Copenhagen (159 bp) and Stockholm (114 bp) lie above a fairly priced yield according to the CAPM. In contrast, returns in Oslo (-238 bp) will lie below a fair yield during the coming years. The average expected yield for Oslo is put at 3.3%. Factoring in the city's volatility figures over time, however, and the fair yield should come in at some 5.7%. As a result, we believe that anyone interested in seizing the ideal moment for market entry in Norway needs to keep a close eye on the country's market.

FIG. 12: EXCESS RETURN



Source: Catella Research

Beta Risk Factor:
The beta factor of an investment indicates whether the investment is more or less volatile than the market. In general, a beta less than 1 indicates that the investment is less volatile than the market, while a beta more than 1 indicates that the investment is more volatile than the market. In mathematical terms, the beta factor corresponds to the divisionof covariance between the expected yields from a specific investment and the expected market portfolio yield and the variance of the market portfolio.
This benchmark assessment tool plays a fundamental role in the Capital Asset Pricing Model (CAPM), an augmentation of Markowitz's portfolio theory that explains how you can evaluate the risk associated with market investment options.

Excess Return:
Catella Research Team calculate efficient yield measures (total return) based on the Capital Asset Pricing Model (CAPM) for each potential investment location and the whole European market. The specific criteria for this yield is volatility. Volatility is measured as the fluctuation of the price around the mean: the standard deviation.
In mathematical terms, efficient yield based on the CAPM is the sum of risk free return and whole market return weighted by the individual beta factor.
The comparison of efficient yield and current yield measures is represented by the excess return for the individual investment location.
Therefore, excess return is the difference between current and efficient yield based on the CAPM.

Summary

The Nordic countries are not as homogeneous as international stereotypes often suggest. There are marked differences to be aware of when investing. Not only do investors need to know how Sweden, Norway, Denmark and Finland differ when it comes to their social, economic and political arenas, but there's something else international observers should keep an eye on, as well: intra-Nordic investment patterns. This report thus concludes that the northern European countries represent enormous potential when it comes to diversifying multinational portfolios. Furthermore, they also demonstrate structural stability for long-term investors with multi-country and multi-asset funds/strategy.