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COMMISSION STAFF WORKING DOCUMENT

**PROGRESS REPORT ON
COMMERCIAL REAL ESTATE STATISTICS**

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COMMERCIAL REAL ESTATE STATISTICS

1.   BACKGROUND

This document reports on the progress in developing commercial real estate statistics and describes current and planned activities.

Developing statistics for commercial real estate has been ongoing in and beyond the European Statistical System for some years. However, in Europe, this work received a strong push with recommendations issued by the European Systemic Risk Board (ESRB) in 2016 and 2019. The ESRB is responsible for the macroprudential oversight of the EU financial system and preventing and mitigating systemic risk. While statistics for residential real estate have developed significantly following the 2008 financial crisis, large data gaps still exist for commercial real estate that hamper macroprudential analysis.

In October 2016, the ESRB issued Recommendation ESRB/2016/14 on closing real estate data gaps [1]. In March 2019, the board amended it with Recommendation ESRB/2019/3 and added 'Recommendation F' [2]:

- *The Commission (Eurostat) is recommended to propose Union legislation establishing a common minimum framework for the development, production and dissemination of a database on commercial real estate indicators on prices, rentals, rental yields, vacancy rates and construction starts;*
- *The Commission (Eurostat) is also recommended to develop and promote statistical standards, sources, methods and procedures for developing this database, in particular to ensure the quality of this set of indicators and minimise the reporting burden;*
- *Recommendation F (timeline): By 31 December 2021, the Commission (Eurostat) is requested to deliver to the ESRB and the Council an interim report containing a first assessment of the implementation of Recommendation F. By 31 December 2023, the Commission (Eurostat) is requested to deliver to the ESRB and the Council a final report on the implementation of Recommendation F.*

The revised recommendation also specifies that indicators should be available quarterly and should include a breakdown by type of property and by type of location (prime/non-prime). This document is the interim report to the ESRB and the Council as requested in Recommendation F addressed to the Commission (Eurostat).

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[1]   OJ C 31, 31.1.2017, p.1-42.
[2]   OJ C 271, 13.8.2019, p. 1-42.

State of development of commercial real estate statistics and their use

There are many challenges in developing commercial real estate statistics:

- commercial real estate markets are thin and heterogeneous;
- companies in this sector often treat source data as private;
- statistical authorities lack expertise on these markets.

Nevertheless, in recent years, Eurostat and the Member States have together made a large investment in developing commercial real estate statistics. They have made significant progress particularly for prices, rentals and construction starts, even if many substantial challenges remain. Progress on rental yields and vacancy rates has been relatively limited.

There are two main uses for commercial real estate indicators:

- in **economic and monetary policy-making**, where macroeconomic indicators, such as prices and rentals, are also used as deflators in national accounts. This may be characterised as mainly backward looking, because it reports how the economy and markets have developed up to the present.
- in **macroprudential supervision** and **financial stability**. This uses price, rental and rental yield indicators to monitor market risks, and is forward looking.

Furthermore, macroeconomic indicators tend to focus on national or European trends, while, for market risks, local or regional information and data for specific property types can provide important signals.

The development of commercial property price indices is also addressed internationally by the G20 Data Gaps Initiative, under the umbrella of the Financial Stability Board ([3]).

Impact of COVID-19

The COVID-19 pandemic and the response to it have had a major impact on real estate markets, including commercial real estate. For example, the increase in working from home and online shopping has had consequences for the demand for office and retail space. Travel and leisure patterns have also changed substantially. These developments further increase the need for official and reliable statistics on how commercial real estate prices, rentals, rental yields, vacancy rates and other variables evolve. Currently, most users rely on private data to analyse these market trends.

Structure of the document

Section 2 describes the work by Eurostat in recent years to progress on developing commercial real estate statistics. Section 3 summarises the state of play in EU Member States and EFTA countries for the various indicators, while section 4 discusses some challenges to

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([3])   See latest status report: https://www.imf.org/en/News/Articles/2021/10/07/pr21290-fsb-and-imf-publish-2021-progress-report-on-the-g20-data-gaps-initiative

meet the ESRB recommendations in full. Section 5 presents the next steps and section 6 provides some concluding remarks.

