JUNE 2021

GLOBAL E-COMMERCE OUTLOOK

What is Driving E-commerce Growth in Different Markets?



KEY THEMES EXPLORED

- 1 | RECENT GROWTH OF E-COMMERCE
- 2 | WHAT FACTORS ARE DRIVING E-COMMERCE?
- 3 | WHAT HAS BEEN THE IMPACT OF COVID-19?
- 4 | WILL E-COMMERCE CONTINUE TO GROW?

5 | WHAT WILL BE THE IMPACT ON LOGISTICS PROPERTY?

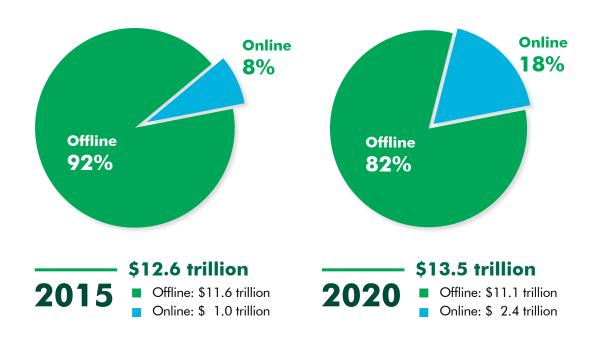


ANALYSIS PROFILE 43 markets were analyzed 27 factors driving e-commerce were explored Key 6 drivers were identified that better explain e-commerce levels **Created an index** to measure the strength of these drivers in different markets **Produced a forecast** of e-commerce penetration rate per market and of additional logistics space required



GLOBAL RETAIL MARKET SIZE

HOW BIG IS THE GLOBAL E-COMMERCE MARKET?

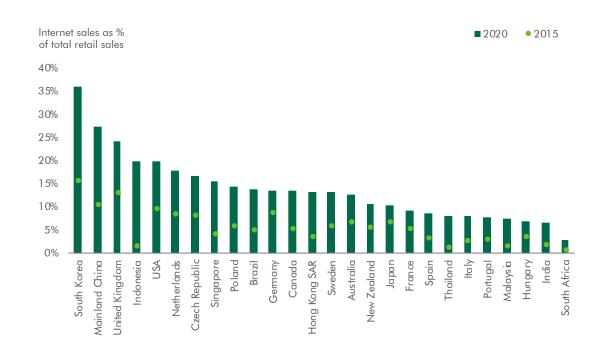


140% increase in global e-commerce sales over the past five years

Source: Euromonitor, sum of the 43 markets included in the analysis. The full list is included in the Appendix. Fixed 2020 US \$ values.

E-COMMERCE PENETRATION RATIO PER MARKET

FAST GROWTH DURING THE LAST 5 YEARS ACROSS ALL MARKETS



6

Source: Euromonitor.

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Top five markets

with the highest e-commerce penetration ratio

- 1 South Korea
- 2 Mainland China
- 3 United Kingdom
- 4 Indonesia
- **5** U.S.

Mainland China and the U.S. are the biggest e-commerce markets in the world, accounting for 57% of global internet sales.



E-COMMERCE DRIVERS: FACTORS LINKED WITH THE GROWTH OF E-COMMERCE

We explored **27 factors** and split the top ones into **four basic** categories



DEMOGRAPHY

- Urban population
- Population density
- Employment in services



USAGE

- Digital skills of the population
- Internet usage
- Mobile internet sales share
- Dominant e-commerce player



CULTURAL PAYMENT PREFERENCE

- Credit/debit card use
- Digital payments
- Online bill pay



INFRASTRUCTURE ACCESS

- Fixed broadband subscriptions in market
- Transport infrastructure
- Timeliness of shipments

SIX KEY E-COMMERCE PENETRATION DRIVERS



We identified **six factors** that **better explain** the different levels of e-commerce penetration among markets:



% OF URBAN POPULATION



MOBILE INTERNET SALES RATIO



DEBIT AND CREDIT CARD USE



DIGITAL SKILLS
OF POPULATION



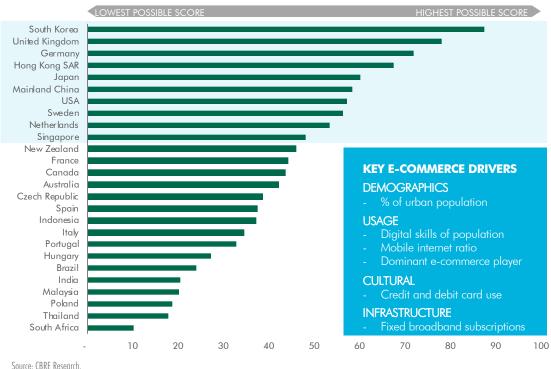
DOMINANT E-COMMERCE PLAYER



FIXED BROADBAND SUBSCRIPTION / POPULATION

CBRE GLOBAL E-COMMERCE DRIVERS INDEX

We created an index that measures the strength of the presence of these six key e-commerce drivers in different markets.

