Executive summary

- Physical and digital drivers are shaping the logistics landscape and increasing demand for space
- European logistics now at the early stages of rental growth cycle, having lagged the UK and US
- Nordic, CEE and Southern European logistics markets offer most opportunity for attractive returns
- Identifying value and best rental growth potential will help secure strong future returns

Overview

Investor interest in the European logistics sector continues to rise, in part due to the relatively attractive yields on offer compared to other sectors. Structural drivers, including urbanisation, e-commerce and reshoring trends, are also set to contribute further to the maturity of the sector. At M&G Real Estate, we have evaluated the physical and digital initiatives that underpin this transition and ultimately drive increased demand for logistics space, leading to stronger rental growth in the long term.

In this paper, we evaluate both the Trans-European Transport Network (TEN-T) infrastructure programme, launched by the European Commission (EC) in 2015, as well as the Digital Single Market (DSM) legislative proposals, implemented across European Union (EU) member states earlier this year. The progress of DSM initiatives by member states is measured by a recently launched Eurostat indicator – the Digital Economy & Society Index (DESI) scoreboard.

Alongside these drivers, we assess the cyclical performance of continental Europe’s logistics sector versus both the US and the UK – early adopters of e-commerce and the first markets to recover following the Global Financial Crisis (GFC). Whilst logistics vacancy rates across Europe have halved during the last five years to a new record low of 5.5%, rental growth is still only evident in a handful of markets. In fact, rents in many logistics markets are yet to recover following the GFC and sit on average still 4% below their pre-crisis peak.1

With European logistics now entering what we believe to be the early stages of its growth cycle, we have used our analysis in forecasting logistics rents. The results highlight the outperformance we expect from the overall sector and help us to identify those markets where rental growth has the potential to be strongest. We have then evaluated the most attractive markets today in terms of value and long term rental growth prospects. With logistics yields having moved significantly lower in recent years, these two traits are increasingly important for investors searching for capital growth to deliver attractive overall returns.

### Rental growth and vacancy

<table>
<thead>
<tr>
<th>Country</th>
<th>Rental Growth 2015-16 (% pa)</th>
<th>Vacancy 16/17 (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Finland</td>
<td>-1.6</td>
<td>6.0</td>
</tr>
<tr>
<td>Belgium</td>
<td>0.0</td>
<td>1.2</td>
</tr>
<tr>
<td>Netherlands</td>
<td>0.0</td>
<td>6.7</td>
</tr>
<tr>
<td>Germany</td>
<td>1.0</td>
<td>4.2</td>
</tr>
<tr>
<td>France</td>
<td>0.4</td>
<td>3.7</td>
</tr>
<tr>
<td>Italy</td>
<td>1.6</td>
<td>2.0</td>
</tr>
<tr>
<td>Poland</td>
<td>0.0</td>
<td>7.3</td>
</tr>
<tr>
<td>Czech Republic</td>
<td>0.0</td>
<td>4.7</td>
</tr>
<tr>
<td>Spain</td>
<td>2.6</td>
<td>4.0</td>
</tr>
<tr>
<td>Sweden</td>
<td>0.0</td>
<td>3.5</td>
</tr>
<tr>
<td>Denmark</td>
<td>2.2</td>
<td>2.3</td>
</tr>
<tr>
<td>Finland</td>
<td>1.6</td>
<td>6.0</td>
</tr>
</tbody>
</table>

Source: M&G Real Estate using JLL data.

1 Source: Prologis and M&G Real Estate based on JLL data.
Physical logistics drivers: Transport infrastructure

The European logistics sector is gaining recognition as a core pillar of economic growth, driven by increasing demand from consumers for ‘everything, everywhere, anytime’. Often overlooked, but forming the foundation of logistics is the infrastructure network which facilitates the movement of goods across the continent, determining both the speed and cost of each journey.

