INSTITUTO NACIONAL DE ESTADÍSTICA

Quarterly National Accounts of Spain: main aggregates

Inventory of sources and methods

September 2020

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1.1 Organization and institutional arrangements

1.1.1 Description of organization and responsibilities in the compilation of the Quarterly National Accounts of Spain: main aggregates

The National Institute of Statistics (INE) is an autonomous administrative body, with legal personality and its own assets, which is attached to the Ministry of Economy and Digital Transformation through the Secretariat of State for the Economic Affairs and Business Support. It is essentially governed by the Law on Public Statistical Function (LFEP, in its Spanish acronym) of May 9, 1989, which regulates statistical activity for state purposes, which is the exclusive competence of the State, and by the Statute approved by Royal Decree 508/2001 of May 11[1].

The Law grants the National Institute of Statistics a prominent role in public statistical activity, expressly entrusting it to carry out large-scale statistical operations, including national accounts.

Also, the law gives the INE competence over the elaboration of the National Statistical Plan project and the Annual Programs that accompany it. The National Statistical Plan is the main ordering instrument for the statistical activity of the General State Administration. It has a validity of four years. The Plan contains the statistics that must be compiled over the four-year period by the services of the General State Administration, or by any other entities dependent on it, and those to be totally or partially carried out with the participation of the autonomous communities and local corporations through cooperation agreements with state statistical services or, where appropriate, in execution of the legal provisions. All the statistics included in the National Statistical Plan are considered statistics for state purposes and are mandatory.

The National Statistical Plan is approved by royal decree. Once approved, it will be updated through the annual programs for its execution, which are also approved by royal decree. The Annual Program includes the actions to be carried out during the year in which the National Statistical Plan is executed, and the forecasts that must thereby be incorporated into the General State Budgets.

According to the Statute of the INE, the **Department of National Accounts** is dependent on the Presidency of the National Institute of Statistics (INE) and is ranked as a directorate. It is charged with elaborating and executing the statistical actions of the national and regional accounts which fall under the purview of the National Institute of Statistics, and with representing the National Institute of Statistics in national and international discussion and decision-making related to its tasks. The Director of the Department of National Accounts is also a member of the Board of Directors of the INE.

According to the current National Statistical Plan, the **INE is responsible for the preparation and dissemination of all statistical actions that make up the national and regional accounts system, both annual and quarterly, with the exception of**

[1] Consolidated text (last modification on March 26, 2015).

the *General Government Accounts*, which are overseen by the Audit Office (IGAE), and the financial accounts of the institutional sectors of the national economy, which correspond to the Central Bank (Banco de España).

In particular, the INE elaborates the ***Quarterly National Accounts of Spain: main aggregates*** **(QNAS)**[2]. This operation is a short-term summary statistic whose main objective is to carry out a systematic and coherent measurement of the recent evolution of the national economy, in accordance with the conceptual and regulatory framework established by the European System of National and Regional Accounts (ESA 2010), approved by Regulation (EU) 549/2013 of the European Parliament and of the Council of 21 May.

The QNAS arises from the need to have information on the evolution of a national economy faster than that provided by the annual national accounts and more comprehensive and integrated than that contained in the short-term indicators. In this sense, it can be defined as a short-term synthesis statistic, available with a reduced time lag, whose main objective is to provide a quantitative, global and coherent description of economic activity.

1.1.2 Organizational scheme of the Department of National Accounts of the INE

There are 33 persons[3] assigned to the Department of National Accounts, of which 4 are auxiliaries and 29 carry out specialized technical jobs (29 of the total are career civil servants). The department is organized into the following units:

- **Deputy Directorate for quarterly accounts and institutional sectors**, responsible for preparing the main aggregates of quarterly accounting, for non-financial quarterly and annual accounts (*current accounts, accumulation accounts* and *balance sheets*) of the institutional sectors and the estimates of operations and aggregates directly related to them that come into play in the general equilibrium of the input-output framework and of the series of main annual aggregates of the national economy.
- **Deputy Directorate of input-output framework and aggregates by branch of activity**, responsible for the technical coordination of the compilation of the input-output framework of the Spanish economy (*Supply-Use Tables* and *Input-Output Tables* and the annual estimates of most of the aggregates of market supply (*production* and *intermediate consumption*) and *gross formation of fixed capital*, income and employment by branch of activity.
- **Regional accounts area**, responsible for the preparation of the *Regional Accounts of Spain,* regional accounts and other operations closely related to it.

1.2 Publication schedule, revision and dissemination policy

1.2.1 General aspects

[2] Operation 30024 of the Inventory of Statistical Operations
[3] As of September 23, 2020.

Regarding dissemination, the INE publishes its **Statistics Availability Calendar**[4] for each year in the last quarter of the previous year, showing the exact dates of the publication of short-term statistics and the month of publication of the structural statistics; subsequently, on the last Friday of each month (t) the exact day of publication of the structural statistics scheduled for the month (t+2) is announced.

The data is disseminated simultaneously, according to the publication schedule, for all users, in most cases accompanied by a press release. At the same time, the data is published on the INE website (www.ine.es). Some users also receive the information with a minimum notice under embargo, in the terms established in the Code of Practice for European Statistics[5].

Likewise, the INE has a policy that regulates the basic aspects of the revision of statistical data, guaranteeing the transparency of the processes and the quality of the products. This policy is described in the document approved by the Board of Directors at the meeting held on March 13, 2015[6].

1.2.2 Publication schedule, revision and dissemination policy

One month after the end of the quarter (**t+30** days, where t is the reference quarter), an advance estimate of its results is offered. The results of each quarter are reviewed around **t+90** days, incorporating all the information available from the advance estimate and including updated results of the previous quarters of the current year T and the estimates of the flows of primary and secondary income with the rest of the world and *consumption of fixed capital* that allow for obtaining the aggregates of national income and national disposable income, in gross and net terms.

In addition, in the case of the second quarter of each year, revised results are published from the first quarter of year T-3, in consistency with the results review policy of the Annual National Accounts of Spain.

At least every five years, extraordinary reviews of the complete results series must be carried out to guarantee the updating of statistical sources and estimation methods, as well as their alignment with the recommendations released by the relevant international forums.

This calendar allows for compliance with the requirements established in the Programme for the Transmission of National Accounts Results to the European Commission in SEC 2010[7] and follows the European recommendations on the policy to review current macroeconomic statistics[8].

1.3 General compilation procedure

[4] https://www.ine.es/daco/daco41/calen.htm
[5]https://www.ine.es/ine/codigobp/codigobupr.pdf
[6] https://www.ine.es/ine/codigobp/politica_revision.pdf
[7]Annex B of *Regulation (EU) 549/2013 on the European System of National and Regional Accounts of 2010*.
[8] *Commitee on Monetary, Finance and Balance of Payments Task Force on a Harmonized European Revision Policy* y *DMES Task Force on Benchmark Revisions*.

The quarterly accounts constitute a subsystem of the National Accounts of Spain, which are fully integrated both methodologically and numerically. This implies, in particular, that the principles, definitions, accounting rules and structure used in this operation are the same as those used in the annual accounts and are established in *Regulation (EU) 549/2013 on the European System of National Accounts and Regionals 2010*. The quarterly estimates provided in the framework of the National Accounts of Spain (QNAS and QNFIS[9]) are fully consistent with each other and with the annual estimates.

Based on the *Eurostat Quarterly Accounts Manual*[10], the compilation process includes the integration of direct results of other operations of the system (for example, accounts of the *Public Administrations* and balance of payments). In areas where these are not available, indirect methods are used in which all available quantitative information is used on the evolution of an aggregate (or part of it) between two periods.

Regarding the scope of the estimates, it should be noted that the quarterly GDP and all its components are estimated from the point of view of supply, demand and income, being reconciled within the framework of an accounting balance process described in the following section.

1.4 Balancing, benchmarking and other reconciliation procedures

Reconciliation procedures are aimed at guaranteeing compliance with both longitudinal restrictions (the temporal consistency of the quarterly and annual estimates) and transversal (the satisfaction of certain accounting identities).

We can distinguish the following phases:

- **Temporary reconciliation of the components**, through the application of benchmarking techniques that follow the recommendations of the *ESS Guidelines on temporal disaggregation, benchmarking and reconciliation*[11].

- **Balance of GDP** to reconcile the preliminary estimates obtained in the supply and demand approaches, based in each case on their own sources.

  When the annual accounts for the period are available, a procedure of temporal disaggregation and balance of GDP is used from the supply and demand approaches, consistent with the recommendations of the *ESS Guidelines on temporal disaggregation, benchmarking and reconciliation*; in recent periods, for which no annual accounts are available, equilibrium is reached through a systematic iterative procedure of approximating the estimates of the supply and demand approaches.

  Finally, equilibrium with the income approach is reached by estimating the *Gross Operating Surplus/Gross Mixed Income* as the difference between the quarterly GDP and the rest of the components of the income approach to the quarterly GDP (again, in the periods with available annual accounts, the

[9] Quarterly Non-Financial Accounts for the Institutional Sectors.
[10] https://ec.europa.eu/eurostat/documents/3859598/5936013/KS-GQ-13-004-EN.PDF/3544793c-0bde-4381-a7ad-a5cfe5d8c8d0
[11] https://ec.europa.eu/eurostat/web/products-manuals-and-guidelines/-/KS-06-18-355

estimates of said components are the result of a temporal disaggregation procedure that follows the international recommendations for this purpose).

1.5 Volume estimates

With regard to the chaining method and weights, quarterly indices chained annually with annual weights and **the *Annual Overlap* method are used** (the links in the chain take as a reference the average value of the aggregate of the previous year to the average prices of that year)[12], due to the fact that it provides indices consistent with the annual chained indices, as this technique is totally aggregative (the average of the indices of the quarters coincides with the annual index), its simplicity of calculation and is the usual practice in other European countries.

1.6 Seasonal and calendar adjustment

The series of quarterly macroeconomic aggregates are published both unadjusted (original or gross series) and adjusted for seasonal and calendar effects.

The seasonal and calendar effects adjustment is made to each of the quarterly macroeconomic aggregates that make up the QNAS, both to the series at current prices and to the series of linked volume indices, obtaining the series of deflators implicitly.

The preparation of the seasonally and calendar adjusted results covers both the signal extraction process, which includes the treatment of seasonal adjustment and calendar effects, and the procedures that guarantee annual consistency between the raw data and the seasonally adjusted data.

The procedures applied comply with the recommendations published in the quarterly accounts manuals (Eurostat, 1999/2013 and IMF 2001/2016) and related to seasonal adjustment (ESS *guidelines on seasonal adjustment, 2015*) and with the *INE Standard for adjusting seasonal and calendar effects in short-term series, 2019*[13].

A parametric approach is used, based on regression models with ARIMA errors, identifying and estimating a priori a model that adequately fits the observed series and deriving from the same appropriate models for each of the components of the series (cyclo- trend, seasonal and irregular).

1.7 Additional information

[12] ESA 2010 12.36 "The annual overlap technique uses the annual average values of the previous year at prices of that year. Adding the quarterly volume measures calculated with this technique for a given year, identical series are obtained to the chained volume measures independently estimated in the annual national accounts. On the other hand, the variation rates from one quarter to another within the same calendar year, between the first and the fourth quarter, are not affected by the jumps. However, the volume series are affected by the jumps that occur between the fourth quarter of one year and the first of the following year, which is also reflected in the respective quarter-on-quarter rate of change. "

[13] https://www.ine.es/clasifi/estandar_efectos_estacionales.pdf

https://www.ine.es/dyngs/INEbase/es/categoria.htm?c=Estadistica_P&cid=1254735576581

https://www.ine.es/dyngs/INEbase/en/categoria.htm?c=Estadistica_P&cid=1254735576581

2. QNAS publication schedule, review and dissemination policy

2.1 Dissemination policy

In **t+30** days, an advance estimate of the GDP generated in the economy during the quarter t and of each of its components is offered, from its three approaches of supply, demand and income (both in volume terms and at current prices in the case of of the first two and at current prices in the case of the income approach). It also provides a measurement of the evolution of employment in the economy in terms of persons employed, jobs, full-time equivalent jobs and hours actually worked.

All estimates are also provided in both raw data and adjusted for seasonal and calendar effects. This is, as mentioned above, a provisional estimate based on all the information available to date for the reference quarter.

Around **t+90** days, the results are reviewed incorporating all the information available from the advance estimate, in particular, the results of the quarterly *Balance of Payments/International Investment Position* and of the *Quarterly Non-Financial Accounts of the General Government*. Updated results of the previous quarters of the current year T are also published and the results on national income and national disposable income are incorporated[14]. In addition, in the case of the dissemination of the estimates corresponding to the second quarter of each year, revised results are disclosed from the first quarter of year T-3, in consistency with the results review policy of the Annual National Accounts of Spain.

At least once every five years, extraordinary reviews of the complete results series, which guarantee the updating of statistical sources and estimation methods, as well as their alignment with the recommendations issued from the relevant international forums, must be carried out.

The data is disseminated simultaneously according to the publication calendar to all interested parties on the INE website[15], accompanied by a press release.

2.2 Disseminated content

The Gross Domestic Product and each of its components are disseminated, both in raw data and adjusted for seasonal and calendar effects, from its three

[14]The results relating to national income are derived from those published in the *Quarterly Non-Financial Accounts of the Institutional Sectors* (https://www.ine.es/dyngs/INEbase/es/operacion.htm?c=Estadistica_C&cid=1254736165305&menu=ultiDatos&idp= 1254735576581)

[15] https://www.ine.es/dyngs/INEbase/es/operacion.htm?c=Estadistica_C&cid=1254736164439&menu=ultiDatos&idp=1254735576581

approaches of supply, demand and income, in terms of volume and current prices in the case of the first two and at current prices in the case of the income approach.

It also provides a measure of the evolution of employment in the economy in terms of employed *persons*, *jobs*, *jobs, hours worked* and *full-time equivalent jobs.*

The corresponding inter-annual and quarter-on-quarter variation rates of each aggregate and contributions to GDP growth of *national demand, external demand* and the *changes in inventories* are also disseminated.

Its main results also include the interannual variation of productivity and labour cost indicators, adjusted for seasonal and calendar effects:

- ***Productivity per full-time equivalent job***: volume index of GDP per full-time equivalent job.
- ***Productivity per hour actually worked***: volume index of GDP per hour actually worked.
- ***Compensation for equivalent salaried job***.
- ***Unit labour cost***: remuneration per salaried equivalent job between productivity per full-time equivalent job.
- ***Wage rate***: salaried full-time equivalent jobs by total equivalent jobs.

The branches of activity are grouped and coded in reference to the 2009 National Classification of Economic Activities (CNAE-2009). Specifically, the breakdown of the *Gross Value Added*, the *compensation of employees* and their components and the employment estimates is offered with the following breakdown:

- Agriculture, forestry and fishing (A, CNAE 2009)
- Industry (BE, CNAE 2009)
    - Industry. Manufacturing industry (C, CNAE 2009)
- Construction (F, CNAE 2009)
- Services (GT, CNAE 2009)
    - Services. Trade, transport and hospitality (GI, CNAE 2009)
    - Services. Information and communications (J, CNAE 2009)
    - Services. Financial and insurance activities (K, CNAE 2009)
    - Services. Real estate activities (L, CNAE 2009)
    - Services. Professional, scientific and technical activities (M-N, CNAE 2009)
    - Services. Public administration, education and health (O-Q, CNAE 2009)
    - Services. Artistic, recreational and other services activities (R-T, CNAE 2009)

Information is also provided on *taxes on products* (D.21) and subsidies on products (D.31).

In the case **of the demand approach,** estimates are provided of:

- **Domestic demand:**
    - Final consumption expenditure
    - Household final consumption expenditure and the NPISHs[16]
    - Household final consumption expenditure
    - Household domestic final consumption expenditure
        - Household domestic final consumption expenditure. Durable goods
        - Household domestic final consumption expenditure. Other goods
    - NPISHs final consumption expenditure
    - Final consumption expenditure of the Public Administrations[17]
        - Final individual consumption expenditure of the Public Administrations
        - Final collective consumption expenditure of the Public Administrations
    - Actual individual final consumption
    - Gross capital formation
        - Gross fixed capital formation
            - GFCF[18]. Tangible fixed assets
                - GFCF. Tangible fixed assets. Construction
                    - GFCF. Tangible fixed assets. Construction. Housing
                    - GFCF. Tangible fixed assets. Construction. Other buildings and constructions
                - GFCF. Tangible fixed assets. Machinery, capital goods and weapons systems
                    - GFCF. Tangible fixed assets. Machinery, capital goods and weapons systems. Transport equipment
                    - GFCF. Tangible fixed assets. Machinery, capital goods and weapons systems. Others

[16] Non-Profit Institutions Serving Households.
[17] General Government.
[18] Gross Fixed Capital Formation.

        - GFCF. Tangible fixed assets. Cultivated biological resources
    - GFCF. Intangible fixed assets. Intellectual property products
- Changes in inventories and acquisitions less disposals of valuables
    - Changes in inventories
    - Acquisitions less disposals of valuables

- **External demand:**
    - Exports of goods and services
        - Exports of goods
        - Exports of services
            - Exports of services. Expenditure of non-resident households in the economic territory
    - Imports of goods and services
        - Imports of goods
        - Imports of services
            - Imports of services. Expenditure of resident households in the rest of the world

2.3 Special transmissions

All data tables required in the SEC 2010 Transmission Programme[19] They are transmitted to Eurostat via the EDamis (Electronic Data files Administration and Management Information System) file exchange system in SDMX-ML format.

Some users receive information under embargo in the terms specified in the Code of Good Practice for European Statistics.

2.4 Metadata policy

The standardized methodological reports constitute the reference metadata that accompany the data of the statistical operations and that allow for knowledge, in a systematic, homogeneous and structured way, of the the content, methodologies and quality aspects associated with each statistical operation.

[19] Annex B of REGULATION (EU) No 549/2013 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of May 21, 2013 on the European System of National and Regional Accounts of the European Union (Relevant text for SES purposes).

The Board of Directors of the INE approved the standard structure of the methodological report[20] at its meeting on December 13, 2011, this standard being applicable to all statistical operations that publish data since 2012.

These reports or sheets are based on the ESMS (Euro SDMX Metadata Structure) structure determined by the Commission Recommendation, of June 23, 2009, on the reference metadata for the European Statistical System[21].

The QNAS standardized methodological report can be found at the following link:

https://www.ine.es/dynt3/metadatos/es/RespuestaDatos.html?oe=30024

3. General approach

3.1 General architecture of the system of compilation

The quarterly accounts constitute a subsystem of the National Accounts of Spain, which are fully integrated both methodologically and numerically. This implies, in particular, that the principles, definitions, accounting rules and structure used in the QNAS are the same as those used in the annual accounts and are established in *Regulation (EU) 549/2013 on the European System of National Accounts and Regionals 2010*. The quarterly estimates provided in the framework of the National Accounts of Spain (QNA and QSA[22]) are fully consistent with each other and with the annual estimates.

Based on the *Eurostat Quarterly Accounts Manual*[23], the QNA compilation process includes the **integration of direct results from other operations of the national accounts system**:

- *Account of foreign exchanges of goods and services* of the *Accounts of the Rest of the World* (consistent with the results of the *Trade Balance* of the *Balance of Payments and International Investment Position*, published by the Bank of Spain) and prepared, basically, from the foreign trade statistics of the Customs and Excites Department of the Tax Agency (AEAT), the *International Trade in Services Survey* (ITSS) and the *Tourist Expenditure Survey* (EGATUR), prepared by the INE.
- *Quarterly Non-Financial Accounts of General Government*, the monthly series of non-financial operations carried out by the aggregate of the *Central Administration, Regional Administration* and *Social Security Funds* subsectors[24] and the monthly series of taxes and social contributions[25], prepared by Audit Office (IGAE).

