Quality report on National and Regional Accounts

2020 DATA | 2021 edition

eurostat

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Executive summary

This document presents Eurostat's assessment of the quality of the national and regional accounts data submitted by the EU Member States, Iceland, Norway and Switzerland in 2020. It also includes information on the quality of key European aggregates published by Eurostat. This publication refers to data transmissions during 2020 when the United Kingdom was no longer a Member State of the European Union. Therefore, the United Kingdom is not included in the evaluation.

The assessment in this quality report is based on national quality reports for data transmissions during 2020. It is the fifth such report since the European System of Accounts 2010 (ESA 2010) was introduced in September 2014.

The quality assessment was carried out in accordance with Article 4 of Regulation (EU) No 549/2013, also called the ESA 2010 Regulation. This requires the quality of national and regional accounts data sent to Eurostat to be assessed against the quality criteria set out in Regulation (EC) No 223/2009 on European statistics. Commission Implementing Regulation (EU) 2016/2304 sets out the modalities, structure, periodicity and indicators of the assessment process.

The quality report covers a number of quality indicators (completeness, revision policy and practice, punctuality, coherence and documentation on methodology). In 2021, the quality reporting was expanded to include all the quality indicators within the scope of Commission Implementing Regulation (EU) 2016/2304. The 2021 report will also be the first to assess the full scope of data transmission under ESA 2010, as the temporary ESA 2010 derogations fully expired in 2020.

Chapters 1 and 2 present the quality reporting and assessment framework of the European Statistical System (ESS) applied to national and regional accounts. Chapter 3 presents the body of legislation and guidance documents pertinent to ESA 2010. Chapters 4 to 9 provide an analysis of country data sent in 2020.These chapters include European aggregates published by Eurostat, in line with the ESS quality criteria, namely relevance, accuracy, timeliness and punctuality, accessibility and clarity, comparability and coherence. Where appropriate, this analysis interprets the results of data delivered to compile EU policy indicators such as the principal European economic indicators (PEEIs) and indicators in support of the Macroeconomic Imbalance Procedure (MIP). The impact of the COVID-19 pandemic on national accounts is also covered. The overall results of the assessment and Eurostat's recommendations to countries are summarised in Chapter 10.

As a general assessment, most Member States have continued to make progress in complying with the data requirements and methodology and in adapting national data compilation systems. Whereas most Member States implemented the benchmark revisions in 2019, some carried them out in 2020. This was the case for Czechia, Malta, Poland and partly Lithuania (second phase for back series). In addition, Latvia, Ireland and Romania carried out further major revisions in 2020. Greece conducted a staged benchmark revision covering the time series back to 2010. Luxembourg conducted a partial benchmark revision in the government finance and financial accounts domain in 2020, but, for some other national account domains, the benchmark revision was further delayed. National statistical institutes (NSIs) took the opportunity to improve the quality of their national accounts estimates further by introducing methodological or statistical changes as well as using new data sources. The data sent in 2020 were broadly in line with the ESS quality standards and the ESA 2010 Regulation. There have been improvements in both data completeness and punctuality since the first quality report on data submissions in 2016. The overall results for the different quality criteria are as follows:

Relevance

In 2020, both quarterly and annual national accounts mandatory data had high completeness. The average completeness rates for tables for national accounts main aggregates (NAMA), government finance statistics (GFS), non-financial sector accounts (NFSA) and annual financial accounts (AFA) were between 93.8% and 100.0%. For supply, use and input-output tables (SUIOT) and regional accounts (RA) tables, the average completeness rates ranged between 95.0% and 100.0%.

Accuracy

In 2020, with respect to implementing coordinated benchmark revisions, that most EU countries implemented in 2019 some countries delayed to 2020 and others either carried out a staged benchmark revision or delayed it for one more year. These revisions aimed to improve the quality of data. Most Member States as well as the EFTA countries make available online their information on national revision policies.

Timeliness and punctuality

Overall, the punctuality of transmission was high in 2020, with most countries submitting all mandatory quarterly accounts at or shortly before the official transmission deadline. For the 17 ESA 2010 tables transmitted annually, twelve Member States submitted all required annual national and regional accounts tables on time.

Accessibility and clarity

All EU Member States and EFTA countries publish online documentation on national accounts methodology and compilation methods. Progress was made in 2020 compared with 2019, with two more Member States publishing QNA inventories in 2020.

Coherence

Overall internal coherence within and between tables (within Table 1 and between Tables 1 and 3 and between Tables 1 and 22) was very high for nearly all countries in 2020. When comparing net lending / net borrowing (B.9) in table 8 with net financial transactions (B.9F) in table 6, the absolute differences range from around 2% in the non-financial corporation sector (S.11) and 1.5% in the household sector (S.14), sectors where data sources tend to be less complete or reliable, to below 0.2% for the general government sector (S.13).

Based on the quality assessment, Eurostat makes the following general recommendations to countries, encouraging them to strive to:

1. Improve compliance in terms of the **completeness** of certain tables
2. Improve compliance in terms of the **punctuality** of certain tables
3. Improve quality aspects regarding the **accuracy** of statistics
4. Improve quality aspects regarding the **accessibility and clarity** of statistics
5. Improve quality aspects regarding the **coherence** of statistics.

In addition, based on national quality reports and analysis of submitted data, Eurostat provided country-specific recommendations. The specific recommendations given to Member States are then linked to and examined under each generic recommendation.

1 Introduction

Data on national and regional accounts underpin the development, implementation and monitoring of a broad range of European policies. These data are indispensable for describing and analysing the economy of the EU, the euro area (EA), and individual Member States and EU regions. They are used for administrative purposes as well, e.g. to calculate Member State contributions to the EU budget. Therefore, it is extremely important that these European statistics are accurate, timely and complete and that users are regularly informed about their quality in a transparent way.

Eurostat began publishing national accounts data aggregated at European level in the 1970s. Since then, the methodological framework has been updated several times, in line with the developments of the United Nations System of National Accounts (SNA). The current framework defining the European system of national and regional accounts is the European System of Accounts 2010 (ESA 2010) whose requirements were laid down by Regulation (EU) No 549/2013 (the ESA 2010 Regulation). ESA 2010 corresponds to the 2008 edition of the SNA and has been used in the EU since September 2014.

The ESA 2010 Regulation prescribes that the quality of national and regional accounts data sent to Eurostat are to be assessed according to the quality criteria set out by Regulation (EC) No 223/2009 on European statistics. The modalities, structure and assessment indicators of the quality assessment process are defined in Commission Implementing Regulation (EU) 2016/2304 (the Implementing Act). Each year, in accordance with Article 4(2) of the ESA 2010 Regulation, Member States report on the quality of national and regional accounts data sent to Eurostat. Based on their national quality reports, Eurostat prepares an overall assessment in accordance with Article 4(4). Additionally, under Article 12, every fifth year, starting from 2018, the Commission reports to the European Parliament and the Council about the quality of data on national and regional accounts. Both the national reports and the Eurostat assessment follow the recommendations of the European Statistical System (ESS) Handbook for Quality Reports. The information provided in these quality reports covers all ESA 2010 domains, namely the main aggregates, government finance statistics, non-financial sector accounts, regional accounts, and supply, use and input-output tables.

The assessment in this quality report shows results for transmissions of national and regional accounts data during 2020. It is the fifth such report since the introduction of the European System of Accounts 2010 (ESA 2010) in September 2014. It also includes information on the quality of key European aggregates published by Eurostat. The intended audience of the report are data users. Therefore, it is structured to provide information which helps to understand the published data and, where applicable, the factors that improve or limit their quality. The report focuses solely on specific aspects of data quality, so while it contains specific information and indicators for individual Member States, the Commission (Eurostat) assesses Member States' adherence to the requirements of the ESA 2010 Regulation separately.

2 Scope of the quality assessment

Eurostat's quality assessment of national and regional accounts covers data submitted by EU Member States and EFTA countries as well as data from its own publications of EU and euro-area aggregates.

The quality reporting and assessment exercise starts every year on 15 February. Eurostat provides countries with pre-filled national quality reports containing quantitative indicators and qualitative information. The countries complement the national quality reports and send them back to Eurostat, no later than 31 May. Eurostat assesses the results, and then prepares and publishes an overall assessment based on the national quality reports and other available information. This is an annual procedure which was carried out for the first time in 2017 based on data submissions in 2016.

Data transmissions based on the ESA 2010 methodology started from 1 September 2014. In 2020, the derogations granted by the Commission to the Member States expired. From that time, all data transmissions must be in line with all the provisions set out in the ESA 2010 transmission programme. Quality reporting is being introduced gradually in three steps. The first two quality exercises in 2017 and 2018 required countries to report to Eurostat on a limited number of quality indicators (completeness, published revision policy, punctuality, coherence between sub-annual and annual statistics and within tables for selected variables, documentation on methodology). In the third quality exercise in 2019, quality reporting was extended to include additional indicators on revision rates of quarterly and annual data for selected variables, and the coherence between non-financial and financial accounts. In 2021, quality reporting was conducted fully within the scope of the transmission programme and included the most recently envisaged indicators (e.g. revision rates of other quarterly variables as well as cross-table consistency).

This assessment report concerns the ESA 2010 mandatory data submitted by countries to Eurostat in 2020. Due to derogations from the data transmission requirements, not all countries submitted the same scope of data. Only Czechia was due to submit all data since the start of the ESA 2010 data submission. By the end of 2016, Greece and the Netherlands closed their derogations and were due to submit a full set of data in 2018. Estonia, Italy, Lithuania and the United Kingdom closed their derogations in 2018 and Slovakia in 2019. All ESA 2010 derogations for the other 20 EU Member States together with Iceland and Norway expired on 1 January 2020. The derogations for Switzerland were established on 2 December 2019 with a decision of the EU/Switzerland Statistical Committee. Eurostat is in cooperation with the countries that still have outstanding data transmissions related to expired derogations for the ESA 2010 domains. Furthermore, for the NFSA domain, data requirements differ depending on whether the country has a small or big economy and whether or not it is a member of the euro area. It is important to note that Eurostat's assessment reflects these differences in mandatory data requirements.

As in past quality reports, national data submitted on a voluntary basis are not part of this quality assessment. The references to voluntary data made in this report acknowledge the

efforts of countries to make additional data available to users, but do not comprise measured assessments.

In addition to national quality reports, the following sources were also used to prepare this quality assessment: information collected during the data validation process; information contained in the provided mandatory and voluntary inventories of methods and data sources; information collected in surveys during the verification processes for gross national income (GNI) and from country visits. For some data used to compile the Macroeconomic Imbalance Procedure (MIP) indicators, available country self-assessment reports and European Central Bank (ECB) metadata for data compiled by national central banks were taken into account.

