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Measuring Commercial Real Estate Developments

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Measuring Commercial Real Estate Developments

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Abstract

Commercial real estate (CRE) has been identified as an area for which statistics are underdeveloped. Users, in particular in the financial markets, have been calling for a harmonized framework for monitoring the CRE markets to ensure early identification of vulnerabilities that could lead to future financial crises. Data are demanded in particular for prices, rents, yields and vacancy of CRE. The challenges in measuring CRE developments are even larger than for residential real estate. They include the facts that CRE markets are thin and heterogeneous, source data are often kept behind closed doors by market participants and statistical offices lack the knowledge and expertise on CRE markets. Different approaches exist or are being developed for the measurement of CRE indicators. They may be driven by the availability of data sources. The paper will report on the results of a survey among European countries on availability and accessibility of data sources for CRE, and discusses different ways forward to meeting the user demand on the basis of these data sources. Can we expect a conversion of methods? Which are the decisive elements for using a specific method?

1. INTRODUCTION

The development of statistics on commercial real estate is a long-standing need of important European users such as the European Systemic Risk Board (ESRB) and the European Central Bank (ECB). The development of commercial property price indices is also an element of the worldwide Data Gaps Initiative (DGI-II)¹.

The ESRB was established in 2010 in response to the global financial crisis. Its mission is the macro-prudential oversight of the EU financial system and the prevention and mitigation of systemic risk. In pursuit of its mandate, the ESRB issues warnings and recommendations. In October 2016², the ESRB issued a recommendation on closing real estate data gaps, following up on one of the lessons learned from the crisis – the risks brought about by the lack of data on house price developments. The recommendation addresses existing gaps in the availability and comparability of data on residential and commercial real estate. Regarding residential real estate (RRE), significant improvement in the availability of statistical data, in particular on prices, has been achieved. The 2016 recommendation therefore focused on commercial real estate (CRE) where data gaps on prices, rents and other indicators are particularly severe.

This paper will discuss the significant challenges in producing CRE statistics. In December 2017, Eurostat published “*Commercial property price indicators: sources, methods and issues*”³. The primary aim of this publication is to outline concepts, methods, data sources and key issues for the compilation of commercial property indicators. The report makes a first attempt at setting out the wide range of challenges linked to the measurement of commercial property prices.

Since then, the development work has been intensified in particular by a variety of pilot projects in EU countries. Some of these pilot projects have already resulted in published indicators (see section 6).

In the meantime, the COVID-19 pandemic had a significant effect on the real estate markets, including on CRE, and these effects are expected to continue in the coming years. For example, people are likely to work more from home, resulting in less demand for office space. Also, the retail and hotel sectors have been hit hard and the question remains to what extent they will be able to recover. On the other hand, due to the increase in online shopping, the demand for warehouses increased.

These developments will further increase the need for reliable official statistics on developments of CRE prices, rents, yields, vacancy rates and other variables. Currently, most users rely on private data to analyse market trends⁴.

¹ <https://www.imf.org/en/News/Seminars/Conferences/DGI/global-conferences-on-dgi>

² https://www.esrb.europa.eu/pub/pdf/recommendations/2016/ESRB_2016_14.en.pdf, subsequently revised by https://www.esrb.europa.eu/pub/pdf/recommendations/esrb.recommendation190819_ESRB_2019-3~6690e1fbd3.en.pdf

³ <https://ec.europa.eu/eurostat/documents/7870049/8545612/KS-FT-16-001-EN-N.pdf>

⁴ See for example <https://www.economist.com/finance-and-economics/2021/06/03/what-a-work-from-home-revolution-means-for-commercial-property>

This paper will outline the efforts made to progress on the measurement of CRE developments. In section 2, the user needs for CRE data are re-iterated and the various indicators described. Section 3 discusses in more detail some of the more significant challenges in producing these indicators. Statistics cannot be produced without source information: section 4 analyses the various data sources (potentially) available to national statistical institutes or central banks on the basis of a survey carried out in 2019. In section 5, the techniques to compile (price and rent) indices on the basis of the available data are reviewed, while section 6 demonstrates that progress is possible, as shown by some achievements in individual countries. Section 7 concludes.

2. USER NEEDS FOR CRE INDICATORS

Two main types of user needs can be identified for CRE indicators: those of economic and monetary policy makers and those of macro-prudential supervision and financial stability. The first type needs macro-economic indicators of e.g. prices and rents, including as deflators of national accounts aggregates such as gross fixed capital formation. This can be characterised as mainly backward looking. The second type needs price, rents and yields indicators in order to monitor financial risk and is forward looking. Macro-economic indicators tend to be focussed on national or European trends, while for financial risks local information on specific property types can be essential. Thus, the various needs may have conflicting requirements to the data.

