

Benchmark Revision 2024 of the NSI's National Accounts operations.

Detailed impacts document

**National Accounts Department:
18 September 2024**

1. Identification of the operation.

The National Statistics Institute (NSI) is the body responsible for the compilation and publication of most of the statistical operations referring to the scope of the non-financial national accounts and the regional accounts whose code and denomination according to the Annual Programme 2024 of the National Statistical Plan are the following:

8479 Spanish Annual National Accounts: Main Aggregates

8480 Spanish Annual National Accounts: Aggregates by Industry

8481 Annual Non-Financial Accounts of Institutional Sectors

8482 Supply & Use Tables

8483 Input-Output Tables

8452 Quarterly Spanish National Accounts: Main Aggregates

8453 Quarterly Non-Financial Accounts of the Institutional Sectors

8457 Spanish Regional Accounts

All these operations have been compiled since September 2014 according to the methodological recommendations of the European System of National and Regional Accounts 2010 (ESA 2010)¹ implemented in the European Union in the form of a Regulation of the European Parliament and of the Council.

ESA-2010 is broadly consistent with the current United Nations System of National Accounts (2008 SNA) with respect to definitions, accounting rules and classifications. It presents, however, certain differences, particularly in its presentation, which reflect the objective of its specific use for EU countries.

The incorporation of the ESA-2010 methodology in the NSI's national accounts operations² was carried out through the process known as "change of accounting base" (in this case, from base 2008 to base 2010). Although the "base changes" originate in methodological modifications of the accounts system, these occasions also include statistical changes, the incorporation of new statistical sources and/or estimation procedures of the accounting aggregates.

The need for national accounts to provide as accurate a measure of the economy as possible at all times makes regular updating of the statistical sources and estimation methods used for their compilation desirable, even in the absence of a change in the international standards contained in the systems of accounts.

Thus, in order to ensure not only high quality but also consistency and comparability of national accounts data across EU countries, the European policy of extraordinary revisions³, published by Eurostat, provides for systematic improvements every five years.

Given that the last one took place in 2019, all EU Member States, in a coordinated manner, will carry out the regulated extraordinary revision of their national accounts data series in 2024.

Therefore, the Benchmark Revision of the Spanish National Accounts to be published this year 2024 (BR-2024) obeys the aforementioned need to periodically update the

¹ Regulation (EU) No 549/2013 of the European Parliament and of the Council of 21 May 2013 on the European system of national and regional accounts in the European Union.

² In this document, the term "national accounts transactions" is used to refer to those specified at the beginning of paragraph 1.

³ Practical guidelines for revising ESA 2010 data, Eurostat, 2019.

sources and estimation methods used in its compilation. The results of the operations that make up the national and regional accounts that the NSI disseminates as of September 2024⁴ will incorporate said revision throughout the entire time series. Moreover, this process is being carried out in coordination with the Bank of Spain, in the financial accounts and the balance of payments and international investment position statistics, and with the General Comptroller of the State Administration (GCSA), in the accounts of the Public Administrations.

This ensures the highest degree of consistency, both within Spanish national accounts operations and with the accounts of other Member States, as well as between the national accounts and balance of payments areas.

2. Objectives of Benchmark Revision 2024

The national accounts, through a detailed and structured system of accounts and tables, aim to show in a systematic, comparable and as complete way as possible, in global terms, the behaviour and evolution of the various economic activities of the country. They can therefore be interpreted as a special form of joint, harmonised and integrated presentation of all available basic statistical sources, both economic and social, which provide information on economic activity.

Thus, the compilation of the accounts implies carrying out an exercise of congruence of all the basic statistical information in which it is necessary to comply with a series of defined rules so that, based on them, the information is ordered and its coherence is taken care of. In this sense, the national accounts can be considered the conceptual and de facto tool that manages to bring coherence to the numerous statistical sources available, providing a single, albeit very detailed, view of economic activity as a whole.

The benchmark revision 2024 has a threefold objective:

- On the one hand, the statistical sources and estimation methods used for the compilation of national accounts are updated in order to guarantee the timeliness, accuracy and punctuality of these accounts following the recommendations made by Eurostat with the aim of achieving a harmonised policy at European level that ensures that data between Member States are comparable and that, therefore, their use for administrative purposes within the Union is appropriate.
- On the other hand, it complies with the requirements of the updated ESA 2010 data transmission programme.
- Third, the benchmark revision 2024 implements the methodological improvements resulting from the current GNI verification cycle 2020-2024 (a multi-annual verification process of national accounts data that includes dialogue visits by the Commission to Member States), as well as those resulting from the update of the General Government Deficit and Debt Manual, thus avoiding breaks in series that would otherwise result.