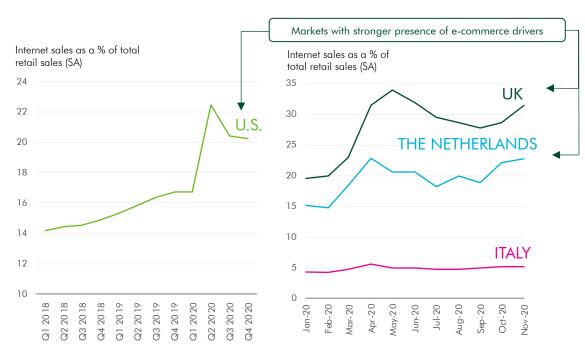




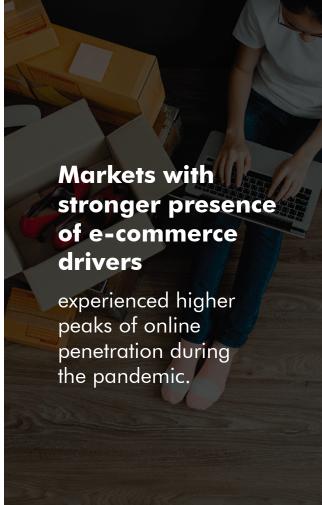


INTERNET SALES HAVE INCREASED RAPIDLY DURING THE PANDEMIC WITH A LASTING EFFECT

EXAMPLES FROM THE U.S. AND EUROPE



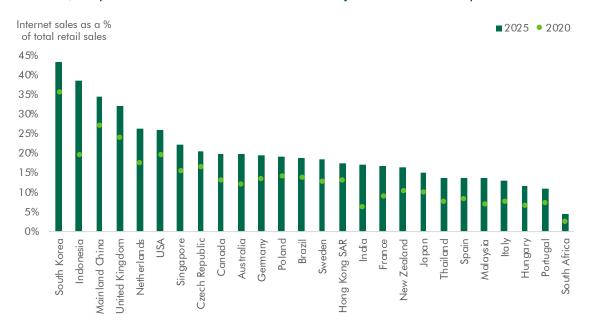
Source: Macrobond, Eurostat, US Census, CBRE Research.





CBRE GLOBAL E-COMMERCE FORECAST

By predicting how the **six key e-commerce drivers** will evolve over time in different markets, we produced a forecast of **e-commerce penetration rate** per market.



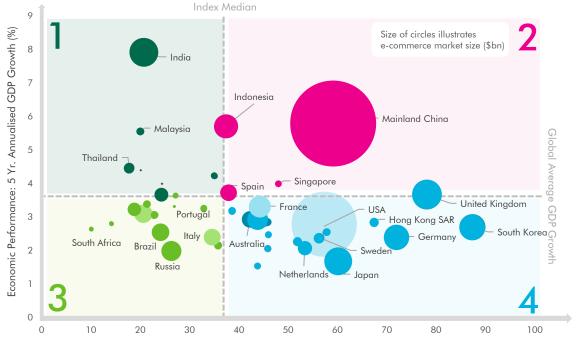
Source: Euromonitor, CBRE Research. We used data from Euromonitor for 2020 e-commerce activity in each country and a cross-sectional regression model to identify the variables that best explained cross-country differences in e-commerce penetration. To arrive at future values for the explanatory variables, we made some general convergence assumptions (lower scoring markets would converge on countries closer to their saturation values). Using these assumptions and the regression model, we predicted future e-commerce penetration rates for all markets. Final forecasts are a mixture of model-based projections and qualitative adjustments also based on feedback from local market teams.

E-commerce penetration will continue to grow in established markets. Less established markets will gradually catch up as the presence of e-commerce drivers in these markets is increasing. increasing and quarter sales



LOGISTICS PROPERTY SECTOR PERFORMANCE DRIVERS

Macroeconomic outlook and e-commerce preparedness driving logistics sector's performance and demand for space.



E-commerce Preparedness: CBRE E-commerce Drivers Index (0-100)

Source: Oxford Economics, CBRE Research, selection of markets illustrated. Size of the bubble illustrates the size of the e-commerce market (\$bn).