2. RECENT PROGRESS IN ADVANCING COMMERCIAL REAL ESTATE STATISTICS

Eurostat and the Member States have been taking forward work on commercial real estate statistics under three work streams.

Work stream 1: Prices, rentals and rental yields

In December 2017, Eurostat published *Commercial property price indicators: sources, methods and issues* ([4]). This publication aimed to outline concepts, methods, data sources and key issues to compile commercial property indicators. It was a first attempt to set out the wide range of challenges in measuring commercial property prices. Since then, the work to develop indicators has intensified, in particular by setting up a variety of pilot projects in EU countries. Some of these pilot projects have already resulted in published indicators.

The Task Force on Commercial Real Estate Indicators ([5]) was set up in 2018 and meets twice per year. Participants come from a selection of EU National Statistical Institutes (NSIs) and National Central Banks (NCBs) as well as the European Central Bank (ECB), the Organisation for Economic Co-operation and Development (OECD), the International Monetary Fund (IMF) and the Bank for International Settlements (BIS). The task force monitors and discusses the various ongoing pilot projects in participating countries, for example on finding the most suitable data sources. The pilot projects contribute to discussions on the methodology for developing commercial real estate indicators with the aim to create a methodological manual.

The task force has already agreed on the outline of this methodological manual and Eurostat has established contracts to draft it. Eurostat has also outsourced technical assistance to the Member States and the provision of a training course to be delivered from 2022. In addition, the task force follows up and is regularly informed on two research studies launched through procurement by Eurostat. Both studies concern automatic data collection ('web scraping'): one from commercial real estate portals and the other from information published by real estate investment funds in Germany.

Eurostat continues to offer grants to EU Member States and EFTA countries to develop commercial real estate indicators. This covers projects on prices, rentals and rental yields under this work stream, and vacancy rates under work stream 3. The task force reports directly to the Real Estate Price Statistics Working Group, which was established in October 2019 following the endorsement by the European Statistical System Committee. The task force will continue to contribute to the development work in line with the timetable provided by the ESRB recommendation. Both the mandate and the composition of the task force may change to take into account developments over time and in the countries.

([4])   https://ec.europa.eu/eurostat/web/products-statistical-reports/-/ks-ft-16-001
([5])   A sub-group to the Commission expert group "Real Estate Price Statistics Working Group".

Work stream 2: Construction starts

In this second work stream, the Task Force for Commercial Real Estate Indicators related to Short-term Statistics ([6]) was set up in 2019 and has met annually since then. In this group, several NSIs from EU Member States, candidate countries and EFTA countries participate, as well as the ECB.

Six Member States applied successfully for grants in 2019 to support their preparatory and analytical work and another two Member States did so in 2020. The grants also supported pilot projects on data production and data exchange.

This task force initially covered construction starts and vacancy rates indicators. It then included building permits and works completions. These two indicators complement the request of the ESRB for the construction starts indicator. This is because not all building permits that are granted will result in construction starting and not all construction work is completed. Building permits are already covered by the European Business Statistics regulation ([7]) and the indicators are available to users. The task force made good progress on developing common definitions, methodology, measurement units and classifications. It also drafted detailed data requirements for the indicators on construction starts and works completions.

The Short-term Statistics Working Group and Business Statistics Directors Group, to which the task force reports, recognised the progress they had made on construction starts and works completions. However, several members raised serious concerns about the additional burden on NSIs and data providers caused by the lack of available administrative data for these indicators. Therefore, in 2021, Eurostat carried out a survey on the additional burden related to data collection for construction starts and works completions data. The information provided by the NSIs suggested that the potential impact of the burden varies considerably from country to country.

Work stream 3: Vacancy rates

From discussions in the two task forces, it became clear that additional technical expertise was necessary to develop an indicator for vacancy rates. Data on vacancy rates do not come from the data sources used for prices. They are also not related to short-term construction indicators but rather to property management. To develop this indicator further, a third task force was created.