[20] https://www.ine.es/clasifi/estandar_informe_metodo.pdf
[21] https://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2009:168:0050:0055:ES:PDF
[22] Quarterly Non-Financial Accounts for the Institutional Sectors.
[23] https://ec.europa.eu/eurostat/documents/3859598/5936013/KS-GQ-13-004-EN.PDF/3544793c-0bde-4381-a7ad-a5cfe5d8c8d0
[24] https://www.igae.pap.hacienda.gob.es/sitios/igae/es-ES/Contabilidad/ContabilidadNacional/Publicaciones/Paginas/DatosConsolizadas.aspx
[25] https://www.igae.pap.hacienda.gob.es/sitios/igae/es-ES/Contabilidad/ContabilidadNacional/Publicaciones/Paginas/iaimpuestosycotizaciones.aspx

– Accounts of the institutional sector of *Financial Corporations*, drawn up mainly from accounting information of the entities that compose it, provided by the supervisory bodies (Banco de España, Stock Market Commission and Directorate of Insurance and Pension Funds of the Ministry of Economy and Digital Transformation).

In the rest of the areas, **indirect methods** are employed **that make use of all the current quantitative information available on the evolution of an aggregate** (or part of it) in the period:

– In the case of periods with available annual accounts, the quarterly estimate of each component of the GDP in terms not adjusted for seasonal and calendar effects, at current prices and in terms of volume, as well as the balanced GDP and its supply and demand components, are obtained from the *Multivariate Denton Method*[26]. However, the application of said algorithm is carried out after analysing all the available information, and the resulting corrections on the preliminary estimates are carried out in the accounting aggregates that may present a lower accuracy. In the case of the rest of the aggregates, the method takes as inputs the direct results of other national accounts operations mentioned and the latest available quarterly estimate.
– In the case of recent periods (without annual accounts available), the quarterly estimate of each component of GDP in terms not adjusted for seasonal and calendar effects, at current prices and in volume terms, is obtained by extrapolating their inter-annual variation rates, based on the evolution observed on the base synthetic indicator designed to capture the short term movement of the aggregate.

The process of estimating the quarterly GDP and its supply and demand components thus follows the following steps:

1. Preliminary estimate of the components of GDP at current prices and in volume, not adjusted for seasonal and calendar effects, from the point of view of supply and demand.
2. Estimate of balanced GDP in volume terms.
3. Adjustment for seasonal and calendar effects and benchmarking[27] of GDP in volume terms.
4. Balance and benchmarking of the components of GDP in terms of volume not adjusted for seasonal and calendar effects to GDP.
5. Estimation of the components of GDP at current prices.

[26] Denton, F.T. (1971) "Adjustment of monthly or quarterly series to annual totals: an approach based on quadratic minimization", Journal of the American Statistical Association, vol. 66, n.333, p. 99-102. The extension to the multivariate case of the Denton method is described in Di Fonzo, T. (1994) "Temporal disaggregation of a system of time series when the aggregate is known," INSEE-Eurostat Workshop on Quarterly National Accounts, Paris, December and in Di Fonzo, T. and Marini, M. (2003): "Benchmarking systems of seasonally adjusted time series according to Denton's movement preservation principle."

[27] To ensure consistency between the annual aggregation of the seasonally and calendar-adjusted quarterly GDP and the available annual GDP series (under the assumption that the calendar effects of a period greater than one year are not significant).

6. Preliminary seasonal and calendar adjustment of the components of GDP in volume and current prices.

7. Balance and benchmarking of GDP components in volume terms and current prices adjusted for seasonal and calendar effects to GDP.

In parallel, the estimation of the components of GDP at current prices is carried out from the income approach. The balance of this approach is guaranteed by estimating the *Gross Operating Surplus/Gross Mixed Income* by difference of the GDP aggregate and the rest of the components of the income approach. The employment variables by branch of activity are also estimated.

Finally, a global assessment of all the information is carried out, carrying out numerous checks on the consistency and viability of the estimates.

The results obtained also pass all the validation controls established by Eurostat on the national accounts data transmitted in compliance with the ESA 2010 regulation.

3.2 Balancing, benchmarking and other reconciliation procedures

3.2.1 Reconciliation with the annual accounts

The coherence of the results of the QNA and the annual aggregates of the national accounts is guaranteed for those aggregates that result from the direct integration of the results of other operations of the national accounts (*exports* and *imports* of goods and services at current prices, *final consumption expenditure* of *General Government* and *Gross Added Value* at current prices of section K *Financial and Insurance Activities* of the CNAE[28] 2009, taxes net of grants).

In the rest of the aggregates, this consistency is achieved in the compilation process followed through the use of temporal disaggregation and benchmarking techniques, all based on the recommendations of the *SES guidelines on temporal disaggregation, benchmarking and reconciliation*.

3.2.2 GDP quarterly equilibrium procedure

The preliminary estimate of each aggregate is, in general, not balanced from the accounting point of view. It is therefore necessary to reconcile such preliminary estimates in such a way as to guarantee the fulfilment of all the accounting identities inherent in the national accounts system. The accounting balancing process is an integral and fundamental part of the methodology used to prepare the national accounts.

In this case, the aim is to reconcile the estimates initially obtained from the quarterly aggregates to guarantee all the accounting identities inherent in the National Accounts framework and, therefore, the economic relationships between them, thus obtaining an understandable representation of the behaviour of the economy in each quarter. The final product of this process will be a set of fully

[28] National Classification of Economic Activities.

balanced accounts, with a single and definitive estimate of the quarterly GDP, and of the different components from all three perspectives.

To begin with, in this balancing process, all preliminary quarterly estimates of the quarterly aggregates are susceptible to being modified to achieve accounting balance, except for those resulting from the integration of results from other national accounts actions. In addition, it is carried out separately for the results not adjusted and adjusted for seasonal and calendar effects:

- In the case of periods with available annual accounts, the balancing of GDP and its components in each of the approaches is derived from the application of the *Multivariate Denton Method.* As has already been said, the algorithm is applied after analysing all the available information, so that the resulting corrections on the preliminary estimates are carried out only in those accounting aggregates that may present a lower accuracy in them.

- In the case of recent periods (without annual aggregates available), balancing is reached through a systematic iterative procedure of approximation of the estimates of the supply and demand approaches, based on the permanent evaluation of their quality and on a contrast of its accuracy with all the auxiliary information available on the economic evolution of the quarter.

The end product of this process is obtaining a single measurement of the quarterly *Gross Domestic Product* (GDP) of each of its components, from the point of view of supply, use and income, at current prices and in terms of volume, fully consistent with its annual measurement.

3.2.3 Other conciliation processes

Before finalizing the result obtained in the previous point, a validation and consistency and viability control process is carried out, in which numerous analysis and contrasts are performed, of which the following could be highlighted:

- Analysis of the evolution of the aggregate (quarter-on-quarter and year-on-year variation rates) in comparison with all the available base short-term information, both that used to prepare the corresponding synthetic indicator, as well as any other complementary high-frequency information that is considered relevant to explain the evolution of the aggregate.
- Consistency analysis of derived indicators (implicit deflators, productivity, average wages, unit labour costs, etc.)
- Analysis of reviews.
- Analysis of the viability of the *Gross Operating Surplus/Gross Mixed Income* obtained as a balance, comparing it with the available external information.
- Analysis, once the seasonally adjusted and calendar estimates have been reconciled, of the seasonal factors.

3.3 Volume estimates

3.3.1 General policy regarding volume

Since 2005, all statistical operations that make up the National Accounts of Spain adopted the use of chain-linked indices to measure changes in volume. According to the principles established in the ESA 2010 (Chapter 10), the type of index used for the measurement of volumes is a Laspeyres index and, consequently, a Paasche index is used for the implicit measurement of prices.

Also according to the principles of the ESA 2010 (Chapter 12), with regard to the chaining method and weights, quarterly indices are chained annually with annual weights and the *Annual Overlap Method* (the links in the chain take as reference the value average of the aggregate of the previous year to the average prices of that year) are used. This is due to the fact that it provides consistent indices with the annual chained indices, since this technique is totally aggregative (the average of the indices of the quarters coincides with the annual index), to its simplicity of calculation, and because it is the usual practice in other European countries.

The weights take as a reference the structure generated by the annual accounting for the immediately preceding year. In this way, structural compatibility between the annual and quarterly accounts is ensured, at the same time that no additional sources of seasonal and irregular variation are introduced in the calculation of the indices, due to the (annual) frequency of said weightings.

Measurements in volume terms can be expressed both as index numbers and in monetary terms. The two types of data give rise to the same rates in their evolution over time. In the case of the QNA, only the chain-linked volume series expressed as indices are published, although it is easy to deduce the same series expressed in monetary terms.

The application of this methodology generates a loss of additivity in the chained volume measurements of an aggregate and its components, except in the data corresponding to the reference years and the one immediately after. Non-additivity is a direct consequence of the mathematical properties of the valuation system, so the differences do not reflect any deterioration of quality in the measurement process. The discrepancy increases as we move away from the reference period. Data at prices from the previous year are always additive.

For the aforementioned reasons, the dissemination of the QNA data focuses on the chained volume indices and their variation rates.

A special problem linked to the chaining technique is the representation of balances, in particular, the changes of inventories and the balance of foreign trade (*external demand*). Given that over time these series can take positive and negative

values, it is not possible to obtain true linked volume indices[29]. Only the contributions to GDP growth of each component allow a comprehensive and seamless representation of GDP from the point of view of demand, given that the variation rates and the index numbers do not make sense for some of the aggregates (also in the case of prices currents).

The ***contributions to the growth*** (decrease) of an aggregate try to measure the impact of the evolution of each component on that of the aggregate and constitute an essential tool for the economic analysis of the data published in the National Accounts. However, based on the introduction of the chain-linked index technique for measuring the variations in economic aggregates in terms of volume and the consequent loss of additivity, the calculation of the contributions to growth (decrease) in volume of GDP it is less direct than when working with a fixed base.

The method used in the QNA to calculate the contributions is the *Additive Volume Data Method (AVD)*[30], following the recommendations[31] of the Eurostat Quarterly Accounts Manual. This method allows obtaining fully additive contributions both in the case of quarter-on-quarter variation rates and for year-on-year variation rates.

However, the previous method is not applicable for those aggregates that can take positive and negative values, such as the change in inventories. In these cases, the contributions to growth are obtained, also in line with international recommendations, in a residual way, to guarantee their additivity.[32]

3.3.2 Chaining and benchmarking

The temporal disaggregation and benchmarking procedures should not be applied to annual data expressed at average prices of the previous year since they do not constitute a time series in the strict sense but rather to the annual series of linked indices.

The quarterly disaggregation of the annual series of chain-linked volume indices using quarterly volume indicators leads to obtaining results equivalent to those obtained by the annual overlap procedure.

Volume measurements expressed at average prices of the previous year for series of quarterly indices chained annually are direct only in the case of the annual overlap procedure. The other chaining techniques require additional information.

3.3.3 Chaining and seasonal adjustment

The seasonal adjustment of the aggregates expressed in terms of chain-linked volume is done on the basis of gross, chained and reconciled figures. An indirect approach is used, that is, the individual components of an aggregate are generally

[29] *Handbook on Quarterly National Accounts*, Eurostat, 2013 Edition, 6.77

[30] A full description of the method can be found in the Handbook on quarterly national accounts, 2013 Edition, 6.97-6.102

[31] See Handbook on quarterly national accounts, 2013 Edition, 6.112

[32] For example, in the case of changes in inventories, the contribution can be obtained as the difference between the contributions of gross capital formation and gross fixed capital formation.

seasonally and calendar adjusted, while the aggregates are obtained by aggregation of the components.

GDP data in terms of chained volume and adjusted for seasonal and calendar effects are obtained directly.

The seasonally adjusted series of the final quarterly GDP is obtained once the direct adjustment has been made to the original quarterly GDP series and after having applied a benchmarking procedure to achieve the time restriction that the aggregation of the four quarters of each year coincides with the annual GDP data for that year. This series constitutes the transversal restriction to which the aggregation of the seasonally adjusted components of supply, use and income must conform.

3.4 Seasonal and calendar adjustment

3.4.1 Policy for seasonal adjustment

The seasonal and calendar effects adjustment is made to each of the quarterly macroeconomic aggregates, both to the series at current prices and to the series of linked volume indices.

The preparation of the seasonally and calendar adjusted results covers both the signal extraction process, which includes the treatment of seasonal adjustment and calendar effects, and the procedures that guarantee annual consistency between the raw data and the seasonally adjusted data.

The methods comply with the recommendations published in the quarterly accounts manuals (Eurostat, 1999/2013 and IMF 2001/2016) and related to seasonal adjustment (ESS *Guidelines on Seasonal Adjustment, 2015*) and with the *INE Standard for Seasonal and Calendar Effects Adjustments in Short-term Series, 2019*[33]. In this way, the seasonal adjustment procedures are developed in accordance with a parametric approach, based on regression models with ARIMA errors, identifying and estimating a priori a model that adequately adjusts to the observed series and deriving from it appropriate models for each of the components of the series (cycle-trend, seasonal and irregular).

It should be taken into account that the ARIMA model is chosen once a year at a time when the annual series are also revised[34]. Such models remain fixed during the rest of the year. However, these are monitored in each quarter. Furthermore, the parameters of the ARIMA model are re-estimated each time a new observation is available, although the seasonally and calendar adjusted results corresponding to periods for which the unadjusted result is not subject to revision are not updated.

Although the assumption that seasonality in the broad sense (seasonal and calendar effects) is neutral in the year can sometimes be questionable, especially if it is changeable or if there are calendar effects of a period longer than one year or interventions. However, following international practice in the matter, the annual consistency between the data not adjusted for seasonal and calendar

[33] https://www.ine.es/clasifi/estandar_efectos_estacionales.pdf

[34] In section 18.6 of the standardized methodological report on the operation, a file with detailed metadata of the seasonal adjustment of all published series is published, which is updated once a year coinciding with the identification of models.

effects and the seasonally adjusted data is maintained, that is, the annual aggregation of the seasonally adjusted series coincides with the annual total of the original series. both in current terms and in terms of volume. For this, the seasonal adjustment procedure is always followed by a benchmarking procedure, using the methodologies of *Chow and Lin (1971)*[35] or *Fernández (1981)*[36] .

In addition, consistent seasonally adjusted data are presented from the accounting point of view for each quarter, guaranteeing the balance of the GDP adjusted for seasonality in its different approaches (supply, use and income).

This preference for consistency in optimality in the sense of seasonal adjustment must be understood in the context of the coherence which should exist in all national accounts systems, which is indispensable for the analysis of both short- and long-term economic developments.

3.4.2 Policy for calendar adjustment

The estimation of the underlying components of the time series is carried out in two stages:

In a first stage, calendar effects as well as other deterministic effects are identified and modelled using a regression model with ARIMA errors.

In a second stage, an estimate of the unobservable components is obtained.

The following calendar effects are considered:

- The different number of working days in each month.
- The different composition of the number of working days.
- The leap-year effect
- Moving holidays, in our case, the effect of the Easter holiday.

The presence of calendar effects is contrasted in each series, so that the adjustment is made when there is statistical evidence and an economic explanation for the presence of such effects. This analysis is complemented by a non-parametric spectral analysis as an additional diagnostic method.

3.4.3 Review policy for seasonally adjusted data

As indicated in the previous sections, the seasonal adjustment is made directly to the gross series and not through the indicators **used to estimate them. In addition, the adjustment is made individually, series by series**.

The ARIMA model is chosen once a year at a time when the annual series are also revised. Such models remain fixed during the rest of the year. However, these are

[35] Chow, G.C. y A. Lin (1971) "Best Linear Unbiased Interpolation, Distribution, and Extrapolation of Time Series by Related Series", The Review of Economics and Statistics, vol. 53, n. 4, p. 372-375.
[36] Fernández, R.B. (1981) "A Methodological Note on the Estimation of Time Series", The Review of Economics and Statistics, vol. 63, n. 3, p. 471-476.

monitored in each quarter. The parameters are recalculated each time a new observation is available.

4. GDP and its components: the supply approach

4.1 Gross value added, including breakdown by branch

An estimate of the *Gross Value Added* is offered for the following branches of activity, in accordance with the National Classification of Economic Activities of 2009 (NACE 2009):

- Agriculture, forestry and fishing (A, NACE 2009)
- Industry (BE, NACE 2009)
    - Industry. Manufacturing industry (C, NACE 2009)
- Construction (F, NACE 2009)
- Services (GT, NACE 2009)
    - Services. Trade, transport and hospitality (GI, NACE 2009)
    - Services. Information and communications (J, NACE 2009)
    - Services. Financial and insurance activities (K, NACE 2009)
    - Services. Real estate activities (L, NACE 2009)
    - Services. Professional, scientific and technical activities (M-N, NACE 2009)
    - Services. Public administration, education and health (O-Q, NACE 2009)
    - Services. Artistic, recreational and other services activities (R-T, NACE 2009)

Synthetic indicators of value, volume and prices are constructed for each of the branches (normally one of them is implicit). Given the absence of reliable quarterly indicators of value or volume of intermediate consumption, gross value added indicators are production indicators such as indicators of turnover, production indices, sales, etc.

In some of the aggregates relative, fundamentally, to the destination of industrial products and durable goods, the synthetic indicators of availability indicators are used. These are self-prepared and based on the balance of supply and use of the national accounts system, and estimated using available indicators for the components of said balance (essentially, the *Industrial Products Index* and detailed results by product of the foreign trade statistics of goods from the AEAT Customs and Excites Department).

On the other hand, in the construction of the synthetic indicators, the latest information available from the source and destination tables is used in most cases to determine the weightings of each of the components of the synthetic indicator.

The following sections provide detailed information on the basic information used for the construction of the synthetic indicators and on the weighting system used.

4.1.1 Agriculture, forestry and fishing (section A of the 2009 National Classification of Economic Activities).

Synthetic price and volume indicators are constructed from the sources listed in the following tables. Synthetic indicators of value are derived implicitly[37].

Aggregate: **GVA of agriculture, livestock, forestry and fishing**
Synthetic indicator of: **Volume**

Base indicator	Source	Frequency	Availability (*)
Agricultural Production, Monthly Preview of Agricultural Areas and Productions	MAPA	Monthly	m-2/m
Carcass weight of cattle slaughter by categories and species, Monthly Survey of Cattle Slaughter in Slaughterhouses	MAPA	Monthly	m-2/m
Cow's milk collected, Monthly Milk Statistics	MAPA	Monthly	m-2/m
Logs with bark, Preview of the Statistical Yearbook	MAPA	Annual	a-2
Amount of fishing, General Summary of Port Traffic of State Ports	MITMA	Monthly	m-1/m+1

Notes:
MAPA (Ministry of Agriculture, Fisheries and Food)
MITMA (Ministry of Transport, Mobility and Urban Agenda)
(*) Usual average availability. Absence of fixed calendar.

Aggregate: **GVA of agriculture, livestock, forestry and fishing**
Synthetic indicator of: **Prices**

Base indicator	Source	Frequency	Availability
Agricultural Perceived Price Index of agricultural products	MAPA	Monthly	m-3/m-1
Agricultural Perceived Price Index of animal products	MAPA	Monthly	m-3/m-1
Fish and seafood CPI (ECOICOP class 0113)	INE	Monthly	m/m+2

Notes:
CPI (Consumer Price Index)
MAPA (Ministry of Agriculture, Fisheries and Food)

For some recent periods where the baseline information is not available or is considered anomalous, a prediction of it is carried out according to an ARIMA modelling.