3 | Legislation, classifications, manuals

3.1 Legislation

3.1.1　Legal basis for ESA 2010

- Regulation (EU) No 549/2013 of the European Parliament and of the Council of 21 May 2013, on the European system of national and regional accounts in the European Union, OJ L 174, 26.6.2013, p. 1-727

- Commission Implementing Decision 2014/403/EU of 26 June 2014 on granting derogations to Member States with respect to the transmission of statistics pursuant to Regulation (EU) No 549/2013 of the European Parliament and of the Council concerning the European system of national and regional accounts in the European Union (notified under document C(2014) 4164), OJ L 175, 2.7.2014, p. 1-131

- Commission Implementing Decision (EU) 2018/1891 of 30 November 2018 amending Implementing Decision 2014/403/EU on granting derogations to Member States with respect to the transmission of statistics pursuant to Regulation (EU) No 549/2013 of the European Parliament and of the Council concerning the European system of national and regional accounts in the European Union, OJ L 309, 5.12.2018, p. 5-39

- Commission Implementing Regulation (EU) No 724/2014 of 26 June 2014 on the interchange standard for the transmission of data required under Regulation (EU) No 549/2013 of the European Parliament and of the Council on the European system of national and regional accounts in the European Union, OJ L 192, 1.7.2014, p. 38

- Commission Delegated Regulation (EU) No 2015/1365 of 30 April 2015 on the transmission format for research and development expenditure data, OJ L 211, 8.8.2015, p. 1

- Commission Delegated Regulation (EU) No 2015/1342 of 22 April 2015 amending the methodology for the classification of products by activity given in Annex A to Regulation (EU) No 549/2013 of the European Parliament and of the Council, OJ L 207, 4.8.2015, p. 35-36

- Commission Implementing Regulation (EU) No 2016/2304 of 19 December 2016 on the modalities, structure, periodicity and assessment indicators of the quality reports on data transmitted under Regulation (EU) No 549/2013 of the European Parliament and the Council of 21 May 2013 on the European system of national and regional accounts in the European Union, OJ L 345, 20.12.2016, p. 27-36

The ESA 2010 Regulation defines the methodology (Annex A) and the transmission programme (called ESA 2010 transmission programme, Annex B) for the compilation of national and regional accounts. Methodology comprises the common standards, definitions, classifications and accounting rules. The transmission programme sets out the accounts and tables as well as the legal deadlines by which EU Member States must submit data to the European Commission (Eurostat).

The complete list of tables is presented in the overview in Annex 1, Table 17. For this report, these tables are organised into the following seven groups, covering the seven ESA 2010 domains:

ESA 2010 domain	Tables of the ESA 2010 transmission programme
National accounts main aggregates (NAMA)	1A, 1Q, 3, 5, 20, 22, 26
Government finance statistics (GFS)	2, 9, 11, 27, 28
Annual financial accounts (AFA)	6, 7
Non-financial sector accounts (NFSA)	8, 801
Regional accounts (RA)	10, 12, 13
Supply, use and input-output tables (SUIOT)	15, 16, 17
Supplementary table on pensions in national accounts[1]	29

The Commission granted 888 derogations[2] from mandatory data transmission requirements on the request of EU Member States. These temporary derogations expired progressively by 2020, with two thirds of them (607 derogations) having already been closed by end-2018. In 2018, the Commission prepared a report, which included a review of the justification of derogations performed by Eurostat in close collaboration with the statistical offices in all EU Member States. Based on that review, on 30 November 2018, the Commission reduced the number of valid derogations from 365 to 267, and changed the description of 23 of those derogations[3].

Derogations vary in substance and in the number of variables included, e.g. different years (quarters), different prices, seasonally or non-seasonally adjusted data, and breakdowns of the Statistical Classification of Economic Activities in the European Community (NACE Rev. 2).

On 1 January 2020, all derogations for EU Member States, Iceland and Norway expired. Eurostat is in cooperation with the countries that still have outstanding data transmissions related to expired derogations for the ESA 2010 domains. The countries that still have open expired derogations should ensure complete data transmissions according to ESA 2010 in order to close the respective non-compliance.

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[1] The three yearly supplementary table on pensions in national accounts was mandatory in 2020, therefore Table 29 is included for consideration in this report.

[2] The Commission adopted Commission Implementing Decision 2014/403/EU granting 888 temporary derogations to 27 Member States. In addition, the EFTA Surveillance Authority granted 145 derogations to Norway and Iceland.

[3] The Commission adopted the Implementing Decision (EU) 2018/1891 of 30 November 2018 amending Implementing Decision 2014/403/EU.

The derogations for Switzerland were established with Decision No 2/2019 of the EU/Switzerland Statistical Committee of 2 December 2019. They are mostly temporary and expire progressively by 2025; however, some derogations are subject to review in 2024.

3.1.2 Other legal acts

- Regulation (EC) No 223/2009 of the European Parliament and of the Council of 11 March 2009 on European statistics, OJ L 087 31.3.2009, p. 164, as amended by Regulation (EU) 2015/759 of the European Parliament and of the Council of 29 April 2015, *OJ L 123, 19.5.2015, p. 90–97*

- Regulation (EU) No 99/2013 of the European Parliament and of the Council of 15 January 2013 on the European statistical programme 2013-2017, *OJ L 39, 9.2.2013, p. 12–29*

- Regulation (EU) 2017/1951 of the European Parliament and of the Council of 25 October 2017 amending Regulation (EU) No 99/2013 on the European statistical programme 2013-17, by extending it to 2020, *OJ L 284, 31.10.2017, p. 1–11*

- European Statistics Annual Work Programme 2019

- Regulation (EU) 2019/516 of the European Parliament and of the Council of 19 March 2019 on the harmonisation of gross national income at market prices, *OJ L 91, 29.3.2019, p. 19–24*

Regulation (EC) No 223/2009 (the European Statistics Regulation) sets out the legal framework for developing, producing and disseminating European statistics, and defines the European Statistical System (ESS), which is the partnership between the Commission (Eurostat) and national statistical institutes (NSIs) and other national authorities responsible in each EU Member State for developing, producing and disseminating European statistics. European statistics are determined in the European statistical programmes and are developed according to the statistical principles of professional independence, impartiality, objectivity, reliability, statistical confidentiality and cost effectiveness. National and regional accounts data submitted in 2020 and covered by this report are produced under the 2013-2017 European statistical programme, which has been extended to 2020, and the European statistics annual work programme for 2020.

Furthermore, the European Statistics Regulation (Article 12) sets out the requirements on the statistical quality of European statistics according to the following quality criteria: relevance, accuracy, timeliness, punctuality, accessibility and clarity, comparability and coherence. EU Member States provide the Commission (Eurostat) with reports on the quality of data submitted, including any concerns they have regarding data accuracy. The Commission (Eurostat) assesses the quality of the data submitted based on an appropriate analysis, and prepares and publishes reports and communications on the quality of European statistics. In the interest of transparency, the Commission (Eurostat), where appropriate, makes public its assessment of the quality of national contributions to European statistics. Specific quality requirements, such as target values and minimum standards for the production of statistics, may also be set out in sectoral legislation.

In 2019, the European Council and the European Parliament adopted Regulation (EU) 2019/516 on the harmonisation of gross national income (GNI) at market prices. GNI aggregates are compiled in line with ESA 2010 and are the basis for calculating the largest share of own resources in the general budget of the Union. They are subject to closer verification of comparability, reliability and exhaustiveness. This process contributes positively to the overall quality of national accounts.

3.2 Classifications used in ESA 2010

- Statistical Classification of Economic Activities in the European Community (NACE), Rev. 2 (2008)

- Statistical Classification of Products by Activity, Version 2.1 (CPA)

- Classification of Individual Consumption by Purpose (COICOP), 1999 version

- Classifications of functions of government, 1999 version

- Classification of the Purposes of (Private) Non-Profit Institutions Serving Households, 1999 version (COPNI)

- Classification of institutional sectors

- Nomenclature of territorial units for statistics (NUTS), 2016 version

3.3 Manuals and guidelines

- System of National Accounts 2008 (SNA 2008)

- ESS manuals and guidelines on national and regional accounts

- Practical guidelines for revising ESA 2010 data

- Guidance notes - Government finance statistics and EDP statistics - Eurostat (europa.eu)

ESA 2010 is broadly aligned with SNA 2008 to make comparable analysis with non-EU economies possible.

The ESS has put together several manuals and guidelines to facilitate the implementation of the ESA 2010 in EU Member States.

3.4 Other information

Additional information on national and regional accounts is available on the following sections of Eurostat's website:

- ESA 2010

- Manuals and Guidelines for ESA 2010

- National accounts (including GDP and regional accounts)

- Government finance statistics

- European sector accounts

- Supply, use and input-output tables

- Pensions in National Accounts

Data submitted under the ESA 2010 transmission programme is assessed in the context of policy requirements for the PEEIs, the MIP indicators, the calculation of GNI for the purposes of EU budget own resources and the EDP. Additional information is available in the following sections of Eurostat's website:

- Principal European economic indicators (PEEIs)

- Macroeconomic Imbalance Procedure (MIP)

- GNI for own resource purposes

- Excessive Deficit Procedure (EDP)

The activities of multinational enterprises are increasingly important for the compilation of national accounts. National compilers and international organisations are working together to further develop the concepts and methods that address the impacts of globalisation on macroeconomic statistics.

- Economic globalisation

3.5 **ESA 2010 application**

Article 12 of the ESA 2010 Regulation states that, by 1 July 2018 and every 5 years after that, the Commission must submit a report to the European Parliament and the Council on the application of this Regulation. The report has to evaluate the quality of data on national and regional accounts, the effectiveness of the Regulation and the monitoring process applied, and the progress on contingent liabilities data and on the availability of ESA 2010 data.

Technical work was carried out in 2017 to prepare the first evaluation, which was conducted in 2018. On 29 June 2018, the Commission adopted and provided to the European Parliament and the Council the first such report on the application of the ESA 2010 Regulation and on the application of the granted derogations accompanied by a staff-working document on ESA 2010 data availability and derogations and on ESA 2010 data quality.

- Report from the Commission to the European Parliament and the Council on the application of Regulation (EU) No 549/2013 of the European Parliament and of the Council of 21 May 2013 on the European System of national and regional accounts in the European Union and on the application of the granted derogations (COM(2018)506).

4 | Relevance

Relevance is an attribute of statistics measuring the degree to which statistics meet current and potential needs of the users.

It examines whether all the statistics that are needed are produced and the extent to which the concepts used (definitions, classifications, etc.) reflect user needs.

This chapter gives an overview of work carried out on national and regional accounts to meet user needs. It presents assessment results on data completeness, namely the situation of data transmitted in 2020 and how data availability evolved over time.

The results of the Eurostat user satisfaction surveys since 2015 are also presented to show the trends in end user appreciation of the overall quality of national accounts data and government finance statistics.

4.1 User satisfaction

Statistical offices and national central banks conduct regular surveys to better understand the needs of national accounts data users, and the results are usually published at national level. The surveys are typically addressed to a wide range of users, including government authorities, academics, research institutes and professional associations, as well as the larger public. The surveys cover both user satisfaction and data needs. In addition to surveys, user data requests and inquiries are also scrutinised to identify data needs.

