

# The Financial Crisis and Information Gaps

9 July 2014

## Recommendation 19: Real estate prices

**Recommendation 19:** *The Inter-Secretariat Working Group on Price Statistics (IWGPS) to complete the planned handbook on real estate price indices. The BIS and member central banks to investigate dissemination on the BIS website of publicly available data on real estate prices. The IAG to consider including real estate prices (residential and commercial) in the Principal Global Indicators (PGI) website.*

**Lead agency:** Eurostat and OECD

This note outlines progress in implementing this recommendation and sets out the plans for the way forward.

### I. MAJOR RECENT DEVELOPMENTS

The *Handbook on Residential Property Prices Indices (RPPIs)* was officially released in April 2013 and is publicly available on the website of Eurostat ([link](#)). The Handbook was written under the aegis of the Inter-secretariat Working Group on Price Statistics (IWGPS) with Eurostat as the lead agency.

Regarding the Commercial Property Price Indices (CPPIs), Eurostat, again working under the aegis of the IWGPS, is the lead agency in preparing a *Handbook on Commercial Property Price Indicators*. The Handbook will cover theoretical and operational aspects of compiling CPPIs. The process for writing the Handbook commenced at the beginning of 2013 and is expected to be completed in 2015.

An international conference to discuss the scope of the work and various methodological issues on *Commercial Property Price Indices (CPPIs)* was held in Frankfurt on May 10-11, 2012 with the participation of experts from several regions<sup>1</sup>. Subsequent CPPI discussion fora included sessions on real estate property price indices at the United Nations International Working Group on Price Indices (Ottawa Group) in May 2013 and at a Special Topic Session of the International Statistical Institute's World Statistics Congress in August 2013<sup>2</sup>. A special feature of applied and research work in this area is the cooperation with private data providers.

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<sup>1</sup> The CPPI Conference was jointly organised by Eurostat and the ECB, supported by the IMF and the OECD and gathered statisticians and economists, academics, policy makers and private data producers. The summary of the Conference along with the program and presentations are available at:  
<http://www.ecb.europa.eu/events/conferences/past/html/index.en.html>

<sup>2</sup> <http://www.dst.dk/da/Sites/ottawa-group/agenda.aspx> and [http://www.isi2013.hk/en/scientific\\_list\\_All\\_STS.php](http://www.isi2013.hk/en/scientific_list_All_STS.php) (STS037).

During February 2014 a first draft of the main chapters of the Handbook on CPPIs was completed and made available for comments on a Eurostat internet platform. A substantive comment received was that there is an undue prescriptive orientation towards an investment returns index; changes to the draft are underway. Eurostat and the ECB have organised a CPPI Workshop in September 2014 devoted to comments and discussions on the draft in order to have a final manuscript for the Handbook by the start of 2015.

In the EU eleven indicators have been selected for the identification of macroeconomic imbalances in the Member States. These include an (annual) index for residential property price changes (relative to changes in the final consumption deflator), which is now based on the harmonised House Price Index (HPI) produced according to the 2013 EU regulation (see part II below). The eleven indicators form the quantitative basis for the Alert Mechanism Report, prepared annually by the European Commission in the context of the Macroeconomic Imbalances Procedure<sup>3</sup>.

CPPIs and RPPIs are both included as Financial Soundness Indicators endorsed by the IMF's Executive Board to assess the strengths and vulnerabilities of the financial system.<sup>4</sup> RPPIs are included in a data category of a new tier of the data dissemination standards, the Special Data Dissemination Plus (SDDS Plus). Residential property prices are among the data items that economies adhering to the SDDS Plus need to disseminate on a quarterly frequency.<sup>5</sup> The IMF's Global Housing Watch tracks developments in housing markets around the world. It provides current (quarterly) data on house prices as well as metrics used to assess valuation, such as house price-to-rent and house price-to-income ratios<sup>6</sup>. The IMF has also undertaken a study of the impact of methodological issues on national RPPIs.<sup>7</sup>

## II. AVAILABILITY OF CROSS-COUNTRY COMPARABLE DATA

### BIS database

With the agreement of its member central banks and approval of various national data providers, the BIS commenced in August 2010 disseminating on its website various national property price indices that are reported to its Data Bank.<sup>8</sup> Since then, the number of central banks reporting property price indices for public dissemination has increased from 37 to 55 (including the Euro Area, and each of the 28 EU member states), of which 18 are located in G20 economies. While there are some reporting differences within these G20 economies, for

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<sup>3</sup> For more information see:

[http://epp.eurostat.ec.europa.eu/portal/page/portal/macroeconomic\\_imbalance\\_procedure/context](http://epp.eurostat.ec.europa.eu/portal/page/portal/macroeconomic_imbalance_procedure/context)

<sup>4</sup> <http://www.imf.org/external/np/sta/fsi/eng/fsi.htm>

<sup>5</sup> <http://dsbb.imf.org/Pages/SDDS/Home.aspx?sp=y>

<sup>6</sup> <http://www.imf.org/external/research/housing/index.htm>

<sup>7</sup> IMF Working Paper No. 12/125 available at: <http://www.imf.org/external/pubs/cat/longres.aspx?sk=25917.0>.

