Germany – The European engine

- The German economy is the engine of Europe
- Germany enjoys the lowest unemployment rate among the major European economies
- On the other hand the employment rate is the highest of the major economies
Germany – The European engine

**UK**
Population: 65.1 m
Employees: 31.3 m
Unemployment rate: 4.8 %
GDP share of EU: 17.5 %
GDP per capita: 39,600 €
Government debt: 89 %

**NETHERLANDS**
Population: 16.9 m
Employees: 8.7 m
Unemployment rate: 5.8 %
GDP share of EU: 4.6 %
GDP per capita: 40,000 €
Government debt: 65 %

**FRANCE**
Population: 66.5 m
Employees: 27.9 m
Unemployment rate: 10.5 %
GDP share of EU: 14.8 %
GDP per capita: 32,800 €
Government debt: 96 %

**SPAIN**
Population: 46.4 m
Employees: 18.5 m
Unemployment rate: 19.5 %
GDP share of EU: 7.3 %
GDP per capita: 23,200 €
Government debt: 100 %

**SWEDEN**
Population: 9.8 m
Employees: 4.8 m
Unemployment rate: 7.0 %
GDP share of EU: 3.0 %
GDP per capita: 45,600 €
Government debt: 44 %

**POLAND**
Population: 38.5 m
Employees: 16.1 m
Unemployment rate: 5.9 %
GDP share of EU: 2.9 %
GDP per capita: 11,200 €
Government debt: 51 %

**GERMANY**
Population: 81.7 m
Employees: 43.0 m
Unemployment rate: 4.2 %
GDP share of EU: 20.6 %
GDP per capita: 37,100 €
Government debt: 71 %

**ITALY**
Population: 60.7 m
Employees: 24.0 m
Unemployment rate: 11.4 %
GDP share of EU: 11.2 %
GDP per capita: 27,000 €
Government debt: 132 %
What makes Germany special in Europe?

Federal structure with “German Mittelstand*” leads to greater relative long-term stability

Several powerful cities with upside potential

<table>
<thead>
<tr>
<th>Country</th>
<th>No. of cities &gt; 1 m</th>
<th>No. of cities &gt; 500k</th>
</tr>
</thead>
<tbody>
<tr>
<td>Germany</td>
<td>4</td>
<td>14</td>
</tr>
<tr>
<td>UK</td>
<td>2</td>
<td>7</td>
</tr>
<tr>
<td>France</td>
<td>1</td>
<td>2</td>
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</tbody>
</table>

Strong performance of small and mid-sized companies

<table>
<thead>
<tr>
<th>Stock exchange indices</th>
<th>Jan. 4, 2010</th>
<th>Nov. 9, 2016</th>
<th>Increase</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dax</td>
<td>5,976</td>
<td>10,182</td>
<td>70%</td>
</tr>
<tr>
<td>M-Dax (Midcap-Dax)</td>
<td>7,515</td>
<td>20,329</td>
<td>171%</td>
</tr>
<tr>
<td>S-Dax (Small-Cap-Dax)</td>
<td>3,557</td>
<td>8,861</td>
<td>149%</td>
</tr>
</tbody>
</table>

Strong position of small and mid-sized companies

<table>
<thead>
<tr>
<th>Indicators for small and mid-sized companies (&lt; 250 employees)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Share of all German companies</td>
</tr>
<tr>
<td>Share of all German employees</td>
</tr>
<tr>
<td>Share of German net product</td>
</tr>
<tr>
<td>Thereof companies with 10 or more employees</td>
</tr>
<tr>
<td>EU-average</td>
</tr>
</tbody>
</table>