Price indices

Price indices for CRE aim to measure the change in transaction prices of assets. For macro-prudential purposes, quarterly indices broken down by property type (office, retail, industrial, residential and other) are most useful and indeed demanded by the ESRB recommendations. Most countries have access to administrative data on transaction prices (see section 4). However, a low number of transactions per quarter and per property type, as would be typical in smaller countries, may affect negatively the quality of the resulting indices. The indices may become volatile and thereby less useful for identifying market trends.

The administrative data on a transaction normally includes a location identifier, but limited information on specific characteristics of the building. It is therefore necessary to link these data with other sources that contain such information, in order to be able to ensure a quality-adjusted index.

An alternative approach would be to base a price index on valuation or appraisal data. Generally, assets are appraised frequently, either for taxation, insurance, financing or general financial reporting purposes (the latter is relevant for real estate investment funds). However, an essential condition for compiling appraisal-based indices is access to sources containing appraisals that are carried out not only regularly but also in a consistent way. Appraisal methods may vary across countries and within countries among purposes. Moreover, an appraisal value does not necessarily coincide with the price at which an asset could be sold. They show market trends with a lag and tend to be much smoother than actual transaction prices.

Relatively easy to access sources of data can be found on the internet. Web portals and real estate agents advertise properties for sale, including an asking price. The asking prices may not be equal to the final selling prices, but they are available in real time and could provide

early indications of market trends. They could complete the transaction data that come in with some lag. They also provide – ideally – good information on characteristics of buildings.

Eurostat has committed pilot projects on collecting data from the web. The projects are still ongoing. A first project is on scraping data from web portals in a number of European countries to evaluate the quality of the data that can be obtained in this way. One early conclusion is that the quality of the characteristics information can leave a lot to be desired. Oftentimes, much of the information is missing. A second project is scraping public information from annual reports of real estate investment funds.

Rent indices

Rent indices are one of the indicators of the space market for CRE. Their purpose is to provide information on the development of prices of the right to use space. Rent developments are important for the financial markets as they indicate trends in possible profitability of purchasing assets.

As in the case of price indices, quarterly frequency and breakdowns by property type and location are recommended by ESRB. Price and rent indices are similar to the extent that similar methodological solutions can be used. However, the measurement of rents is more difficult due to the greater number of factors that determine the price level. In addition to the characteristics of the property and its location, the terms of the contract, its length as well as the characteristics of the tenant play an important role. Contract details (such as the way operating expenses are dealt with or applied incentives) are well known to the contracting parties but not necessarily publicly available. At the same time, such information is necessary in order to provide a measure based on the same price concept (e.g. net of operating costs) and quality adjusted for changes in the mix of different types of contracts. Another important aspect of rent indices is their scope in terms of new and continued contracts. Rent indices based on new contracts seem to be particularly important as they reflect the current market situation. However, also indicators based on continued contracts may be interesting for some users, e.g. for the deflation of expenditure on rents.

The possibility of using administrative data in the calculation of rent indices is rather limited. Lease registers exist only in a few European countries. Another data source, which can be potentially useful, is data gathered by tax authorities. However, they usually do not include all the details of contracts and matching with other data sources may be necessary.

In view of the lack of administrative data, statistical surveys directed to property owners or tenants seems to be a good alternative. The big advantage of such a solution is the possibility to control the process of collecting and processing data. Moreover, it allows obtaining information about all contract details that is known only to contract parties. However, statistical surveys involve high costs for statistical institutions and burden for respondents. Another important aspect of statistical surveys is access to the appropriate sampling frame, which should help to generate a representative sample of rentable properties. While the building registers contain the basic characteristics of buildings, which allow for identification of commercial properties, the purpose of the building (for own use vs. for rent) is usually not disclosed. It is also possible to use the business registers as a significant part of property owners should belong to the NACE group 68.2 “Rental and operating of own or leased real estate”. However, it should be borne in mind that the rental of commercial properties may take place as a secondary activity as well.

As in the case of price indices, it is possible to use data from portals advertising properties for rent. However, this approach is appropriate only for new rental contracts. Moreover, asking rents have their limitations as they reflect the property owners' views on the market situation and may differ significantly from the actual rents.

This year Eurostat initiated a project which aims to research the CRE space market in selected Members States. It should allow to better understand how the market is functioning, to identify the best sources with information on rents for CRE and to identify problems that can be encountered in the compilation of rent indices.