3. Characteristics of the Benchmark Revision 2024

⁴ Most Member States publish the first SR2024 results in September 2024. However, some countries, following their specific national timetables, have published results in the course of the May-August period.

Therefore, and taking up some of the ideas already set out in the previous sections, the benchmark revision, which will affect all publications of national accounts operations as of September 2024, has the following general characteristics:

- This is a revision that, according to the classification of the Committee on Monetary, Financial and Balance of Payments Statistics (CMFB), would be included in the regular extraordinary revision kind. These revisions have their origin in the incorporation of changes in the basic statistical sources and/or in new methods of estimating the aggregates, and should occur regularly (at least every five years).
- Follows the recommendations of Eurostat regarding the establishment of a harmonized revision policy at the European level and the recommendations of the INE revision policy (HERP).
- It affects all the operations of the national accounts prepared by the INE and is carried out in coordination with the Bank of Spain (financial accounts and balance of payments and international investment position statistics) and Audit Office (General Government accounts).
- The reference year for chained volume indices is 2020 (the value of the index in 2020 is equal to 100).
- Its dissemination will take place from September to December 2024. From that moment on, the operations of national accounts will be affected by the usual policy of ordinary revisions (that is, it is three years that are subject to review in the case of annual data and, in the case of quarterly data, the quarters of the current reference year).

4. Description of statistical changes and impact

The statistical changes incorporated in this revision 2024 of the national accounts originate from the integration of new statistical sources (or relevant changes in the existing ones) and from the application of new methods and procedures for estimating the accounting aggregates.

Main changes due to statistical sources

- In the changes originating in the incorporation of new statistical sources, **the incorporation of the information derived from the 2021 Population and Housing Censuses** must be highlighted.

This statistical change affects several aggregates of the national accounts, both directly - in those where the Population and Housing Census is used as the basic source - and indirectly, through its impact on household surveys (the Labour Force Survey or the Household Budget Survey) and on the estimates based on them.

- The incorporation in the BR-2024 of the Spanish National Accounts of the 2021 Census as a source of information for the housing stock implies a change in the estimation of operations related to housing rental production services with respect to those recorded in the current series.

In this respect, it is necessary to recall that, in the national accounts, by convention, the output of dwelling rental services includes not only rental services relating to dwellings actually rented, but also those relating to owner-occupied dwellings (imputed rentals).

As regards the valuation of the rental service output of dwellings, the ESA 2010 states that *"the rental service output of owner-occupied dwellings is measured by the estimated value of the rent that a tenant would pay for the same accommodation, taking into account elements such as location, amenities of the area, etc., as well as the size and quality of the dwelling in question"*. Furthermore, both the ESA 2010 and the Enforcement Regulation 2021/1949⁵ recommend the stratification method for calculating the value of services produced by owner-occupied dwellings. This method combines information on the housing stock, broken down into different strata, with information on the actual rents paid in each stratum for the right to use an unfurnished dwelling of those characteristics.

- On the other hand, some household surveys are the basic source used in the estimates of fundamental aggregates of the system of national accounts. This is the case of the Labour Force Survey (LFS) in relation to the employment variable and the Household Budget Survey (HBS) in reference to household final consumption expenditure. The information on the population, its structure by certain demographic characteristics and the composition of households, is fundamental in these surveys as they use it to raise/calibrate the data obtained for the population as a whole. Thus, the incorporation of the new series of population and households resident in Spain derived from the 2021 Population and Housing Census determines an update of its results. The BR-2024 of the Spanish National and Regional Accounts incorporates the revised results of both surveys⁶.

⁵ Commission Implementing Regulation (EU) 2021/1949 of 10 November 2021 on the principles for the calculation of dwelling services for the purposes of Regulation (EU) 2019/516 of the European Parliament and of the Council on the harmonisation of gross national income at market prices.

⁶ In the case of the LFS, homogeneous back series, calculated with the new population base for the period 2021-2023, were provided on 19 April.