Low dependence on largest companies - wide base of economic power

<table>
<thead>
<tr>
<th>Companies</th>
<th>Revenues 2014 (bn €)</th>
<th>Share</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dax companies</td>
<td>1,250</td>
<td>21%</td>
</tr>
<tr>
<td>&gt; €1 bn turnover</td>
<td>653</td>
<td>11%</td>
</tr>
<tr>
<td>€500 m - €1 bn turnover</td>
<td>400</td>
<td>7%</td>
</tr>
<tr>
<td>€100 m - €500 m turnover</td>
<td>997</td>
<td>17%</td>
</tr>
<tr>
<td>€50 m - €100 m turnover</td>
<td>400</td>
<td>7%</td>
</tr>
<tr>
<td>&lt; €50 m turnover</td>
<td>2,171</td>
<td>37%</td>
</tr>
<tr>
<td>Total</td>
<td>5,871</td>
<td>100%</td>
</tr>
</tbody>
</table>

* Small and mid-sized companies, often owned by private families, a lot of which are nevertheless global players
1
OFFICE MARKET GERMANY
• Key sentiment indicators are improving with a very positive development of the labour market, lower joblessness figures and higher numbers of people in gainful employment

• This helps office markets to new record levels

• The first three quarters of 2016 produced an all-time high of 2.7 million m² in office leasing volume in Germany’s major office centres*

• For the total year 2016 a new record is expected

• Five of the Big Six cities registered increased leasing volume, underlining the fact that demand base is broad and healthy

• The only city with lower year-on-year leasing volume is Düsseldorf; it nonetheless still registered its second-best performance of all time

* Berlin, Cologne, Düsseldorf, Essen, Frankfurt, Hamburg, Leipzig, Munich
Office vacancy rates

• The volume of vacant office space has been decreasing for some years now

• All major German office centres have registered year-on-year-decreases

• Even in the long-term view, the amount of vacant space is on a very low level

• Especially in Berlin and Munich the vacancy rate has decreased strongly in recent years

• At the end of Q3 2016 it stands at 2.9% in Berlin, 4.5% in Munich and 5.8% in Hamburg

• With 10.7%, Frankfurt is the only major German office centre with a vacancy rate above 10%
Germany – weighting of leasing by market category

Office leasing volume 2015

- Top 4: 2,500,000 m² (40%)
- Other A cities: 1,000,000 m² (16%)
- B cities: 1,250,000 m² (20%)
- C cities: 950,000 m² (15%)
- Others: 500,000 m² (8%)

Total: 6,200,000 m² (100%)
• The bottleneck in the availability of modern premises has triggered increases in the prime rent

• Especially in Berlin the prime rent has experienced a remarkable development: since 2006 the prime rent there has risen by 37%

• Düsseldorf (+23%) and Munich (+20%) also registered high increases between 2006 and Q3 2016

• Further increases are anticipated against the background of just moderate construction activity, low vacancy and ongoing high demand

• In front again is Berlin with an anticipated prime rent increase between Q3 2016 and 2020 of 20%, followed by Hamburg (+10%), Munich and Frankfurt (each +7%)
After a strong increase in the course of the new economy boom, with an all-time high above 4 million m² in 2001, construction activity slowed down significantly.

Since 2003 the average annual construction volume has been clearly below 2 million m².

In the last three years the level of new construction was only a bit more than one third of the all-time high.

More than 50% of new construction is generally already pre-let before delivery.

One reason for the very limited new office construction is the positive development of the residential markets.

Rising levels of CBD residential development produces increased competition for development sites, additionally fuelled by the trend to convert offices to apartments.
Along with the moderate construction activity, the volume of office completions is also on a comparatively moderate level.

In recent years the total volume of office completions exceeded the 1 million m² threshold only in 2009, 2010 and 2014.

The rise in 2014 was mainly driven by some huge owner-occupier projects eg. BND (Berlin) or ECB (Frankfurt).

On average slightly above 900,000 m² per annum were delivered between 2006 and 2015.

In the first nine months of 2016 around 650,000 m² were delivered.

From 2006 to Q3 2016 office completions made up between 0.7% and 1.5% of the total stock.