Indicators on rental yields

Indicators on rental yields are the least developed indicators among measures on the physical market required by the ESRB. Methodological research is still needed and there is little practical experience on producing official statistics on yields. According to the ESRB definition, rental yield means the ratio of annual rent to the market value of the immovable property. Its purpose is to monitor the income-generating capacity of CRE.

Statistics on rental yields expressed as ratios are however demanding to produce. Information would be needed on rents and values (or prices) for individual assets. If administrative data sources are used, these variables would typically not be available for the same asset in the same source. Hence, detailed data matching would be necessary. One possible source in which the information on rents and value or price is simultaneously available are reports from real estate investment funds, for example as reported in Germany by the Federal Gazette (Bundesanzeiger)⁵. Another solution would be a statistical survey addressed to property owners. However, in this case, the question arises on what basis property owners would report the current market value of their properties, especially on a quarterly basis.

An alternative approach may be to focus on changes in rental yields over time, without the need to calculate yield levels first. An index of rental yields could be calculated as the ratio of a rent index and a price index. Such approach seems relatively easy; however, it would be necessary to ensure consistency between measures for rents and prices.

Vacancy rates

Vacancy rates are physical indicators that help to assess the relationship between demand and supply in the space market. They are presented as a percentage of vacant space in the total amount of space. The ESRB defines vacancy rates as the surface area available for rent relative to the total surface area of the property. However, also other definitions exist. In particular, it is possible to extend vacancy rates to the whole stock of commercial properties and not limit the scope to the properties for rent. Another important aspect to be considered when developing vacancy rates is the definition of vacant space. In the case of vacancy rates for rentable properties, it can be the space temporary vacant due to the change of the tenant but also the space which is not rented out due to other reasons (for example due to modernizations). Moreover, it is necessary to decide on the measurement unit. It is possible to measure vacant space in the number of vacant buildings, in the number of square meters or in the market value measured in monetary units. Depending on the scope and the definition of the indicator, different data sources will be the most appropriate.

⁵ <https://www.bundesanzeiger.de/pub/en/start?11>

Generally, administrative data sources do not contain information on vacant space or vacancy rate of individual properties. However, they can be helpful to identify vacant units. In particular, it can be assumed that properties in which no company is registered or properties with very low energy consumption are vacant. A certain limitation of the administrative data is the lack of information on the reason of vacancy as well as the purpose of the property (for own use vs. for rent). Hence, vacancy rates based on administrative data would refer to the whole stock of commercial properties without considering the reason for the vacancy.

Data on vacancy rates can be found in numerous private data sources. However, individual data producers differ from each other in terms of used definitions and methods. As a result, it would be difficult to achieve comparability of results between countries. Moreover, in the case of private data sources continuity of the data availability is not guaranteed. For some statistical institutions, a serious obstacle may also be the need to pay a fee for the access to data.

Another possibility for obtaining information on vacancy rates is through a statistical survey. In particular, it seems that the survey on vacancy rates could be potentially combined with the survey on rents. This solution would allow producing vacancy rates for rentable properties as it is required by the ESRB recommendations, but is costly and increases the survey burden on businesses.

3. CHALLENGES FOR STATISTICS ON CRE

The definition of CRE

The ESRB defines CRE 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.”⁶

The key element of this definition is “income-producing”. This way of defining CRE includes e.g. rental housing and social housing. An alternative way of defining CRE is to consider the purpose of the building (residential, commercial or mixed).

Some data sources to be used for the CRE indicators may not cover the entire ESRB definition, or may not provide the information to separate CRE from RRE. In “*Commercial property price indicators: sources, methods and issues*”⁷, Eurostat therefore introduced a more flexible “building block” approach that allows to group the types of CRE according to needs.

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 to produce reliable quarterly statistics. The number of transactions in CRE is much smaller. In combination with the heterogeneity inside market segments it is a challenge to compile meaningful statistics taking properly into account the quality of the

⁶https://www.esrb.europa.eu/pub/pdf/recommendations/esrb.recommendation190819_ESRB_2019-3~6690e1fbd3.en.pdf, page 5

⁷<https://ec.europa.eu/eurostat/documents/7870049/8545612/KS-FT-16-001-EN-N.pdf>, section 4.2.1

objects sold. In smaller countries or markets it might be possible to compile annual data but not quarterly data.

An aggregate price index for all CRE may not provide enough information for policy makers. Price developments in the CRE sector have to be broken down into the various segments: office, retail, industrial, hotel, logistics and other. Also within these segments, the heterogeneity has to be considered. In addition to size and physical quality of the building, location has to be taken into account when compiling an index suitable to capture market developments. Small shops and shopping centers are both considered retail.