The Task Force on Vacancy Rates of Commercial Real Estate ([8]) was set up in 2021 and met twice that year, with participation by NSIs from EU Member States and EFTA countries, the ECB and one NCB. Its mandate is to identify data sources, analyse costs and benefits, match data sources with the target definition and produce recommendations that meet the ESRB recommendation on vacancy rates. It has discussed different country approaches to vacancy

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([6]) A sub-group to the Commission expert group "Short Term Statistics Working Group".
([7]) OJ L 327, 17.12.2019, p. 1-35.
([8]) A sub-group to the Commission expert group "Real Estate Price Statistics Working Group".

rates for commercial real estate and has focussed on the various definitions used and data sources available in the task force countries.

The task force has produced a draft set of recommendations aiming to standardise the collection and compilation of statistics on vacancy rates for commercial real estate properties.

3. COMMERCIAL REAL ESTATE STATISTICS IN EU MEMBER STATES AND EFTA COUNTRIES

In 2021, Eurostat carried out a survey on the development of four commercial real estate indicators by EU Member States and EFTA countries, complementing the information already available for construction starts. The four indicators covered by the survey were price indices, rental indices, rental yield indicators and vacancy rates.

For each indicator, the survey collected information on:

- the institutions involved;
- the current state of development;
- planned activities;
- applied methodologies (if calculations of the indicators had started).

The questionnaire was sent to the NSIs in the 27 EU Member States and three EFTA countries. In situations where the NCB or another part of the administration is responsible for developing one or more of the indicators in question, the NSI was asked to contact the appropriate institution to collect the necessary information. Respondents could provide two sets of responses if two institutions carry out the work independently. Responses were received from all 30 countries.

Overview of the survey results

The results showed that 25 of the 30 countries surveyed had started work on at least one indicator. Five EU Member States were already working on all four indicators. Five other Member States were relatively well advanced and working on three indicators. However, five countries (including four Member States) had not yet taken any action to develop indicators on the physical commercial real estate market.

In those countries that were already working on more than one indicator, the amount of progress usually varied significantly between individual indicators. In most cases, countries had started to develop price and rental indices first, and so work was more advanced on these. The least amount of progress was on rental yield and vacancy rates indicators, as can be seen in Chart 1.

Among the countries that had started work on commercial real estate indicators, many were still in the early stage of development. Relatively few countries had started publishing the results.

Chart 1: State of development of commercial real estate indicators
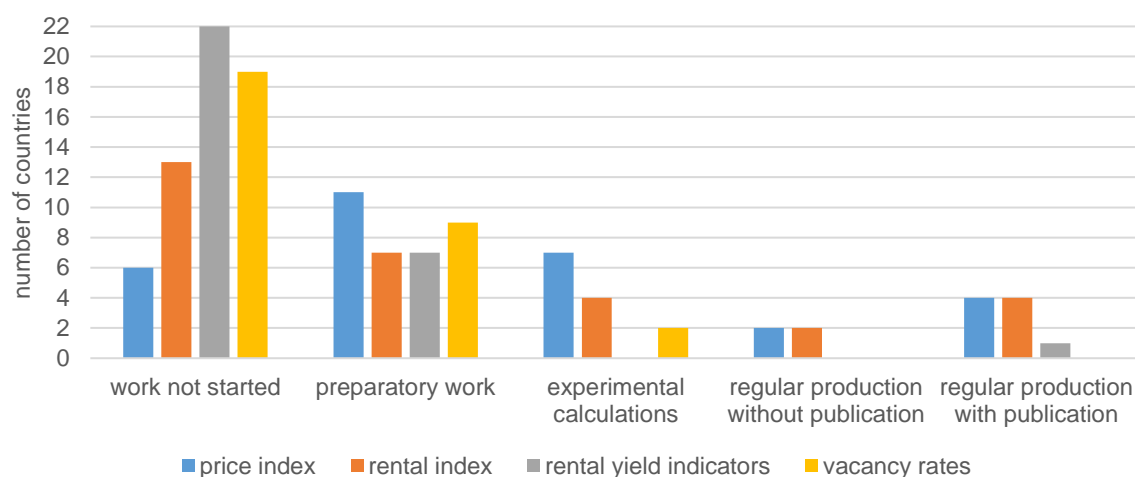
The answers to the questions about methodologies applied by the countries showed that many differences exist. The solutions applied largely depended on the specific nature of the data sources used by individual countries. The breakdowns used and frequency at which indicators were compiled also depended on the size of the respective markets. The availability of methodological guidelines and the introduction of a legal obligation to compile commercial real estate indicators were considered particularly important to accelerate the pace of work.