Due to demolished and repurposed office buildings the net addition to the office stock is low and has decreased further in the last two years.
Germany’s top office markets

**HAMBURG**
- No. 4 market of the Big Six
- Relatively balanced market with low volatility of demand and prime rents
- New submarket HafenCity is gaining in importance, producing additional office space supply along the river Elbe
- International reputation thanks to the famous harbour

**BERLIN**
- Very dynamic growth in leasing activity, in recent years either No. 1 or 2
- Take-up share of CBD relatively small due to variety of other interesting locations
- Broad range of demand, traditionally strong demand from public sector, creative/tech companies and consultancies
- By far the lowest vacancy rate among the large German office markets

**FRANKFURT**
- In the long-term No. 2 market
- By far the highest vacancy rate among the major markets, still double-digit
- Traditionally highest share of large lettings
- Demand strongly focused on the CBD
- CBD: vacancy rate modern space only 6.5%
- Historically strong influence from sectors like consultants or banks
- Sole German city with a skyscraper skyline
- Home of the ECB

**MUNICH**
- Largest office market in Germany in terms of area
- Take-up widely spread across the submarkets
- Vacancy traditionally low
- Highest prime rents after Frankfurt
- Strong and stable economy of Munich and Bavaria
- Excellent reputation
- Safe haven
Germany’s top office markets

**COLOGNE**
- **Smallest** market of the Big Six
- Strong focus on the CBD
- Lowest share of contracts > 5,000 m² among the Big Six
- Most important German centre for insurances
- **Headquarters** of major German wholesale/retail companies, like Rewe and Kaufhof

**DÜSSELDORF**
- Office space take-up close to 400,000 m² a year
- **No. 5** in terms of take-up among the Big Six
- **Vacancy** relatively high – just below 10%
- Most important base for Japanese companies in Germany
- Germany’s fashion capital

**STUTTGART**
- Long-term average take-up slightly above 200,000 m²
- City Centre and Vaihingen/Möhringen most favoured locations
- **Smallest** market among the top locations
- **Owner-occupiers** play an important role
- Very low vacancy rate, even below Munich
- Strong influence of automotive sector due to HQ of **Daimler AG**

**RHINE-RUHR**
- Largest **agglomeration** in Germany
- Most important office markets: **Essen, Dortmund, Duisburg, Bochum**
- **Headquarters** of several major companies (Thyssen Krupp, Degussa, RWE and Aldi)
- New development areas like “Innenhafen” (Duisburg) or “Phönix-See” (Dortmund)
- Stable base of demand but office take-up also dependent on large contracts from major companies
BERLIN OFFICE MARKET

Total office inventory: 19.3 million m²
New construction: 0.2 million m²
Current vacancy rate: 2.9% trending down
Top rent: €28.00/m²

• Undisputedly the most dynamic of the German office markets
• Among the cities with the highest population growth in Germany
• Popular city among young and well-educated people ➔ skilled workforce
• Massive decrease in vacancy rates
• Rental level still very low and highly attractive in a European comparison
• Investment market will probably benefit more than other markets from the Brexit
MUNICH OFFICE MARKET

Total office inventory: 20.5 million m²
Under construction: 0.3 million m²
Current vacancy rate: 4.5% trending down
Top rent: €35.50/m²

- Heart of Bavaria and one of the most dynamic economic regions in Europe
- Headquarters of some of Germany’s best-known companies and global players such as BMW, Siemens, Allianz
- Base to more DAX-listed companies than any other German city
- Renowned for its superb quality of life and international flair
- Popular investment location due to its stability and secure long-term incomes
FRANKFURT OFFICE MARKET

Total office inventory: 15.7 million m²
Under construction: 0.3 million m²
Current vacancy rate: 10.7% trending down
Top rent: €38.00/m²

• Frankfurt is a global city and the most cosmopolitan metropolis in Germany
• Second-largest airport in continental Europe
• Second most important banking centre in Europe; home of the ECB and the Bundesbank
• In no other German city are so many of the 100 top-performing German business companies represented
• With its international flair and iconic skyline, it attracts hosts of first-time investors from around the world
Hamburg

HAMBURG OFFICE MARKET

Total office inventory: 13.9 million m²
New construction: 0.2 million m²
Current vacancy rate: 5.8% trending down
Top rent: €25.50/m²