Complexity of contracts

Sales of CRE assets are often bundled in “portfolio” transactions. One portfolio could include several residential and/or commercial assets, transacted at one overall price. Disentangling this overall price into prices for the individual assets included in the transaction is a challenge. Using available appraisal data for the individual assets could provide the key for the allocation of the transaction price to the assets.

An additional significant challenge is the fact that not all real estate transactions are identifiable as such. Many, especially large, transactions are hidden in sales of shares in companies, often special purpose vehicles, that own the assets. Such share deals can be very complex, involving a bundle of assets (possibly both commercial and residential) and multiple companies. As there is no sale of an asset recorded, such transactions escape the usual administrative data sources based on land registers or notaries.

In addition, share deals allow to combine the asset with related debt or to be packaged in a structure suitable for buyer and seller. A relevant feature of share deals is their taxation. Depending on the country – or in case of cross-border deals the countries involved – the property transfer tax may be avoided, and thus no registration of the transfer of an asset takes place. This prevents statisticians from capturing it.

Access to comprehensive information on transactions

Transaction or appraisal data registered by public institutions such as land registers or taxation authorities are usually accessible to statistical offices. However, large amounts of relevant data are held by market participants, such as (organisations of) real estate agents, (organisations of) real estate investment funds, banks, insurance companies, etc. (see section 4). This kind of data is usually harder to access for statisticians.

Some private institutions, often consultants or research institutions, sell indicators of various kinds, demonstrating there is a market for CRE data. Their market coverage and methodologies are not always stated clearly. Nevertheless, for lack of official data, this is the information available to investors and policy makers alike.

There is a trend for statistical offices to get easier access to private data sources. In some countries, the statistical institute’s right of access is already included in the national statistical law. Nevertheless, in practice, statistical institutes are seen as potential competitors on the data market, a situation that provides no incentive for the sharing of data.

Lack of expertise in compiling institutions

The CRE market is complex. Producing meaningful statistical information on CRE for economic, monetary or macro-prudential policy makers requires a thorough understanding of the workings of the market: the market participants and their incentives, the regulations and administrative procedures governing the market, the structures of transactions, data reporting obligations, etc. Statistical institutes have ample experience with collecting data on, say, turnover, employment and value added of businesses, but less with collecting information on transactions, values or other variables related to individual assets held by businesses. It takes time to develop the expertise needed to produce such relatively new statistics and in particular to develop an in-depth understanding of the CRE markets.

4. SURVEY ON AVAILABLE DATA SOURCES

In 2019, Eurostat undertook a survey among Member States to investigate the availability of data sources for CRE. The questionnaire used in the survey was organized by type of data source. Twenty data source categories, which potentially might include information on at least one of the variables under consideration, were taken into account. Among the identified data sources there are both sources typically held by public authorities (registers or data sets held by tax authorities) and sources held by private organizations (e.g. by banks, investment funds, appraisers, real estate agents, private research companies, insurance companies). Additionally respondents had the possibility to add up to two additional data sources. The list of data source categories included in the questionnaire is shown in chart 1.

Respondents were asked to describe each of the existing data sources by answering a set of questions. The same set of questions was used for each data source. In the first place, respondents were asked whether the specific data source is available to them. The next questions related to the ownership (public or private), the periodicity, the accuracy/reliability, the cost of access, and the included variables. Finally, respondents had the possibility to provide further information and explanations on the given data source in a specially designated text box.

The questionnaire was sent separately to the national statistical institutes (NSIs) and the national central banks (NCBs). Responses were given by 28 countries that is by all the EU countries and by the UK. 25 NSIs and 20 NCBs participated in the survey. In the case of 17 countries, replies from both the NSI and the NCB were obtained. In 8 countries only the NSI participated and in 3 countries – only the NCB.

In this paper, we highlight some key results.

When answering the question about availability respondents had a possibility to classify each of the data sources to one of the following four groups:

1. The source exists and is used for statistics on CRE,
2. The source exists, is accessible but is not yet used for statistics on CRE,
3. The source exists but is not accessible for legal or commercial reasons,
4. The source is currently under development.

Accessible but not yet used data sources represent the largest part of the listed data sources (43.3%). The second largest category are data sources already used which account for 27.5%. Data sources not accessible constitute 23.2%. Finally, 6.0% of data sources are under development.