Similarly, Eurostat conducts an EU-level user satisfaction survey, normally each year. This survey is based on a model questionnaire designed to obtain a better knowledge about users, their needs and satisfaction with the services provided by Eurostat. The ESA 2010 domains are included in the 'economy and finance' theme and grouped as 'national accounts' data (including GDP, main aggregates, sector accounts, input-output tables and regional accounts), 'financial accounts and monetary indicators' and 'government finance statistics'.

The most recent user satisfaction survey was conducted in early 2020. Eurostat did not conduct the survey in 2018. The 2020 survey resulted in 726 replies from users of the 'National accounts' data, 182 replies from the users of 'Financial accounts and monetary indicators' and 296 replies from the users of 'Government finance statistics'. The new personal data protection rules that came into force in 2019 resulted in a considerable decrease in the registered user population; therefore, a significant reduction in responses to the ESA 2010 domains was noted for 2019. Nevertheless, with 1 842 replies in 2020, the overall number of respondents for the entire user satisfaction survey almost doubled.

'Economy and finance' is one of the statistical areas most often utilised and typically receives one of

the highest positive evaluations ('very good' or 'good') for the overall quality of statistics, including for timeliness, completeness and comparability. The results for data quality in 2020 marked a significant increase, making it the year with the highest scores in the user satisfaction survey, while national accounts is the top domain for almost all quality dimensions.

Figure 1: User satisfaction survey - overall quality of 'national accounts', surveys since 2015

As shown in Figure 1, the overall quality of 'National accounts' was perceived as 'very good' or 'good' by 80.6% of users in 2020, an increased share compared to previous years. The share of users replying with the category 'poor' or 'very poor' decreased. In the 2019 survey, the share of 'very good' or 'good' ratings was lower than in previous years.

Figure 2: User satisfaction survey - overall quality of 'financial accounts and monetary indicators', surveys since 2015
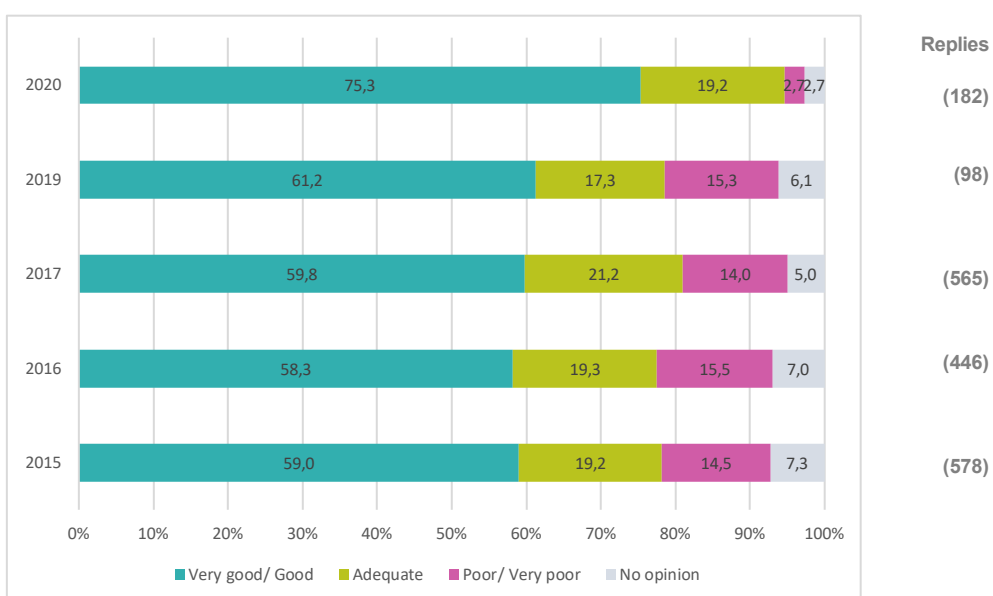
The assessments for the overall quality of 'Financial accounts and monetary indicators' shown in Figure 2 **are similar**, with the share of 'very good' or 'good' assessments rising to 75.3% in 2020 from 61.2% in 2019 and the share of 'poor' or 'very poor' assessments of overall quality diminishing as a consequence.

Figure 3: User satisfaction survey - overall quality of 'government finance statistics', surveys since 2015
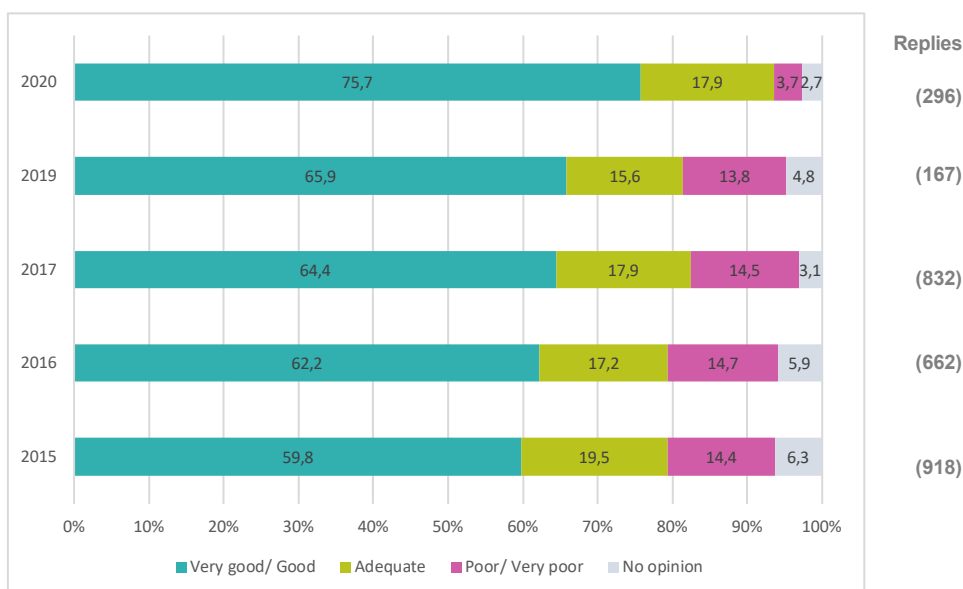
Similarly, in the assessments for the overall quality of 'government finance statistics' shown in Figure 3, the share of 'very good' or 'good' assessments rose to 75.7% in 2020 from 65.9% in 2019. The share of 'poor' or 'very poor' assessments decreased to less than 4% compared to 13.8% in the previous year's survey.

The data completeness of 'national accounts' was assessed as 'very good' or 'good' by 71.8% of users in 2020, up from 56.2% in 2019. For 'financial accounts and monetary indicators' 67.6% of users assessed data completeness as 'very good' or 'good' (55.1% in 2019) and for 'government finance statistics', 64.5% of users assessed data completeness as 'very good' or 'good' (58.7% in 2019). The data timeliness of national accounts data and the data comparability were assessed to be 'very good' or 'good' by 73.3% and 67.8% of users, respectively (56.9% and 56.2% in 2019). The timeliness and comparability of 'Financial accounts and monetary indicators' was assessed as 'very good' or 'good' by 71.4% and 62.6% of users, respectively (62.2% and 56.1% in 2019). For 'government finance statistics' data, these percentages were 67.6% for data timeliness (57.5% in 2019) for data comparability (59.9% in 2019).

Generally, the results in the various response categories for 'National accounts', for 'Financial accounts and monetary indicators' and 'government finance statistics' improved significantly compared to the previous survey in 2019. Eurostat looked in detail at the results of the survey and at the comments provided by individual users in order to understand better these changes. Generally, users suggested improvements to the quality of statistical data by, in particular, improving timeliness and reducing data gaps due to confidentiality and late sending of data for some countries. Most comments mentioned difficulties in navigating and not being able to easily access the vast information that is available on the Eurostat site. Other suggestions included: providing data at a more disaggregated level and at a more detailed regional level; providing cross-country and cross-sector comparisons; improving availability of financial statistics (i.e. foreign direct investments stocks and flows, financial assets, intra/ extra-EU trade, etc.); and improving metadata. For the latter, individual users pointed to improvements such as: giving clear, easy-to-understand and less

technical explanations, and trying to avoid specialist language; providing metadata at a more detailed level, always giving definitions for all codes and explanations of methodology; and regularly updating metadata.

4.2 Actions to meet user needs

In response to user requests, Eurostat and Member States worked from 2018 to 2021 to review and improve existing practices for enhancing cross-domain consistency of data under ESA 2010. Several actions have been initiated with the help of the dedicated task force on ESA cross-domain consistency. They included analysis of practices, developing recommendations and addressing the need for possible improvements in the ESA 2010 transmission programme.

As a result, in March 2019, Eurostat published a handbook on Consistency of ESA 2010 based national accounts, which was prepared with contributions from the task force members. The handbook focuses on the numerical consistency of the accounts. It contains definitions, explanations, recommendations and examples of good practice under the current ESA 2010. All recommendations aim to ensure that the output of national accounts compilation is numerically consistent across the related accounts and their data sets.

In addition, a mid-term review of the ESA 2010 transmission programme started in 2019 to identify desired changes in data transmission requirements that facilitate the cross-domain consistency. The analysis showed that there was room for aligning the deadlines for reporting some accounts. It also noted some gaps in data requirements and an opportunity to simplify certain data requirements, to improve harmonisation across tables and enhance the clarity of instructions. Therefore, Regulation (EU) No 549/2013 is to be amended to update Annex B, which describes the ESA 2010 transmission programme. Eurostat prepared the proposed changes, working together with the task force and Member States throughout 2020-2021. At the same time, the amendment of the Regulation will introduce changes to Annex A (conceptual basis) regarding the new Classification of Individual Consumption by Purpose (COICOP 2018) in national accounts and repeal outdated legal acts related to ESA 95.

All the amendments were presented and discussed within the task force and working groups, and to the Directors of Macroeconomic Statistics (DMES), up until June 2021.

Work on preparing a final proposal for the amendment of Regulation (EU) No 549/2013 is currently ongoing. Eurostat's proposal was subject to an inter-service consultation with the other Directorates-General of the Commission and presented to the European Statistical System Committee for opinion.

The European Commission legislative proposal will be lastly discussed by the European Parliament and the Council for endorsement. The aim is to implement the revised requirements introduced by the amended Regulation with the next coordinated benchmark revision of national accounts in 2024.

4.3 Data production and conceptual aspects under COVID-19

Since March 2020, the COVID-19 pandemic has not only severely endangered the health and economic conditions of millions of people in the EU and worldwide, but also affected the compilation of statistics in many ways. While the ESS has overall been very successful in maintaining the dissemination of timely and reliable national accounts statistics, the challenges caused by COVID-19 were multiple. Notably, these included dealing with disruptions in the collection of source data and usual economic and econometric relationships in addition to organisational, technical and methodological compilation aspects.