### World Bank’s Logistics Performance Index 2016

<table>
<thead>
<tr>
<th>Top 10 Global Nations</th>
<th>Rank</th>
<th>Bottom 10 EU Nations</th>
<th>Rank</th>
</tr>
</thead>
<tbody>
<tr>
<td>Germany</td>
<td>1</td>
<td>Hungary</td>
<td>31</td>
</tr>
<tr>
<td>Luxembourg</td>
<td>2</td>
<td>Poland</td>
<td>33</td>
</tr>
<tr>
<td>Sweden</td>
<td>3</td>
<td>Portugal</td>
<td>36</td>
</tr>
<tr>
<td>Netherlands</td>
<td>4</td>
<td>Estonia</td>
<td>38</td>
</tr>
<tr>
<td>Singapore</td>
<td>5</td>
<td>Latvia</td>
<td>43</td>
</tr>
<tr>
<td>Belgium</td>
<td>6</td>
<td>Greece</td>
<td>47</td>
</tr>
<tr>
<td>Austria</td>
<td>7</td>
<td>Slovenia</td>
<td>50</td>
</tr>
<tr>
<td>UK</td>
<td>8</td>
<td>Croatia</td>
<td>51</td>
</tr>
<tr>
<td>Hong Kong</td>
<td>9</td>
<td>Romania</td>
<td>60</td>
</tr>
<tr>
<td>US</td>
<td>10</td>
<td>Bulgaria</td>
<td>72</td>
</tr>
</tbody>
</table>

Several of the more advanced European countries are already global leaders when it comes to logistics, taking seven out of the top ten spots for overall performance (World Bank’s Logistics Performance Index 2016). However, to keep up with the increasing demands of a consumer-driven economy, future infrastructure investment across the EU will be crucial. Although western European nations individually rank highly, the index says nothing about the interconnectivity of these states as a whole and with the rest of Europe. Southern Europe and the Central and Eastern European (CEE) nations currently lag their western European neighbours by some margin.

Since 2011, international road freight across Europe has grown by 10%, while domestic road freight has dropped by 4%, highlighting the importance of interconnectivity. Cross-border freight travels an average of 640km from source to end user, equating to a journey roughly from the Port of Rotterdam in the Netherlands to the city of Berlin in Germany. The inconsistency of infrastructure quality across EU states therefore poses a significant problem for the cross-border movement of goods.

### Top/bottom EU market by infrastructure quality

The World Economic Forum’s Global Competitiveness report illustrates this gulf between EU members. Infrastructure is listed as one of the 12 key pillars of competitiveness that drives productivity and economic growth, yet the quality of infrastructure still varies significantly across the EU. Road infrastructure in the Netherlands, for example, is ranked 4th out of 138 in the world. This compares to Romania where road infrastructure is deemed to be amongst the worst in the world, ranking 128th. Other low performers include Poland (72nd), Czech Republic (65th) and even Italy (46th).

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2 Index based on surveys of global logistics professionals and measures variables including quality of transport infrastructure and customs and border efficiency.
Unlocking faster, cheaper, more efficient logistics through inter-modal transport

The importance of building a modern and efficient infrastructure network has been recognised by the EC. To improve the speed, cost and ease of logistics across the EU, the EC has identified some €700 billion of infrastructure improvements to be carried out by 2030 across 2,500 projects, as part of the TEN-T programme. The purpose of this investment is to optimise existing infrastructure along nine pre-identified core network corridors that dissect Europe from north to south, east to west. This will promote intelligent, more efficient transport systems and integrate urban areas into core logistics corridors. By improving efficiency, the scheme will also move towards cleaner transport solutions, an area where the logistics sector continues to fall down. These corridors will more effectively link 94 ports, 38 airports and tackle 35 major cross-border projects, thereby contributing to European cohesion and a more competitive economy. With the cost of logistics in the EU currently representing around 15% of the end product’s value, this legislation aims to half these costs by better facilitating cross-border trade.

Source: European Commission.
Case Study: CEE and Poland

One of the key areas identified for infrastructure investment is Poland. Alongside other CEE nations, Poland stands to benefit from improvements to both the North Sea-Baltic and Baltic-Adriatic network corridors. Recent investment of €12.2 billion has been used to modernise cross-border sections with Germany and the Czech Republic, and improve road and rail connectivity with Warsaw, Poznan and Lodz. A further 52 infrastructure projects have so far been identified in Poland amounting to €27.6 billion, the highest of any EU state to be invested over the medium term.