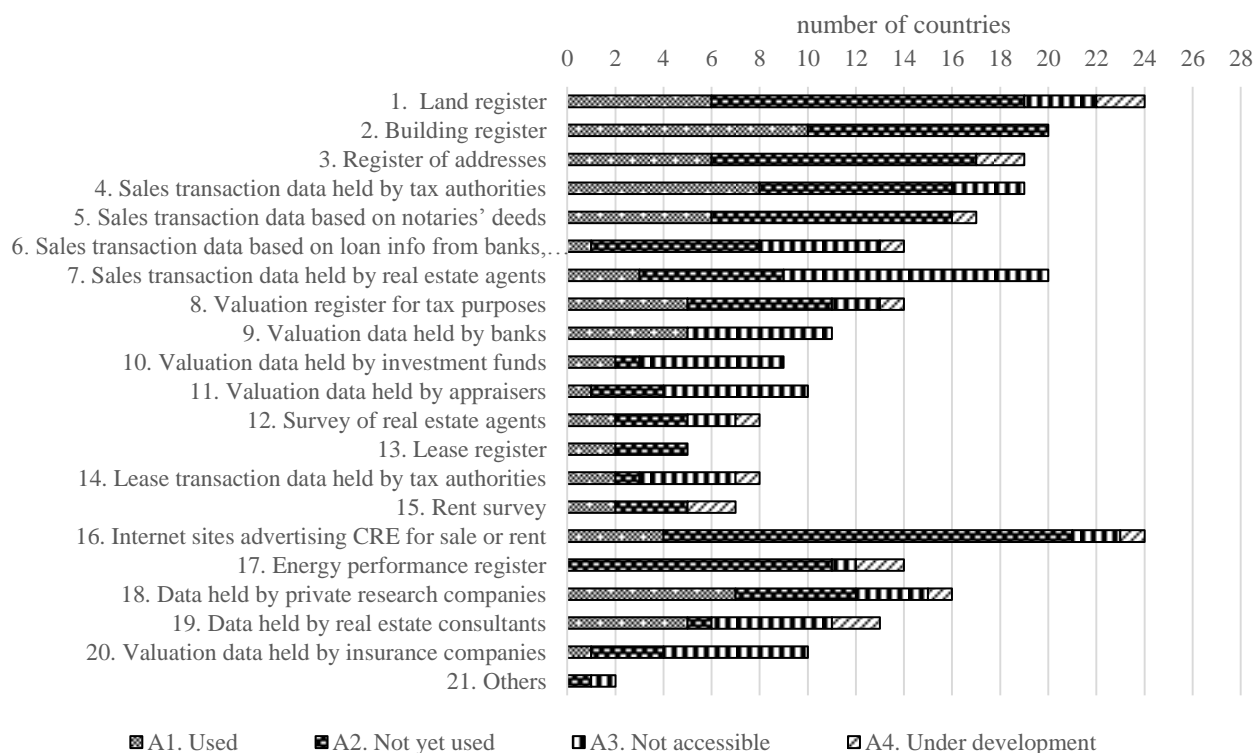
However, the share of each of these categories depends on the ownership of data sources. In particular, “accessible but not yet used data sources” account for 52.7% of public data sources and 32.1% of private data sources while “not accessible data sources” account for 9.3% of public data sources and 39.7% of private data sources.

Results on availability status vary greatly between different data source categories as well, as shown in chart 1. On the one hand, there are data sources that are accessible and are already used or potentially can be used in a large number of countries. Such data sources include “Building register”, “Internet sites advertising CRE”, “Land register”, “Register of addresses”, “Sales transaction data held by tax authorities” and “Sales transaction data based on notaries’ deeds”. On the other hand, there are data sources that are accessible in a small number of countries and these are “Lease transactions data held by tax authorities”, “Lease register”, “Survey of real estate agents”, “Rent survey”, “Valuation data held by investment funds”, “Valuation data held by appraisers”, “Valuation data held by insurance companies”.

One of the data sources that exists in many countries is “Sales transaction data held by real estate agents”. However, more than 50% of countries in which this data source exists classified it as not accessible.

The only data source category that is not used in any of the surveyed countries is “Energy performance register” (although it exists or is under development in 14 countries).