<sup>8</sup> <http://www.bis.org/statistics/pp.htm>.

example RPPIs for only new residential property (land and structures) is available for Canada, for most of the 55 countries an indicator covering all types of dwellings in the whole country, in both new and existing dwelling markets, is available.

The majority of the data reported cover RPPIs. CPPI data are reported by 6 countries (including two G20 countries), mixed RPPI-CPPI series<sup>9</sup> are reported by 5 countries (two G20 countries) and residential property land price by 8 countries, along with a single G20 country reporting commercial property land price series.

RPPI reporting frequencies have improved considerably from the last report. All the reporting G20 countries now transmit RPPIs on a monthly and/or quarterly basis. RPPI timeliness varies considerably; the reporting lag for most of the series is between one to four months. Each series has individual metadata.

Many G20 countries have more than one provider of property price indices. Individual national providers often report several indices covering different types of properties, geographical areas, and vintages of dwellings. The BIS's website caters for this and includes, for example, 309 series for 55 countries.

On 11 June 2014 the BIS published two additional data sets on its website. In the first new data set, the BIS selected one indicator for each country (series expressed in nominal and real terms are available for each indicator). The selection was based on the recommendations of the Handbook on RPPIs. For the majority of the 54 countries the selected indicator covers all dwellings in the country. A quarterly note on residential property price developments is also published based on the selected indicators. The second new data set contains long series constructed by the BIS for 18 advanced economies. The start date of the long series is 1970 or 1971. Where the selected indicators do not cover the entire period, these series are backdated with proxy indicators.

In the September 2014 issue of the BIS Quarterly Review, a Special Feature on “Residential property price statistics across the globe” introduced the three data sets (detailed, selected and on long series) published by the BIS and explained how they can be used, in particular for supporting financial stability analyses.

## **EU and EU Member States**

In the European Union new legislation came into force in February 2013, which requires Member States to provide data on HPIs. Countries have to deliver quarterly indices one quarter after the reference period. Eurostat produces aggregate HPIs for the EU and the euro area, published around 100 days after the reference quarter. The regulation also requires the compilation by EU Member States of sub-indices for new and existing dwellings. In addition, the regulation provides, starting from September 2014, for the production of other indices covering various other expenditures of owner-occupiers.

The regulation, adopted in 2013, is based on the work carried out over the last decade, by Eurostat and by the EU Member States, to develop harmonised RPPIs. Eurostat has also collected countries' metadata on their HPIs. These metadata are being released on the

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<sup>9</sup> Mixed indicators are weighted averages of RPPIs and CPPIs.

Eurostat website. The methodology is based on the practical experiences of the European compilers and has been summarised into a technical manual available on the Eurostat website<sup>10</sup>.

The ECB also disseminates residential property price indices for all EU countries, using data from the BIS Data Bank, from Eurostat and, for some countries, from National Central Banks and other national sources. The ECB database contains not only headline national indices such as those collected by Eurostat, but also sub-indices with specific regional coverage or partial coverage by dwelling type<sup>11</sup>.

Concerning CPPIs, the ESCB has developed experimental indicators, along with their metadata. The indicators were published for the first time in the ECB Monthly Bulletin of February 2014. They will be produced at a quarterly frequency around 65 days after the reference quarter<sup>12</sup>.

## OECD

Since 2006, the OECD Economics Department collects and publishes quarterly HPIs for both macroeconomic analysis and country studies for 25 OECD countries, based on available national series (since these data were not easily available at that time they were initially transmitted by the BIS to the OECD).

In 2013, the Prices Unit of the OECD Statistics Directorate started a project for the development of harmonized HPIs, based on the methodology in the *Handbook on RPPIs*, in the 34 OECD countries and possibly OECD accession and key partner countries. As a first step, countries have been consulted in the course of 2013 with a questionnaire aiming to provide an updated picture of the state of play concerning their national sources and methods. The long term goal is to create an internationally comparable database focusing on HPIs as well as other associated indicators on housing that provide a picture as complete as possible of the residential real estate market.