Removing barriers and boosting freight levels

Consumer demand for quick and easy access to goods is already having a substantial impact on freight levels within the EU. By investing in transport infrastructure, the TEN-T programme should pave the way for a more efficient logistics system which can adapt to further increases in demand. Using figures provided by Eurostat, freight volumes across the EU are expected to increase 36% by 2050. CEE markets stand to see some of the largest growth with Poland (54%) and Czech Republic (46%) well above average. As freight volumes increase, demand for logistics space will naturally follow. Given the relative lack of institutional grade logistics stock across Europe compared to office and retail, this should open up further opportunities for investors in this sector.

A further 52 infrastructure projects have so far been identified in Poland amounting to €27.6 billion, the highest of any EU state to be invested over the medium term.
Alongside the physical infrastructure that allows for the movement of goods, the digital economy is also fundamental to enabling e-commerce to expand internationally. Online sales today provide a strong indication of the most advanced e-commerce markets and the extent of digital advancement across Europe.

The figures highlight a north-south divide, with turnover concentrated in the core markets of the UK, France and Germany. Yet future growth prospects in both southern European and CEE markets may also offer opportunities for investors, as online activity accelerates more quickly versus more established regions. Amazon, for example, have already established several large-scale distribution facilities in both Spain and Italy and are in the process of expanding their southern European network further, including express delivery centres in city centre markets.

![Online sales in Europe by region, 2016 (€ billion)](chart)

Source: BNP Paribas Real Estate.

Future growth prospects in both southern European and CEE markets may offer opportunities for investors.

Without further technological change, however, online sales are likely to remain domestically focused, as consumers avoid international retailers and the transactional barriers associated with them, opting instead for ease of purchase in their home countries. The Digital Single Market (DSM) aims to tackle these transactional barriers through initiatives outlined in the next section. Funding of €21 billion will be directed at mobilising and enhancing the digital economy, alongside the promotion of both private equity and venture capital schemes. This will positively impact the European logistics sector.

Digital Single Market

According to the European Commission (EC), around three-quarters of Europeans use the internet on a regular basis, but only 15% shop online from another country. Many online stores across the continent regularly refuse custom from other countries, charging higher prices to international customers and in some cases blocking them. Between 2013 and 2015, the European Consumer Centre received a total of 532 complaints from customers unable to shop freely online, representing a 140% increase compared to 2010 to 2012.3

Unlocking e-commerce potential by stopping geo-blocking practices

Adopted in 2015 by the EC and introduced across EU member states earlier this year, the DSM initiative aims to open up digital opportunities across Europe, allowing the free movement of persons, services and capital. This could contribute €415 billion pa to the EU economy and create hundreds of thousands of new jobs according to the EC. In this inclusive competitive environment, individuals and businesses can access and exercise online activities with a high level of consumer and personal data protection, irrespective of their nationality or place of residence.

3  “Do invisible borders still restrict consumer access to services in the EU?”. Analysis of Article 20.2 of the Services Directive relating consumer complaints reported to ECC.
Tackling geo-blocking

One key consumer issue the DSM will tackle is geo-blocking, a practice used for commercial reasons by online sellers that denies access to websites in other states. Other objectives include reducing parcel delivery costs and simplifying VAT compliance arrangements for online businesses wishing to trade in another EU country.

We can determine which parts of Europe will benefit most from e-commerce and therefore predict the requirements from retailers and logistics operators for real estate.

By understanding the impact of this legislation and the extent and pace that digital technology and consumer habits are changing, we can determine which parts of Europe will benefit most from e-commerce and therefore predict the requirements from retailers and logistics operators for real estate. At M&G Real Estate we have used the EC’s Digital Economy and Society Index (DESI) outlined below as a measure to monitor and track this progress across Europe.