In order to improve the understanding of estimates in relation to the particular circumstances created by the COVID-19 pandemic, Eurostat stepped up its efforts to improve the availability of guidance (three notes on QNA compilation, QSA compilation and transmission aspects) and metadata. As from 2020Q1, Eurostat started to collect metadata on the timing and severity of the COVID-19 impact on the economy, estimation techniques used, and on the quality and reliability of the estimates. Due to time constraints, the collection of metadata is rather limited and covers only main aspects. However, metadata were much appreciated by users and helps to be fully transparent on how the pandemic has affected national accounts. The latest available metadata for 2020Q3, 2020Q2 and 2020Q1 are provided in Eurostat's website on national accounts.

In the domain of government finance statistics, country-specific metadata providing information on the impact and recording of COVID-19 measures were agreed with national compilers and published for 2020Q1, 2020Q2 and 2020Q3. Furthermore, coherent use of data flags (provisional data) was assured throughout 2020. Guidance on the recording of government measures as a response to the COVID-19 pandemic was published.[4] In order to ensure continued accuracy of data, Eurostat started collecting metadata on government measures to counter the impact of the COVID-19 pandemic in a specific template, designed to serve the needs of quarterly GFS validation as well as EDP verification.

Against this background, Annex 4 analyses the development of key economic indicators from main aggregates and quarterly sector accounts. It presents the information that has been collected through metadata that NSIs compiled specifically on the impact of COVID-19. Annex 4 focuses on the main GDP aggregates (including employment) and analyses the developments of key variables in quarterly sector accounts.

4.4 Completeness rate

The ESA 2010 transmission programme specifies the data requirements for EU Member States. Temporary derogations according to the ESA 2010 Transmission programme expired on 1 January 2020. However, there are currently expired derogations for which data are missing or the timeliness had not been fully addressed. Currently only Switzerland has derogations in place and they will be in force until 2025.

This section provides an overview, by ESA 2010 domain, of the data that countries were expected to submit in 2020 and which were actually received and validated by Eurostat from 1 January to 31 December 2020. To allow for comparable assessment, the percentages are based on a completeness indicator calculated from the number of data cells included in the tables, covering all reference periods specified as mandatory in the ESA 2010 transmission programme[5].

4.4.1 Quarterly data

The ESA 2010 transmission programme requires EU Member States to submit quarterly tables for:

- national accounts main aggregates (Table 1);
- non-financial sector accounts (Table 801);
- government finance statistics (Tables 27 and 28).

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[4] Guidance notes - Government finance statistics and EDP statistics - Eurostat (europa.eu)

[5] Please note that derogations are not taken into account when computing the averages.

The overall average completeness rate of quarterly data continued to be very high in 2020 (see Figure 4). Thirteen Member States achieved a full completeness rate for all quarterly tables across all domains: Belgium, Ireland, Spain, Cyprus, Lithuania, Luxembourg, Hungary, the Netherlands, Austria, Portugal, Romania, Slovenia and Sweden, while ten Member States achieved almost full completeness (above 99.5%) with data gaps in one table: Czechia, Denmark, Germany, Estonia, Greece, France, Italy, Latvia, Slovakia and Finland.

On average, across all four tables of quarterly data submissions, the lowest completeness rate among EU Member States in 2020 was observed for Malta, Croatia and Poland.

Figure 4: Completeness rate of national accounts quarterly tables reported in 2020
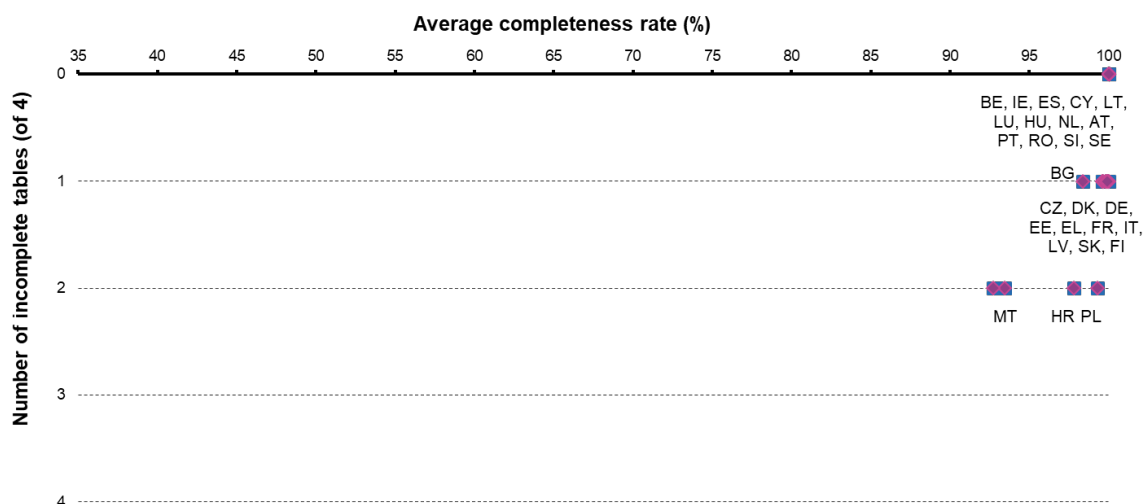
The completeness rate for quarterly national accounts data provided by individual EU Member States and by Iceland, Norway and Switzerland can be found in Annex 2. The completeness rate for each country is calculated on the basis of mandatory data submissions in 2020, which covered data submitted for reference quarters up to and including 2020Q3.

For **quarterly national accounts main aggregates**, data completeness was very high, with the EU average at 99.0% and the EA-19 average at 98.9%. Twenty one EU Member States achieved 100%, and all Member States had a completeness rate above 98.5%, with the exception of Croatia (93.6%) and Malta (81.2%). Iceland and Switzerland had the lowest completeness of EFTA countries (37.7% and 73.7%, respectively).

For **quarterly non-financial sector accounts** (see Annex 2), the EU average completeness rate was 99.2%. Seventeen Member States submitted all required data. The lowest completeness rate was observed for Bulgaria (93.4%), but it was nonetheless an improvement from the 2019 completeness rate (93.2%), and Malta (92.5%). The EFTA countries submitted data with a lower completeness; Norway's completeness rate for the quarterly non-financial sector accounts is 80.3% (79.6% in 2019) and Iceland's completeness rate is 46%. Switzerland has derogations for the full set of quarterly non-financial accounts and does not report this data.

The completeness rate of **quarterly government finance statistics** was on average higher than that observed for tables submitted for the other quarterly national accounts domains. The EU average reached 99.9% in 2020 for Table 27 (quarterly financial accounts of general government), with a 100% completeness rate for all but two of the EU Member States (Germany and Slovakia),as well as Norway. Iceland and Switzerland had not supplied Table 27 (partially). There was 100% completeness for Table 28 (quarterly general government gross debt for all EU Member States and for Norway, but not for Iceland (14%) and Switzerland (0%).

4.4.2 Annual data

In 2020, the EU Member States, as well as Norway, Iceland and Switzerland, reported a total of 19 mandatory annual national accounts tables across seven domains:

- National accounts main aggregates (Tables 1, 3, 5, 20, 22 and 26);
- Government finance statistics (Tables 2, 9, 11);
- Non-financial sector accounts (Table 8);
- Financial accounts (Tables 6 and 7);
- Supply, use and input-output tables (Tables 15, 16, 17);
- Regional accounts (Tables 10, 12, 13);
- Supplementary table on pensions in national accounts (Table 29).

In 2020, the average completeness rate of annual data was high for all domains, and overall, the EU average across all tables reached 97.5% (arithmetic average). For individual tables, the EU average completeness rates ranged from a low of 89.0% for accrued-to-date pension entitlements in social insurance (Table 29) to a high of 99.8% for main aggregates of general government (Table 2).

For annual tables, nineteen Member States submitted all, or nearly all, mandatory data (completeness rate above 98% for average overall completeness, see Figure 5). Seven Member States achieved a full completeness rate for all annual tables across all domains - Germany, Spain, Cyprus, Italy, the Netherlands, Austria and Slovakia - while seven Member States achieved almost full completeness (above 99.5%) with minor data gaps in one table: Belgium, Czechia, Ireland, Latvia, Lithuania, Hungary and Slovenia.

Figure 5: Completeness rate of national accounts annual tables reported in 2020
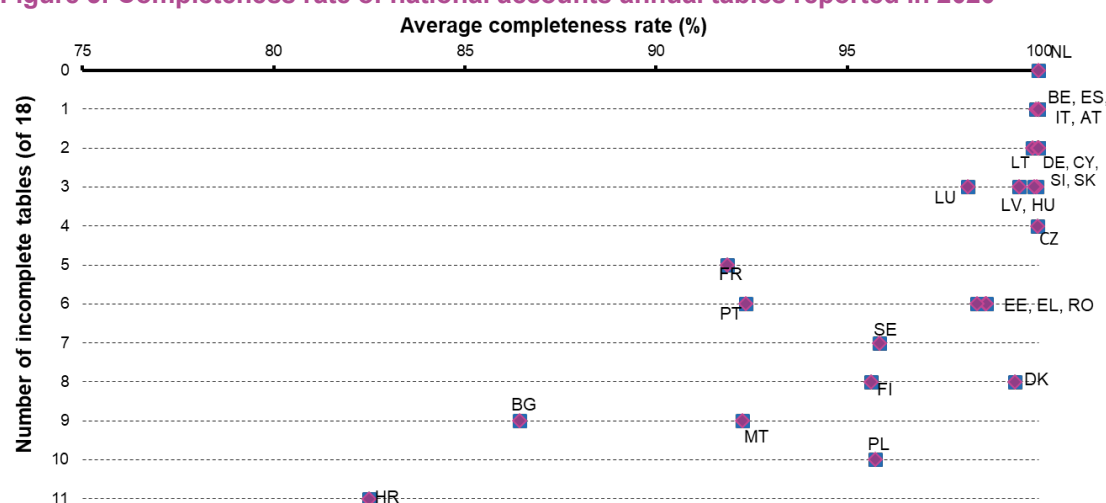
The completeness rates for annual national accounts data provided by individual EU Member States, as well as Iceland, Norway and Switzerland, can be found in Annex 2. The completeness rate for each country is calculated on the basis of mandatory data submissions in 2020, which for most of the annual tables covers data submitted for reference years up to and including 2020.

For **annual national accounts main aggregates,** the overall completeness rate continued to be very high in 2020. The EU average rate exceeded 99.5% for all tables, an improvement compared to 2019 (98%). Twenty-five EU Member States submitted all mandatory data, achieving completeness rates of 100% for all annual tables, with the exception of Croatia and Malta (93.4% for both). Norway achieved 100% completeness rate for the annual main aggregates, while Iceland and Switzerland achieved lower completeness rates, 84% and 75%, respectively.

Annual government finance statistics continued to have the highest average completeness rate among all the annual tables in the ESA 2010 domains. The EU average completeness rate of main

aggregates of general government (Table 2) was 99.8%, while for detailed tax and social contribution receipts (Table 9) it was 99.7% and for general government expenditure by function (Table 11) it was 99.6%.