[37] Regarding availability (t+30 / t+90) in the advance of results for the quarter t (t+30 days) or in the update of the same (t+90), "m" refers to the last month of the reference quarter and "t" refers to the reference quarter.

4.1.2 Industry (sections B, C, D and E of the 2009 National Classification of Economic Activities)

In the case of *Mining and quarrying; Electricity, gas, steam and air conditioning supply; Water supply; sewerage; waste management and remediation activities* (sections B, D and E of the NACE 2009), synthetic price and volume indicators are constructed from the sources listed in the following tables. Synthetic indicators of value are derived implicitly.

Aggregate:	**GVA of Extractive Industries; Supply of electricity, gas, steam and air conditioning; Water supply, sewerage, waste management and remediation activities**		
Synthetic indicator of:	**Volume**		
Base indicator	**Source**	**Frequency**	**Availability**
IPI for the supply of electricity, gas, steam and air conditioning (division 35 of the NACE 09)	INE	Monthly	m-1 / m+1
Energy (renewable and non-renewable) generated	REE	Monthly	m / m+2
Deflated sales in large companies and SMEs in the extractive industries (divisions 05, 06, 07, 08 and class 09.10 of NACE 09), Sales, Employment and Wages in Large Companies and SMEs	AEAT	Quarterly	t-1 / t
IPI of extractive industries (section B of the NACE 09)	INE	Monthly	m-1 / m+1
Deflated sales of large energy companies and SMEs (section D, group 43.2 and divisions 46.11, 46.12, 46.19, 46.52, 46.75, 46.90, 47.78, 49.50, 55.20, 61.10, 70.10, 70.22, 71.12 of the NACE 09), Sales Employment and Wages in Large Companies and SMEs	AEAT	Quarterly	t-1 / t
ITI of extractive industries (section B of NACE 09) and IPRI of extractive industries (section B of NACE 09)	INE	Monthly	m-1 / m+1
Deflated sales in large companies and SMEs and IPRI of water supply, waste treatment and decontamination (section E of NACE 09), Sales, Employment and Wages in Large Companies and SMEs	AEAT, INE	Quarterly	t-1 / t

Notes:
IPI (Industrial Production Index)
ITI (Industrial Turnover Indeces)
IPRI (Industrial Price Index)

Aggregate:	**GVA of Extractive Industries; Supply of electricity, gas, steam and air conditioning; Water supply, sewerage, waste management and remediation activities**		
Synthetic indicator of:	**Prices**		
Base indicator	**Source**	**Frequency**	**Availability**
IPRI for the supply of electricity, gas, steam and air conditioning (division 35 of the CNAE 2009)	NEMO	Monthly	m-1/m+1
Arithmetic mean price of the daily market matching of the Spanish electricity system	NEMO	Monthly	m/m+2
IPRI of extractive industries (section B of the CNAE 2009)	INE	Monthly	m-1/m+1
IPRI of water supply, sewerage, waste management and remediation activities (section E of the CNAE 2009)	INE	Monthly	m-1/m+1

Notes:
NEMO (Nominated electricity market operator)
IPRI (Industrial Price Index)

In the case of *Manufacture of coke and refined petroleum products* (division 19 of the NACE 2009), synthetic price and volume indicators are constructed from the information sources listed in the following tables. Synthetic indicators of value are derived implicitly.

Aggregate: **GAV of the manufacture of coke and refined petroleum products**

Synthetic indicator of: **Volume**

Base indicator	Source	Frequency	Availability
IPI of the manufacture of coke and refined petroleum products (division 19 of NACE 09)	INE	Monthly	m-1 / m+1
Production of petroleum products (not for personal consumption) in refineries	CORES	Monthly	m-1 / m
Deflated sales in large companies and SMEs of manufacture of coke and refined petroleum products (division 19 of the NACE 09), VESGEP	AEAT	Quarterly	t-1 / t
ITI and IPRI of the manufacture of coke and refined petroleum products (division 19 of NACE 09)	INE	Monthly	m-1 / m+1

Notes:
IPI (Industrial Production Index)
ITI (Industrial Turnover Indices)
AEAT (Tax Agency office)
VESGEP (Sales, Employment and Wages in Large Companies and SMEs)

Aggregate: **GAV of the manufacture of coke and refined petroleum products**
Synthetic indicator of: **Prices**

Base indicator	Source	Frequency	Availability
IPRI of the manufacture of coke and refined petroleum products (division 19 of NACE 09)	INE	Monthly	m-1 / m+1
Sales in large companies and SMEs at current and deflated prices of the manufacture of coke and refined petroleum products (division 19 of the NACE 09), VESGEP	AEAT	Quarterly	t-1 / t

Notes:
IPRI (Industrial Price Index)
VESGEP (Sales, Employment and Wages in Large Companies and SMEs)

Finally, in the case of the *Manufacturing industry*, excluding manufacture of coke and refined petroleum products (section C of the 2009 National Classification of Economic Activities, except for division 19), synthetic price and volume indicators are constructed based on the related sources in the following tables. Synthetic indicators of value are derived implicitly.

Aggregate: **GVA of the manufacturing industry (rest)**
Synthetic indicator of: **Volume**

Base indicator	Source	Frequency	Availability
IPI of the manufacture of food products (division 10 of NACE 2009)	INE	Monthly	m-1/m+1
IPI (division 11 of NACE 2009)	INE	Monthly	m-1/m+1
IPI of the manufacture of tobacco products (division 12 of NACE 2009)	INE	Monthly	m-1/m+1
ICN and IPRI of the manufacture of food products (division 10 of NACE 2009)	INE	Monthly	m-1/m+1
ICN and IPRI of the manufacture of beverages (division 11 of NACE 2009)	INE	Monthly	m-1/m+1
ICN and IPRI of the manufacture of tobacco products (division 12 of NACE 2009)	INE	Monthly	m-1/m+1
IPI of the manufacture of textiles (division 13 of NACE 2009)	INE	Monthly	m-1/m+1
IPI of the manufacture of wearing apparel (division 14 of NACE 2009)	INE	Monthly	m-1/m+1
IPI of the manufacture of leather and related products (division 15 of NACE 2009)	INE	Monthly	m-1/m+1
ICN and IPRI of the manufacture of textiles (division 13 of NACE 2009)	INE	Monthly	m-1/m+1
ICN and IPRI of the manufacture of wearing apparel (division 14 of NACE 2009)	INE	Monthly	m-1/m+1
ICN and IPRI of the manufacture of leather and related products (division 15 of NACE 2009)	INE	Monthly	m-1/m+1
IPI of the manufacture of chemicals and chemical products (division 20 of NACE 2009)	INE	Monthly	m-1/m+1
IPI of the manufacture of basic pharmaceutical products (division 21 of NACE 2009)	INE	Monthly	m-1/m+1
IPI of the manufacture of rubber and plaICNc products (division 22 of NACE 2009)	INE	Monthly	m-1/m+1
IPI of the manufacture of other non-metallic mineral products (division 23 of NACE 2009)	INE	Monthly	m-1/m+1
IPI of the metallurgy; manufacture of iron, steel and ferro-alloy products (division 24 of NACE 2009)	INE	Monthly	m-1/m+1
ICN and IPRI of the manufacture of chemicals and chemical products (division 20 of NACE 2009)	INE	Monthly	m-1/m+1
ICN and IPRI of the manufacture of basic pharmaceutical products (division 21 of NACE 2009)	INE	Monthly	m-1/m+1
ICN and IPRI of the manufacture of rubber and plaICNc products (division 22 of NACE 2009)	INE	Monthly	m-1/m+1
ICN and IPRI of the manufacture of other non-metallic mineral products (division 23 of NACE 2009)	INE	Monthly	m-1/m+1
ICN and IPRI of the metallurgy; manufacture of iron, steel and ferro-alloy products (division 24 of NACE 2009)	INE	Monthly	m-1/m+1
IPI of the manufacture of fabricated metal products, except machinery and equipment (division 25 of NACE 2009)	INE	Monthly	m-1/m+1
IPI of manufacture of computer, electronic and optical products (division 26 of the NACE 2009)	INE	Monthly	m-1/m+1
IPI of manufacture of electrical equipment (division 27 of NACE 2009)	INE	Monthly	m-1/m+1
IPI of manufacture of machinery and equipment n.e.c. (division 28 of NACE 2009)	INE	Monthly	m-1/m+1
ICN and IPRI of the manufacture of fabricated metal products, except machinery and equipment (division 25 of NACE 2009)	INE	Monthly	m-1/m+1
ICN and IPRI of manufacture of computer, electronic and optical products (division 26 of the NACE 2009)	INE	Monthly	m-1/m+1
ICN and IPRI of manufacture of electrical equipment (division 27 of NACE 2009)	INE	Monthly	m-1/m+1
ICN and IPRI of manufacture of machinery and equipment n.e.c. (division 28 of NACE 2009)	INE	Monthly	m-1/m+1
ICN and IPRI of manufacture of motor vehicles, trailers and semi-trailers (division 29 of NACE 2009)	INE	Monthly	m-1/m+1
IPI of manufacture of motor vehicles, trailers and semi-trailers (division 30 of the NACE 2009)	INE	Monthly	m-1/m+1

Aggregate: **GVA of the manufacturing industry (rest)**
Synthetic indicator of: **Volume**

Base indicator	Source	Frequency	Availability
Total deflated sales of large companies and SMEs of the manufacture of food products, manufacture of beverages, and manufacture of tobacco products (divisions 10, 11 and 12 of NACE 2009), Sales, Employment and Salaries of Large Companies and SMEs	AEAT	Quarterly	t-1/t
Total deflated sales of large companies and SMEs of the manufacture of textiles, manufacture of wearing apparel, and manufacture of leather and related products (divisions 13, 14 and 15 of NACE 2009), Sales, Employment and Salary of Large Companies and SMEs	AEAT	Quarterly	t-1/t
Total deflated large companies and SMEs of the manufacture of chemicals and chemical products, the manufacture of basic pharmaceutical products, of rubber and plaICNcs, of other non-metallic mineral products and metallurgy; manufacture of iron, steel and ferro-alloy products (divisions 20, 21 , 22, 23 and 24 of NACE 2009), Sales, Employment and Salaries of Large Companies and SMEs	AEAT	Quarterly	t-1/t
Total deflated sales of large companies and SMEs in the manufacture of wood and of products of wood and cork, except furniture; manufacture of articles of straw and plaiting materials; printing and reproduction of recorded media; manufacture of furniture; other manufacturing industries; and repair and installation of machinery and equipment (divisions 16, 17, 18, 31, 32 and 33 of NACE 2009), Sales, Employment and Wages of Large Companies and SMEs	AEAT	Quarterly	t-1/t
ICN and IRPI of the manufacture of wood and of products of wood and cork, except furniture; manufacture of articles of straw and plaiting materials (division 16 of NACE 2009)	INE	Monthly	m-1/m+1
ICN and IPRI of the manufacture of paper and paper products (division 17 of NACE 2009)	INE	Monthly	m-1/m+1
ICN and IPRI of printing and reproduction of recorded media (division 18 of the NACE 2009)	INE	Monthly	m-1/m+1
ICN and IPRI of the manufacture of furniture (division 31 of NACE 2009)	INE	Monthly	m-1/m+1
ICN and IPRI of other manufacturing industries (division 32 of NACE 2009)	INE	Monthly	m-1/m+1
ICN and IPRI of the repair and installation of machinery and equipment (division 33 of NACE 2009)	INE	Monthly	m-1/m+1

Notes:
IPRI (Industrial Price Index)
IPI (Industrial Production Index)
ICN (Industrial Turnover Indices)

Aggregate: **GVA of the manufacturing industry (rest)**
Synthetic indicator of: **Prices**

Base indicator	Source	Frequency	Availability
IPRI of the manufacture of food products (division 10 of NACE 2009)	INE	Monthly	m-1 / m+1
IPRI of the manufacture of beverages (division 11 of NACE 2009)	INE	Monthly	m-1 / m+1
IPRI of the manufacture of tobacco products (division 12 of NACE 2009)	INE	Monthly	m-1 / m+1
Sales in large companies and SMEs at current and deflated prices of the manufacture of food products, manufacture of beverages, and manufacture of tobacco products (divisions 10, 11 and 12 of NACE 2009), Sales, Employment and Salaries in Large Companies and SMEs	AEAT	Quarterly	t-1 / t
IPRI of the manufacture of textiles (division 13 of NACE 2009)	INE	Monthly	m-1 / m+1
IPRI of the manufacture of wearing apparel (division 14 of NACE 2009)	INE	Monthly	m-1 / m+1
IPRI of the manufacture of leather and related products (division 15 of NACE 2009)	INE	Monthly	m-1 / m+1
Sales at current and deflated prices in large companies and SMEs of the manufacture of textiles, manufacture of wearing apparel, and manufacture of leather and related products (divisions 13, 14 and 15 of NACE 2009), Sales, Employment and Salary in Large Companies and SMEs	AEAT	Quarterly	t-1 / t
IPRI of the manufacture of chemicals and chemical products (division 20 of NACE 2009)	INE	Monthly	m-1 / m+1
IPRI of the manufacture of basic pharmaceutical products (division 21 of NACE 2009)	INE	Monthly	m-1 / m+1
IPRI of the manufacture of rubber and plastic products (division 22 of NACE 2009)	INE	Monthly	m-1 / m+1
IPRI of the manufacture of other non-metallic mineral products (division 23 of NACE 2009)	INE	Monthly	m-1 / m+1
IPRI of the metallurgy; manufacture of iron, steel and ferro-alloy products (division 24 of NACE 2009)	INE	Monthly	m-1 / m+1
Sales in large companies and SMEs at current and deflated prices of the manufacture of chemicals and chemical products, the manufacture of basic pharmaceutical products, of rubber and plastics, of other non-metallic mineral products and metallurgy; manufacture of iron, steel and ferro-alloy products (divisions 20, 21 , 22, 23 and 24 of NACE 2009), Sales, Employment and Salaries in Large Companies and SMEs	AEAT	Quarterly	t-1 / t
IPRI of the manufacture of fabricated metal products, except machinery and equipment (division 25 of NACE 2009)	INE	Monthly	m-1 / m+1
IPRI of manufacture of computer, electronic and optical products (division 26 of the NACE 2009)	INE	Monthly	m-1 / m+1
IPRI of manufacture of electrical equipment (devision 27 of NACE 2009)	INE	Monthly	m-1 / m+1
IPRI of manufacture of machinery and equipment n.e.c. (Devision 28 of NACE 2009)	INE	Monthly	m-1 / m+1
Sales at current and deflated prices in large companies and SMEs of the manufacture of fabricated metal products, except machinery and equipment, of of computer, electronic and optical products, of of electrical equipment, of machinery and equipment n.e.c. (divisions 25 , 26, 27 and 28 of NACE 2009), Sales, Employment and Salary in Large Companies and SMEs	AEAT	Quarterly	t-1 / t
IPRI of manufacture of motor vehicles, trailers and semi-trailers (devision 29 of NACE 2009)	INE	Monthly	m-1 / m+1
IPRI of manufacture of motor vehicles, trailers and semi-trailers (devision 30 of the NACE 2009)	INE	Monthly	m-1 / m+1
Sales at current and deflated prices of the manufacture of motor vehicles, trailers and semi-trailers (divisions 29 and 30 of NACE 2009), Sales, Employment and Salary in Large Companies and SMEs	AEAT	Quarterly	t-1 / t
IRPI of the manufacture of wood and of products of wood and cork, except furniture; manufacture of articles of straw and plaiting materials (division 16 of NACE 2009)	INE	Monthly	m-1 / m+1
IPRI of the manufacture of paper and paper products (division 17 of NACE 2009)	INE	Monthly	m-1 / m+1
IPRI of printing and reproduction of recorded media (division 18 of the NACE 2009)	INE	Monthly	m-1 / m+1
IPRI of the manufacture of furniture (division 31 of NACE 2009)	INE	Monthly	m-1 / m+1
IPRI other manufacturing (division 32 of NACE 2009)	INE	Monthly	m-1 / m+1

Aggregate: **GVA of the manufacturing industry (rest)**
Synthetic indicator of: **Prices**

Base indicator	Source	Frequency	Availability
General IPRI	INE	Monthly	m-1 / m+1
Sales at current and deflated prices in large companies and SMEs in the manufacture of wood and of products of wood and cork, except furniture; manufacture of articles of straw and plaiting materials; printing and reproduction of recorded media; manufacture of furniture; other manufacturing industries; and repair and installation of machinery and equipment (divisions 16, 17, 18, 31, 32 and 33 of NACE 2009), Sales, Employment and Wages in Large Companies and SMEs	AEAT	Quarterly	t-1 / t

Notes:
IPRI (Industrial Price Index)

In all cases, for some recent periods where the baseline information is not available or is considered anomalous, a prediction is carried out according to an ARIMA model. In addition, in the advancement of results, since the first quarter of 2020, in some quarters advance data has been available on sales from the statistics of *Sales, Employment and Wages of Large Companies and SMEs* of the AEAT, and, from the second quarter of 2020, from partial advance results of the IPI.

4.1.3 Construction (section F of the 2009 National Classification of Economic Activities).

Synthetic price and value indicators are constructed from the information sources listed in the following tables. Synthetic volume indicators are derived implicitly.

Aggregate: **Gross Value Added of construction**

Synthetic indicator of: **Value at current prices**

Base indicator	Source	Frequency	Availability
Production in construction, including real estate development (EIPIC)	MITMA	Monthly	m-1 / m
Total sales of large companies and SMEs in building construction (division 41 of NACE 09), VESGEP	AEAT	Quarterly	t-1 / t
Total sales of large companies and SMEs in civil engineering (division 42 of NACE 09), VESGEP	AEAT	Quarterly	t-1 / t
Total sales of large companies and SMEs in specialised construction activities (division 43 of NACE 09), VESGEP	AEAT	Quarterly	t-1 / t
Apparent consumption of cement and IPRI of cement manufacturing (class 23.51 of NACE 09)	INE, OFICEMEN and Ministry of Industry	Monthly	m / m
IPRI for the Manufacture of bricks, tiles and construction products, in baked clay for construction (class 23.32 of NACE 09) and IPI for the manufacture of clay building products (class 23.3 of NACE 09)	INE	Monthly	m-1 / m

Notes:
EIPIC (Survey of Construction Industry Production Indices)
VESGEP (Sales, Employment and Wages in Large Companies and SMEs)
IPI (Industrial Production Indices)
IPRI (Industrial Price Index)
MITMA (Ministry of Transport, Mobility and Urban Agenda)
AEAT (Tax Agency offices)

Aggregate: **Gross Value Added of construction**
Synthetic indicator of: **Prices**

Base indicator	Source	Frequency	Availability
Price per m2 of a new free-market housing less than 5 years old (*)	MITMA	Quarterly	t-1 / t
New housing price index (HIP)	INE	Quarterly	t-1 / t
Average remuneration in construction (section C of CNAE 09), LFS	INE	Quarterly	t-1 / t

Notes:
LFS (Labour Force Survey)
HPI (Housing Price Index)
MITMA (Ministry of Transport, Mobility and Urban Agenda)
(*) Until 2014, price per m2 of new free-market housing less than 2 years old

For some recent periods where the baseline information is not available or is considered anomalous, a prediction of it is carried out according to an ARIMA modelling. In addition, in the advancement of results, since the first quarter of 2020, in some quarters advance data has been available on sales from the statistics of *Sales, Employment and Wages of Large Companies and SMEs* of the AEAT, and, from the second quarter of 2020, from partial advance results of the IPI.