Price indices

Commercial real estate price indices aim to measure the change in transaction prices of assets. According to the requirements in the ESRB recommendation, they should be calculated quarterly and broken down by property type (office, retail, industrial, residential and other) and location (prime and non-prime). Furthermore, the calculation methods for price indices should measure 'constant quality' price changes. This means quality changes such as depreciation or appreciation should be removed by means of quality adjustment.

Of the 24 countries that had started work on price indices, there were big differences in how much they had progressed. A large group of 11 countries were in the preparatory phase. This is the stage before starting to calculate indices and is limited to work such as reviewing literature, researching the availability of potential data sources, gaining access to data sources etc.

Thirteen countries had started calculating price indices for commercial real estate. Among them, four countries had implemented a system of regular production and started to publish results regularly. Two other countries were well advanced but had not yet started officially publishing the results.

Countries that had started the index calculations had usually used administrative data sources containing transaction data. In most cases, the frequency of calculations was quarterly. For all countries, the indices covered the whole country. There were quite big differences between countries in the commercial real estate types covered by the index, but typically at least office

and retail properties were taken into account. Almost all countries had indices broken down by type of commercial real estate. A few countries applied an additional breakdown by region.

All countries that had started work on price indices were asked when they planned to publish data. Most respondents could not indicate a specific date, which may reflect the relatively early stage of progress. Two countries indicated 2021, one country 2023 and another country planned to start publication between 2023 and 2025.

When asked about the obstacles to begin publishing commercial real estate price indices, the respondents most often indicated the need for further methodological research and the need for time to develop a regular production system.

Among the surveyed countries, six countries (including four Member States) had not yet started work on price indices for commercial real estate and they could not say when this would start. The obstacles that they most often indicated that prevented them from starting work were insufficient knowledge about the commercial real estate market, the lack of clarity on the methodological guidelines, and other priority work.

Rental indices

Rental indices for commercial real estate provide information on the development of rentals paid by tenants. As in the case of price indices, the ESRB recommends a quarterly frequency and a breakdown by property type and location.

Seventeen countries had started work on commercial real estate rental indices. Seven of these were at the preparatory stage and the remaining ten had started calculating them. Four EU Member States were the most advanced and were publishing rental indices on a regular basis. Two other EU Member States were also well advanced but had not yet started the official publication of results.

There were big differences in the methodologies applied by individual countries. In particular, there was a wide variation in the data sources used for the calculations. Statistical surveys, administrative data, private data and a combination of data sources were being used with similar frequency ([9]).

Half the countries calculated the indices quarterly and the other half calculated them monthly, semi-annually or annually. For almost all countries, the indicator covered the whole country. Typically, the countries included office, retail and industrial properties in their calculations. In most cases, both new and existing contracts were covered by the index, but no country applied a breakdown by these two types of contracts.

Most countries did not apply any adjustments to compensate for differences in the way operating expenses are treated in individual contracts. Only countries using statistical surveys

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([9])   Some countries have reported that services producer price indices are available for 'Renting and operating of own and leased commercial real estate', based on a statistical survey of businesses classified in NACE 68.

and private data made such adjustments. Incentive schemes were only taken into account by two countries.

When asked about their plans to publish rental indices for commercial real estate, most respondents could not give a specific date. One country indicated 2022 and another planned to start publishing them in 2024.

When asked about obstacles to starting publication of rental indicators, respondents typically mentioned the need for further methodological research and for time to develop a regular production system.

Among the surveyed countries, 13 (including 12 EU Member States) had not yet started work on rental indices and most of those countries could not say when they would begin. They explained that their biggest barriers were having other priorities and not having enough qualified staff.

Rental yield indicators

ESRB defines the rental yield as the ratio of annual rentals to the market value of the immovable property. It measures the investor's profit in terms of rent. According to the requirements in the ESRB recommendations, rental yields should be presented as indices with a quarterly frequency and broken down by property type and property location.