The overall completeness rate of **annual non-financial sector accounts** (Table 8) was high with an EU average of 94.5%. Twenty countries submitted all, or nearly all, mandatory data (above 99% completeness). Two EU Member States submitted less than 95% of mandatory data, Croatia (91.9%) and Malta (70.9%), while Bulgaria did not transmit Table 8 by the time of extraction of data (February 2021).

For **annual financial accounts**, the EU average completeness rate of both the annual financial accounts by sector (Table 6) and the balance sheets for financial assets and liabilities (Table 7) reached 99.9%, with almost all EU Member States submitting almost all mandatory data. Three MIP headline indicators are derived from annual financial accounts: private sector debt, private sector credit flow and total financial sector liabilities. In 2020, the data underlying the MIP indicators were sufficiently complete for their validation for MIP purposes.

For **regional accounts** in 2020, the EU average completeness rate for tables by industry (Tables 10 and 12), by household accounts (Table 13), by NUTS level 2 region (Tables 10 and 13) and by NUTS level 3 region (Table 12) rose to 96.7% for all Member States except France.

Relative to the other national accounts tables, the average completeness rates for **supply, use and input-output tables** were slightly lower. The EU average completeness rates for annual supply and use tables (Tables 15 and 16) for reference year 2017 were 97.0% and 96.7%, respectively.

For the three-yearly supplementary table on accrued-to-date **pension entitlements** in social insurance national accounts (Table 29), the EU average completeness rate is 89.0%. Fifteen Member States submitted all, or nearly all, mandatory data (above 99% completeness) – Belgium, Bulgaria, Estonia, Spain, France, Croatia, Latvia, Lithuania, Hungary, Malta, the Netherlands, Slovenia, Slovakia and Finland.

4.5 Completeness rate of data underlying key indicators

MACROECONOMIC IMBALANCE PROCEDURE INDICATORS

The analysis in the Alert Mechanism Report (AMR) builds on the economic reading of a scoreboard of 14 headline indicators covering the most relevant areas of macroeconomic imbalances: external and internal imbalances, competitiveness positions, labour market and social aspects. These 14 indicators are complemented by 28 auxiliary indicators providing additional information.

The economic rationale defining the medium- to long-term horizon for MIP analysis requires the availability of 10-year long time series for all MIP indicators. The MIP scoreboard is published usually in November each year, in the Statistical Annex to the AMR. This package forms one of the major components launching the European Semester in autumn each year. The latest report was the Alert Mechanism Report 2022 (COM(2021) 741), published on 24 November 2021.

The national accounts are one of the major sources of data underlying the MIP indicators. Five out of 14 headline MIP scoreboard indicators are derived from national accounts data. In recent years, revisions to the set of auxiliary indicators were introduced in order to benefit from improvements in available statistics and to ensure the pertinence of the indicators. Following these changes, nine out of twenty-eight auxiliary indicators are now derived from national accounts data. Moreover, many of the MIP indicators are compiled relative to GDP.

The quality of data underlying the MIP has improved as a consequence of the entry into force of ESA 2010 in 2014. However, the process of implementing the new statistical standard led to revisions

and, due to derogations, temporarily shortened the available series. Since 2014, the overall completeness of underlying data for MIP indicators has substantially improved, and in 2020 it was very high for all EU Member States. Data coverage for the 10-year timespan needed for the 2022 Statistical Annex (2011-2020) was 100% for all headline indicators. The overall completeness rate of auxiliary indicators was also nearly 100 %.

The key part of the MIP, however, covers in-depth reviews, which in line with Regulation (EU) No 1176/2011 of the European Parliament and of the Council on the prevention and correction of macroeconomic imbalances establish whether imbalances exist. For these in-depth reviews, the completeness of detailed ESA 2010 data is essential. In particular cross-country bench-marking and analytical assessment tools used in the in-depth reviews depend on the timeliness, accuracy and completeness of national accounts main aggregates, government finance statistics, and non-financial and financial sector accounts.

4.6 Evolution of data availability

Since the start of transmission of ESA 2010 data in September 2014, data availability has significantly improved for the EU as a whole, as well as for the majority of individual EU Member States and EFTA countries. The assessment in this section is based on a more aggregate method than the completeness rate charts for individual tables found in Annex 2. The charts in Figure 6 and Figure 7 provide the trend in data availability from the end of 2017 up until the situation at the end of 2020. In order to examine the data availability at the end of each year analysed the extraction was done at January 2018, January 2019, February 2020 and February 2021, respectively. The charts in question illustrate the progress in data submissions from one year to the next, as the percentages of tables in each of the four completeness categories.

Figure 6: Evolution of overall data availability from 2017 to 2020
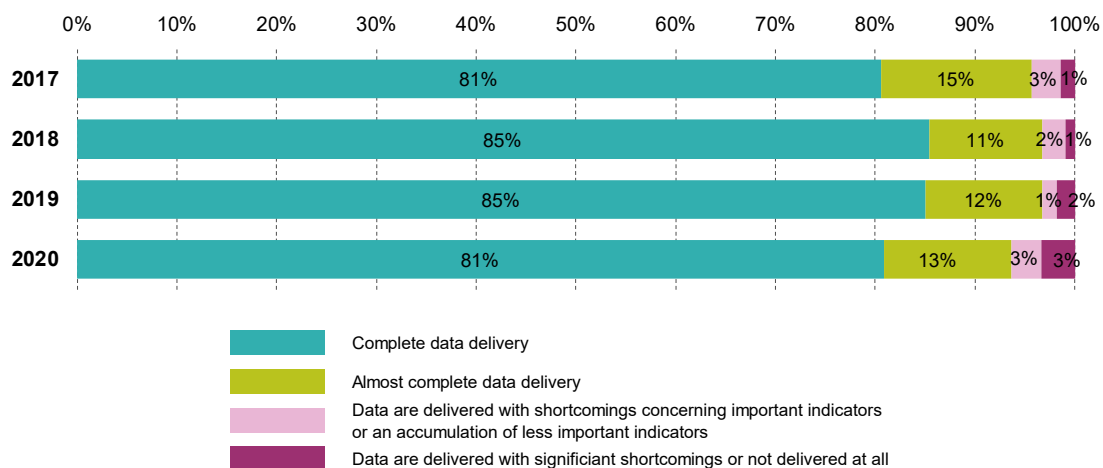
The chart in Figure 6 shows data availability calculated as the average of all EU Member States and EFTA countries. It clearly shows a trend of improvement since the first Eurostat quality report, with the percentage of complete tables increasing from 81% in 2017 to 85% in 2018 and 2019. The decrease to 81% that is noted in 2020 can be explained by the expired derogations that remain open. The percentage of almost complete data has fallen from 15% in 2017 to 13% in 2020. There was also a reduction in the share of data delivered with significant shortcomings, or not delivered at all, down from 1.4% in 2017 to 0.9% in 2018 and increasing to 2% in 2019 and 3% in 2020 due to the open expired derogations at the time of the extraction of the data.

In Figure 7, the data availability charts per country show in four assessment categories: how many of

the 23 tables under the ESA 2010 transmission programme were delivered complete; almost complete; with some shortcomings; and, with significant shortcomings. There has been progress for Czechia, Spain, Ireland, as well as Denmark, Italy, Austria, Poland and Slovakia. By contrast, six countries (Bulgaria, Croatia, Malta, Romania and Iceland and Norway) show mixed progress, with a persistent share of tables being delivered with significant shortcomings or not being delivered at all, also affected by expired derogations that are still open.

Figure 7: Data availability per country as it evolved from 2017 to 2020, expressed as the number of the 22 tables under the ESA 2010 transmission programme delivered each year, in each of the four availability categories

Legend:
- Complete data delivery
- Almost complete data delivery
- Data are delivered with shortcomings concerning important indicators or an accumulation of less important indicators
- Data are delivered with significant shortcomings or not delivered at all
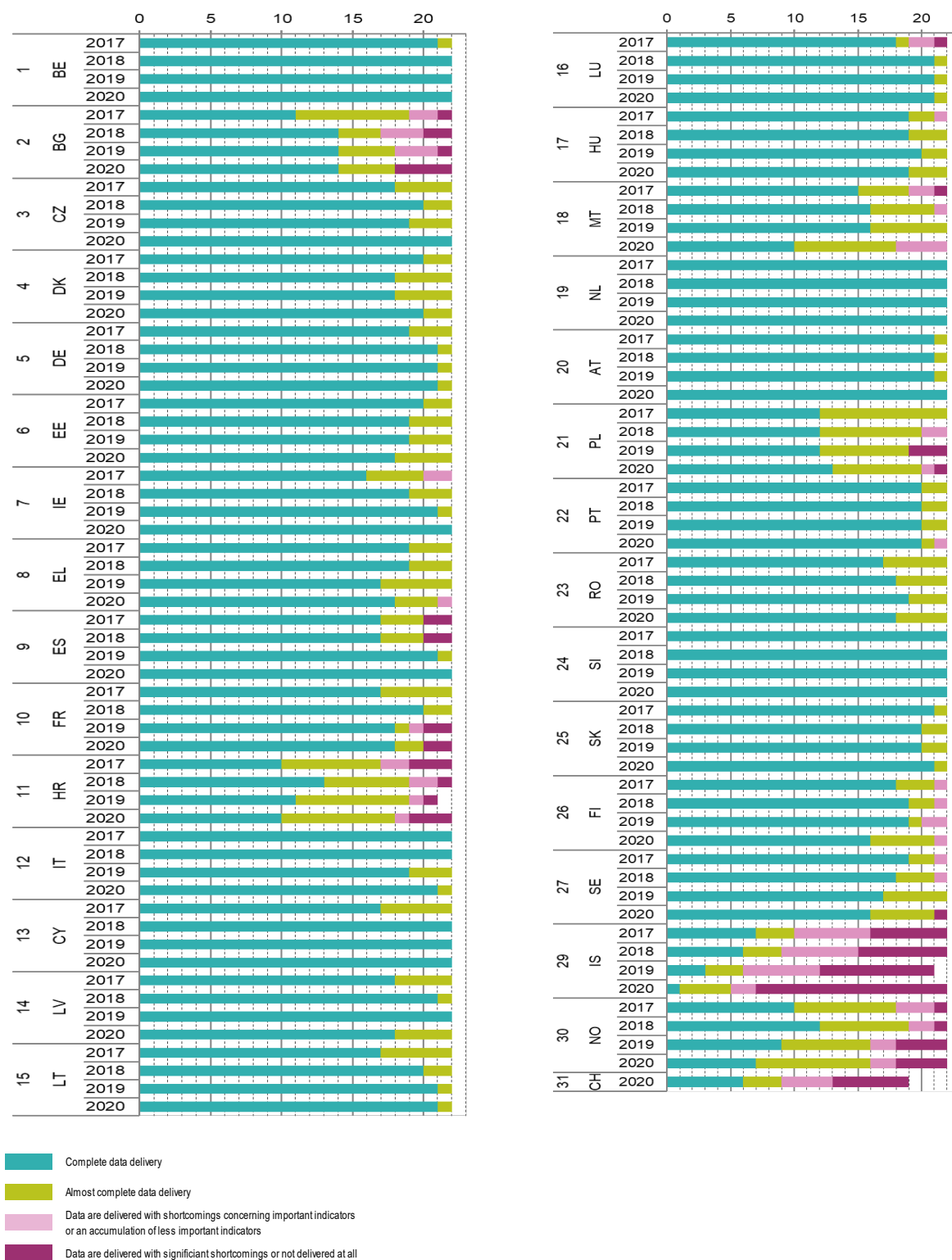
5 Accuracy

Accuracy of statistical outputs, in the general statistical sense, is the degree of closeness of computations or estimates to the exact or true values that the statistics were intended to measure.