4.1.4 Trade, transport and hospitality (sections G, H and I of the 2009 National Classification of Economic Activities)

In the case of *Wholesale and retail trade; motor vehicle and motorcycle repair* (section G of the 2009 National Classification of Economic Activities), synthetic price and value indicators are constructed from the information sources listed in the following tables. Synthetic volume indicators are derived implicitly.

Aggregate: **GVA of Wholesale and retail trade; motor vehicle and motorcycle repair**

Synthetic indicator of: **Value at current prices**

Base indicator	Source	Frequency	Availability
Sales of large companies and SMEs of Wholesale and retail trade and repair of motor vehicles and motorcycles (division 45 of the NACE 2009), Sales, Employment and Wages in Large Companies and SMEs	AEAT	Quarterly	t-1/t
SSAI turnover index of sale of motor vehicles, group 45.1 of the NACE 2009 (IASS 451)	INE	Monthly	m-1/m+1
Passenger car registrations and motor car CPI (ECOICOP class 0711)	DGT/INE	Monthly	m-1/m+1
Motorcycle registrations and motorcycle CPI (ECOICOP class 0712)	DGT/INE	Monthly	m-1/m+1
Registration of cargo vehicles and CPI of purchase of vehicles (ECOICOP subgroup 071)	DGT/INE	Monthly	m-1/m+1
Registrations of buses and CPI of purchase of vehicles (subgroup 071 of the ECOICOP)	DGT/INE	Monthly	m-1/m+1
SSAI turnover index of maintenance and repair of vehicles (group 45.2 of the NACE 2009)	INE	Monthly	m-1/m+1
Sales of large vehicle maintenance and repair companies (class 45.31 of the NACE 2009), Sales, Employment and Wages of Large Companies	AEAT	Monthly	m-1/m+1
Sales of large companies and SMEs of wholesale trade and trade intermediaries, except motor vehicles and motor cycles (division 46 of the NACE 2009), Sales, Employment and Wages in Large Companies and SMEs	AEAT	Quarterly	t-1/t
SSAI turnover index of the activity of wholesale trade intermediaries (group 46.1 of the NACE 2009)	INE	Monthly	m-1/m+1
SSAI turnover index of the activity of wholesale of agricultural raw materials and live animals (group 46.2 of the NACE 2009)	INE	Monthly	m-1/m+1
SSAI turnover index of the activity of the wholesale of food products, beverages and tobacco (group 46.3 of the NACE 2009)	INE	Monthly	m-1/m+1
SSAI turnover index of the activity of wholesale of domestic goods (group 46.4 of the NACE 2009)	INE	Monthly	m-1/m+1
SSAI turnover index of the activity of the wholesale of information and communication equipment (group 46.5 of the NACE 2009)	INE	Monthly	m-1/m+1
SSAI turnover index of the activity of the wholesale of other machinery, equipment and supplies (group 46.6 of the NACE 2009)	INE	Monthly	m-1/m+1
SSAI turnover index of the activity of wholesale of fuels, metals, and others (group 46.7 of the NACE 2009)	INE	Monthly	m-1/m+1
SSAI turnover index of the activity of non-specialised wholesale (group 46.8 of the NACE 2009)	INE	Monthly	m-1/m+1
SSAI turnover index of the activity of wholesale of vehicles, motorcycles and spare parts (group 46.9 of the NACE 2009)	INE	Monthly	m-1/m+1
Wholesale trade sales of large companies and SMEs, except for motor vehicles and motor cycles (division 47 of the NACE 2009), Sales, Employment and Wages in Large Companies and SMEs	AEAT	Quarterly	t-1/t
RTI general turnover index	INE	Monthly	m / m

Notes:
Services Sector Activity Indicators (SSAI)
Retail Trade Index (RTI)
Consumer Price Index (CPI)
General Directorate of Traffic (DGT)

Aggregate: **GVA of Wholesale and retail trade; motor vehicle and motorcycle repair**
Synthetic indicator of: **Prices**

Base indicator	Source	Frequency	Availability
Vehicle acquisition CPI (ECOICOP subgroup 071)	INE	Monthly	m/m+2
General IPRI without energy	INE	Monthly	m-1/m+1
General CPI	INE	Monthly	m/m+2

In the case of *Transportation and storage* (section H of the 2009 National Classification of Economic Activities), synthetic price and value indicators are also constructed from the information sources listed in the following tables. Synthetic volume indicators are derived implicitly.

Aggregate:	**GVA of the transport and storage sector**
Synthetic indicator of:	**Value at current prices**

Base indicator	Source	Frequency	Availability
Sales in large companies and SMEs of land transport and transport via pipelines (class 49 of the NACE 2009), Sales, Employment and Wages in Large Companies	AEAT	Quarterly	t-1 / t
SSAI turnover index of other passenger land transport (group 4939 of the NACE 2009)	INE	Monthly	m-1 / m
Travelers in urban transport (Passenger Transport Statistics) and CPI of passenger transport by road (subclass 07.3.2 of the ECOICOP)	INE	Monthly	m-2 / m-1
Travelers in inter-city bus (Passenger Transport Statistics) and CPI of passenger transport by road (subclass 07.3.2 of the ECOICOP)	INE	Monthly	m-2 / m-1
Travelers in special and discretionary transport (Passenger Transport Statistics) and CPI of passenger transport by road (subclass 07.3.2 of the ECOICOP)	INE	Monthly	m-2 / m-1
Number of passengers per kilometre in rail transport and CPI of passenger transport by rail (subclass 07.3.1 of the ECOICOP)	RENFE, INE	Monthly	m-1 / m
Sales in large companies and SMEs of air transport (class 51 of the NACE 2009), Sales, Employment and Wages in Large Companies	AEAT	Quarterly	t-1 / t
SSAI turnover index of air transport (group 51 of the NACE 2009)	INE	Monthly	m-1 / m
Passengers in air transport (AENA) and CPI of passenger air transport (class 07.3.3 of the ECOICOP)	AENA, INE	Quarterly	m / m
Sales in large companies and SMEs of water transport (class 50 of the NACE 2009), Sales, Employment and Wages in Large Companies	AEAT	Quarterly	t-1 / t
SSAI turnover index of the activity of waterway transport (group 50 of the NACE 2009)	INE	Monthly	m-1 / m
Sea passengers (Puertos del Estado) and CPI of passenger transport by sea and inland waterway (subclass 07.3.4 of the ECOICOP)	MITMA, INE	Monthly	m-1 / m
Sales in large companies and SMEs of warehousing and support activities for transportation (class 52 of the NACE 2009), Sales, Employment and Wages in Large Companies	AEAT	Quarterly	t-1 / t
SSAI turnover index of warehousing and support activities for transportation (group 52 of the NACE 2009)	INE	Monthly	m-1 / m
Number of passengers per kilometre in rail transport	RENFE	Monthly	m-1 / m
Sales in large companies and SMEs of rail transport (class 4920 of the NACE 2009), Sales, Employment and Wages in Large Companies	AEAT	Quarterly	t-1 / t
SSAI turnover index of rail transport (group 49.2 of the NACE 2009)	INE	Monthly	m-1 / m
Tonnes per kilometre transported by rail	RENFE	Monthly	m-1 / m
Sales in large companies and SMEs of other types of transport (divisions 4931, 4932, 4939, 4941 and class 4950 of NACE 2009), Sales, Employment and Salaries in Large Companies and SMEs	AEAT	Quarterly	t-1 / t
SSAI turnover index of freight transport by road and removal services (group 49.4 of the NACE 2009)	INE	Monthly	m-1 / m
SSAI turnover index of transport by taxi (group 49.32 of the NACE 2009)	INE	Monthly	m-1 / m
Tonnes per kilometre transported and average price index per kilometers, according to distance of the route. Transport of goods by road.	MITMA, INE	Quarterly	t-1 / t
Sales in large companies and SMEs of sea transport (class 50 of the NACE 2009), Sales, Employment and Wages in Large Companies	AEAT	Quarterly	t-1 / t
Tonnes transported by sea and SPI of cargo transport (group 50.2 of the NACE 2009)	MITMA, INE	Monthly	m-1 / m
Sales in large companies and SMEs of air transport (class 51 of the NACE 2009), Sales, Employment and Wages in Large Companies	AEAT	Quarterly	t-1 / t
Tonnes of cargo transported by air and CPI of passenger air transport (subgroup 07.3.3 of the ECOICOP)	AENA, INE	Monthly	m / m

Aggregate:	**GVA of the transport and storage sector**
Synthetic indicator of:	**Value at current prices**

Base indicator	Source	Frequency	Availability
Total sales in large companies and SMEs of support activities for transportation (class 52 of the NACE 2009), Sales, Employment and Wages in Large Companies	AEAT	Quarterly	t-1 / t
Sales in large companies and SMEs of travel agencies and other tourism support activities (division 79 of the NACE 2009), Sales, Employment and Wages in Large Companies and SMEs	AEAT	Quarterly	t-1 / t
Sales in large companies and SMEs of postal and courier activities (class 53 of the NACE 2009), Sales, Employment and Wages in Large Companies	AEAT	Quarterly	t-1 / t
SSAI turnover index of the activity of postal and courier activities (group 53 of the NACE 2009)	INE	Monthly	m-1 / m

Notes:
IPS (Services Sector Prices Index)
SSAI (Services Sector Activity Indicators)
CPI (Consumer Price Index)
MITMA (Ministry of Transport, Mobility and Urban Agenda)

Aggregate:	**GVA of the transport and storage sector**
Synthetic indicator of:	**Current prices**

Base indicator	Source	Frequency	Availability
CPI of passenger transport by railway (ECOICOP subgroup 07.3.1)	INE	Monthly	m / m+2
CPI of passenger transport by road (ECOICOP subgroup 07.3.2)	INE	Monthly	m / m+2
CPI of passenger air transport (ECOICOPsubgroup 07.3.3)	INE	Monthly	m / m+2
CPI of passenger transport by sea and inland waterway (ECOICOP subgroup 07.3.4)	INE	Monthly	m / m+2
CPI of other purchased transport services (subclass 07.3.6 of the ECOICOP)	INE	Monthly	m / m+2
CPI of transport services (clase 08.1.07.3 de la ECOICOP)	INE	Monthly	m / m+2
IPS of sea and coastal freight water transport (division 50.2 of CNAE 2009)	INE	Quarterly	t-1/t-1
IPS of passenger air transport (group 51.1 of CNAE 2009)	INE	Quarterly	t-1/t-1
IPS of warehousing and storage (group 52.1 of CNAE 2009)	INE	Quarterly	t-1/t-1
IPS of cargo handling (division 52.24 of CNAE 2009)	INE	Quarterly	t-1/t-1
CPI of postal services (clase 08.1.0 de la ECOICOP)	INE	Monthly	m / m+2
IPS of mail and postal activities (division 53 of CNAE 2009)	INE	Quarterly	t-1/t-1

Notes:
CPI (Consumer Price Index)
IPS (Services Sector Prices Index)

Finally, in the case of the *Hotel, restaurants and catering* (section I of the 2009 National Classification of Economic Activities), synthetic price and value indicators are also prepared from the information sources listed in the following tables. Synthetic volume indicators are derived implicitly.

Aggregate: **GVA in Accomodation and Food Service**

Synthetic indicator of: **Value at current prices**

Base indicator	Source	Frequency	Availability
Sales in Large Companies and SMEs of hospitality services (class 55 of the NACE 2009), Sales, Employment and Wages in Large Companies	AEAT	Quarterly	t-1 / t
SSAI turnover index of the activity of hospitality services (group 55 of the NACE 2009)	INE	Monthly	m-1 / m+1
Overnight stays in hotels and hotel price index, Hotel Tourism Situation	INE	Monthly	m-1 / m+1
Overnight stays in hostels and campsites and price index in hostels and campsites, Non-Hotel Tourist Accommodation Occupancy Survey	INE	Monthly	m-1 / m+1
Overnight stays in tourist apartments and tourist apartment price index, Non-Hotel Tourist Accommodation Occupancy Survey	INE	Monthly	m-1 / m+1
Overnight stays in rural tourism accommodations and price index of rural accommodations, Non-Hotel Tourist Accommodation Occupancy Survey	INE	Monthly	m-1 / m+1
Sales in Large Companies and SMEs of food and beverage services (division 56 of the NACE 2009), Sales, Employment and Wages in Large Companies and SMEs	AEAT	Quarterly	t-1 / t
SSAI turnover index of food and beverage services (group 56 of the NACE 2009)	INE	Monthly	m-1 / m+1

Notes:
SSAI (Services Sector Activity Indicators)

Aggregate: **GVA in Accomodation and Food Service**
Synthetic indicator of: **Prices**

Base indicator	Source	Frequency	Availability
CPI of hospitality services (ECOICOP subgroup 112)	INE	Monthly	m / m+2
Hotel price index, Hotel Tourism Situation	INE	Monthly	m-1 / m+1
Price index of hostels and campsites, Non-Hotel Tourist Accommodation Occupancy Survey	INE	Monthly	m-1 / m+1
Price index of tourist apartments, Non-Hotel Tourist Accommodation Occupancy Survey	INE	Monthly	m-1 / m+1
Price index of rural accommodations, Non-Hotel Tourist Accommodation Occupancy Survey	INE	Monthly	m-1 / m+1
CPI of catering services (ECOICOP subgroup 111)	INE	Monthly	m / m+2

Notes:
CPI (Consumer Price Index)

For some recent periods where the baseline information is not available or is considered anomalous, a prediction of it is carried out according to an ARIMA modelling. In addition, in the advancement of results, since the first quarter of 2020, in some quarters advance data has been available on sales from the statistics of *Sales, Employment and Wages of Large Companies and SMEs* of the AEAT.

4.1.5 Information and communications (section J of the 2009 National Classification of Economic Activities)

Synthetic price and value indicators are prepared from the information sources listed in the following tables. Synthetic volume indicators are derived implicitly.

Aggregate:	**GVA of information and communications**
Synthetic indicator of:	**Value at current prices**

Base indicator	Source	Frequency	Availability
Sales in Large Companies and SMEs of publishing (class 58 of the NACE 2009), Sales, Employment and Wages in Large Companies	AEAT	Quarterly	t-1/t
SSAI turnover index of the activity of publishing (group 58 of the NACE 2009)	INE	Monthly	m-1/m+1
Sales in Large Companies and SMEs of motion picture, video and television programme production, sound recording and music publishing activities (division 59 of the NACE 2009), Sales, Employment and Wages in Large Companies and SMEs	AEAT	Quarterly	t-1/t
SSAI turnover index for motion picture, video and television programme production, sound recording and music publishing activities (division 59 of NACE 2009)	INE	Monthly	m-1/m+1
Sales in Large Companies and SMEs of television and radio programming and broadcasting activities (division 60 of the NACE 2009), Sales, Employment and Wages in Large Companies and SMEs	AEAT	Quarterly	t-1/t
SSAI turnover index of the activity of television and radio programming and broadcasting activities (group 60 of the NACE 2009)	INE	Monthly	m-1/m+1
Telecommunications sector revenue	CNMC	on a quarterly basis	t-1/t
Sales in Large Companies and SMEs of telecommunications (class 61 of the NACE 2009), Sales, Employment and Wages in Large Companies	AEAT	Quarterly	t-1/t
SSAI turnover index of telecommunications activity (group 61 of the NACE 2009)	INE	Monthly	m-1/m+1
Sales in Large Companies and SMEs of programming, consulting and other computer-related activities (division 62 of the NACE 2009), Sales, Employment and Wages in Large Companies and SMEs	AEAT	Quarterly	t-1/t
SSAI turnover index of the activity of programming, consulting and other computer-related activities (group 62 of the NACE 2009)	INE	Monthly	m-1/m+1
Sales in Large Companies and SMEs of information services (class 63 of the NACE 2009), Sales, Employment and Wages in Large Companies	AEAT	Quarterly	t-1/t
SSAI turnover index of the activity of informaction services (group 63 of the NACE 2009)	INE	Monthly	m-1/m+1

Note:
CNMC (National Commission of Markets and Competition)
SSAI (Services Sector Activity Indicators)

Aggregate:	GVA of information and communications
Synthetic indicator of:	Prices

Base indicator	Source	Frequency	Availability
CPI of Newspapers, books and stationery (ECOICOP class 09.5)	INE	Monthly	m / m+2
CPI of cultural services (subclass 09.4.2 of the ECOICOP)	INE	Monthly	m / m+2
IPS of telecommunications activity (division 55 of NACE 2009)	INE	Quarterly	t-1/t-1
IPS of programming, consulting and other computer-related activities (division 62 of NACE 2009)	INE	Quarterly	t-1/t-1
IPS of information service activities (division 63 of NACE 2009)	INE	Quarterly	t-1/t-1
Sales in Large Companies and SMEs of programming, consulting and other computer-related activities (division 62 of the NACE 2009), Sales, Employment and Wages in Large Companies and SMEs	AEAT	Quarterly	t-1/t
Sales in Large Companies and SMEs of information services (class 63 of the NACE 2009), Sales, Employment and Wages in Large Companies	AEAT	Quarterly	t-1/t
IPS of merchandise handling (division 52.24 of NACE 2009)	INE	Quarterly	t-1/t-1
CPI of postal services (clase 08.1.0 de la ECOICOP)	INE	Monthly	m / m+2
IPS of mail and postal activities (division 53 of NACE 2009)	INE	Quarterly	t-1/t-1

Notes:
IPS (Services Sector Prices Index)
CPI (Consumer Price Index)

For some recent periods where the baseline information is not available or is considered anomalous, a prediction of it is carried out according to an ARIMA modelling. In addition, in the advancement of results, since the first quarter of 2020, in some quarters advance data has been available on sales from the statistics of *Sales, Employment and Wages of Large Companies and SMEs* of the AEAT.

4.1.6 Financial and insurance activities (section K of the 2009 National Classification of Economic Activities)

The GVA at current prices of these activities integrates the results of the *Quarterly Non-Financial Accounts of the Institutional Sectors* (QSA) for each of the subsectors of the *Financial Institutions* sector. Its evolution in terms of volume is estimated from the synthetic indicator made up of the indicators that are listed in the table below. The evolution of its price is obtained implicitly.

Aggregate:	**GVA of financial intermediation**
Synthetic indicator of:	**Volume**

Base indicator	Source	Frequency	Availability
Full-time equivalent positions of persons employed in the financial intermediation section (section K of NACE 2009)	INE	Quarterly	t / t
Loans and credits granted by *Credit and Depository Companies, except the Central Bank*	BdE	Monthly	m-1 / m+1
Fixed assets of the *Credit and Depository Companies, Except the Central Bank*	BdE	Monthly	m-1 / m+1
Cash in circulation of the *Credit and Depository Companies, Except the Central Bank*	BdE	Monthly	m-1 / m+1
Capital and reserves of the *Credit and Depository Companies, Except the Central Bank*	BdE	Monthly	m-1 / m+1

Note:
BdE (Bank of Spain)

For some recent periods where the baseline information is not available or is considered anomalous, a prediction of it is carried out according to an ARIMA modelling.

4.1.7 Real estate activities (section L of the 2009 National Classification of Economic Activities)

In the case of housing rental services (real or imputed owner-occupied housing), synthetic price and volume indicators are constructed from the information sources listed in the following tables. Synthetic indicators of value are derived implicitly.