The direct and indirect impact of these improvements in sources derived from the 2021 Population and Housing Censuses amounts to 4,407 million euros for the reference year 2021.

- Likewise, the new information available resulting from the **improvement in the coverage of the Structural Survey of Companies by industry**⁷ is integrated. In particular, this statistic extended its study scope last year (with reference to the year 2021) including, for the first time, Education and Health activities in its population scope.

The effect of this improved source coverage through the Structural Business Survey for the reference year 2021 results in a negative impact of -1,153 million euros.

- The information collected through the NSI's **Intermediate Consumption and Investment Survey (ICIS)** is also included. This survey is carried out every four years and its objective is to gain knowledge of the raw materials and other inputs used by the different industries of the Spanish economy in their production processes, as well as the investment made by said industries in the year under study. The information obtained through this survey serves to cover some aspects that are not covered by the Structural Business Survey and which, nevertheless, are necessary for the compilation of several aggregates of the national accounts. Thus, for example, the information obtained for the reference year 2021 is used to update the distribution of intermediate consumption by product in the Supply & Use Table, as well as to improve the estimates of gross fixed capital formation for own final use or the recording of travel allowances.

The effect of the implementation of the new information obtained through the Survey of Intermediate Consumption and Investment for the reference year 2021 amounts to 1,101 million euros.

- **Eurostat's recommendations** are implemented regarding the average valuation of transport assets, in relation to the final sale price by type of brand and cylinder capacity, the treatment of special discounts for Renove plans and the acquisition of second-hand vehicles (with or without intermediaries). To this end, we have made further use of existing sources of prices and volume such as the General Directorate of Traffic or the Special Tax on Certain Means of Transport.

The impact of the incorporation of Eurostat's recommendations on the measurement of transport assets amounts to EUR 1,933 million.

- Some **components of the estimation of construction assets**, such as civil engineering end-use, taxes related to construction and installations or repairs, refurbishment and improvements to dwellings and non-residential buildings, are revised based on an extension of existing sources.

The impact of the improved measurement of these components of the construction assets amounts to EUR 1,081 million.

- The impact of other changes relating to the **extension of information from existing sources** for machinery, biological resources and intellectual property assets (excluding R&D assets) amounts to EUR 1,206 million.

The combined effect of the changes due to the incorporation of new statistical sources is estimated at 8,575 million euros, a 0.7% increase in nominal GDP by 2021.

⁷ Consistent with the update of the framework regulation on Business Statistics (Regulation 2019/2152 of the European Parliament and of the Council on European Business Statistics and its implementing act 2020/1197 as regards structural business statistics and statistics on subsidiaries).

Main changes due to estimation methods

Among the changes due to the application of new methods and procedures for estimating the accounting aggregates, there are those resulting from the improvement actions indicated by the European Commission in the framework of the 2020-2024 cycle of verification of the Gross National Income⁸, as well as those arising from the recommendations of the working groups of the European Statistical System⁹, and those resulting from the implementation of the update of the ESA 2010 transmission programme¹⁰. The most significant are the following:

- Certain parameters used in the **calculation of fixed capital consumption** of some assets are reviewed following the recent recommendations of the European Statistical System Working Group on Fixed Assets and Estimation of Fixed Capital Consumption (depreciation functions, retirement functions and useful lives).

The impact of incorporating Eurostat recommendations in the measurement of fixed capital consumption is estimated at -144 million euros in the reference year 2021.

- The methods for estimating **stock changes** are revised to bring them in line with those recommended in the Eurostat/OECD Compilation Guide on Stocks.

The incorporation of Eurostat's recommendations in the methodology for estimating the change in stocks amounts to 2,047 million euros.

- A **new classification** is introduced **for household final consumption expenditure (COICOP 2018¹¹)**, and a further breakdown in the quarterly publication (according to durability of goods) of this aggregate.

The implementation of the new COICOP 2018 classification and its further quarterly breakdown has had no impact on the level of nominal GDP.

- **The number of sample units of the Non-Profit Institutions sector** that are used, by means of their elevation to the CBR population framework, in the estimation of the operations of this institutional sector **is extended**.

The effect of this improved coverage of the non-profit sector serving households results in an impact of EUR 181 million.

- **Information from recent studies** is incorporated **with the aim of updating the parameters** used in some estimates. This is the case of estimates related to certain illegal activities such as prostitution and marijuana or those related to tips received as remuneration in kind by hotel and catering workers.