Digital Economy and Society Index

The DESI measures the digital performance and competitiveness of EU member states. The index reflects five principal policy areas which, including sub-categories, represent more than 30 indicators:

- **Connectivity**: how widespread, fast and affordable broadband is
- **Human Capital/Digital Skills**: the digital skills of the population and workforce
- **Use of Internet**: the use of online activities from shopping to news or banking
- **Integration of Digital Technology**: how businesses integrate key digital technologies, such as e-invoices, cloud services and e-commerce turnover
- **Digital Public Services**: such as e-government and e-health

At a country level, DESI aims to help EU countries identify priority areas requiring investment and action to create a unified and cohesive Digital Single Market.

EU DESI scores

DESI: 5 dimensions

1 Connectivity

2 Human Capital/Digital Skills

3 Use of Internet

4 Integration of Digital Technology

5 Digital Public Services

In 2013 and 2016, the EU DESI has been used to assess the progress of EU member states in digital economy and society. The index reflects five principal policy areas: connectivity, use of internet, human capital/digital skills, integration of digital technology, and digital public services.

While select countries are clearly ahead, having already established themselves as digitally advanced markets (those that score above the EU average), others are playing ‘catch up’.

To monitor the expansion of e-commerce across EU states and its impact on European logistics, we identified connectivity, use of internet and integration of digital technology as the most relevant factors. The following analysis reviews the re-weighted scores of these three indicators across member states in 2016, and their aggregate progress since DESI’s inception in 2013. While select countries are clearly ahead, having already established themselves as digitally advanced markets (those that score above the EU average), others are playing ‘catch up’ (those that score below the EU average but whose score grew faster than that of the EU since 2013). Although at an earlier stage in their growth cycle, we expect this latter group to also provide opportunities in the logistics market, as their digital economies evolve and consumer habits across continental Europe become more aligned.

Source: M&G Real Estate, European Commission Digital Scoreboard.

Based on the three selected DESI dimensions, the Nordic and Benelux countries lead the 2016 ranking

Based on the three selected DESI dimensions, the Nordic and Benelux countries lead the 2016 ranking whilst the CEE and southern European markets occupy the bottom positions. This is largely a reflection of higher digital connectivity and e-commerce turnover figures. The following analysis highlights which countries are catching up the fastest by adopting digital technologies.

Based on DESI score growth rates since 2013, the regional differences outlined above have reversed, with southern Europe and Poland now ranking above the EU28 average. These regions have adopted DESI initiatives at a faster rate, on average moving up two places each in the overall rankings. They saw particularly strong growth, of 35%, within the Connectivity and Integration of Digital Technology sub-sectors.

Belgium and Ireland are the outliers, consistently ranking above the EU28 average. The faster progress of non-core markets reflects the continued integration and cohesion of Europe, as the continent moves towards an increasingly level playing field for international consumers.

Impact on logistics rents

Taking into consideration both the TEN-T infrastructure project and the structural changes to the digital market, we have identified which markets offer the strongest growth prospects today and in the future. Underlying this is the current lag in continental European rental growth versus other global markets such as the UK and US. European logistics rents historically tracked these markets to a high degree of correlation from 1991 to 2010 (0.76), yet during the most recent recovery period from 2011-16, there has been a noticeable difference with almost zero correlation (0.14) between Europe and the UK/US.

Europe has historically recorded a greater degree of volatility, driven by markets such as Ireland, Spain and Portugal, which experienced extreme boom and bust cycles over the last decade. EU instability over the last five years has arguably held back rental growth, yet both the retail and office sectors have seen a sizeable recovery post-GFC, with prime rents now 30% and 10% above their previous peaks respectively. Rents in the logistics sector, however, are still 4% below. Only German markets buck this trend with prime logistics rents now 4% higher than their previous peak.
The UK and US were the earliest adopters of e-commerce globally, underpinning their strength in logistics rents, which have grown by 3.7% pa and 5.8% pa respectively over the last three years. This compares to just 0.8% pa for continental Europe, where consumer habits have, in the past, been fragmented. Online sales continue to gain momentum, however, as European states adopt faster, cheaper and easier means of purchasing goods through technological improvements. We believe these factors will have a positive and substantial impact on European logistics by increasing demand for space in the medium term, as Europe ‘catches up’ with other global markets. As the region enters a more advanced stage of its growth cycle, we expect logistics rents to outperform those in the US and the UK, which are closer to the top of their respective cycles.