Aggregate:	**GVA of real estate activities**
Synthetic indicator of:	**Volume**

Base indicator	Source	Frequency	Availability
Construction Management Visas of the Colleges of Technical Architects (Building Works)	MITMA	Monthly	m-1 / m
Overnight stays in personally-owned home on trips within the national territory, ETR	INE	Quarterly	t-1 / t
Overnight stays in rented home on trips within the national territory, ETR	INE	Quarterly	t-1 / t

Notes:
MITMA (Ministry of Transport, Mobility and Urban Agenda)
ETR (Residents Travel Survey)

Aggregate:	**GVA of real estate activities**
Synthetic indicator of:	**Prices**

Base indicator	Source	Frequency	Availability
CPI of housing rental (ECOICOP subgroup 04.1)	INE	Monthly	m / m+2

Notes:
CPI (Consumer Price Index)

In the rest of real estate activities, synthetic price and value indicators are constructed from the information sources listed in the following tables. Synthetic volume indicators are derived implicitly.

Aggregate: **GVA of real estate activities (excludes production of housing rental services)**

Synthetic indicator of: **Value at current prices**

Base indicator	Source	Frequency	Availability
Sales in Large Companies and SMEs of real estate activities (section L of the CNAE 2009), Sales, Employment and Wages in Large Companies	AEAT	Quarterly	t-1/t
Home sales (DGRN and Statistics on Transfer of Property Rights), home appraisals, HPI and free-market housing prices (Appraised Housing Value statistics)	INE, Ministry of Justice and Ministry of Development	Quarterly	t-1/t

Note:
HPI (Housing Price Index)
DGRN (Directorate General of Registries and Notaries of the Ministry of Justice)

Aggregate: **GVA of real estate activities (excludes production of housing rental services)**
Synthetic indicator of: **Prices**

Base indicator	Source	Frequency	Availability
Housing price index	INE	Quarterly	t-1/t
Free-market housing prices (Appraised Housing Value statistics)	MITMA	Monthly	m-1/m+1

Notes:
MITMA (Ministry of Transport, Mobility and Urban Agenda)

For some recent periods where the baseline information is not available or is considered anomalous, a prediction of it is carried out according to an ARIMA modelling. In addition, in the advancement of results, since the first quarter of 2020, since the first quarter of 2020, in some quarters advance data has been available on sales from the statistics of *Sales, Employment and Wages of Large Companies and SMEs* of the AEAT.

4.1.8 Professional, scientific and technical activities (section M of the 2009 National Classification of Economic Activities)

Synthetic price and value indicators are constructed from the information sources listed in the following tables. Synthetic volume indicators are derived implicitly.

Aggregate: **GVA of professional, scientific, technical activities and others**

Synthetic indicator of: **Value at current prices**

Base indicator	Source	Frequency	Availability
Sales in large companies and SMEs of legal and accounting activities (class 69 of the NACE 2009), Sales, Employment and Wages in Large Companies	AEAT	Quarterly	t-1/t
Sales in large companies and SMEs of the activities of head offices and management consultancy activities (division 70 of the NACE 2009), Sales, Employment and Wages in Large Companies and SMEs	AEAT	Quarterly	t-1/t
SSAI turnover index of management legal, accounting, and consulting activities (group 70.2 of the NACE 2009)	INE	Monthly	m-1/m+1
Sales in large companies and SMEs of architectural and engineering activities; technical testing and analysis (division 71 of the NACE 2009), Sales, Employment and Wages in Large Companies	AEAT	Quarterly	t-1/t
SSAI turnover index of architectural and engineering activities; technical testing and analysis (division 71 of NACE 2009)	INE	Monthly	m-1/m+1
Sales in large companies and SMEs of advertising and market research (division 73 of the NACE 2009), Sales, Employment and Wages in Large Companies	AEAT	Quarterly	t-1/t
SSAI turnover index of advertising and market research activities (group 73 of the NACE 2009)	INE	Monthly	m-1/m+1
Sales in large companies and SMEs of scientific research and development (class 72 of the NACE 2009), Sales, Employment and Wages in Large Companies	AEAT	Quarterly	t-1/t
Sales in large companies and SMEs of other professional, scientific and technical activities (class 74 of the NACE 2009), Sales, Employment and Wages in Large Companies	AEAT	Quarterly	t-1/t
Sales in large companies and SMEs of veterinary activities (class 75 of the NACE 2009), Sales, Employment and Wages in Large Companies	AEAT	Quarterly	t-1/t
SSAI turnover index of the activity of other professional, scientific and technical activities (group 74 of the NACE 2009)	INE	Monthly	m-1/m+1
Sales in large companies and SMEs of employment activities (class 78 of the NACE 2009), Sales, Employment and Wages in Large Companies	AEAT	Quarterly	t-1/t
SSAI turnover index of the activity of employment activities (class 78 of the NACE 2009)	INE	Monthly	m-1/m+1
Sales in large companies and SMEs of travel agency and tour operator activities (division 79 of the NACE 2009), Sales, Employment and Wages in Large Companies and SMEs	AEAT	Quarterly	t-1/t
SSAI turnover index of activities of travel agency, tour operator and other reservation service and related activities (division 79 of NACE 2009)	INE	Monthly	m-1/m+1
Number of leisure, recreation and vacation trips (Resident Tourism Survey) and CPI of package holidays (subclass 0960 of the ECOICOP)	INE	Monthly	m-3/m-1
Sales in large companies and SMEs of rental and leasing activities (class 77 of the NACE 2009), Sales, Employment and Wages in Large Companies	AEAT	Quarterly	t-1/t
Sales in large companies and SMEs of security and investigation activities (class 80 of the NACE 2009), Sales, Employment and Wages in Large Companies	AEAT	Quarterly	t-1/t
Sales in large companies and SMEs of services to buildings and landscape activities (class 81 of the NACE 2009), Sales, Employment and Wages in Large Companies	AEAT	Quarterly	t-1/t
Sales in large companies and SMEs of office administrative, office support and other business support activities (division 82 of the NACE 2009), Sales, Employment and Wages in Large Companies and SMEs	AEAT	Quarterly	t-1/t
SSAI turnover index of the activity of security and investigation activities (group 80 of the NACE 2009)	INE	Monthly	m-1/m+1
SSAI turnover index of cleaning activities (group 81.2 of the NACE 2009)	INE	Monthly	m-1/m+1
SSAI turnover index of office administrative, office support and other business support activities (group 82 of the NACE 2009)	INE	Monthly	m-1/m+1

Notes:
SSAI (Services Sector Activity Indicators)

Aggregate:	GVA of professional, scientific, technical activities and others		
Synthetic indicator of:	Prices		
Base indicator	**Source**	**Frequency**	**Availability**
IPS for legal and economic consulting activities (groups 69.1, 69.2 and 70.2 of NACE 2009)	INE	Quarterly	t-1/t-1
IPS of architectural and engineering activities; technical testing and analysis (division 71 of NACE 2009)	INE	Quarterly	t-1/t-1
IPS of advertising and market research activities (division 73 of NACE 2009)	INE	Quarterly	t-1/t-1
CPI of services (excluding housing rental)	INE	Monthly	m / m+2
IPS of employment activities (division 78 of NACE 2009)	INE	Quarterly	t-1/t-1
CPI of tourist packages (ECOICOP class 0960)	INE	Monthly	m / m+2
IPS of security and investigation activities (division 80 of NACE 2009)	INE	Quarterly	t-1/t-1
IPS of cleaning activities (group 81.2 of NACE 2009)	INE	Quarterly	t-1/t-1

For some recent periods where the baseline information is not available or is considered anomalous, a prediction of it is carried out according to an ARIMA modelling. In addition, in the advancement of results, since the first quarter of 2020, in some quarters advance data has been available on sales from the statistics of *Sales, Employment and Wages of Large Companies and SMEs* of the AEAT.

4.1.9 Public administration and defence; compulsory social security; Education; Human health and social work activities (sections O, P and Q of the 2009 National Classification of Economic Activities)

Synthetic indicators of value and volume are constructed from the information sources listed below. Synthetic price indicators are obtained implicitly.

Both the synthetic indicator of value and volume result from a weighted average of an indicator of the evolution of the GVA of the non-market units of the branch (of the *General Governments and Non-Profit Institutions Serving Households institutional sectors*) and of an indicator of the evolution of the GVA of its market units.

The GVA evolution indicator for the General Government units corresponds to that of the GVA for the *General Government* sector as a whole, which results from the integration of the results of the *General Government Quarterly Accounts.* The indicator of its evolution in volume results from deflating the previous one by components (the *remuneration of employees* for the remuneration per job equivalent estimated for the period and the *consumption of fixed capital* according to its measurement in volume resulting from the Permanent Inventory Method that allows for obtaining the estimate of the aggregate at current prices and at prices of the previous year, and its subsequent quarterly execution based on the quarterly flows of *gross fixed capital formation*) .

The indicator of evolution of the GVA of the *Non-Profit Institutions serving Households* of the branch is obtained from a sample of said units for which quarterly accounting information is available. The indicator of its evolution in volume results from deflating the previous one by components (the *remuneration of employees* for the remuneration per job equivalent estimated for the period and the *consumption of fixed capital* according to its measurement in volume resulting

from the Permanent Inventory Method, that allows to obtain the estimate of the aggregate at current prices and at prices of the previous year, and their subsequent quarterly realisation based on quarterly flows of *gross fixed capital formation in* the sector).

The indicator of evolution of the GVA in volume of the market units is constructed from the evolution of the number of employed persons in the branches of *education* and *human health activities and social services* according to the *Labour Force Survey* (EPA). Its evolution in value is determined from the product of the above indicators by the CPI for *education* (function 10 of the ECOICOP) and a combination of the CPI for *outpatient services* (class 06.2 of the ECOICOP) and *hospital services* (class 06.3 of the ECOICOP).

The synthetic price indicator is obtained implicitly.

4.1.10 Artistic, recreational and other services activities (sections R, S and T of the National Classification of Economic Activities 2009)

In the case of *artistic, recreational and other entertainment services; Other services* (sections R and S of the 2009 National Classification of Economic Activities) synthetic price and value indicators are constructed from the information sources listed in the following tables. Synthetic volume indicators are derived implicitly.

Aggregate:	**GVA of arts, entertainment, recreation and other services**
Synthetic indicator of:	**Value at current prices**

Base indicator	Source	Frequency	Availability
Total sales in large companies and SMEs of creative, arts and entertainment activities (class 90 of the NACE 2009), Sales, Employment and Wages in Large Companies	AEAT	Quarterly	t-1/t
Total sales in large companies and SMEs of libraries, archives, museums and other cultural activities (class 91 of the NACE 2009), Sales, Employment and Wages in Large Companies	AEAT	Quarterly	t-1/t
Total sales in large companies and SMEs of sports activities and amusement and recreation activities (class 94 of the NACE 2009), Sales, Employment and Wages in Large Companies	AEAT	Quarterly	t-1/t
Cinema box office	Ministry of Culture and Sports	Monthly	m-1/m+1
Sales in large companies and SMEs of repair of computers and personal and household goods (class 95 of the NACE 2009), Sales, Employment and Wages in Large Companies	AEAT	Quarterly	t-1/t
SSAI turnover index of the maintenance and repair of vehicles (group 45.2 of the NACE 2009)	INE	Monthly	m-1 / m
Total sales in large companies and SMEs of insurance, reinsurance and pension funding, except compulsory social security(class 65 of the NACE 2009), Sales, Employment and Wages in Large Companies	AEAT	Quarterly	t-1/t
Total sales in large companies and SMEs of financial service activities, except insurance and pension funding (class 64 of the NACE 2009), Sales, Employment and Wages in Large Companies	AEAT	Quarterly	t-1/t
Total sales in large companies and SMEs of other personal service activities (class 96 of the NACE 2009), Sales, Employment and Wages in Large Companies	AEAT	Quarterly	t-1/t
Sales in large companies and SMEs of cultural services (division 56 of the NACE 2009), Sales, Employment and Wages in Large Companies and SMEs	AEAT	Monthly	m-1/m+1
Active game sales	SELAE	Quarterly	t-1/t
National lottery sales (Saturdays)	SELAE	Quarterly	t-1/t
National lottery sales (Thursdays)	SELAE	Quarterly	t-1/t
Lottery and gambling sales	ONCE	Monthly	m/m
Total sales in large companies and SMEs of gambling and betting activities (class 92 of the NACE 2009), Sales, Employment and Wages in Large Companies	AEAT	Quarterly	t-1/t
Amounts played in online gambling	DGOJ	Monthly	m-3/m
Employees of membership organisations (division 94 of NACE 2009), EPA and CPI of services (excluding housing rental)	INE	Quarterly	t-1/t
Sales in large companies and SMEs of other personal service activities (class 96 of the NACE 2009), Sales, Employment and Wages in Large Companies	AEAT	Quarterly	t-1/t
SSAI turnover index of food and beverage service activities (group 56 of the NACE 2009)	INE	Monthly	m-1/m+1

Notes:
SELAE (State Lottery and Gambling Company)
SSAI (Services Sector Activity Indicators)
EPA (Labour Force Survey)
DGOJ (Directorate General for the Regulation of Gambling)
AEAT (Tax Agency office)

Aggregate:	**GVA of arts, entertainment, recreation and other services**
Synthetic indicator of:	**Prices**

Base indicator	Source	Frequency	Availability
CPI of recreational and cultural services (ECOICOP class 09.4)	INE	Monthly	m / m+2
CPI of services (excluding housing rental)	INE	Monthly	m / m+2
CPI of insurance (ECOICOP class 12.5)	INE	Monthly	m / m+2
CPI of non-financial services not declared elsewhere (ECOICOP class 12.6)	INE	Monthly	m / m+2
CPI of other goods and services (ECOICOP subgroup 12)	INE	Monthly	m / m+2
CPI of hairdressing salons and personal grooming establishments (ECOICOP subgroup 12.1.1)	INE	Monthly	m / m+2

Notes:
CPI (Consumer Price Index)

For some recent periods where the baseline information is not available or is considered anomalous, a prediction of it is carried out according to an ARIMA modelling. In addition, in the advancement of results, since the first quarter of 2020, in some quarters advance data has been available on sales from the statistics of *Sales, Employment and Wages of Large Companies and SMEs* of the AEAT.

In the case of *household activities as employers of domestic staff; Activities of households as producers of goods and services for their own use* (section T of the 2009 National Classification of Economic Activities), the evolution of their GVA in

volume corresponds to the evolution of their employment (in terms of equivalent jobs full time). In estimating the evolution of its price, the CPI for domestic service is used as an indicator (subclass 05.6.2 of the ECOICOP).

4.2 FISIM

The production of *financial intermediation services* (section K of CNAE 2009) and *imports of services* include *Financial Intermediation Services Indirectly Measured* (FISIM), determining the total supply of such services in the national economy as a whole.

On the other hand, the demand for such services is recorded as *final consumption expenditure of households* on *services, final consumption expenditure of the General Government, final consumption expenditure of NPISHs, intermediate consumption* of different productive activities and *exports of services.*

The quarterly analysis of the annual estimates of the aforementioned aggregates and their extrapolation in recent quarters is carried out based on the indicators described in previous sections, implicitly including the corresponding FISIM in their results, although it is not carried out carry out an explicit quarterly measurement of their supply-demand balance.

4.3 Taxes less subsidies on products

The QNA integrates the value of previous current *taxes on products* and *subsidies on products* registered in the *General Government Quarterly Accounts,* prepared by the IGAE.

On the date of publication of the preliminary results, the quarterly results for the entire *General Government institutional sector* (S.13) are not yet available, although the monthly accounts of the State are available (part of the *institutional subsector* S. 1311 *Central Government, excluding Social Security funds*) for the three months of the reference quarter and for the first two months of *Central Government, excluding social security funds* (S.1311), *Regional Government, excluding funds from social security* (S.1312) and *Social Security Funds* (S.1314), in addition to information on monthly tax collection from the Tax Agency (AEAT). With all the information available, an estimate is made of *taxes on products* and *subsidies on products* for the quarter as a whole from an econometric modelling of its components.

To the previous estimates of *taxes on imports, excluding VAT* (D.212) and *other taxes on products, excluding VAT and taxes on imports* (D.214) are added the value of the taxes payable to the institutions of the European Union accrued in each month m, derived from the information on payments in these concepts published by the Public Treasury[38] for month m+2.

And to the estimates of *subsidies on the products* (D.31) is added the value of the subsidies received from the EU (they include those corresponding to the European

[38] https://www.tesoro.es/pagos-del-tesoro/flujos-financieros-con-la-union-europea

Agricultural Guidance and Guarantee Fund EAGGF, the European Social Fund and other non-classified subsidies) obtained from the information disseminated by the Public Treasury and by the Spanish Agrarian Guarantee Fund (FEGA)[39].

To estimate the volume of *value added taxes (VAT) (D.211)* a synthetic indicator is used that collects the weighted changes in the volume of *final consumption expenditure of domestic households*, *gross capital formation* in *housing*, purchases by *General Government* (*intermediate consumption* and *social transfers in kind: production acquired in the market*) and the activity of other branches that are mostly exempt (from passing VAT on their sales).

It is important to note that when we talk about exempt branches, we are not referring to those operations that enjoy full exemption, that is, operations that will not have any impact on their input VAT deduction regime (mainly, intra-Community supplies of goods and their assimilated operations and exports of goods and their assimilated operations), but of or exempt operations that do affect the right to deduct VAT borne by the company that performs them (normally known as limited exemptions[40]).

Regarding changes in the volume of *net taxes on imports, excluding VAT*, the change in volume is determined by the change in the volume of the tax bases, that is, imports of goods.

Finally, for estimating the volume changes of the *other net taxes on products, excluding VAT and taxes on imports*, a synthetic indicator is used that captures the volume changes of taxed basic products.

5. GDP and its components: the demand approach

5.1 Household final consumption expenditure

5.1.1 Household final consumption expenditure on food, beverages, tobacco and narcotics

Synthetic price and value indicators are constructed from the information sources listed in the following tables. Synthetic volume indicators are derived implicitly.

[39]Compensatory incentives for herbaceous crops, production incentives, premiums for cattle, sheep and goats, export rebates and all those subsidies in which the producers of agricultural products receive the difference between the average market prices and the guaranteed prices (EAGGF Guarantee section), are recorded as *product subsidies.* The rest of the EAGGF flows that are not classified as *capital transfers* (incentives for set-aside, incentives for agricultural production in disadvantaged and/or mountainous areas, etc.), and the rest of the flows are recorded as *other production subsidies*.

[40]These are mainly the operations included in article 20 of the VAT Law, among which are financial operations, insurance operations, educational and health activities, housing rentals, etc. These operations are exempt from tax (VAT must not be charged on their performance) but, in turn, require limiting the right to deduct input VAT in proportion to its performance.

Aggregate: **Household domestic final consumption expenditure. Food, beverages, tobacco and narcotics**
Synthetic indicator of: **Value at current prices**

Base indicator	Source	Frequency	Availability
Food Consumption Panel	MAPA	Monthly	m-4 / m-3
RTI for food	INE	Monthly	m / m
Sales of tobacco products to tocacco shops (euros)	CMT	Monthly	m-1 / m

Notes:
MAPA (Ministry of Agriculture, Fisheries and Food)
CMT (Tobacco Market Commission)
RTI (Retail Trade Index)

Aggregate: **Household domestic final consumption expenditure. Food, beverages, tobacco and narcotics**
Synthetic indicator of: **Prices**

Base indicator	Source	Frequency	Availability
CPI of food (ECOICOP class 01.1)	INE	Monthly	m / m
CPI of non-alcoholic beverages (ECOICOP class 01.2)	INE	Monthly	m / m
CPI of alcoholic beverages (ECOICOP class 02.1)	INE	Monthly	m / m
CPI of tobacco (ECOICOP class 02.2)	INE	Monthly	m / m

Notes:
CPI (Consumer Price Index)

For recent periods where the baseline information is not available or is considered anomalous, a prediction is carried out according to an ARIMA modelling.