On March 24 –25, 2014, the OECD organized a Workshop with national RPPI compilers. The Workshop concluded by developing a broad consensus on the way forward.

## III. WAY FORWARD

Concerning RPPIs, the main objectives of Recommendation 19 are the implementation of the methodology according to the *Handbook on RPPIs* and the further dissemination of national data. In addition, the development of other non-price indicators is desirable.

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<sup>10</sup> [http://epp.eurostat.ec.europa.eu/portal/page/portal/hicp/methodology/owner\\_occupied\\_housing\\_hpi/owner\\_occupied\\_housing](http://epp.eurostat.ec.europa.eu/portal/page/portal/hicp/methodology/owner_occupied_housing_hpi/owner_occupied_housing)

<sup>11</sup> The ECB notes the residential property price indicator for the euro area is an average of non-harmonised country indicators based on data from national sources, for which coverage may vary across countries and that accuracy would not be the same as other euro area statistics. Available at: <http://sdw.ecb.europa.eu/browse.do?node=2120781>.

<sup>12</sup> The indicators are available in the Statistical Data Warehouse section of the ECB's website at <http://sdw.ecb.europa.eu/reports.do?node=1000003724>

The discussions at the OECD Workshop of March 2014 indicated a broad consensus on the preferred type of RPPI. The target output is an index that covers all dwellings; breakdowns should relate to the geographic dimension, dwelling vintage and type of property. The index should be based on actual transaction prices and be weighted according to relative values of transactions/stocks depending on purpose. Target frequency and timeliness of the price index should be quarterly, with releases within one quarter after the end of the reference period. A step-wise implementation approach to RPPIs was proposed. The approach recognised the need to take into account country-specific issues, data sources and the long-run development of such sources. Notwithstanding this:

A first step is the harmonization of good practice with regard to RPPIs coverage, according to the dimensions identified as most important: geographical coverage, property type (flats versus other types), vintage (new versus existing dwellings), financing (loans versus cash sales). Complete coverage of RPPI transactions was a long term objective; a minimum requirement would be existing flats or houses in major cities. A further dimension, i.e. property-type, should then be expanded to cover all types of dwelling. In a further step, data on all vintages should be made available.

Concerning the methodological dimension, mix-adjustment (stratification) should go hand-in-hand with disaggregation. With respect to the quality-mix adjustment methodology, use should be made, as applicable, of the various methods presented in chapters 4 to 7 of the *Handbook on RPPIs*. The most appropriate method for quality-mix adjustment may vary between countries, and even inside the same country according to the different cases of dwellings. The principles in the *Handbook on RPPIs* will help inform countries as to the choice. Countries should provide metadata in standardised format describing the methodology applied, in particular their quality-adjustment approach.

Following the workshop of March 2014 OECD proposed a framework for the collection of residential property prices and other housing indicators, which is based on a two-tier approach. It is currently being discussed with OECD member states. The framework is also submitted to the IAG members for feedback and with a view to agree on a common template.

For the purpose of global monitoring, the comparability of RPPIs for major economies would benefit if developments in disaggregation by coverage and type of property were guided by a common target structure and an agreed framework for data collection at international level. Convergence in terms of frequency and timeliness of the data release is also highly desirable. Since issues of implementation apply to a wider range of countries than the G20, IAG and IWGPS will closely cooperate in the implementation process.

It should also be noted that coverage of other key housing indicators should be encouraged, including (but not limited to):

- house sales (existing and new dwellings)
- building permits
- housing starts and completions
- pending home sales
- vacancy rates

- construction activity
- land price indices

As additional data on RPPIs become available, the various international organisations will include them in their respective data collections and disseminate them in comparable SDMX format on their website.<sup>13</sup> Moreover, in order to avoid duplication and reduce reporting burdens for national compilers, a data cooperation arrangement may be worked out for real estate prices among the international organisations involved.

On CPPIs, completion of the *Handbook on CPPIs* is an important first step and work is underway on this project with expected completion in 2015. Making recommendations in this area is more problematic than for RPPIs and it is encouraging that there are emerging lines of practically-oriented research accompanying the writing of the Handbook. In this context, the ECB's work on CPPIs data is most welcome. Recommendation 19 will be considered complete when all G-20 economies provide RPPIs with the required minimum standards, and the *Handbook on CPPIs* is published. However, further work on the implementation will continue under the auspices of the IWGPS, in cooperation with the IAG.

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<sup>13</sup> On its side the BIS will focus on expanding the country coverage of the long series data set (property prices can be very useful for monitoring the financial cycles and related financial stability issues).