We have taken this into account, alongside the 2016 DESI scores which benchmark e-commerce growth, in our logistics rent forecasts, favouring those markets with the highest degree of digital capability and online use. The results are shown below:

We believe those markets with the highest DESI scores, ie benefitting from advanced integrated digital technology, superior broadband infrastructure and higher internet usage by consumers, will see a significant improvement in logistics rental growth. This is typically reflective of the Nordic and Benelux markets. Those markets less currently advanced on the DESI scale, such as Poland and Italy, may see a smaller benefit. However, the pace at which their digital infrastructure is improving should also be taken into account, as covered in the next section. Given the evolving nature of e-commerce and consumer habits, we will continue to monitor the progression of these DESI scores, ensuring that we reflect current market trends.
Where to find value?

The share of real estate investors targeting European logistics has more than doubled from 27% in 2012 to 59% in 2016,\(^5\) compressing logistics property yields by 190bps over this same period. Prime yields across Germany now stand at 4.9%, the lowest across continental Europe historically, which has solidified European logistics as an institutionalised asset class.

For investors looking for growth in the sector, the need to identify specific markets which offer good value alongside attractive rental growth prospects is becoming more important.

This poses challenges for investors targeting the sector, as competition increases and finding value in the market becomes more difficult. While further yield compression is expected, as low interest rates persist and the spread between logistics yields and government bonds remains attractive, we expect this compression to slow compared to the last four years. For investors looking for growth in the sector, the need to identify specific markets which offer good value alongside attractive rental growth prospects is becoming more important.

Rental growth vs prime logistics yields

The following chart plots our rental growth expectations for the next five years against the latest prime yields, highlighting the best opportunities for above average total returns.

At a country level, we believe the Nordic markets are amongst those offering greater opportunities to investors. We expect Denmark to see some of the strongest rental growth in Europe, yet at a 6% yield is among those countries which also offers the best value. Spain and the Czech Republic also offer relative value alongside healthy rental growth. Yields in core markets like France and Germany are at record lows, however, having already compressed to 5% and 4.9% respectively.

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Logistics rents in Germany have already surpassed their 2007 peak and we expect rental growth here to moderate going forward.

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\(^5\) Source: CBRE.
The physical and digital logistics landscape in Europe is set to change dramatically over the next decade, driven by innovation, technological advancement and growing consumer demand for online products. The implications for the logistics real estate sector are enormous. Our research has analysed these structural changes and identified markets where we see the most opportunity to benefit from increased demand, stronger rental growth and good value. Given the recent investor demand for this sector, having the skills and expertise to capture this growth in an increasingly competitive market is fundamental.

Our findings have shown that as a snapshot of the European market, the Nordic regions offer some of the most attractive opportunities to achieve above average total returns. Their mature e-commerce markets, highly digital economies and advanced level of infrastructure offer significant potential for rental growth. With yields ranging from 5.5% (Sweden) to 6% (Denmark), there is also still considerable scope for further compression, driving up returns.

As long term investors, we pay particular attention to both the strengths in the market today and where we see the greatest potential in the years ahead. With southern Europe and Poland benefiting from faster e-commerce growth and the bulk of future infrastructure spending, we remain optimistic about the opportunities here to find value. Whilst investors need to consider risk when looking outside of the core markets of Germany and France, there is a compelling argument for investing in carefully selected assets in core logistics markets, where demand drivers are strong, vacancies are low, and the yields on offer can generate substantially better returns. Given the structural drivers we have discussed are focused on cohesion and interconnectivity across Europe, from north to south, east to west, investors should feel confident in targeting those overlooked markets, where we believe the growth potential is strongest and the returns outlook is the most attractive.
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