The impact of the parameter update on the methods for estimating the illegal economy and tips amounts to EUR 603 million for the reference year 2021.

- The list of products making up the estimate of the **net acquisition of valuables** is updated, with an impact of 459 million in the reference year 2021.
- The methodology for estimating **production for own final use of R&D fixed assets** according to the available sources is reviewed, as well as the destination of sales of

⁸ Regulation (EU) 2019/516 of the European Parliament and of the Council of 19 March 2019 on the harmonisation of gross national income at market prices.

⁹ Some in cooperation with the European System of Central Banks.

¹⁰ Regulation (EU) 2023/734 of the European Parliament and of the Council of 15 March 2023 amending Regulation (EU) 549/2013.

¹¹ The Classification of Individual Consumption by Purpose, abbreviated as COICOP, is a classification developed by the United Nations Statistics Division to classify and analyse individual consumption expenditures. In March 2018, the United Nations Statistical Commission considered and approved the revised COICOP classification - COICOP 2018 - as the internationally accepted standard.

these assets among intermediate consumption of the industry whose main activity is R&D production or as gross capital formation of other industries of the economy.

The impact of the update of the R&D asset components amounts to EUR 937 million for the reference year 2021.

- Other changes in the application of new methods and procedures for estimating the accounting aggregates of **the Agriculture and Forestry industry** amount to EUR 251 million.

The combined effect of this update of methods and procedures is estimated at 4,334 million, a 0.4% increase in nominal GDP by 2021.

Other statistical changes

In parallel to the BR-2024 of the Spanish National Accounts, and in a coordinated manner, the revision processes of the Balance of Payments and International Investment Position statistics have been carried out by the Bank of Spain and of the accounts of the Public Administrations by the GCSA.

The results of both revisions are integrated in the BR-2024 of the Spanish National Accounts.

▪ Balance of Payments and International Investment Position benchmark revision

The NSI and the Bank of Spain maintain very close cooperation with respect to the compilation of the Balance of Payments and International Investment Position (BoP/IIP) and the accounts of the rest of the world of the National Accounts through the Balance of Payments/IIP-Rest of the World Accounts Working Group. Both statistical domains, the national accounts and the balance of payments, are furthermore compiled according to accounting standards which, since the implementation of the ESA 2010 and the 6th Balance of Payments and International Investment Position Manual, are consistent with each other.

This cooperation between the NSI and the Banco de España means, on the one hand, that the results of the BoP IIP, compiled and disseminated by the Bank of Spain, are integrated in the national accounts, and on the other hand, that most of the sources and methods used in the compilation of the BoP IIP are jointly agreed and/or designed.

The main changes in this area correspond, on the one hand, to those derived from the reform of the NSI International Trade in Services Survey and, on the other hand, to improvements made in the estimation of the CIF-FOB adjustment¹² and of the import and export of merchandise transport services.

▪ Benchmark revision in the accounts of the General Government sector

As in the previous case, the General Comptroller of the State Administration (GCSA) has carried out a benchmark revision process of the accounts of the general government sector which it compiles and disseminates. These accounts are integrated into the Spanish National Accounts compiled by the NSI.

The changes introduced in the results already published on the occasion of the Benchmark Revision 2024 come mainly from the implementation of the new edition of the Government Deficit and Debt Manual¹³, as well as from guidance notes, decisions,

¹² Adjustment in the value of imports of goods specific to the input-output framework

¹³ Manual on Government Deficit and Debt - ESA 2010 implementation. Eurostat, 2022 edition

etc., resulting from the different working groups on Government Finance Statistics, not yet incorporated in these statistics in order not to affect the comparability of the series.

These changes, in general, will not have an impact on the government deficit, but will affect the allocation of some transactions. Thus, certain fees and charges and revenues have been analysed and their classification as market output, payments for non-market output, taxes on production or miscellaneous current transfers has been reviewed, where appropriate. The allocation to COFOG divisions of certain general government expenditure is also reviewed, where appropriate. On the other hand, within the framework of the new estimates prepared by the NSI as a consequence of the recommendations issued in other domains (for example, those emanating from the European Statistical System Working Group on Fixed Assets and Estimation of Consumption of Fixed Capital), the affected transactions of the accounts of the General Government sector are revised.