- Germany’s second-largest centre of population and the biggest city in the country’s north
- Most important seaport in Germany and the third-largest in Europe, known as Germany’s Gateway to the World
- Important hub of aircraft production and media activities
- Hamburg forms a bridgehead to the Baltic region and Eastern Europe and is Germany's chief centre of logistics
- Investors appreciate the stable market conditions and the many attractive areas the city has to offer
Düsseldorf

DÜSSELDORF OFFICE MARKET

Total office inventory: 9.3 million m²
Under construction: 0.3 million m²
Current vacancy rate: 9.8% trending down
Top rent: €26.50/m²

- Administrative centre of North Rhine-Westphalia, Germany’s most densely populated federal state
- Short distances to such key European cities as Brussels, Paris and London
- Major centre of telecommunications and home to head offices of most important network providers
- Growth-oriented B2B service-providers include ICT firms, media and advertising, law firms and consultancies
- No. 1 investment location in North Rhine-Westphalia with significant upwards trend in the last years
COLOGNE OFFICE MARKET

Total office inventory: 7.8 million m²

Under construction: 0.3 million m²

Current vacancy rate: 5.4% trending down

Top rent: €21.50/m²

• Germany’s oldest large city bears the stamp of many different traditions
• With around 1 million inhabitants, it is the fourth-biggest centre of population
• With more than 60 head offices, Cologne is the most important centre for insurance companies
• Many major wholesale/retail companies run their German and worldwide business activities from here
• In recent years, Cologne has become increasingly significant as a key office and investment centre
**STUTTGART OFFICE MARKET**

- Total office inventory: 7.7 million m²
- Under construction: 0.2 million m²
- Current vacancy rate: 3.3% trending down
- Top rent: €22.50/m²

- Capital of the federal state of Baden-Württemberg the centre of the “German Mittelstand”
- Strong reputation for its economic strength, cutting-edge technology, and exceptionally high quality of life
- The Stuttgart region is the home of German global players such as Daimler, Porsche or Bosch
- Balanced mix of global brands and extremely innovative, medium-sized companies
- Growing importance and increasing office take-up and commercial investment volume in the last few years
**Rhine-Ruhr**

**RHINE-RUHR OFFICE MARKET**

- **Total office inventory:** 15.3 million m²
- **Under construction:** 0.15 million m²
- **Current vacancy rate:** 4.7% trending down
- **Top rent:** €14.00/m²

- With more than five million inhabitants, this is the biggest agglomeration in Germany
- Several cities with interesting office markets. Most important is Essen, ahead of Dortmund
- Transformation from historic industrial structure to modern service sectors offers future upside potential
- Energy, logistics, healthcare management and chemicals are the most important fields of expertise
- Total yearly take-up comparable to Hamburg and Frankfurt
2 INVESTMENT MARKET GERMANY
Why is Germany so in demand?

**THE FRAMEWORK**

**Political stability and absence of violence/terrorism indicator 2015**

- **Germany**
- **UK**
- **Italy**
- **Spain**
- **France**

Source: World Bank

**Leading position in terms of political stability**

**Development of gross government debt**

- **Germany**
- **France**
- **UK**
- **Spain**
- **USA**
- **Canada**
- **Italy**

Source: Eurostat, IMF

**Solid national budget even during crises**

Real Estate for a changing world
Why is Germany so in demand?

- LTVs increasing
- Gap between real estate yields and bonds at all-time high despite yield compression
- Historically low financing costs ensuring meaningful leverage effects
Why is Germany so in demand?

STRONG OCCUPIER MARKETS...

- Positive economic development has boosted office take-up in the last few years. For 2016 a new take-up record is expected
- Office vacancy is at its lowest level for 14 years
- Prime rents have increased in several cities
- Further rental growth expected

...PROVIDING INVESTMENT OPPORTUNITIES

- In recent years all segments registered significant growth in investment turnovers
- Supply side is insufficient to meet demand
- Yield compression continues
- Further growth in capital values highly likely
In recent years all segments registered significant growth. Commercial volume of 56 bn € was close to the 2007 record. For 2016 more than 50 bn € is again expected. Residential turnover reached a new record (24 bn €). Nevertheless the supply is insufficient and limits the total amount somewhat. However, yield compression continues, underlining the strong demand vs. the limited supply.