5.1.2 Household final consumption expenditure on non-durable non-food goods

In the case of *household final consumption expenditure* (HFCE) in the *supply of water and various services* and in *electricity, gas and other fuels* (classes 04.4 and 04.5 of the COICOP), synthetic price and volume indicators are constructed, based on starting from the sources of information listed in the following tables.

Aggregate: **HFCE on non-durable goods**
Synthetic indicator of: **Volume or value at constant prices**

Base indicator	Source	Frequency	Availability
Consumption of petroleum products (liquefied petroleum gases, petrol and diesel)	CORES	Monthly	m-1 / m
Consumption of natural gas with a pressure less than or equal to four bars	CORES	Monthly	m-1 / m
Household electricity consumption	NCMC	Monthly	m-3 / m-2
Water consumption	Canal de Isabell II	Monthly	m-1 / m

Notes:
CORES (Spanish Petroleum Energy Reserves Company)
NCMC (National Commission on Market Competition)

Aggregate: **HFCE on non-durable goods**
Synthetic indicator of: **Prices**

Base indicator	Source	Frequency	Availability
CPI of water supply of subclass 04.4.1 of the ECOICOP	INE	Monthly	m / m
CPI of electricity of subclass 04.5.1 of the ECOICOP	INE	Monthly	m / m
CPI of gas of subclass 04.5.2 of the ECOICOP	INE	Monthly	m / m
CPI of fuels and lubricants of subclass 07.2.2 of the ECOICOP	INE	Monthly	m / m
CPI of liquid fuels of subclass 04.5.3 of the ECOICOP	INE	Monthly	m / m

For the rest of *household final consumption expenditure* (HFCE) on non-durable non-food goods, synthetic price and value indicators are constructed based on the information sources listed in the following tables.

Aggregate: **Household domestic final consumption expenditure. Non-durable goods**
Synthetic indicator of: **Value at current prices**

Base indicator	Source	Frequency	Availability
Expenditure (euros contributed by the user) on medicines and health products prescribed by the National Health System, in pharmacy offices run using public funds from the Autonomous Communities and the National Institute of Health Management (INGESA)	Ministry of Health	Monthly	m-2 /m-1
Health RTI	INE	Monthly	m / m
Availability of manufacture of soap and detergents, cleaning and polishing preparations, perfumes and toilet preparations of group 20.4 of NACE 2009	Own elaboration	Monthly	m-1 / m
Availability of manufacture of articles of paper and paperboard of group 17.2 of NACE 2009	Own elaboration	Monthly	m-1 / m
SSAI turnover index of publishing of newspapers and magazines (groups 58.13 and 58.14 of the NACE 2009)	INE	Monthly	m-1 / m

Aggregate: **Household domestic final consumption expenditure. Non-durable goods**
Synthetic indicator of: **Prices**

Base indicator	Source	Frequency	Availability
CPI of newspapers and periodicals of subclass 09.5.2 of the ECOICOP	INE	Monthly	m / m
CPI of pharmaceutical products of subclass 06.1.1 of the ECOICOP	INE	Monthly	m / m
CPI for non-durable household items of subclass 05.6.1 of the ECOICOP	INE	Monthly	m / m
CPI of other articles and products for personal care of subclass 12.1.3 of the ECOICOP	INE	Monthly	m / m

Notes:
CPI (Consumer Price Index)

For recent periods where the baseline information is not available or is considered anomalous, a prediction is carried out according to an ARIMA modelling. In addition, in the advancement of results, since the first quarter of 2020, data on spending made with credit cards in service stations and pharmacies from the Sistema de Tarjetas y Medio de Pago S.A. has been handled in the three months of the reference quarter.

5.1.3 Household final consumption expenditure on semi-durable goods

Synthetic price and value indicators are constructed from the information sources listed in the following tables. Synthetic volume indicators are derived implicitly.

Aggregate: **Household domestic final consuption expenditure. Semi-durable goods**
Synthetic indicator of: **Value at current prices**

Base indicator	Source	Frequency	Availability
Availability of the manufacture of textiles (division 13 of NACE 2009)	Own elaboration	Monthly	m-1 / m
Availability of wearing apparel (division 14 of NACE 2009)	Own elaboration	Monthly	m-1 / m
Availability of leather goods, travel and saddlery articles; preparation and dyeing of skins (group 15.1 of NACE 2009)	Own elaboration	Monthly	m-1 / m
Availability of footwear (group 15.2 of NACE 2009)	Own elaboration	Monthly	m-1 / m
Turnover index at current prices for the RTI of personal equipment	INE	Monthly	m / m
Domestic sales of large companies and SMEs in the textile industry (division 13 of NACE 2009), SEWLCS	AEAT	Quarterly	t-1 / t
Domestic sales of large companies and SMEs in the manufacture of wearing apparel (division 14 of NACE 2009), SEWLCS	AEAT	Quarterly	t-1 / t
Domestic sales of large companies and SMEs in the manufacture of leather and related products (division 15 of NACE 2009), SEWLCS	AEAT	Quarterly	t-1 / t
SSAI turnover index of book publishing and newspapers (groups 58.11 and 58.13 of the NACE 2009)	INE	Monthly	m-1 / m
Availability of games and toys (group 32.4 of NACE 2009)	Own elaboration	Monthly	m-1 / m
Turnover index at current prices for the leisure RTI	INE	Monthly	m / m

Note:
SEWLCS (Sales, Employment and Wages of Large Companies and SMEs)

Aggregate: **Household domestic final consumption expenditure. Semi-durable goods**
Synthetic indicator of: **Prices**

Base indicator	Source	Frequency	Availability
CPI of clothing (ECOICOP class 03.1)	INE	Monthly	m / m
CPI of footwear (ECOICOP class 03.2)	INE	Monthly	m / m
CPI for household textiles (subclass 05.2.0 of the ECOICOP	INE	Monthly	m / m
CPI of books (subclass 09.5.1 of the ECOICOP)	INE	Monthly	m / m
CPI of games, toys and hobbies (subclass 09.3.1 of the ECOICOP)	INE	Monthly	m / m
CPI of recording media (ECOICOP 09.1.4)	INE	Monthly	m / m
CPI of recreation and culture (ECOICOP subgroup 09)	INE	Monthly	m / m

Notes:
CPI (Consumer Price Index)

For some recent periods where the baseline information is not available or is considered anomalous, a prediction of it is carried out according to an ARIMA modelling. In addition, in the advancement of results, since the first quarter of 2020, in some quarters advance data has been available on sales of the statistics of *Sales, Employment and Salaries of Large Companies and SMEs* of the AEAT and, since the second quarter of 2020, of partial advanced results of the IPI (in the elaboration of the availability indicators).

5.1.4 Household final consumption expenditure on durable goods

Synthetic price and value indicators are constructed from the information sources listed in the following tables. Synthetic volume indicators are derived implicitly.

Aggregate: **Household domestic final consumption expenditure. Durable goods**
Synthetic indicator of: **Value at current prices**

Base indicator	Source	Frequency	Availability
Registrations of cars and SUVs for private use and CPI of motor cars (subclass 07.1.1 of the ECOICOP)	ANFAC, INE	Monthly	m / m
Registrations of motor cycles and CPI of motor cycles (ECOICOP subgroup 07.1.2)	DGT, INE	Monthly	m / m
Availability of manufacture of domestic appliances (group 27.5 of the NACE 2009)	Own elaboration	Monthly	m-1 / m
Availability of computers and peripheral equipment (group 26.2 of the NACE 2009)	Own elaboration	Monthly	m-1 / m
Availability of furniture (group 31 of NACE 2009)	Own elaboration	Monthly	m-1 / m
Availability of electronic products (group 26.4 of NACE 2009)	Own elaboration	Monthly	m-1 / m
Turnover index at current prices for the RTI of domestic equipment	INE	Monthly	m / m
Availability of jewellery, bijouterie and related articles (group 32.1 of the NACE 2009)	Own elaboration	Monthly	m-1 / m
Turnover index at current prices for the RTI of other goods	INE	Monthly	m / m
Turnover index at current prices for the health RTI	INE	Monthly	m / m

Notes:
CPI (Consumer Price Index)
RTI (Retail Trade Index)

Aggregate: **Household domestic final consumption expenditure. Durable goods**
Synthetic indicator of: **Prices**

Base indicator	Source	Frequency	Availability
CPI of motor cars (subclass 07.1.1 of the ECOICOP)	INE	Monthly	m / m
CPI of motor cycles (subclass 07.1.2 of the ECOICOP)	INE	Monthly	m / m
CPI of home and garden tools and equipment (class 05.5 of the ECOICOP)	INE	Monthly	m / m
CPI of furniture and furnishings (subclass 05.1.1 of the ECOICOP)	INE	Monthly	m / m
CPI of large household appliances and other large household devices (subclass 05.3.1 of the ECOICOP)	INE	Monthly	m / m
CPI of the consumption of audiovisual, photographic and information processing equipment and accessories (subclass 09.1.1 of the ECOICOP)	INE	Monthly	m / m
CPI of photographic and cinematographic equipment; optical instruments (ECOICOP subgroup 09.1.2)	INE	Monthly	m / m
CPI of information processing equipment (ECOICOP subgroup 09.1.3)	INE	Monthly	m / m
CPI of recreation and culture (ECOICOP subgroup 09)	INE	Monthly	m / m
CPI of jewellery, clocks and watches (subclass 12.3.1 of the ECOICOP)	INE	Monthly	m / m
CPI of telephone and telefax equipment (ECOICOP subgroup 08.2.0)	INE	Monthly	m / m
CPI of other therapeutic appliances and equipment (subclass 06.1.3 of the ECOICOP)	INE	Monthly	m / m
CPI of other articles and products for personal care (subclass 12.1.3 of the ECOICOP)	INE	Monthly	m / m

Notes:
CPI (Consumer Price Index)

For some recent periods where the baseline information is not available or is considered anomalous, a prediction of it is carried out according to an ARIMA

modelling. In addition, since the second quarter of 2020, partial early results of the IPI are available (in the preparation of availability indicators).

5.1.5 Household final consumption expenditure. Services.

Synthetic price and value indicators are constructed from the information sources listed in the following tables. Synthetic volume indicators are derived implicitly.

There are two exceptions in which synthetic indicators of prices and volume are constructed, obtaining the indicator of value implicitly: spending on consumption of domestic service and spending on consumption of housing rental services.

In the case of domestic service consumption, the CPI for domestic service and other housing services (subclass 05.6.2 of the ECOICOP) is taken as the price indicator; the volume estimate corresponds to that of full-time equivalent jobs in household services as employers of domestic staff (section T of CNAE 2009).

In the case of housing rental services, the CPI for Rent of primary residence (COICOP subclass 04.1.1) is used as a price indicator and completion certificates (number of residential homes) of the statistics of Construction Management Visas of the Colleges of Technical Architects (Building Works) of the Ministry of Transport, Mobility and Urban Agenda together with the overnight stays in rented home on trips within the national territory of the Resident Tourism Survey of the INE as volume indicators.

Aggregate:	**Household domestic final consumption expenditure. Services**		
Synthetic indicator of:	**Value at current prices**		
Base indicator	**Source**	**Frequency**	**Availability**
Gambling sales	SELAE and ONCE	Quarterly	t-1 / t
Online gambling market data. Amounts played by type of game	Ministry of Consumer Affairs	Monthly	m-3 / m-1
Domestic sales of large companies and SMEs in the manufacture of wearing apparel (division 92 of NACE 2009), VESGEP	AEAT	Quarterly	t-1 / t
SSAI turnover index of the activity of postal and courier activities (group 53 of the NACE 2009)	INE	Monthly	m-1 / m
Domestic sales of large companies and SMEs in postal and courier activities (division 92 of NACE 2009), VESGEP	AEAT	Quarterly	t-1 / t
Number of trips for business tand other professional reasons (Resident Tourism Survey) and CPI for tour packages (subgroup 09.6 of ECOICOP)	INE	Quarterly	m-3 / m-1
SSAI turnover index of activities of travel agencies, tour operators and other reservation services and related activities (division 79 of NACE 2009)	INE	Monthly	m-1 / m
Domestic sales of large companies and SMEs of activities of travel agencies, tour operators and other reservation services and related activities (division 79 of NACE 2009), VESGEP	AEAT	Quarterly	t-1 / t
Synthetic indicator for the GVA value of transport and storage (section H of NACE 2009)	INE	Quarterly	t / t
Synthetic indicator for the GVA value of hotels, restaurants and catering (section I of NACE 2009)	INE	Quarterly	t / t
Synthetic indicator of the GVA value of other services (recreational, repairs, financial and other personal services)	INE	Quarterly	t / t
Domestic sales of large companies and SMEs in education (division 85 of NACE 2009), VESGEP	AEAT	Quarterly	t-1 / t
Employment in education (division 85 of NACE 2009), EAPS, and CPI of education(group 10 of ECOICOP)	INE	Quarterly	t-1 / t
Domestic sales of large companies and SMEs in human health activities (division 86 of NACE 2009), VESGEP	AEAT	Quarterly	t-1 / t
Employment in human health activities (division 86 of NACE 2009), EAPS, and CPI of outpatient and inpatient medical services (group 06.3 of ECOICOP)	INE	Quarterly	t-1 / t

Notes:
MITMA (Ministry of Transport, Mobility and Urban Agenda)
SELAE (State Lottery and Gambling Company)
VESGEP (Sales, Employment and Wages in Large Companies and SMEs)
SSAI (Services Sector Activity Indicators)
CPI (Consumer Price Index)

Aggregate:	Household domestic final consumption expenditure. Services
Synthetic indicator of:	Volume

Base indicator	Source	Frequency	Availability
Full-time equivalent positions of persons employed in activities of households as employers of domestic personnel (section T of NACE 2009)	INE	Quarterly	t / t

Aggregate:	Household domestic final consumption expenditure. Services
Synthetic indicator of:	Prices

Base indicator	Source	Frequency	Availability
CPI of actual rentals paid by tenants (subgroup 04.1 of the ECOICOP)	INE	Monthly	m / m
CPI of recreational and sporting services (subclass 09.4.1 of the ECOICOP)	INE	Monthly	m / m
CPI of telephone and telefax services (subgroup 08.3.0 of the ECOICOP)	INE	Monthly	m / m
CPI of postal services (subclass 08.1.0 of the ECOICOP)	INE	Monthly	m / m
CPI of tourist packages (subclass 09.6 of the ECOICOP)	INE	Monthly	m / m
Synthetic indicator for the GVA price of transport and storage (section H of CNAE 2009)	INE	Quarterly	t / t
Synthetic indicator for the GVA price of hotels, restaurants and catering (section I of CNAE 2009)	INE	Quarterly	t / t
Synthetic indicator of the GVA price of other services (recreational, repairs, financial and other personal services)	INE	Quarterly	t / t
CPI of education (function 10 of the ECOICOP)	INE	Monthly	m / m
CPI of outpatient medical services (ECOICOP class 06.2)	INE	Monthly	m / m
CPI of hospital services (ECOICOP class 06.3)	INE	Monthly	m / m

Notes:
CPI (Consumer Price Index)

For some recent periods where the baseline information is not available or is considered anomalous, a prediction of it is carried out according to an ARIMA modelling. In addition, in the advancement of results, since the first quarter of 2020, in some quarters advance data has been available on sales from the statistics of *Sales, Employment and Wages of Large Companies and SMEs* of the AEAT.

5.2 Final consumption expenditure by Public Administrations

The *final consumption expenditure* (FCE) of the General Government is equal to their total *production* (P.1) (measured as the sum of costs, that is, *compensation of employees*, *intermediate consumption*, *consumption of fixed capital* and *other taxes on production* to be paid), plus spending on goods and services acquired in the market and provided free to households (D.632 *In kind social transfers acquired on the market*), less *market production* (P .11), *production for personal final use* (P.12) and *payments for other non-market production* (P.131).

The QNA integrates the value to previous flows of the *final consumption expenditure* of the *General Government* and of its different components, recorded in the *Quarterly Accounts of the General Government,* prepared by the IGAE.

On the date of publication of the advance results, such quarterly results of *the General Government institutional sector* (S.13) are not yet available, although there

are monthly State accounts (part of the *institutional subsector* S.1311 *Central Government, excluding Social Security funds*) for the three months of the reference quarter and for the first two months of *Central Government, excluding social security funds* (S.1311), *Regional Government, excluding social security funds* (S.1312) and *Social Security Funds* (S.1314). With all the information available, an estimate of the FCE of the *General Government* for the quarter as a whole is made based on an econometric modelling of its components.

Regarding the evolution in volume, each of the components of the FCE is deflated (*intermediate consumption*, *compensation of employees*, *other taxes on production* and *fixed capital consumption*):

In the case of compensation of employees, its evolution in volume is equated with that of the employment input of General Government (in terms of jobs) carrying out a reconciliation of the evolution of the same and of the average remuneration of the employees of the General Government, making use of the available information sources (*Labour Force Survey* and statistics of public employees affiliated to the Social Security system, disseminated by the Ministry of Inclusion, Social Security and Migrations).

The volume estimate of the *fixed capital consumption* is derived from its calculation through the Permanent Inventory Method in annual terms, which allows for obtaining the estimate of the aggregate at current prices and at prices from the previous year, and their subsequent quarterly realization based on the quarterly flows of *gross fixed capital formation in* the sector.

The rest of the components, according to the following price indices:

- General weighted average of the *Consumer Price Index* (CPI), the *Industrial Price Index* (IPRI) and the *Service Price Index* (IPS), in the case of *intermediate consumption.*
- The general CPI in the case of *in kind social transfers acquired in the market, market production* and *production for personal final use.*

5.3 Household final consumption expenditure

The *final consumption expenditure* of NPISHs includes, in the Spanish case, the value of the goods and services produced by NPISHs that do not constitute *gross capital formation* on their own account or expenditure by households or other units[41], being the result of their total *production* (P.1) (measured as the sum of costs, that is, *compensation to employees*, *intermediate consumption*, *fixed capital consumption* and *other taxes on production* to be paid net of subsidies) minus *market production* (P.11) and *production for personal final use* (P.12).

The estimation in current terms of each component is carried out from the evolution observed in a sample of entities with quarterly availability of accounting information.

[41] In the National Accounts of Spain, all purchases of goods and services by NPISHs are recorded as *intermediate consumption* thereof, forming part of their aggregate of *production* and *final consumption expenditure.* The *in kind social transfers acquired on the market* are therefore nil.

Regarding the evolution in volume, each of the components of the FCE is deflated (*intermediate consumption*, *compensation of employees*, *other taxes on production* and *fixed capital consumption*):

In the case of *compensation of employees*, its evolution in volume is compared to that of the employment input of NPISHs (in terms of jobs) carrying out a reconciliation of the evolution thereof and the average remuneration of the employees of such entities, making use of the available information sources (results of the *Labour Force Survey* and *the Social Security Affiliation Statistics* in the branches of activity where the activity of these types of entities is concentrated).