Work on rental yield indicators was clearly less advanced than work on price and rental indices. Out of 30 countries, 22 (including 19 EU Member States) had not taken any action in this area. Most of these countries did not give any specific date for beginning work except for one country, which indicated 2022. Moreover, two countries reported that they had no plan to start work on this indicator.

When asked why work on rental yield indicators had not started, the countries most often cited the lack of qualified staff, lack of access to relevant data sources and other priority work.

Among the countries that had started work on rental yield indicators, seven were at the preparatory stage. Most of those countries could not say when they would start publishing the data regularly and one country did not expect to publish these data at all.

In one Member State, the NCB had already started publishing rental yield indicators regularly. However, the indicator's scope was limited to rental housing.

Vacancy rates

ESRB defines the vacancy rate as the surface area available for rent relative to the total surface area of the property. It helps assess the market conditions and in particular, the relationship between demand and supply in the rental market. Like the other commercial real estate indicators, vacancy rates should be calculated quarterly and broken down by property type and location.

Progress on vacancy rates was similar to that of rental yield indicators. Out of 30 countries, 19 had not yet started work on this indicator. Two of them had no plans to start work in this area. None of the other countries could say when they would begin. They most often pointed to other priorities and the lack of access to relevant data sources as the reasons for not starting.

Of the 11 countries that had started on vacancy rates, nine of them were at the preparatory stage and the remaining two were working on experimental calculations. When asked about their publishing plans, one country did not intend to publish the indicator, one country said it planned to publish in 2022 and another said 2023. The other countries did not have specific publication plans.

Construction starts indicators

Indicators for commercial real estate construction starts should be based on the ESRB data requirements where construction starts is the surface area, in square metres, of new commercial construction projects begun during the reporting period. If this information is not available, construction starts may refer to the number of new commercial construction projects begun during the reporting period.

Before the launch of the task force responsible for this indicator (see work stream 2 in section 2), a survey in July 2018 indicated some data were already available on construction starts and works completions. The survey results showed that seven EU Member States had national data on works completions at the required frequency and with the necessary breakdown. In addition, another dozen countries had partial data (only residential buildings) and five more countries had annual data. Six Member States had complete data on construction starts.

The commonly agreed data requirements on construction starts and works completions (see section 2) were used for national pilot projects, financed by EU grants in 2019 and 2020.

In March 2021, Eurostat looked into the possibility of organising voluntary pilot data transmissions. Of the task force members, four Member States could send pilot data on construction starts by the end of 2021, and six other Member States expected to send data in 2022 at the latest. Two additional Member States and three candidate countries were still assessing data sources but could not commit to providing data in 2022.

4.   CHALLENGES IN MEETING THE ESRB DEFINITIONS AND REQUIREMENTS

The work carried out so far to develop the indicators requested by the ESRB recommendations has shown that there will be challenges in meeting some requirements and definitions. This section briefly describes some of these challenges.

Definition of commercial real estate

Recommendation 2019/3 of the ESRB defines commercial real estate as '*any income-producing real estate, either existing or under development, including rental housing; or real*

estate used by the owners of the property for conducting their business, purpose or activity, either existing or under construction; that is not classified as residential real estate and includes social housing.'

The key element of this definition is 'income-producing'. This way of defining commercial real estate includes rental housing and social housing, for example. An alternative way of defining it would be to consider the purpose of the building (residential, commercial or mixed).

Some data sources used for the indicators may not cover the entire ESRB definition, or may not provide the information needed to separate commercial real estate from residential real estate. In *Commercial property price indicators: sources, methods and issues* (section 4.2.1), Eurostat therefore introduced a more flexible 'building block' approach that allowed types of commercial real estate to be grouped depending on the analytical objective. This approach will remain fundamental to Eurostat's further development of the statistics.

For example, for construction starts, available data sources do not allow rental housing to be separated from buy-to-let, as information on the legal status of the owner is not available. Thus, construction starts will cover all residential buildings.