* Forecast  
** Residential portfolios ≥ 30 units  
*** Berlin, Cologne, Düsseldorf, Frankfurt, Hamburg, Munich
The increase in prices reflects the ongoing high demand. Current prime office yields are at 3.30% in Munich and 3.40% in Berlin.

A strong yield compression can be seen, not only in the main markets, but also in B locations.

The risk premium for investments outside the major markets has remained relatively stable around 130 bps.

During 2016 this yield gap has widened somewhat due to the strong yield compression in the major markets, especially in Berlin and Munich.

Currently the risk premium for B markets amounts to more than 150 bps.

This should generate increased investor interest in B locations, but the supply of prime properties is restricted everywhere, even outside the Big Six.
Germany’s investment market - structure

**Distribution of commercial investment volume 2015**

**FRANCE**
- Central Paris: 19%
- Ile De France: 4%
- Lille: 5%
- Lyon: 1%
- Marseille: 1%
- Remaining France: 70%
- Total: €32.0 billion

**GERMANY**
- Berlin: 47%
- Cologne: 15%
- Düsseldorf: 4%
- Frankfurt: 11%
- Hamburg: 11%
- Munich: 7%
- Remaining Germany: 11%
- Total: €56.3 billion

**UK**
- Central London: 58%
- Thames Valley: 34%
- Glasgow: 4%
- Leeds: 2%
- Manchester: 1%
- Remaining UK: 1%
- Total: €74.8 billion

**Distribution of office leasing activity 2015**

**FRANCE**
- Central Paris: 23%
- Ile de France: 25%
- Lille: 9%
- Lyon: 16%
- Marseille: 13%
- Toulouse: 14%
- Remaining France: 11%
- Total: 65%

**GERMANY**
- Berlin: 25%
- Cologne: 23%
- Düsseldorf: 9%
- Frankfurt: 16%
- Hamburg: 13%
- Munich: 14%
- Remaining Germany: 7%
- Total: 70%

**UK**
- Central London: 75%
- Thames Valley: 7%
- Glasgow: 9%
- Leeds: 5%
- Manchester: 7%
- Remaining UK: 4%
- Total: 70%
Germany’s top investment markets

**HAMBURG**
- No. 4 in Germany, sometimes neck-and-neck with Munich and Frankfurt
- Investments relatively broadly spread across the market
- Generally high number of transactions
- Investment market domestically driven, with high shares of German investors
- Most expensive office market after Munich and Berlin

**FRANKFURT**
- No. 3 slightly behind Munich
- Highest volume of office investments
- Highest share of CBD investments
- High proportion of transactions ≥ 50 m €
- For many investors the place for the German market entry

**BERLIN**
- No. 1 investment location in Germany
- One of the strongest retail investment markets
- Low proportion of CBD investments – several interesting locations outside CBD
- Strongest yield compression
- Highest interest by foreign investors
- Largest upside potential in Germany

**MUNICH**
- No. 2 slightly ahead of Frankfurt
- Office investments are dominating
- Very low share of CBD investments: broad spread of investments across the market area
- Popular market for private investors
- Most expensive location in Germany
Germany’s top investment markets

**COLOGNE**
- Smallest investment market of Big Six
- Comparatively high share of retail investments
- Focus on the CBD
- Fewer large-scale transactions
- Least expensive location among the Big Six

**DÜSSELDORF**
- No. 5 in Germany
- Best development of investment volume in recent years
- Office investments dominate the scene
- More investments in the centre fringe than in the CBD
- Lower impact of large deals

**STUTTGART**
- Generally highly sought-after investment location but restrictions on the supply side
- Office properties by far the most favoured asset class
- Price level comparable to Cologne and Düsseldorf
- High share of core and core plus investments

**RHINE-RUHR**
- In recent years increased interest in smaller markets such as Essen, Dortmund, Duisburg or Bochum
- Tendency towards rising investment volumes, but overall still somewhat volatile depending on large transactions
- Attractive risk premium compared to prime cities
Germany – investment volume by market category