In national accounts, a direct approach for measuring accuracy is difficult to apply, thus the main instrument used is the analysis of revisions.

Revisions are broadly defined as any change in a value of a statistic released to the public. Revisions are made when new data sources and better information become available and thus result in more accurate observations. Therefore, even if some relevant information is still not available, revisions are inevitable whenever released statistics report promptly on economic developments.

Revisions should be considered a normal phenomenon to progressively increase the quality and, in particular, the accuracy of data. Revision policy should be recognised as an important aspect of good governance in statistics. Good governance in statistics, in turn, is part of a broader policy of transparency and accountability of the public sector.

Revisions and their correct interpretation have two-sided effects on both users and producers of statistical data. From the users' perspective, revisions improve the information available and thus are welcome. However, they may also lead to an adjustment of measures used in economic analysis and, as a consequence, result in a different assessment of the state of the economy. From the producers' perspective, the new information brought by the revisions describes economic developments more accurately; yet, frequent and/or major revisions can damage the credibility of data. Finally, a lack of revisions can also indicate that indicators for which more accurate source data are available are not being updated and that errors are not being corrected; i.e. that the statistics published are stable but potentially inaccurate.

It follows that a well-established and publicly-communicated revision policy is a sign of strength of the statistical system in question.

5.1 Revision policy

The importance of developing a revision policy and performing revision analysis is increasingly recognised, and considerable work has been done in this field over the past few years, both by national and international statistical organisations.

5.1.1 Harmonised European revision policy

The 2012 harmonised European revision policy (HERP) endorsed by the Committee on Monetary, Finance and Balance of Payments Statistics (CMFB) was adopted shortly before the introduction of the new statistical manuals and revised transmission programmes in 2014. In principle, the scope of the 2012 HERP extended across the national accounts and balance of payments domains, in major as well as routine revisions, and in both quarterly and annual frequencies. It was envisaged that countries would start implementing the 2012 HERP with the introduction of the new standards under the ESA 2010 and the sixth edition of the IMF's Balance of Payments and International Investment Position Manual in 2014.

Reported to the CMFB in July 2015, the results of stocktaking showed implementation difficulties: 9 EU Member States had implemented the policy by 2014, 8 had not, and 12 had implemented it only partially. As a follow-up, the CMFB created the Task Force on Harmonised European Revision Policy (Task Force-HERP) at its July 2015 meeting to address issues related to routine revisions. The Directors of Macroeconomic Statistics of the European Statistical System (ESS) mandated a separate Task Force on Benchmark Revision Policy to investigate benchmark revisions. After 2 years of intensive work, adaptations were made where appropriate and the CMFB published a communication on Harmonised European Revision Policy for Macroeconomic Statistics supported by Eurostat and the ECB, recommending that Member States follow a specific sequence of routine revisions for some annual and quarterly data. DMES recommended that EU Member States disseminate the results of the benchmark revisions in 2024.

5.1.2 National revision policies

Most EU Member States and EFTA countries provide information on national revision policies online. Croatia, Luxembourg and Malta have not made their revision policies public. However, many publicly available national revision policies often only cover the domain of non-financial accounts or parts of it, and lack information on revisions in the domain of financial accounts. Generally, aligning national policies to the HERP still remains a challenge. To address these issues, Eurostat has made it possible for countries to obtain financial support through grants for work on the national revision policy and practice.

A majority of EU Member States performed benchmark revisions in 2019 while a few countries did so in 2020. A fully coordinated benchmark revision for all Member States is planned in 2024. Eurostat collected information on the benchmark revisions in 2019 and designed a communication strategy for users. Information on the 2019 coordinated benchmark revision was published on the Eurostat website in autumn 2019, including details on the published benchmark revisions. Some countries delayed the benchmark revision to 2020. Information on the 2020 benchmark and routine revisions was published on the Eurostat website in autumn 2020. In July 2021, Eurostat published the Benchmark revisions of national accounts — Impact on sector accounts, analysing the impact of the 2019 benchmark revisions in the institutional sector accounts, focusing on households and non-financial corporations.

Overall, the benchmark revisions followed guidance given in the handbook on Practical guidelines for revising ESA 2010 data — 2019 edition, published as a practical tool for compilers of ESA 2010-based national and regional accounts. Its objective is to translate the voluntary EU recommendations on data revisions into specific practices, ensuring accurate, reliable, consistent and comparable data. The handbook provides good practices for routine and benchmark revisions as well as for non-scheduled revisions.

5.2 Revision practice

There are two important groups of revisions that represent the core of national accounts compilation: routine revisions and major revisions due to changes in methods, data sources and classifications.

Routine revisions are typically revisions that apply to an annual or intra-annual window, combined with a specified depth to backward revisions. For national and regional accounts, the depth is 4 years (including t-1). In other words, routine revisions are changes in published data, which are related to the regular data production process (e.g. estimated values for missing responses are replaced by reported figures). Normally, these routine revisions follow a revision policy, they are published according to a publicly available, pre-announced release/revision calendar.

Major revisions, which are the second group of revisions, can be further broken down into two types:

1. revisions originating from ad-hoc methodological changes or special events; and

2. benchmark revisions occurring on a regular basis (5 years) in order to incorporate the results of changes in basic data sources and/ or new estimation methods.

5.2.1 In-depth analysis of 2020 benchmark and major revisions

Benchmark revisions are a coordinated major European revision carried out at least once every 5 years to incorporate new data sources and major changes in international statistical methodology. They ensure a maximum degree of consistency within national accounts, i.e. the longest possible time series and consistency across Member States and between domains. As data sources and statistical methods evolve, improvements must be introduced in national accounts in a coherent and systematic way. It also helps to ensure the stability of key macroeconomic indicators for policy and business analysis.

The introduction in 2014 of the European System of Accounts 2010 (ESA 2010)[6] represented a coordinated benchmark revision due to changes in concepts, definitions and compilation methods.

In 2019, 17 Member States, namely Belgium, Bulgaria, Germany, Estonia, Spain, Croatia, Italy, Cyprus, Latvia, Lithuania, Hungary, Portugal, Romania, Slovenia, Slovakia, Finland and Sweden, as well as Norway carried out coordinated benchmark revisions of national accounts.

Some Member States opted out of this coordinated initiative and instead carried out their benchmark revisions earlier or later than 2019 due to national needs and in line with the voluntary nature of recommendations. France and the Netherlands implemented their benchmark revisions in 2018, while Austria did so in 2017.

In 2020, Czechia, Malta and Poland carried out benchmark revisions on the entire time series and Lithuania completed the 2019 benchmark revision as a second phase for back series. Iceland and Switzerland also implemented benchmark revisions in 2020. Greece conducted a staged benchmark revision back to 2010, while Luxembourg informed that their planned benchmark revision would be further delayed for some national accounts' domains other than for government finance statistics and (partially for) financial accounts. In addition, Latvia, Ireland and Romania carried out further major revisions in 2020.

In Table 1, the benchmark or major revisions by country are presented.

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[6] Regulation (EU) No 549/2013, *OJ L 174, 26.6.2013, p. 1–727.*

Table 1: Benchmark or major revisions carried out in 2020

Country	Revisions carried out
Czechia	30 June 2020 - Benchmark revision On 30 June 2020 Czechia published a preliminary report of the annual national accounts for 2019 as well as revised reports of the national accounts for 2017 and 2018, which incorporate all available annual data. At the same time, improved methods for obtaining partial estimates resulting from the extraordinary revision of the national accounts, which concerned the whole time series for 1990-2016, were also utilised. News release: http://apl.czso.cz/nufile/Comment_30_06_2020.pdf
Ireland	20 July 2020 – Major revision On 20 July 2020 Ireland published data for National Income and Expenditure 2019, which are the first detailed results of the main National Accounts aggregates and their components for 2019. It includes revisions for the years from 2014 to 2018. The estimates for the most recent years, especially 2019, are based on provisional indicators for the different aggregates and are subject to revision. (A preliminary estimate of the 2019 outturn was already provided in the quarterly accounts release for Q4). News release: https://www.cso.ie/en/csolatestnews/pressreleases/2020pressreleases/pressstatementnationalincomeandexpenditure2019quarterlynationalaccountsquarter12020finalandinternationalaccountsquarter12020final/ Methodological information: https://www.cso.ie/en/releasesandpublications/ep/p-nie/nie2019/methodology/
Greece	16 October 2020 - Benchmark revision The Hellenic Statistical Authority (ELSTAT) announces the 2nd estimate of the Annual National Accounts for the years 2018 and 2019 (provisional data), the revision of base year (2015=100) and the revised data for years 2010-2017 according to the European System of National and Regional Accounts ESA 2010. News release (annual): Link News release (quarterly): https://www.statistics.gr/en/statistics/-/publication/SEL84/-
Lithuania	1 October 2020 - Benchmark revision (2nd stage) In 2020, Statistics Lithuania carried out the second stage of the revision of the time series of the national accounts (NA). This stage of the revision is coordinated within three main domains of macroeconomic statistics; i.e. National Accounts, Balance of Payments and Government Finance statistics, and will cover time series for 1995-2009. NA aggregates for 1995–2018 were revised following the introduction of new data sources and improvement of estimation methods, as well as taking into account the European Commission (EC) request provided after the gross national income (GNI) verification and having harmonised the NA aggregates with the time series of government finance and balance of payments statistics. Break in series for 2010 (introduced with the 1th stage of benchmark revision in 2019) was eliminated. News release: https://osp.stat.gov.lt/informaciniai-pranesimai?eventId=231667
Latvia	30 September 2020 – Major revision CSB has performed major revision on 30 September 2020, incorporating in