▪ Improvements in the measurement of globalisation

Revisions in sources and methods also include the implementation of improvements in the accounts related to the measurement of globalisation based on the work developed by the Large Enterprises Unit Division, recently created in the NSI.

The combined effect of these other statistical changes has been -EUR 26 million, less than 0.1% of nominal GDP for the year 2021.

Finally, the ordinary revisions (301 million) to the accounting aggregates for 2021 are insignificant and are mainly due to the incorporation of the final version of the Economic Accounts for Agriculture and Forestry and the final compilation of the Supply & Use Table, which involves the completion of the supply-demand balancing process at the level of 94 activities and 140 products, both at current and previous year's prices.

The impact of all these statistical changes for the reference year 2021, in the context of the Benchmark Revision 2024, amounts to EUR **13,184** million, an increase of 1.1% over the previous accounting base level.

Statistical changes in GDP. Year 2021 Benchmark Revision 2024

In EUR million

	TOTAL
Incorporation of information derived from the 2021 Population and Housing Census: owner-occupied housing serv	4.357
Incorporation of information derived from the 2021 Population and Housing Census: other	50
Improvement of the SBS coverage	-1.153
Incorporation of information derived from the ICIS related to own-account GFCF	482
Incorporation of information derived from the ICIS related to daily allowances	521
Incorporation of new sources regarding fixed asset AN.1131 (Transport equipment) and HFCE	1.933
Improvements in the estimation of the components of Construction fixed assets (AN.111, AN.112)	1.081
Other changes in information sources	1.206
TOTAL REVISION DUE TO NEW INFORMATION SOURCES	8.477
Revision of parameters used in fixed capital consumption estimation	-144
Revision of methods used to estimate Changes in inventories	2.047
Increase of the sample used for S15 estimates	181
Revision of methods used to estimate acquisition less disposal of valuables	459
Update of the parameters used in certain estimations (prostitution, marijuana production and tips)	492
Update of methods used to estimate own-account GFCF of R+D	937
Crop periodization by crop type (Agriculture)	375
Changes in the valuation of "wood in the rough" output	174
TOTAL REVISION DUE TO NEW METHODS	4.521
Statistical revision of the BP and the IIP	-227
Statistical revision of S13 accounts	-104
Improvements in the measurement of globalization	0
TOTAL REVISION DUE TO OTHER CHANGES	-331
TOTAL EXTRAORDINARY REVISION	12.668
Regular update of the Economic Accounts for Agriculture	301
TOTAL ORDINARY REVISION	301
RESIDUAL REVISIONS + BALANCING	215
TOTAL REVISION	13.184

Of the last five extraordinary revisions, the impact of BR-2024 on the level of GDP has been the second lowest:

Extraordinary revisions since 1995

Revision in level in EUR million

	AÑO DE REFERENCIA	REVISIÓN EN NIVEL	%SOBRE EL PIB PREVIO
BASE 2000	2000	19.722	3,2
BASE 2000	2004	38.885	4,9
BASE 2010	2010	34.511	3,3
RE-2019	2016	-4.903	-0,4
RE-2024	2021	13.184	1,1

5. Dissemination plan and periodicity

All publications of national accounts results from now on will be consistent with the main aggregates of the national economy disseminated today 18 September 2024 in the BR-2024 accounting basis, according to the established timetable:

- 18 September:
Annual Spanish National Accounts: main aggregates. Series 1995-2023.
- 27 September:

Quarterly Spanish National Accounts: main aggregates, up to Q2 2024.

– 30 September:

Annual Spanish National Accounts: aggregates by industry. Series 1995-2023.

Non-Financial Annual Accounts of the Institutional Sectors. Series 1995-2023.

Quarterly Non-Financial Accounts of the Institutional Sectors. Until the second quarter of 2023.

2021 Supply & Use Tables (at current and previous year's prices).

This dissemination timetable is in line with the deadlines required in the ESA 2010 data transmission programme to Eurostat.

The Supply & Use Tables at current prices for the year 2022 (provisional data) will be published on 28 October, thus bringing forward the deadlines required by Eurostat by one year.

The next regulated extraordinary revision of the national accounts is scheduled for 2029. In addition to the recommendations of the European Statistical System, a new methodological basis of accounting (ESA-2029) - which will replace the current one (ESA-2010) - will be implemented and the National Classification of Economic Activities (NACE) will be updated.