Investment volume 2015

- **Top 4**  25,300 m €  45%
- **Other A cities**  5,800 m €  10%
- **B cities**  8,900 m €  16%
- **C cities**  5,900 m €  11%
- **Others**  10,400 m €  18%

**Total**  56,300 m €  100%
• Foreign investors play a major role in the investment market
• Especially in boom years they are very active on the markets
• Their share of all commercial investment since 2010 is 42%
• By far the most the foreign capital comes from European investors; they represent approximately half of the capital deployed
• Investors from North America, especially the United States, also play an important role, representing one third of the foreign investment volume
• In recent years, investors from Middle East and Asia have gained in relative importance
Conclusion

Stable consumer sentiment and ongoing high domestic demand

Biggest market in continental Europe

Diversification: multiple interesting cities

Sufficient liquidity in the markets

Stable consumer sentiment and ongoing high domestic demand

Less volatile than other European investment locations

Anchor of stability even during several crises

Very low interest rates

Favourable financing conditions

Solid economic development and forecast
Thank you for your attention

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APPENDIX: ADDITIONAL SLIDES
• Overall, offices are the predominant asset class

• Especially in the Big Six they head the field with a share of 58% on average (Germany total: 42%)

• Outside the Big Six, other asset classes such as retail (especially supermarkets, retail parks etc.) are in demand

• In Germany in total they gain a share of 31% vs. 21% in the Big Six

• The situation for logistics properties is similar: With 7% their share in Germany is higher than in the Big Six (5%)

• Hotel investments on the other hand dominate in the Big Six

• Here, they produced 7% of the investment volume, while the nation-wide equivalent is 5%
Investments by buyer profile

Investment volume 2010-Q3 2016 by investor

- Thanks to the diversity and the range of investment opportunities the German investment market is generally interesting for a broad variety of investors
- From 2010 to Q3 2016 the investor groups were dominated by special-purpose funds
- Such funds often involve institutional investors using indirect vehicles to lift the real estate proportion of their portfolios
- Equity/real estate funds and listed real estate companies - which are predominantly active in the portfolio segment - are also among the TOP 3 investor groups in Germany
- Private investors form a stable base of demand, especially in the Big Six cities
- Pension funds have invested increasingly in recent years
The sell side is a little less balanced and is dominated by property developers selling new or refurbished buildings.

Equity/real estate funds are increasingly selling assets from portfolios acquired during the last real estate cycle/boom.

Whereas property developers are easily the leaders in the field of single deals, equity/real estate companies are the No. 1 seller of portfolios.

Nonetheless, in total terms, they sold a higher volume with single properties.

Rather surprisingly, after having already sold strongly in the course of the last boom, Corporates have still been among the TOP 3 sellers between 2010 and Q3 2016.
BNP Paribas

• A leading provider of banking and financial services in Europe
• Present in 75 countries
• Nearly 190,000 employees, including more than 5,000 employees across 19 locations in Germany

• More than 30 million individual customers
• Nearly 1 million professionals, small business and corporate clients

• World’s Best Bank 2016 acc. to Euromoney
• BNP Paribas ranks in the major CSR indices
BNP Paribas Real Estate

- Subsidiary of BNP Paribas Group with 180 offices around the world
- More than 3,800 employees in 16 countries worldwide, including more than 700 in Germany in 12 locations
- 3,200 further employees through alliances in 20 countries
- No. 1 in continental Europe in commercial real estate
- More than 36.3 m² of property under management in Europe
- Close to 143 m² valued (worth close to 292 bn €)
- Present in 11 countries
- Real Estate Advisory 74%
- Project Management 18%
- Occupier Services 8%
- 22 bn € of assets under management in Europe
- More than 100,000 clients
- No. 1 in Europe
- 281,000 m² of commercial property under construction in Europe
- 5.2 m² of commercial property leased or sold
- 17.1 bn € transaction volume
- 3,700 transactions, one every 17 minutes
- Comprehensive services in all phases of the property cycle
- Covering the segments Office, Industrial, Logistics, Retail, Hotel, Development Sites and Residential Properties

Real Estate for a changing world