	national accounts the results of work done on the certain transaction-specific GNI reservations. The updated time-series include all annual data and also updated quarterly time-series of GDP indicators. News release: https://stat.gov.lv/sites/default/files/Metadati/GDP_2020_benchmark_revision_30092020.pdf
Luxembourg	30 September 2020 - Benchmark revision (only financial accounts) A benchmark revision took place in the financial accounts domain in 2020. For other national account domains, the benchmark revision was postponed. The revisions are mainly due to the recompilation of historical estimates, the revisions in the BOP/IIP and population changes for sectors S.11 and S.127. In addition, because Luxembourg's derogation for the annual financial accounts 1995 – 1998 has expired this year, STATEC expanded the time series, also for the quarterly financial accounts, all the way back to 1995 Q1.Due to COVID-19, STATEC was not able to implement the planned benchmark revision of the non-financial National Accounts in 2020.
Malta	28 August 2020 – Benchmark revision In August 2020, the National Statistics Office (NSO) carried out a benchmark revision in National Accounts data for the reference period 1995Q1 to 2020Q2. The enhancements brought about by the benchmark revision include the publication, for the first time, of GDP data in chain-linked volumes from the production approach. Data in chain-linked volumes has been re-referenced to 2015. News release: https://nso.gov.mt/en/News_Releases/Documents/2020/08/News2020_142.pdf Q&A: https://nso.gov.mt/en/nso/Sources_and_Methods/Unit_A1/National_Accounts/Pages/%E2%80%8BFrequently-Asked-Questions-Benchmark-Revision-2020.aspx Detailed methodological information: https://nso.gov.mt/en/nso/Sources_and_Methods/Documents/National_Accounts/National%20Accounts%20-%20Benchmark%20Revision%202020.pdf
Poland	22 October 2020 - Benchmark revision Poland sent revised annual series incorporating benchmark revisions in October 2020, where the complete time series 1995-2019 were revised This revision of national accounts incorporated changes resulting from: 1) Implementation of Manual on Deficit and Debt (2019 edition); 2) Reservations placed as a result of GNI verification cycle 2016-2019; 3) Application of new and updated data sources as well as improvement of compilation methods. The first information on the overall impact of the revision on GDP for 2015 was provided to Eurostat in June 2020. Preliminary analyses of the whole time series starting from 1995 revealed that the impact of benchmark revision on GDP ranged from -0.63% in 2013 to 0.20% in 2001 and 2002. Concurrently with the benchmark revision, the reference year 2010 will be replaced by year 2015. The representatives of data users were informed on the planned benchmark revision in December 2019. The official information has been published on the Statistics Poland website on 14 August 2020 and in the upcoming dissemination of national accounts statistics in August 2020. Detailed data and metadata regarding benchmark revision 2020 were made publicly available in October 2020. News Release (PL): https://stat.gov.pl/aktualnosci/informacja-o-zaplanowanych-rewizjach-

	rachunkow-narodowych-w-latach-2020-2022,308,1.html Detailed methodological information (PL): https://stat.gov.pl/obszary-tematyczne/rachunki-narodowe/roczne-rachunki-narodowe/informacja-o-zaplanowanych-cyklicznych-rewizjach-rachunkow-narodowych-w-latach-2020-2022,12,1.html
Romania	9 October 2020 - Major revision Gross domestic product for the period 2010-2017 was revised for implementing certain reservations placed by Eurostat during the GNI verification cycle in relation to: - Including the changes from the Balance of Payments; - Including the changes linked to the revision of the Government sector; - Compensation of employees in relation to the Rest of the World; - Revision of the estimates of consumption of fixed capital using the Perpetual Inventory Method; - Implementing specific issues: - The improvement of the estimates on income in kind; - The improvement of the output estimation for „Financial Corporations" sector; - The improvement of the estimates for acquisition less disposal of valuables; - The estimation of acquisition of used cars from EU countries. The revision was based on the new macroeconomic indicator revision policy which was elaborated to comply with the Regulation (EU) 2016/2304 of 19 December 2016 on the modalities, structure, periodicity and assessment indicators of the quality reports on data transmitted pursuant to Regulation (EU) No 549/2013 of the European Parliament and of the Council. News Release: https://insse.ro/cms/sites/default/files/com_presa/com_pdf/pib_2018e_def.pdf
Iceland	30 November 2020 - Benchmark revision Time series from 1995-2019 have been revised. As a part of the revision, the reference year for constant prices and chain-linking has been shifted from 2005 to 2015. The main revision points are as follows: - The reference year was shifted from 2005 to 2015 in the process of chain linking the GDP figures. - An extensive review of sector classification of public entities previously classified outside the public sector that affects government consumption expenditure. - An increased coverage of households' consumption expenditure as consumption of digital service is incorporated. - Errors in credit card and cash turnovers are in this revision corrected affecting the household consumption expenditure back to 2014. - Revision of price indices used in the deflation process for governments consumption expenditure. - The implementation of ÍSAT2008 (statistical classification of economic activities based on the EU classification (NACE Rev. 2)) for fixed capital formation, replacing the ÍSAT95, as well as revised public investment. - Correction of older time series of external trade, where missing or improved sources are now available, as well as implementation of the IMTS 2010 framework for trade in goods. News release: https://statice.is/publications/news-archive/national-accounts/national-accounts-benchmark-revision/ Methodological note: http://hagstofan.s3.amazonaws.com/media/public/2020/c636ba30-dc59-4661-9cbe-a641d9f07cd0.pdf Working paper: http://hagstofan.s3.amazonaws.com/media/public/2020/11163b91-c98f-4245-bbb4-6087b3510347.pdf

	28 September 2020 - Benchmark revision
Switzerland	The results of the national accounts published by the Federal Statistical Office have been revised upwards. New data series are available for the period 1995 to 2019. This revision was carried out in collaboration with the sector responsible for quarterly estimates at SECO, provides methodological improvements and takes into consideration new data. It was carried out in coordination with European countries and results in a gross domestic product (GDP) level increase of between 2.8% and 3.6% over the 1995-2017 period. The GDP in 2019 at current prices amounts to CHF 727 billion. The revision affects all institutional sectors and all items of the NA that are reported collectively. The main changes concern two areas: the revision of the methods and data sources used and improvements to coverage and completeness. Full coverage of all economic activities is a key component of the NA's quality. News release (SECO): https://www.seco.admin.ch/seco/en/home/seco/nsb-news.msg-id-80532.html https://www.newsd.admin.ch/newsd/message/attachments/63072.pdf News release (BFS): https://www.bfs.admin.ch/bfs/en/home/statistics/national-economy.assetdetail.14447443.html Methodological note: https://www.seco.admin.ch/dam/seco/en/dokumente/Wirtschaft/Wirtschaftslage/VIP%20Quartalssch%C3%A4tzungen/2020_technische_notiz_vgr_benchmark_revision.pdf.download.pdf/2020_technical_note_NA_benchmark_revision.pdf

5.2.2   Revisions of European aggregates

The revision rates for European aggregates presented are based on two commonly used statistical measures to gauge the size of revisions of economic variables published on an intra-annual frequency: average revision rates and average absolute revision rates. The latter avoids the offsetting effects of combined negative and positive revisions on the average rate.

For the European aggregates of national accounts data for the euro area and the EU, Eurostat publishes:

- quarterly estimates of GDP and employment from the quarterly **main aggregates** data;

- the saving rate and investment rate for households and non-profit institutions serving households (NPISH) and the investment rate and profit share for non-financial corporations from the quarterly **non-financial sector accounts** data; and
- data on the government debt and deficit from quarterly **government finance statistics**.

Eurostat also publishes data on government debt and deficits for the euro area and EU from the data provided for the **excessive deficit procedure** in the first and second notifications, including also data on government total revenue and total expenditure. While information on revisions in government finance statistics is not provided here, it can be found in the news releases on the Eurostat website.

REVISIONS OF GDP AND EMPLOYMENT GROWTH ESTIMATES FOR THE EU AND THE EA

Tables 2 to 5 present the subsequent revisions of EU and euro area (EA-19) aggregates released between 2017Q3 and 2020Q3. The **quarter-on-quarter GDP growth rates** and the **year-on-year GDP growth rates** are given on the left-hand side of the tables and the revisions of the growth rates appear on the right-hand side.

In general, the four GDP estimates (at t+30, t+45, t+65 and t+100) were stable as both average revisions, and average absolute revisions were small. For the EA GDP estimates, the average absolute revision between the t+100 estimates and the t+30 estimate was 0.1 percentage points for both the quarter-on-quarter and year-on-year growth rates. Upward revisions were most common, and there were upward quarter-on-quarter revisions for all estimates in 8 of the 13 quarters. Downward revisions were observed only in 3 of the 13 quarters. For the EU GDP estimates, the average absolute revision between the t+100 estimates and the t+30 estimate was at 0.14 percentage points for the quarter-on-quarter growth rates, and 0.11 percentage points for the year-on-year growth rates. Once again, upward revisions were most common, and there were upward revisions across all estimates in 8 of the 13 quarters. The largest revisions in GDP growth estimate for both the EA and EU aggregates occurred between 2020Q1 and 2020Q3, coinciding with the COVID-19 pandemic where much bigger growth/contraction rates than usual were observed; however in relative terms revisions still remained small.

Tables 6 and 7 present the subsequent revisions of Eurostat's **employment growth estimates** for the EU and EA aggregates released between 2017Q3 and 2020Q3. From 2018Q3, the revision schedule changed, and the employment is released at t+45, t+65 and t+100 days after the quarter (from only t+75 days).

Generally, there were low revision rates between the first estimate and the following estimations. The EA quarter-on-quarter estimates showed an average revision of 0.01 percentage points (2018Q2-2020Q3) between the flash estimate at t+45 days and the estimation at t+100 days. The EU quarter-on-quarter estimates had an average revision of -0.01 percentage points for the same period. The absolute average revision was 0.01 for the EA and 0.02 for the EU.