In addition, price indices currently available for renting of dwellings (for example, as included in the Harmonised Index of Consumer Prices (HICP)) cover all rentals, regardless of the owner's legal status. Social housing is also included. Including rental housing and social housing in rental indices for commercial real estate would lead to an overlap with the HICP.

The House Price Indices (HPI) currently available cover only purchases of households, and do not distinguish between the different purposes of dwellings (e.g. for renting or for owning).

Property location

The ESRB recommendations request a breakdown by prime and non-prime locations. The main obstacle to this is that there is no objective definition identified for such a breakdown. It depends on the reporting country, on the changing market situation and on the type of building. As a result, comparing commercial real estate statistics using a prime/non-prime breakdown across Member States and over time may not be possible. This applies to all commercial real estate indicators that are covered by the ESRB's Recommendation F.

Small number of transactions in heterogeneous markets

Statistics on residential real estate can usually be based on a large number of transactions in a given period. This allows us to produce reliable quarterly statistics. The number of transactions in commercial real estate is much smaller. Together with the heterogeneity inside market segments, it is a challenge to compile meaningful statistics taking into account properly the quality of the properties sold. In smaller countries or markets, it might be possible to compile annual data but not quarterly data. Similarly, some smaller segments of the market may be difficult to cover adequately.

5. NEXT STEPS FOR DEVELOPING COMMERCIAL REAL ESTATE STATISTICS IN THE EU

In the coming years, the methodological discussions and research on prices, rentals, rental yields and vacancy rates will continue, mainly within the existing task forces. Furthermore, as previously noted, a manual will be developed and training and technical assistance will be provided to countries through a dedicated contract with experts in those fields.

Concerning the manual, drafting on the first two chapters – 'Functioning of the real estate market' and 'User needs for commercial real estate indicators' – was completed in summer 2021. Drafting on two additional chapters – 'Indicators used in analysing commercial real estate markets' and 'Methods of compiling commercial real estate indicators' – is due to be completed by mid-2022. The manual will cover prices and rental indices, as well as rental yields and vacancy rates. Work on the manual is followed up as a regular item in task force meetings.

For construction starts, the outcome of the pilot data collection will be discussed further as regards the quality of the data, their coverage and the burden on businesses. Work on the methodological guidance will continue in the coming years supported by the experience gained by countries who have received grants.

Concerning vacancy rates, the draft recommendations will be finalised and Member States will be encouraged to start pilot projects to test their implementation.

ESRB Recommendation 2019/3 included a specific recommendation to Eurostat '*to propose Union legislation establishing a common minimum framework for the development, production and dissemination of a database on indicators on the physical commercial real estate market (...)*'.

Statistical legislation is instrumental in harmonising data availability and quality across Member States. It can also help ensure adequate resources for data collection at national level. However, legislative processes are also complex and time-consuming, and less formal and more flexible tools can sometimes be the more appropriate choice for the purpose.

Eurostat will be considering all options, including legislation.

6. CONCLUSION

This document has provided an overview of the progress made towards developing commercial real estate indicators on prices, rentals, rental yields, construction starts and vacancy rates, as well some of the main challenges in producing these indicators.

Significant progress has been made in developing commercial real estate statistics, particularly for prices, rentals and construction starts, even if substantial data and methodological challenges remain. However, progress has not been the same across all indicators or all Member States.

Progress so far on rental yields and on vacancy rates has been limited, although Eurostat and the Member States continue to develop them.

The specific approach to be used for compiling commercial real estate indicators depends crucially on the data sources available, which vary from country to country. The level of detail and frequency at which reliable indicators can be compiled will also depend on the size of the respective commercial real estate markets.

The necessary expertise in the different national statistical offices and central banks will be further developed, supported by the methodological guidance being prepared. For some indicators and methods, before methodological requirements can be provided, some wider and deeper experience from the ongoing pilot work will be necessary.

Producing meaningful commercial real estate indicators will continue to be challenging for statistical institutes. Eurostat will continue to provide the forums for countries to share their experience, an important part of developing uniform methodological guidance.

Adequate resources will also be necessary if countries are to meet the requirements of the ESRB recommendations as closely as possible. In particular, those Member States that have not yet begun pilot work on some of the commercial real estate indicators will need to give that work the necessary priority and resources.