Chart 1. Availability status of data source categories

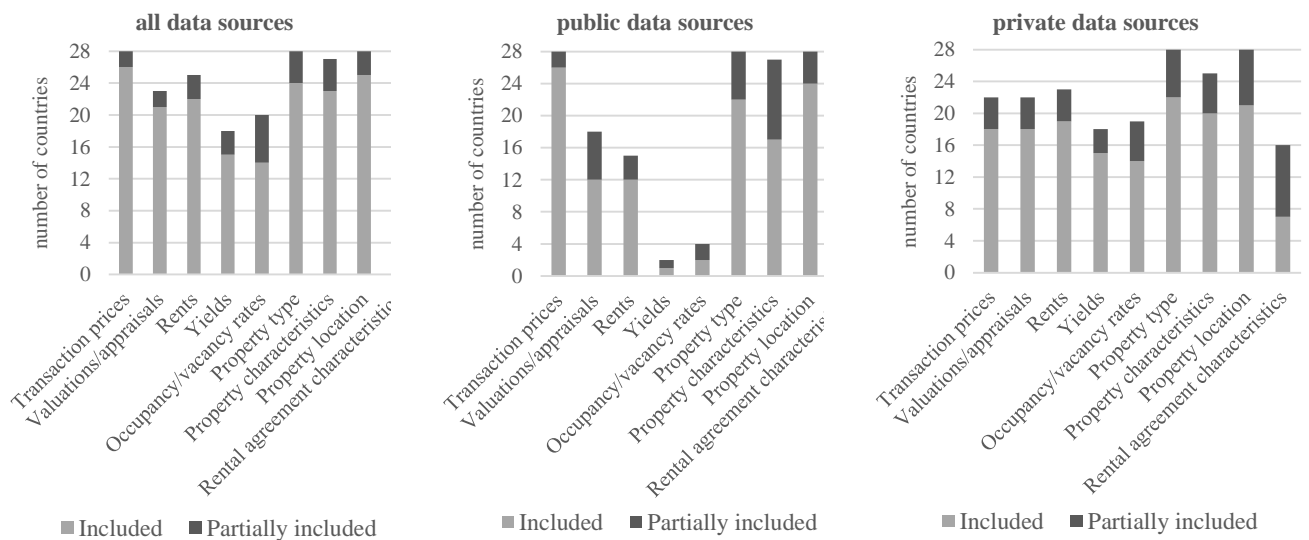


One of the aspects taken into account when collecting information on individual data sources was the inclusion of information useful for CRE market analysis. The following variables were taken into account:

- transaction prices,
- valuations/appraisals,
- rents,
- yields,
- occupancy/vacancy rates,
- property type,
- property characteristics,
- property location,
- rental agreement characteristics.

The results of the survey suggest that in almost all countries it is possible to find at least one data source with information on transaction prices, property type, property characteristics and property location (see chart 2). These variables are relatively well available in both public and private data sources. The availability of the remaining variables is slightly worse and they are more often included in private than public data sources. The worst situation is with yields and vacancy rates. In almost all countries, information on these two variables is not included in any public data source. In addition, descriptions of rental agreements are available only in some data sources and in a relatively low number of countries.

Chart 2. Inclusion of variables in at least one data source per country (28 countries)



Information on inclusion of variables in each data source category provided by respondents allowed identifying potential data sources for each variable. Table 1 lists data source categories that were the most often indicated as including or partially including each of the considered variables.

Table 1. Inclusion (or partial inclusion) of variables in data source categories

Data source category	Number of countries
property type	
Internet sites advertising CRE for sale or rent	24
Building register	20
Land register	18
Sales transaction data based on notaries' deeds	17
Sales transaction data held by real estate agents	13
property location	
Internet sites advertising CRE for sale or rent	23
Land register	20
Building register	18
Register of addresses	18
Sales transaction data based on notaries' deeds	17
Sales transaction data held by tax authorities	15
property characteristics	
Internet sites advertising CRE for sale or rent	23
Building register	19
Land register	18
Sales transaction data based on notaries' deeds	15
Valuation register for tax purposes	10
transaction prices	
Sales transaction data based on notaries' deeds	17
Sales transaction data held by tax authorities	16
Internet sites advertising CRE for sale or rent	13
Land register	13
Sales transaction data held by real estate agents	11
valuations/appraisals	
Valuation register for tax purposes	11
Internet sites advertising CRE for sale or rent	9
Sale transaction data held by real estate agents	9
Valuation data held by banks	8
Data held by private research companies	8
rents	
Internet sites advertising CRE for sale or rent	17
Sale transaction data held by real estate agents	10
Data held by private research companies	9
Data held by real estate consultants	9
rental agreement characteristics	
Internet sites advertising CRE for sale or rent	6
Rent survey	5
yields	
Sale transaction data held by real estate agents	9
Data held by real estate consultants	8
Data held by private research companies	7
Valuation data held by investment funds	6
Valuation data held by appraisers	5
occupancy/vacancy rates	
Data held by private research companies	9
Data held by real estate consultants	8
Sales transaction data held by real estate agents	8
Valuation data held by investment funds	5

5. PRICE INDEX COMPILATION METHODOLOGIES

There is a close link between the availability of data sources and the index compilation methodology. For price indices, in an ideal scenario, transaction data would be available on a timely and frequent basis, matched with information on the relevant price-determining characteristics. This would allow the use of a variety of hedonic methods for the index calculation, which are considered as the “gold” standard.