The volume estimate of the *fixed capital consumption* is derived from its calculation through the Permanent Inventory Method in annual terms, which allows for obtaining the estimate of the aggregate at current prices and at prices from the previous year, and their subsequent quarterly realization based on the quarterly flows of *gross fixed capital formation in* the sector.

The rest of the components, according to the following price indices:

- Weighted average of the CPI, IPRI and IPS, in the case of *intermediate consumption.*
- The CPI in the case *of market production.*

For some recent periods where the baseline information is not available or is considered anomalous, a prediction of it is carried out according to an ARIMA modelling.

5.4 Gross capital formation

5.4.1 Gross capital formation in tangible fixed assets: Construction

5.4.1.1 Gross fixed capital formation

Synthetic price and volume indicators are constructed from the sources listed in the following tables. Synthetic indicators of value are derived implicitly.

Aggregate:	**GFCF. Tangible fixed assets. Construction. Dwellings**		
Synthetic indicator of:	**Volume**		
Base indicator	**Source**	**Frequency**	**Availability**
Production in residential construction, including real estate development (EIPIC) and synthetic price index of new dwelling HIP and price per m2 of new free-market housing less than 5 years old (*)	MITMA	Monthly	m-1 / m
Number of started homes accrued	MITMA	Monthly	m-3 / m-1
Mortgages on dwellings (Mortgage Statistics) accrued	INE	Monthly	m-2 / m-1
Permits for new construction, expansion or remodelling (Building Works, Construction Oversight Permits from the College of Technical Architects) periodized	MITMA	Monthly	m-2 / m-1

Notes:
EIPIC (Survey of Construction Industry Production Indices)
MITMA (Ministry of Transport, Mobility and Urban Agenda)
(*) Until 2014, price per m2 of new free-market housing less than 2 years old

Aggregate:	**GFCF. Tangible fixed assets. Construction. Dwellings**
Synthetic indicator of:	**Prices**

Base indicator	Source	Frequency	Availability
New dwelling HIP	INE	Quarterly	t-1 / t
Price per m2 of new free-market housing less than 5 years old (Appraised Housing Value)(*)	MITMA	Quarterly	t-1 / t

Notes:
HPI (Housing Price Index)
(*) Until 2014, price per m2 of new free-market housing less than 2 years old

For some recent periods where the baseline information is not available or is considered anomalous, a prediction of it is carried out according to an ARIMA modelling.

5.4.1.2 Gross fixed capital formation in other buildings and constructions

Synthetic price and volume indicators are constructed from the sources listed in the following tables. Synthetic indicators of volume are derived implicitly.

Aggregate:	**GFCF. Tangible fixed assets. Construction. Other buildings and structures**
Synthetic indicator of:	**Value at current prices**

Base indicator	Source	Frequency	Availability
Production in non-residential construction: work carried out by companies, including real estate development (EIPIC)	MITMA	Monthly	m-1 / m
Production in civil engineering, including real estate development (EIPIC)	MITMA	Monthly	m-1 / m
Total sales of large companies and SMEs in civil engineering (division 42 of NACE 09), VESGEP	AEAT	Quarterly	t-1 / t
Amount of the official tender with the General Government as contracting agent (Official tender under construction) (*)	MITMA	Monthly	m-1 / m

Notes:
EIPIC (Survey of Construction Industry Production Indices)
VESGEP (Sales, Employment and Wages in Large Companies and SMEs)
MITMA (Ministry of Transport, Mobility and Urban Agenda)
(*) Amount for the quarter t-4, once the series has been made quarterly.

Aggregate:	**GFCF. Tangible fixed assets. Construction. Other buildings and structures**
Synthetic indicator of:	**Prices**

Base indicator	Source	Frequency	Availability
Labour cost per building construction worker (division 41 of NACE 2009), QLCS	INE	Quarterly	t-1 / t
Non-residential construction cost index (Construction Cost Index)	MITMA	Monthly	m-2 / m-1
Price per m2 of new free-market housing less than 5 years old (Appraised Housing Value)(*)	MITMA	Quarterly	t-1 / t
Total labour cost per civil engineering worker (division 42 of NACE 09), QLCS	INE	Quarterly	t-1 / t
Cost index in civil engineering in the construction sector	MITMA	Monthly	m-2 / m-1

Notes:
QLCS (Quarterly Labour Cost Survey)
MITMA (Ministry of Transport, Mobility and Urban Agenda)
(*) Until 2014, price per m2 of new free-market housing less than 2 years old

For some recent periods where the baseline information is not available or is considered anomalous, a prediction of it is carried out according to an ARIMA modelling. In addition, in the advancement of results, since the first quarter of 2020, in some quarters advance data has been available on sales from the statistics of *Sales, Employment and Wages of Large Companies and SMEs* of the AEAT.

5.4.2 Gross capital formation in tangible fixed assets: machinery, capital goods and weapon systems

5.4.2.1 Gross fixed capital formation in transport equipment

Synthetic volume and value indicators are constructed from the sources listed in the following tables. Synthetic volume indicators are derived implicitly.

Aggregate: GFCF in transport equipment
Synthetic indicator of: Volume

Base indicator	Source	Frequency	Availability
Availability of manufacture of motor vehicles (29.1 of the NACE 2009)	Own elaboration	Monthly	m-1 / m
Availability of coachwork for motor vehicles, trailers and semi-trailers (29.1 of NACE 2009)	Own elaboration	Monthly	m-1 / m
Availability of parts and accessories for motor vehicles (29.3 de NACE 2009)	Own elaboration	Monthly	m-1 / m
Availability of other equipment equipment n.e.c. (30.9 of NACE 2009)	Own elaboration	Monthly	m-1 / m

Aggregate: GFCF in transport equipment
Synthetic indicator of: Volume

Base indicator	Source	Frequency	Availability
Availability of manufacture of motor vehicles (29.1 of the NACE 2009)	Own elaboration	Monthly	m-1 / m
Availability of coachwork for motor vehicles, trailers and semi-trailers (29.1 of NACE 2009)	Own elaboration	Monthly	m-1 / m
Availability of parts and accessories for motor vehicles (29.3 de NACE 2009)	Own elaboration	Monthly	m-1 / m
Availability of building of ships and boats (30.1 of NACE 2009)	Own elaboration	Monthly	m-1 / m
Availability of locomotives and railway equipment (30.2 of the NACE 2009)	Own elaboration	Monthly	m-1 / m
Availability of air and spacecraft equipment (30.3 of the NACE 2009)	Own elaboration	Monthly	m-1 / m
Availability of military fighting vehicles (30.4 of NACE 2009)	Own elaboration	Monthly	m-1 / m
Availability of other equipment equipment n.e.c. (30.9 of NACE 2009)	Own elaboration	Monthly	m-1 / m

For some recent periods where the baseline information is not available or is considered anomalous, a prediction of it is carried out according to an ARIMA modelling. In addition, since the second quarter of 2020, partial advance results of the IPI are available.

5.4.2.2 Gross fixed capital formation in other machinery, capital goods and weapons systems

Synthetic indicators of value and volume are constructed from the sources listed in the following tables. Synthetic price indicators are obtained implicitly.

Aggregate: GFCF in machinery, equipment and weapons systems (except transport equipment)
Synthetic indicator of: Value at current prices

Base indicator	Source	Frequency	Availability
Availability of consumer electronic productsproducts (group 26.4 of NACE 2009)	Own elaboration	Monthly	m-1 / m
Availability of instruments and devices for measurement, testing and navigation (26.5 of NACE 2009)	Own elaboration	Monthly	m-1 / m
Availability of irradiation, electromedical and electrotherapeutic equipment (26.6 of the NACE 2009)	Own elaboration	Monthly	m-1 / m
Availability of electric motors, generators and transformers, and of electrical control and distribution devices (27.1 de NACE 2009)	Own elaboration	Monthly	m-1 / m
Availability of batteries and electric accumulators (27.2 of the NACE 2009)	Own elaboration	Monthly	m-1 / m
Availability of wiring and wiring devices (group 27.3 of NACE 2009)	Own elaboration	Monthly	m-1 / m
Availability of manufacture of domestic appliances (27.4 of the NACE 2009)	Own elaboration	Monthly	m-1 / m
Availibility of other material and electric equipment (27.9 of NACE 2009)	Own elaboration	Monthly	m-1 / m
Availability of machinery and equipment n.c.o. (28 of the NACE 2009)	Own elaboration	Monthly	m-1 / m
Availability of furniture (division 31 of NACE 2009)	Own elaboration	Monthly	m-1 / m
Availability of other manufacturing (division 32 of NACE 2009)	Own elaboration	Monthly	m-1 / m
Availability of the repair and installation of machinery and equipment (division 33 of NACE 2009)	Own elaboration	Monthly	m-1 / m

Aggregate: GFCF in machinery, equipment and weapons systems (except transport equipment)
Synthetic indicator of: Volume

Base indicator	Source	Frequency	Availability
Availability of consumer electronic products (group 26.4 of NACE 2009)	Own elaboration	Monthly	m-1 / m
Availability of instruments and devices for measurement, testing and navigation (26.5 of NACE 2009)	Own elaboration	Monthly	m-1 / m
Availability of irradiation, electromedical and electrotherapeutic equipment (26.6 of the NACE 2009)	Own elaboration	Monthly	m-1 / m
Availability of electric motors, generators and transformers, and of electrical control and distribution devices (27.1 de NACE 2009)	Own elaboration	Monthly	m-1 / m
Availability of wiring and wiring devices (group 27.2 of the NACE 2009)	Own elaboration	Monthly	m-1 / m
Availability of telecommunications equipment (group 27.3 of NACE 2009)	Own elaboration	Monthly	m-1 / m
Availability of manufacture of domestic appliances (group 27.4 of the NACE 2009)	Own elaboration	Monthly	m-1 / m
IPI of manufacture of electrical equipment (division 27.9 of NACE 2009)	Own elaboration	Monthly	m-1 / m
Availability of computers and peripheral equipment (group 28 of the NACE 2009)	Own elaboration	Monthly	m-1 / m
Availability of furniture (group 31 of NACE 2009)	Own elaboration	Monthly	m-1 / m
Availability of other manufacturing (division 32 of NACE 2009)	Own elaboration	Monthly	m-1 / m
Availability of the repair and installation of machinery and equipment (division 33 of NACE 2009)	Own elaboration	Monthly	m-1 / m

For recent periods where the baseline information is not available or is considered anomalous, a prediction is carried out according to an ARIMA modelling. In addition, since the second quarter of 2020, partial advance results of the IPI are available.

5.4.3 Gross capital formation in tangible fixed assets: cultivated biological resources

The evolution in value at current prices and in volume of this estimated aggregate in the periods for which there is no annual estimate based on the prediction obtained through an ARIMA modelling of the available historical series. The evolution of its price is obtained implicitly.

5.4.4 Gross capital formation in intangible fixed assets: products of intellectual property

In the case of the *originals of recreational, artistic and literary works,* synthetic price and volume indicators are constructed from the sources listed in the following tables. Synthetic indicators of value are derived implicitly.

Aggregate: GFCF in originals of recreational, literary and artistic works
Synthetic indicator of: Volume

Base indicator	Source	Frequency	Availability
Spectators in movie theatres	Ministry of Culture	Monthly	m-1 / m
Book publishing (first edition and reissue)	Ministry of Culture	Monthly	m-1 / m
Recorded music market in Spain	PROMUSICAE, Music producers of Spain	Biannual	b-1 / b

Aggregate: GFCF in originals of recreational, literary and artistic works
Synthetic indicator of: Price

Base indicator	Source	Frequency	Availability
CPI for image and sound recording hardware	INE	Monthly	m / m+2
CPI for books, newspapers and periodicals	INE	Monthly	m / m+2
CPI for cultural services	INE	Monthly	m / m+2

Note:
CPI (Consumer Price Index)

In the case of the rest of *the intellectual property assets*, synthetic price and value indicators are constructed from the sources listed in the following tables. Synthetic volume indicators are derived implicitly.

Aggregate: GFCF on intellectual property assets (excluding original recreational, literary or artistic works)
Synthetic indicator of: Value at current prices

Base indicator	Source	Frequency	Availability
Sales in large companies and SMEs of computer programming, consultancy and related activities (division 62 of the NACE 2009), Sales, Employment and Wages in Large Companies and SMEs	AEAT	Quaterly	t-1 / t
SSAI turnover index of computer programming, consultancy and related activities (division 62 of the NACE 2009)	INE	Monthly	m-1 / m
Sales in large companies and SMEs of architectural and engineering activities; technical testing and analysis (division 71 of the NACE 2009), Sales, Employment and Wages in Large Companies and SMEs	AEAT	Quaterly	t-1 / t
SSAI turnover index of architectural and engineering activities; technical testing and analysis (division 71 of NACE 2009)	INE	Monthly	m-1 / m
Sales in large companies and SMEs of research and development (class 72 of the NACE 2009), Sales, Employment and Wages in Large Companies and SMEs	AEAT	Monthly	t-1 / t

Notes:
SSAI (Services Sector Activity Indicators)

Aggregate:	GFCF on intellectual property assets (excluding original recreational, literary or artistic works)		
Synthetic indicator of:	Price		
Base indicator	**Source**	**Frequency**	**Availability**
CPI for Services sector	INE	Monthly	m / m+2
CPI for arts, entertainment and recreation (group R of the NACE 2009)	INE	Monthly	m / m+2
General SSPI	INE	Quarterly	t-1 / t-1
SSPI of computer programming, consultancy and related activities (division 62 of the NACE 2009)	INE	Quarterly	t-1 / t-1
SSPI of architectural and engineering activities; technical testing and analysis (division 71 of the NACE 2009)	INE	Quarterly	t-1 / t-1

Notes:
SSPI (Services Sector Prices Index)

For some recent periods where the baseline information is not available or is considered anomalous, a prediction of it is carried out according to an ARIMA modelling. In addition, in the advancement of results, since the first quarter of 2020, in some quarters advance data has been available on sales from the statistics of *Sales, Employment and Wages of Large Companies and SMEs* of the AEAT.

5.4.5 Variation in inventories and acquisition less transfer of valuable objects

The synthetic indicator of the quarterly *change in inventories and acquisitions minus the sale of valuable objects at current prices* is prepared, on the one hand, from a linear regression model that relates the annual aggregate of the *change in inventories* of *Wholesale and retail trade; repair of motor vehicles and motorcycles* with the turnover, according to the *Annual Trade Survey*, the IASS and sales, according to *Sales, Employment and Salaries of Large Companies* of the AEAT, of said activities and with the *introductions/imports* of consumer goods and equipment in the foreign trade statistics of the AEAT Customs and Special Taxes Department; on the other, based on a linear regression model that relates the annual aggregate of the *change in inventories* of industrial activities with the turnover, according to the *Structural Survey of* Companies, sales, according to *Sales, Employment and Salaries of Large Companies* of the AEAT and *introductions/imports* of consumer goods and equipment of those same activities.

In the case of prices, the synthetic indicator includes the general IPRI and CPI.

For recent periods where the baseline information is not available or is considered anomalous, a prediction is carried out according to an ARIMA modelling.

5.5 Imports and exports of goods and services

The sources and methods used in the exports / imports of goods, on the one hand, and in the exports / imports of services, on the other, will be described. Within the latter, the expenditure of non-residents in the national economic territory / expenditure of residents outside the national economic territory will be distinguished from exports / imports of other services.

In any case, the QNA integrates the value at current prices of the *account of foreign exchanges of goods and services* of the accounts of the rest of the world of the *Quarterly Non-Financial Accounts of the Institutional Sectors* (QSA), consistent with the results of the *Trade Balance of the Balance of Payments and International*

Investment Position, published by the Bank of Spain, and drawn up, basically, from the foreign trade statistics of the AEAT Customs and Excites Department of the, and of the *International Trade in Services Survey* (ITSS) and the *Tourist Expenditure Survey* (EGATUR) of INE.

5.5.1 Export of goods

The value at current prices *of goods exports* corresponds, therefore, to that registered in the *account of foreign exchanges of goods and services* in the accounts of the rest of the world[42].

In the preliminary results, use is made of the interannual evolution of *shipments* / *exports* of goods according to *month of realization* in the foreign trade statistics of the AEAT Department of Customs and Excites until the second month of the quarter and a prediction thereof according to an ARIMA modelling for the third month.

The evolution of its price is estimated from a synthetic indicator composed of the following indicators:

Aggregate: **Exports of goods**
Synthetic indicator of: **Prices**

Base indicator	Source	Frequency	Availability
Export Price Indices for Industrial Products (IPRIX)	INE	Monthly	m-1 / m
IVU of agriculture, livestock, forestry and fishing (section A of CNAE 2009)	MINECO	Monthly	m-1 / m

Notes:
IVU (Unit Value Indexes)

For recent periods where the baseline information is not available or is considered anomalous, a prediction is carried out according to an ARIMA modelling.

The evolution in volume is obtained implicitly.

42 https://www.ine.es/dyngs/INEbase/es/operacion.htm?c=Estadistica_C&cid=1254736165305&menu=ultiDatos&idp=1254735576581

5.5.2 Import of goods

The value at current prices of *imports of goods* corresponds to that registered in the *account of foreign exchanges of goods and services* of the accounts of the rest of the world[43].

In the preliminary results, use is made of the interannual evolution of *shipments* / *Imports* of goods according to *month of realization* in the foreign trade statistics of the AEAT Department of Customs and Excites until the second month of the quarter and a prediction thereof according to an ARIMA modelling for the third month.

The evolution of its price is estimated from a synthetic indicator composed of the following indicators:

Aggregate: **Imports of goods**
Synthetic indicator of: **Prices**

Base indicator	Source	Frequency	Availability
IPRIM of crude petroleum (division 06 of NACE 2009)	INE	Monthly	m-1 / m
IPRIM of manufacture of coke and refined petroleum products (division 19 of NACE 2009)	INE	Monthly	m-1 / m
IPRIM for rest of the products	INE	Monthly	m-1 / m
IVU of agriculture, livestock, forestry and fishing (section A of NACE 2009)	MINECO	Monthly	m-1 / m

Notes:
IVU (Unit Value Indexes)
IPRIM (Import Price Indices of Industrial Products)

For recent periods where the baseline information is not available or is considered anomalous, a prediction is carried out according to an ARIMA modelling.

The evolution in volume is obtained implicitly.

5.5.3 Export of services (excluding spending by non-resident households in the economic territory)

The value at current prices *of service imports* corresponds to that registered in the *account of foreign exchanges of goods and services* of the accounts of the rest of the world[44].

In previewing the results, the estimate is obtained by the difference between that of total *exports of goods and services* (excluding *spending by non-resident households in the* economic *territory*) and that of *exports of goods.* The total *exports of goods and services* (excluding the *expenditure of non-resident households in the* economic *territory*) correspond to the results of the Balance of Payments for the first two months of the quarter, prepared by the Bank of Spain and a prediction of the same according to an ARIMA modelling for the third month.