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QUADRANT 1

- Above global average economic growth supporting spend with lower levels of e-commerce penetration and presence of e-commerce drivers.
- Slower transition from traditional retail to e-commerce.
- Infrastructure supporting e-commerce less developed.

 Demand for logistics space lower but gradually increasing.

QUADRANT 2

- Above global average economic growth supporting consumption. Higher levels of e-commerce penetration and stronger presence of e-commerce drivers.
- Accelerated transition from traditional retail to e-commerce driving strong demand for logistics space.
- Stronger presence of established online retailers.

QUADRANT 3

- Below global average economic growth affecting consumption combined with lower levels of e-commerce penetration and presence of e-commerce drivers.
- Slower transition from traditional retail to e-commerce.
- Infrastructure supporting e-commerce less developed.
- Certain retailers acting as online market pioneers.

QUADRANT 4

- Below global average economic growth in an environment of high e-commerce penetration supported by strong presence of drivers.
- Accelerated transition from traditional retail to e-commerce driving strong demand for logistics space.
- Stronger presence of established online retailers.

LOGISTICS SPACE REQUIREMENTS GLOBAL FORECAST

ESTIMATED 5 YEAR SPACE REQUIREMENTS DUE TO THE GROWTH OF E-COMMERCE







GLOBAL

E-COMMERCE SALES

LOGISTICS SPACE

2020-25 Change +\$ 1.5 Trillion

- \$3.9 Trillion in 2025
- \$2.4 Trillion in 2020

Additional
138 million sq. m.
to support
e-commerce growth
over five years

Source: Euromonitor, CBRE Research. Aggregated estimates of the 43 markets included in the analysis. List of all markets included in the Appendix.

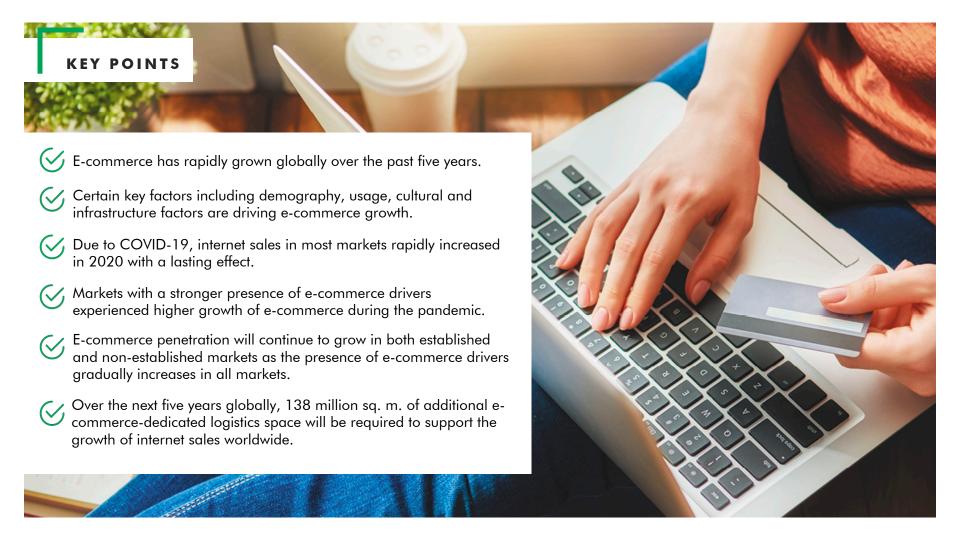
E-commerce sales forecast is based on our forecast of e-commerce penetration rate per different market, using 2020 data from Euromonitor as the base year.

Our calculation assumes an estimate of \$1 billion of additional e-commerce sales requiring an additional 1million sq. ft. or 92,903 sq. m. of logistics space.

Over the next five years, 138 million sq. m. of additional e-commerce-dedicated logistics space will be required worldwide to support the growth of internet sales.

\$1 billion of additional e-commerce sales requires an additional 1 million sq. ft. or 92,903

sq. m. of logistics space



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APPENDIX: THE 43 MARKETS INCLUDED IN THE ANALYSIS

AMERICAS | APAC | EMEA

Australia

Austria

Belgium

Brazil

Canada

Croatia

Czech Republic

Denmark

Finland

France

Germany

Greece

Hong Kong SAR

Hungary

India

Indonesia

Ireland

Italy

Japan

Latvia

Lithuania

Malaysia

Mainland China

Mexico

The Netherlands

New Zealand

Norway

Poland

Portugal

Romania

Russia

Singapore

Slovakia

Slovenia

South Africa

South Korea

Spain

Sweden

Switzerland

Thailand

Turkey

United Kingdom

USA