Classic “matched model” type approaches, used e.g. for consumer price indices, are less applicable in the CRE context – where they are referred to as “repeat sales” methods – as real estate assets are not frequently transacted and these methods don’t take depreciation into account.

Depending on data sources, it may be possible to combine transaction data with appraisal data. The so-called “Sales Price Appraisal Ratio (SPAR)” method compares sales prices with appraisal values (in earlier or later periods) for the same buildings. This is to be preferred over pure appraisal indices because, as already mentioned in section 2, the latter method tends to smooth out trends and miss turning points.

If no, or insufficient, data are available on price-determining characteristics, repeat sales, SPAR or pure appraisal indices may be the best options. As a last resort, compilers can use a stratified median or mean approach. In this approach, the transactions are classified in homogeneous strata, e.g. by type of property and location, for which the median or mean price is calculated and tracked over time. This method is not recommended as it generally does not sufficiently take into account the quality differences. In addition, especially for the case of CRE where the number of transactions per strata will generally be low, the resulting stratum-level indices can be highly volatile.

The location of a building will often be one of the most important price-determining characteristics. It is therefore crucial that this aspect is reflected in the index compilation method, as a minimum by stratification or, for example, as dummy variables in the hedonic model.

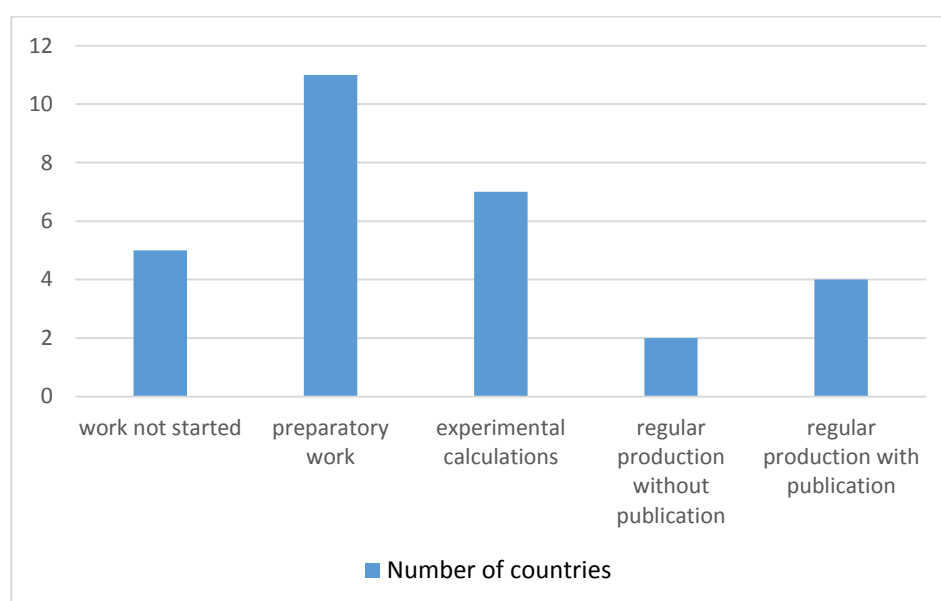
For rent indices, as already stated in section 2, basically the same index compilation methodologies apply, but with different challenges related to the available data sources. It may for example be more difficult to obtain data on all important rent-determining characteristics. Matched model approaches may work well in particular for rent indices that cover ongoing rents. For new rents, hedonic approaches may be preferred.

6. SOME SUCCESS STORIES IN EU COUNTRIES

In 2021, Eurostat carried out a follow-up survey among EU Member States and EFTA countries to determine the current state-of-play of development on CRE indicators in each country. The detailed results are being processed at the time of writing, but chart 3 gives a quick view of the overall status as regards price indices.

Clearly, a large number of countries are still in the early phases of preparation. Still, there are a few success stories to highlight.