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https://www.ine.es/dyngs/INEbase/es/operacion.htm?c=Estadistica_C&cid=1254736165305&menu=ultiDatos&idp=1254735576581
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https://www.ine.es/dyngs/INEbase/es/operacion.htm?c=Estadistica_C&cid=1254736165305&menu=ultiDatos&idp=1254735576581

The evolution of its price is estimated from a synthetic indicator composed of the following indicators:

Aggregate:	**Export of services (excluding spending by non-resident households on the economic territory)**		
Synthetic indicator of:	**Prices**		
Base indicator	**Source**	**Frequency**	**Availability**
CPI of services (excluding housing rental)	INE	Monthly	m / m+1
CPI for transport services (ECOICOP 07.3)	INE	Monthly	m / m+1
CPI for communications services (ECOICOP 08)	INE	Monthly	m / m+1
SSPI for freight transport by road (NACE 49.41)	INE	Quarterly	t-1 / t-1
SSPI of sea freight transport (NACE 50.2)	INE	Quarterly	t-1 / t-1
SSPI of passenger air transport (NACE 51.1)	INE	Quarterly	t-1 / t-1
SSPI of warehousing and storage (NACE 52.1)	INE	Quarterly	t-1 / t-1
SSPI of cargo handling (NACE 52.24)	INE	Quarterly	t-1 / t-1
SSPI of mail and postal activities (NACE 53)	INE	Quarterly	t-1 / t-1
SSPI of Telecommunications (NACE 61)	INE	Quarterly	t-1 / t-1
SSPI of computer programming and consultancy (NACE 62)	INE	Quarterly	t-1 / t-1
SSPI of information service activities (NACE 63)	INE	Quarterly	t-1 / t-1
SSPI for legal and economic consulting activities (NACE groups 6	INE	Quarterly	t-1 / t-1
SSPI of architectural and engineering activities; technical testing a	INE	Quarterly	t-1 / t-1
SSPI of advertising and market research activities (NACE 73)	INE	Quarterly	t-1 / t-1
SSPI of employment activities (NACE 78)	INE	Quarterly	t-1 / t-1
SSPI of security and investigation activities (NACE 80)	INE	Quarterly	t-1 / t-1
SSPI of cleaning activities (NACE 81.2)	INE	Quarterly	t-1 / t-1

Notes:
CPI (Consumer Price Index)
SSPI (Services Sector Prices Index)

For recent periods where the baseline information is not available or is considered anomalous, a prediction is carried out according to an ARIMA modelling.

The estimation of the evolution in volume is obtained implicitly.

5.5.4 Import of non-tourist services (excluding consumption by households residing in the rest of the world)

The value at current prices *of imports of services* corresponds to that registered in the account of foreign exchanges of goods and services of the accounts of the rest of the world[45].

In previewing the results, the estimate is obtained by the difference between that of total *imports of goods and services* (excluding *consumption by resident households in the rest of the world*) and that of *imports of goods.* Total *imports of goods and services* (excluding *consumption by resident households in the rest of the world*) correspond to the results of the Balance of Payments for the first two months of the quarter, prepared by the Banco de España and a prediction of the same according to an ARIMA modelling for the third month.

The evolution of its price is estimated from a synthetic indicator composed of the following indicators:

Aggregate:	**Import of services (excluding spending by households residing in the rest of the world)**
Synthetic indicator of:	**Prices**

Base indicator	Source	Frequency	Availability
Harmonized Services Price Index for EUM Services	Eurostat	Monthly	m
Harmonised Consumer Price Index of France	Eurostat	Monthly	m
Harmonised Consumer Price Index of Germany	Eurostat	Monthly	m
Harmonised Consumer Price Index the Netherlands	Eurostat	Monthly	m
Harmonised Consumer Price Index of the United Kingdom	Eurostat	Monthly	m
Consumer Price Index (CPI) of the United States	BEA	Monthly	m
Harmonised Consumer Price Index of Switzerland	Federal Statistical Office of Switzerland	Monthly	m
Pound / dollar exchange rate	Bank of England	Monthly	m
Swiss franc / dollar exchange rate	Federal Reserve	Monthly	m
Euro / dollar exchange rate	ECB	Monthly	m
Harmonised Consumer Price Index of Germany	Eurostat	Monthly	m
Harmonised Consumer Price Index the Netherlands	Eurostat	Monthly	m
Harmonised Consumer Price Index of the United Kingdom	Eurostat	Monthly	m
Consumer Price Index (CPI) of the United States	BEA	Monthly	m
Harmonised Consumer Price Index of Switzerland	Federal Statistical Office of Switzerland	Monthly	m
Pound / dollar exchange rate	Bank of England	Monthly	m
Swiss franc / dollar exchange rate	Federal Reserve	Monthly	m
Euro / dollar exchange rate	ECB	Monthly	m

The estimation of the evolution in volume is obtained implicitly.

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https://www.ine.es/dyngs/INEbase/es/operacion.htm?c=Estadistica_C&cid=1254736165305&menu=ultiDatos&idp=1254735576581

5.5.5 Consumption of non-resident households in the economic territory

The value at current prices of *consumption by non-resident households in the* national *economic territory* corresponds to that registered in the account of foreign exchange of goods and services of the accounts of the rest of the world[46].

In the preliminary results, the estimate is made based on the year-on-year evolution of the *travel income* of the Balance of Payments for the first two months of the quarter, prepared by the Banco de España, and a prediction thereof according to an ARIMA modelling for the third month.

The evolution of its price is estimated from a synthetic indicator composed of the following indicators:

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https://www.ine.es/dyngs/INEbase/es/operacion.htm?c=Estadistica_C&cid=1254736165305&menu=ultiDatos&idp=1254735576581

Aggregate: Final consumption expenditure of non-resident households on the economic territory
Synthetic indicator of: Prices

Base indicator	Source	Frequency	Availability
CPI of Food (ECOICOP 01.1)	INE	Monthly	m
CPI of Non-alcoholic beverages (ECOICOP 01.2)	INE	Monthly	m
CPI of Alcoholic beverages (ECOICOP 02.1)	INE	Monthly	m
CPI of Tobacco (ECOICOP 02.2)	INE	Monthly	m
CPI of Clothing (ECOICOP 03.1)	INE	Monthly	m
CPI of Footwear (ECOICOP 03.2)	INE	Monthly	m
CPI for Housing rental (ECOICOP 04.1)	INE	Monthly	m
CPI of Current expenses for home maintenance and repair (ECOICOP 04.3)	INE	Monthly	m
CPI for Water supply and miscellaneous services relating to the dwelling (ECOICOP 04.4)	INE	Monthly	m
CPI for Electricity, gas and other fuels (ECOICOP 04.5)	INE	Monthly	m
CPI for Furniture and furnishings (ECOICOP 05.1)	INE	Monthly	m
CPI for Household textiles (ECOICOP 05.2)	INE	Monthly	m
CPI for Household appliances and repairs (ECOICOP 05.3)	INE	Monthly	m
CPI for Glassware, tableware and household utensils (ECOICOP 05.4)	INE	Monthly	m
CPI for Home and garden tools (ECOICOP 05.5)	INE	Monthly	m
CPI for Non-durable household items (ECOICOP 05.6 . 1)	INE	Monthly	m
CPI for Domestic services and other household services (ECOICOP 05.6.2)	INE	Monthly	m
CPI for Medicines, other pharmaceutical products and therapeutic material (ECOICOP 06.1)	INE	Monthly	m
CPI for Outpatient Medical and Paramedical Services (ECOICOP 06.2)	INE	Monthly	m
CPI for Hospital services (ECOICOP 06.3)	INE	Monthly	m
CPI for Use of personal vehicles (ECOICOP 07.2)	INE	Monthly	m
CPI for Transport services (ECOICOP 07.3)	INE	Monthly	m
CPI for Postal services (ECOICOP 08.1)	INE	Monthly	m
CPI for Telephone and telefax equipment (ECOICOP 08.2)	INE	Monthly	m
CPI for Telephone and telefax services (ECOICOP 08.3)	INE	Monthly	m
CPI for Sound and image receivers, recorders and reproducers (ECOICOP 09.1.1)	INE	Monthly	m
CPI for Photographic and cinematographic equipment and optical instruments (ECOICOP 09.1.2)	INE	Monthly	m
CPI for Information processing equipment (ECOICOP 09.1.3)	INE	Monthly	m
CPI of Support for image, sound and data recording (ECOICOP 09.1.4)	INE	Monthly	m
CPI of the Repair of audiovisual, photographic and information processing equipment (ECOICOP 09.1.5)	INE	Monthly	m
CPI for Other durable goods important for leisure and culture (ECOICOP 09.2)	INE	Monthly	m

Aggregate:	Final consumption expenditure of non-resident households on the economic territory
Synthetic indicator of:	Prices

Base indicator	Source	Frequency	Availability
Cpi for Games, toys and hobbies (ECOICOP 09.3.1)	INE	Monthly	m
CPI for Equipment for sport, camping and open-air recreation (ECOICOP 09.3.2)	INE	Monthly	m
CPI for Gardens, plants and flowers (ECOICOP 09.3.3)	INE	Monthly	m
CPI for Pets and related items (ECOICOP 09.3.4)	INE	Monthly	m
CPI for Veterinary services and other services for pets (ECOICOP 09.3.5)	INE	Monthly	m
CPI for Recreational and cultural services (ECOICOP 09.4)	INE	Monthly	m
CPI for Books, newspapers and periodicals (ECOICOP 09.5)	INE	Monthly	m
CPI for Restaurants, cafés and the like (ECOICOP 11.1)	INE	Monthly	m
CPI for Accommodation services (ECOICOP 11.2)	INE	Monthly	m
CPI for Hairdressing salons and personal grooming establishmentss (ECOICOP 12.1.1)	INE	Monthly	m
CPI of Electrical appliances for personal care (ECOICOP 12.1.2)	INE	Monthly	m
CPI of Other articles and products for personal care (ECOICOP 12.1.3)	INE	Monthly	m
CPI of Personal effects not previously declared (ECOICOP 12.3)	INE	Monthly	m
CPI for Social protection (ECOICOP 12.4)	INE	Monthly	m
CPI for Insurance services (ECOICOP 12.5)	INE	Monthly	m
CPI for Other not previously declared services (ECOICOP 12.7)	INE	Monthly	m

Notes:
CPI (Consumer Price Index)

The evolution in volume is estimated implicitly.

5.5.6 Consumption of residents households in the rest of the world

The value at current prices of consumption by resident households in the rest of the world corresponds to that registered in the account of foreign exchanges of goods and services of the accounts of the rest of the world[47].

In the preliminary results, the estimate is made based on the year-on-year evolution of the *travel income* of the Balance of Payments for the first two months of the quarter, prepared by the Banco de España, and a forecast thereof according to an ARIMA modelling for the third month.

The evolution of its price is estimated from a synthetic indicator composed of the following indicators:

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https://www.ine.es/dyngs/INEbase/es/operacion.htm?c=Estadistica_C&cid=1254736165305&menu=ultiDatos&idp=1254735576581

Aggregate:	Final consumption expenditure of resident households in the rest of the world
Synthetic indicator of:	Prices

Base indicator	Source	Frequency	Availability
Harmonised Consumer Price Index of EMU	Eurostat	Monthly	m
Harmonised Consumer Price Index of France	Eurostat	Monthly	m
Harmonised Consumer Price Index of Germany	Eurostat	Monthly	m
Harmonised Consumer Price Index of Italy	Eurostat	Monthly	m
Harmonised Consumer Price Index the Netherlands	Eurostat	Monthly	m
Harmonised Consumer Price Index of the United Kingdom	Eurostat	Monthly	m
Harmonised Consumer Price Index of Portugal	Eurostat	Monthly	m
Consumer Price Index (CPI) of the United States	BEA	Monthly	m
Harmonised Consumer Price Index of Andorra	Departament d'Estadística Govern d'Andorra	Monthly	m
Harmonised Consumer Price Index of Morocco	Haut-Commissariat au Plan	Monthly	m
Harmonised Consumer Price Index of Belgium	Eurostat	Monthly	m
Harmonised Consumer Price Index of Ireland	Eurostat	Monthly	m
Harmonised Consumer Price Index of Mexico	INEGI	Monthly	m

The evolution in volume is estimated implicitly.

6. GDP and its components: the income approach

6.1 Compensation of employees

An estimate of the *compensation of employees* is offered and its breakdown into *wages and salaries* and *social contributions paid by the employer* at current prices of the total economy, disaggregated by activity branches, according to the 2009 National Classification of Economic Activities (NACE-2009):

- Agriculture, forestry and fishing (A, NACE 2009)
- Industry (BE, NACE 2009)
    - Industry. Manufacturing industry (C, NACE 2009)
- Construction (F, NACE 2009)
- Services (GT, NACE 2009)
    - Services. Trade, transport and hospitality (GI, NACE 2009)
    - Services. Information and communications (J, NACE 2009)
    - Services. Financial and insurance activities (K, NACE 2009)
    - Services. Real estate activities (L, NACE 2009)
    - Services. Professional, scientific and technical activities (M-N, NACE 2009)
    - Services. Public administration, education and health (O-Q, NACE 2009)

- Services. Artistic, recreational and other services activities (R-T, NACE 2009)

In each of them, except in the case of sections A, K and O-Q of the NACE 2009, the one derived from the *Quarterly Labour Cost Survey* is used as a synthetic indicator of the average remuneration per job position (in terms of national accounting).

In the case of section A, the evolution of the average daily *wage* derived from the *Statistics of Agrarian Indices and Salaries* of the Ministry of Agriculture is used as a synthetic indicator of the average remuneration per job position (in terms of national accounting). In recent periods where such information is not available, predictions are made according to ARIMA modelling.

In the case of sections O, P and Q, the synthetic indicator is a weighted average of the average remuneration of the *General Government* sector and that derived from the *Quarterly Labour Costs Survey* for said branch. The weights are established taking into account the weight of the *remuneration of the employees* of the *General Government* in the total of said activity in the reference year or in the previous year (in the case of the quarters of the current year).

In the case of section K, the results of the *Quarterly Non-Financial Accounts of the Institutional Sectors* (QSA) for each of the subsectors of the *Financial Institutions* sector.

In the advancement of results for a quarter t, the average remuneration per salaried position in each activity of said quarter is carried out making use of the estimated evolution of the *average gross return* in each activity according to the statistics of *Sales, Employment and Salaries of Large Companies* in the quarter (based on the available results of said statistics for the first two months of the quarter and a forecast with ARIMA modelling for the third month of the same) and a forecast with ARIMA modelling of the series available up to the previous quarter.

The *compensation of employees* for each activity results from the product of the average compensation estimated by the total number of salaried jobs in it.

6.1.1 Wages and salaries and social contributions paid by the employer

Except in the case of sections A, K and O-Q of the CNAE 2009, those derived from the *Quarterly Labour Cost Survey* are used as a synthetic indicator of *average wages and salaries* per job position (in terms of national accounting).

In the case of section A, the evolution of the average daily *wage* derived from the *Statistics of Agrarian Indices and Salaries* of the Ministry of Agriculture is used as a synthetic indicator of the average wages and salaries of the salaried job (in terms of national accounting). In recent periods where such information is not available, predictions are made according to ARIMA modelling.

In the case of the OQ sections, the synthetic indicator is a weighted average of the average *wages and salaries* of the General Government and the one derived from the *Quarterly Labour Cost Survey* for said branch. The weights are established taking into account the weight of the *salaries and salaries* of the General Government in the total of said activity in the reference year (or in the previous one in the case of the quarters of the current year).

In the case of section K, the results of the *Quarterly Non-Financial Accounts of the Institutional Sectors* for each of the subsectors of the *Financial Institutions* sector.

The *social contributions paid by the employer* in each activity result from the difference between the *compensation of the employees* and the estimated *wages and salaries*.

In the advancement of results, the *salaries and wages* in each activity of said quarter are estimated based on a forecast with ARIMA modelling of the weight of the same over the total *compensation of employees* in each branch of activity, with the *social contributions paid by the employer* resulting from difference between the total remuneration and the estimated *wages and salaries* in each activity.

6.2 Taxes less subsidies on production

Taxes less subsidies on production at current prices are made up of taxes minus subsidies on products plus other taxes minus subsidies on production.

In both cases, the QNA integrates the results of the *Quarterly Non-Financial Accounts of the General Government,* prepared by the IGAE. To the estimates of *subsidies on products* (D.31) and *other subsidies on production* (D.39) is added the value of the subsidies received from the EU (including those corresponding to the European Agricultural Guarantee and Guidance Fund EAGGF, to the European Social Fund and other unclassified subsidies), obtained from the information disseminated by the Public Treasury and by the Spanish Agrarian Guarantee Fund (FEGA)[48] .

On the date of publication of the preliminary results, the quarterly results for the entire *institutional sector* of the *General Government* (S.13) are not yet available, although the monthly accounts of the State are available (part of the *institutional subsector* S. 1311 *Central Government, excluding Social Security funds*) for the three months of the reference quarter and for the first two months of *Central Government, excluding social security funds* (S.1311), *Regional Government, excluding funds from social security* (S.1312) and *Social Security Funds* (S.1314), in addition to information on monthly tax collection from the Tax Agency (AEAT). With all the available information, an estimate is made of the *other taxes on production* and of the *other subsidies on production* to be collected / paid by the *General Government* for the quarter as a whole from an econometric modelling of its components.

6.3 Gross operating surplus and gross mixed income

The aggregate of *Gross Operating Surplus and Gross Mixed Income* of the national economy is obtained as the difference between the *Gross Domestic Product* at

[48]Compensatory incentives for herbaceous crops, production incentives, premiums for cattle, sheep and goats, export rebates and all those subsidies in which the producers of agricultural products receive the difference between the average market prices and the guaranteed prices (EAGGF Guarantee section), are recorded as *product subsidies.* The rest of the EAGGF flows that are not classified as *capital transfers* (incentives for set-aside, incentives for agricultural production in disadvantaged and/or mountainous areas, etc.), and the rest of the flows are recorded as *other production subsidies*.

current prices and the sum of the *remuneration of employees* and taxes less subsidies on production estimated.

7. Population and employment

7.1 Population

The calculations of GDP and per capita income for each quarter must be made according to the figures for the population resident in Spain at the middle of the quarter (as an approximation to the average population resident in Spain throughout the same), derived from the preparation of the *Population Figures* for residents in Spain, published by the INE.

7.2 Employment

An estimate of employment is offered, measured in terms of *people* (employed), *jobs* and *hours worked* and *full-time equivalent jobs*, of the total economy, disaggregated by branches of activity and employment of *salaried* and *non-salaried employees,* according to the 2009 National Classification of Economic Activities (NACE-2009):

- Agriculture, forestry and fishing (A, NACE 2009)
- Industry (BE, NACE 2009)
    - Industry. Manufacturing industry (C, NACE 2009)
- Construction (F, NACE 2009)
- Services (GT, NACE 2009)
    - Services. Trade, transport and hospitality (GI, NACE 2009)
    - Services. Information and communications (J, NACE 2009)
    - Services. Financial and insurance activities (K, NACE 2009)
    - Services. Real estate activities (L, NACE 2009)
    - Services. Professional, scientific and technical activities (M-N, NACE 2009)
    - Services. Public administration, education and health (O-Q, NACE 2009)
    - Services. Artistic, recreational and other services activities (R-T, NACE 2009)

Except in the case of the O-Q sections of the NACE 2009, the result derived, in terms of each variable, from the *Labour Force Survey* (EPA), prepared by the INE, is used as a synthetic indicator.

In the case of the O-Q sections, the synthetic indicator is a weighted average of the estimate of the evolution of employment prepared for the General Government as a whole and that derived from the EPA (excluding the results relating to public sector workers). The weightings are established taking into account the weight of

employment, in terms of each variable, of the General Government in the total of said activity in the reference year (or in the previous one in the case of the quarters of the current year).

8. Preliminary Estimate of Quarterly National Accounts of Spain: main aggregates (QNA).

The general procedure for compiling the advance of results for the quarter t in t+30 days of the QNA is identical to the update of the same in t+90 days, with the exceptions on the sources of information used that have been mentioned for each accounting aggregate in the previous sections.