Chart 3. State of development of CRE price indices



So far, three statistical offices publish price indices for CRE on the basis of transaction data:

- Statistics Portugal has released an annual commercial property price index based on transaction data since 2019⁸. Portugal is working on increasing the frequency to semi-annual and also on a commercial property rent index.
- Statistics Slovenia made the first release of a quarterly commercial property price index in June 2021⁹.
- Statistics Netherlands published the results of their investigations as experimental data including extensive methodological information¹⁰. Statistics Netherlands developed methods for breaking down portfolio transactions into the individual transactions of assets, and studies intensively the issue of share deals (see section 3). The current experimental data are presented with confidence intervals and trend lines, as in the example for office buildings shown in chart 4. This allows users to understand the reliability of the indices as well as to interpret the volatility in the series.

In addition, two institutions publish price indices for CRE on the basis of appraisal or market valuation data, Statistics Denmark¹¹ and the National Bank of Greece¹².

⁸https://www.ine.pt/xportal/xmain?xpid=INE&xpgid=ine_destaquas&DESTAQUESdest_boui=472656494&DESTAQUESmodo=2

⁹<https://www.stat.si/StatWeb/en/News/Index/9585>

¹⁰<https://www.cbs.nl/en-gb/over-ons/innovation/project/measuring-commercial-property-prices>

¹¹<https://www.statistikbanken.dk/statbank5a/SelectVarVal/Define.asp?MainTable=EJ5&PLanguage=0&PXSid=0&wsid=cftree>

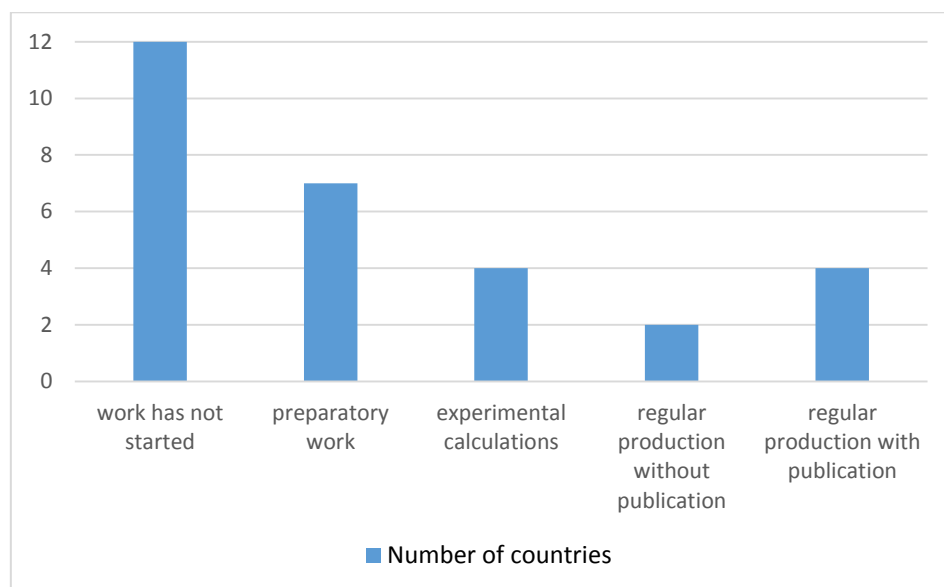
¹²<https://www.bankofgreece.gr/en/statistics/real-estate-market/residential-and-commercial-property-price-indices-and-other-short-term-indices>

Chart 4. Price index for office buildings, the Netherlands



Regarding rent indices, the picture emerging from the recent survey is as shown in chart 5.

Chart 5. State of development of CRE rent indices



The four countries included in “regular production with publication” are Greece (national bank), Czechia, Finland and Norway (all statistical offices). A number of countries report the availability of the services producer price index for NACE 68.201 “Rental and operating services of own or leased non-residential real estate”. This is to some extent a proxy of CRE rent index as commercial property may also be owned and rented by businesses outside this activity (see also section 2). Moreover, in the case of the SPPI survey, in addition to rents,

prices of other services are taken into account as well. Norway produces a rent index on the basis of tax data.

7. FINAL REMARKS

This paper gives an overview of the user needs for data on developments in CRE – in particular on prices, rents, yields and vacancy rates – as well the challenges in producing the relevant indicators.

We have shown that the specific approach to be used for the compilation of CRE indicators depends crucially on the data available, which vary a lot from country to country. The level of detail and frequency at which reliable indicators can be compiled depends also on the size of the respective markets.

The necessary expertise in the various statistical offices and central banks will be further developed, aided by an increase in methodological guidance that can be expected. Still, differences in methodologies across countries will remain.

Producing meaningful CRE indicators will continue to be challenging for statistical institutes. Eurostat will continue to provide the fora for the exchange of experience among countries, which is an important element in the development of common methodological guidance.