Table 2 : Revisions of quarterly GDP for the EA-19 aggregates (quarter-on-quarter growth rates) based on data for reference quarters from 2017Q3 to 2020Q3

EA-19	Quarter-on-quarter, Eurostat growth estimates				Quarter-on-quarter revisions			
	t+30	t+45	t+65	t+100	45-30	65-30	65-45	100-30
2017Q3	0.58	0.61	0.61	0.71	0.03	0.02	-0.01	0.13
2017Q4	0.56	0.59	0.60	0.67	0.03	0.04	0.01	0.11
2018Q1	0.42	0.40	0.38	0.37	-0.02	-0.03	-0.02	-0.05
2018Q2	0.35	0.37	0.38	0.45	0.03	0.04	0.01	0.10
2018Q3	0.16	0.18	0.16	0.16	0.03	0.00	-0.03	0.00
2018Q4	0.22	0.19	0.22	0.22	-0.03	-0.01	0.02	0.00
2019Q1	0.38	0.40	0.39	0.45	0.02	0.01	-0.01	0.07
2019Q2	0.20	0.19	0.20	0.19	-0.01	0.00	0.01	-0.01
2019Q3	0.19	0.22	0.23	0.27	0.03	0.05	0.02	0.09
2019Q4	0.09	0.06	0.11	0.11	-0.03	0.02	0.06	0.01
2020Q1	-3.83	-3.75	-3.59	-3.58	0.08	0.24	0.16	0.24
2020Q2	-12.11	-12.08	-11.77	-11.80	0.03	0.34	0.31	0.31
2020Q3	12.67	12.55	12.47	12.44	-0.11	-0.20	-0.08	-0.22
Average revision					0.01	0.04	0.04	0.06
Average absolute revision					0.04	0.08	0.06	0.10

Table 3: Revisions of quarterly GDP for the EA-19 aggregates (year-on-year growth rates) based on data for reference quarters from 2017Q3 to 2020Q3

EA-19	Year-on-year, Eurostat growth estimates				Year-on-year revisions			
	t+30	t+45	t+65	t+100	45-30	65-30	65-45	100-30
2017Q3	2.45	2.48	2.59	2.76	0.03	0.14	0.11	0.31
2017Q4	2.65	2.68	2.67	2.76	0.03	0.02	-0.01	0.11
2018Q1	2.52	2.51	2.54	2.51	-0.02	0.02	0.03	-0.01
2018Q2	2.14	2.17	2.11	2.17	0.03	-0.02	-0.05	0.03
2018Q3	1.66	1.69	1.64	1.62	0.03	-0.03	-0.05	-0.04
2018Q4	1.18	1.15	1.13	1.15	-0.03	-0.05	-0.02	-0.03
2019Q1	1.16	1.18	1.17	1.24	0.02	0.01	-0.01	0.09
2019Q2	1.06	1.06	1.15	1.15	-0.01	0.09	0.10	0.09
2019Q3	1.15	1.18	1.22	1.23	0.03	0.07	0.04	0.08
2019Q4	0.98	0.94	1.03	1.03	-0.04	0.05	0.09	0.05
2020Q1	-3.29	-3.21	-3.15	-3.09	0.08	0.14	0.06	0.19
2020Q2	-15.00	-14.97	-14.74	-14.77	0.03	0.26	0.23	0.23
2020Q3	-4.29	-4.38	-4.26	-4.29	-0.10	0.03	0.12	-0.01
Average revision					0.01	0.06	0.05	0.08
Average absolute revision					0.04	0.07	0.07	0.10

Table 4: Revisions of quarterly GDP for the EU aggregates (quarter-on-quarter growth rates) based on data for reference quarters from 2017Q3 to 2020Q3

EU	Quarter-on-quarter, Eurostat growth estimates				Quarter-on-quarter revisions			
	t+30	t+45	t+65	t+100	45-30	65-30	65-45	100-30
2017Q3		0.64	0.64	0.73			0.00	
2017Q4	0.59	0.61	0.64	0.70	0.02	0.04	0.03	0.11
2018Q1	0.49	0.45	0.45	0.44	-0.04	-0.04	0.00	-0.05
2018Q2	0.42	0.44	0.45	0.50	0.02	0.03	0.01	0.08
2018Q3	0.27	0.29	0.25	0.26	0.02	-0.02	-0.04	-0.01
2018Q4	0.27	0.25	0.30	0.31	-0.02	0.03	0.05	0.04
2019Q1	0.44	0.47	0.45	0.50	0.03	0.01	-0.02	0.06
2019Q2	0.25	0.25	0.23	0.23	0.00	-0.02	-0.02	-0.02
2019Q3	0.26	0.28	0.30	0.34	0.02	0.04	0.02	0.08
2019Q4	0.14	0.11	0.16	0.17	-0.03	0.02	0.05	0.03
2020Q1	-3.47	-3.33	-3.18	-3.18	0.14	0.29	0.15	0.29
2020Q2	-11.90	-11.68	-11.42	-11.43	0.22	0.49	0.26	0.47
2020Q3	12.08	11.62	11.55	11.54	-0.47	-0.53	-0.07	-0.54
Average revision					-0.01	0.03	0.03	0.04
Average absolute revision					0.08	0.12	0.06	0.14

Table 5: Revisions of quarterly GDP for the EU aggregates (year-on-year growth rates) based on data for reference quarters from 2017Q3 to 2020Q3

EU	Year-on-year, Eurostat growth estimates				Year-on-year revisions			
	t+30	t+45	t+65	t+100	45-30	65-30	65-45	100-30
2017Q3		2.70	2.80	2.95			0.10	
2017Q4	2.82	2.84	2.83	2.91	0.02	0.01	-0.01	0.09
2018Q1	2.67	2.63	2.65	2.62	-0.04	-0.01	0.03	-0.04
2018Q2	2.31	2.33	2.29	2.31	0.02	-0.02	-0.04	0.00
2018Q3	1.91	1.93	1.88	1.88	0.02	-0.03	-0.05	-0.03
2018Q4	1.46	1.44	1.46	1.47	-0.02	-0.01	0.01	0.00
2019Q1	1.46	1.48	1.47	1.53	0.03	0.01	-0.02	0.07
2019Q2	1.34	1.33	1.40	1.39	0.00	0.06	0.07	0.06
2019Q3	1.39	1.41	1.46	1.48	0.02	0.07	0.05	0.09
2019Q4	1.21	1.18	1.25	1.26	-0.03	0.04	0.07	0.06
2020Q1	-2.74	-2.60	-2.58	-2.53	0.14	0.16	0.02	0.20
2020Q2	-14.35	-14.13	-13.93	-13.93	0.22	0.42	0.20	0.42
2020Q3	-3.90	-4.30	-4.18	-4.19	-0.40	-0.28	0.12	-0.29
Average revision					0.00	0.04	0.04	0.05
Average absolute revision					0.07	0.09	0.06	0.11

Table 6: Revisions of quarterly employment growth estimates for the EA-19 aggregates based on data for reference quarters from 2017Q3 to 2020Q3

	Year-on-year growth estimates					Quarter-on-quarter growth estimates					
EA-19	t+45	t+65/75	t+100	t+150/165	Revision 100-65	EA-19	t+45	t+65/75	t+100	t+150/165	Revision 100-65
2017Q3		1.72				2017Q3		0.39			
2017Q4		1.62				2017Q4		0.27			
2018Q1		1.44				2018Q1		0.38			
2018Q2		1.49	1.51	1.55	0.02	2018Q2		0.36	0.37	0.39	0.01
2018Q3	1.28	1.30	1.32	1.43	0.02	2018Q3	0.20	0.20	0.20	0.24	0.00
2018Q4	1.19	1.28	1.34	1.35	0.07	2018Q4	0.28	0.26	0.29	0.30	0.04
2019Q1	1.25	1.28	1.32	1.37	0.04	2019Q1	0.34	0.35	0.37	0.37	0.02
2019Q2	1.10	1.15	1.15	1.17	0.00	2019Q2	0.24	0.25	0.24	0.23	-0.01
2019Q3	0.96	0.93	0.97	1.11	0.04	2019Q3	0.13	0.12	0.13	0.15	0.01
2019Q4	1.00	1.10	1.10	1.09	0.00	2019Q4	0.27	0.29	0.29	0.26	0.00
2020Q1	0.35	0.44	0.44	0.43	0.01	2020Q1	-0.24	-0.20	-0.20	-0.28	0.00
2020Q2	-2.88	-3.09	-3.09	-3.13	0.00	2020Q2	-2.83	-2.92	-2.90	-2.95	0.03
2020Q3	-2.02	-2.26	-2.26	-2.14	0.00	2020Q3	0.93	1.01	1.01	0.98	0.00
Average revision					0.02	Average revision					0.01
Average absolute revision					0.02	Average absolute revision					0.01

Table 7: Revisions of quarterly employment growth estimates for the EU aggregates based on data for reference quarters from 2017Q3 to 2020Q3

	Year-on-year growth estimates					Quarter-on-quarter growth estimates					
EU	t+45	t+65/75	t+100	t+150/165	Revision 100-65	EU27	t+45	t+65/75	t+100	t+150/165	Revision 100-65
2017Q3		1.90				2017Q3		0.33			
2017Q4		1.58				2017Q4		0.23			
2018Q1		1.43				2018Q1		0.39			
2018Q2		1.42	1.44	1.37	0.02	2018Q2		0.40	0.41	0.41	0.00
2018Q3	1.23	1.24	1.25	1.29	0.01	2018Q3	0.16	0.17	0.17	0.18	0.00
2018Q4	1.11	1.19	1.20	1.20	0.02	2018Q4	0.16	0.15	0.17	0.19	0.02
2019Q1	1.12	1.19	1.18	1.21	-0.02	2019Q1	0.35	0.37	0.39	0.37	0.02
2019Q2	0.94	1.00	0.95	0.97	-0.05	2019Q2	0.23	0.27	0.25	0.26	-0.02
2019Q3	0.85	0.82	0.78	0.86	-0.04	2019Q3	0.10	0.10	0.07	0.08	-0.04
2019Q4	0.92	0.98	0.98	0.98	0.00	2019Q4	0.20	0.24	0.28	0.23	0.03
2020Q1	0.32	0.40	0.40	0.39	0.00	2020Q1	-0.18	-0.11	-0.12	-0.21	-0.01
2020Q2	-2.73	-2.94	-2.94	-2.95	0.00	2020Q2	-2.64	-2.72	-2.75	-2.78	-0.03
2020Q3	-1.79	-2.03	-2.10	-1.97	-0.07	2020Q3	0.92	0.93	0.87	0.89	-0.06
Average revision					-0.01	Average revision					-0.01
Average absolute revision					0.02	Average absolute revision					0.02

REVISIONS OF AGGREGATES FOR HOUSEHOLDS AND NON-FINANCIAL CORPORATIONS FOR THE EU AND THE EA

The revisions for releases of the EA-19 quarterly **saving rate and investment rate for households and NPISH**, and the **investment rate and profit share for non-financial corporations**, are presented in Tables 8 and 9 on data for reference quarters from 2017Q3 to 2020Q3. The early release of data from seasonally adjusted quarterly European sector accounts occurs at t+94 days, with the final release at t+120 days. The average revision and average absolute revisions are small for all four indicators.

Similarly, Tables 10 and 11 present the revisions for releases of the EU[7] quarterly saving rate and investment rate for households and NPISH, and the investment rate and profit share for non-financial corporations. There are no early releases for these aggregate series, therefore the comparison is between the first transmission data (when the news release is produced) and the second transmission of data in the subsequent quarter. The largest revisions are for the profit share of non-financial corporations.

Table 8: Revisions of quarterly saving and investment rates of households and NPISH, for the EA-19 aggregates (seasonally adjusted) based on data for reference quarters from 2017Q3 to 2020Q3

EA-19 Households and NPISH							
Saving rate (seasonally adjusted data)				Investment rate (seasonally adjusted data)			
Quarter	Early release (t+94)	Final release (t+120)	Revision Final - Early	Quarter	Early release (t+94)	Final release (t+120)	Revision Final - Early
2017Q3	12.02	12.01	-0.01	2017Q3	8.79	8.79	0.00
2017Q4	12.21	12.26	0.05	2017Q4	8.80	8.79	-0.01
2018Q1	11.98	11.98	0.00	2018Q1	9.01	9.01	0.00
2018Q2	12.08	12.10	0.02	2018Q2	9.01	9.04	0.03
2018Q3	12.30	12.28	-0.02	2018Q3	9.08	9.12	0.04
2018Q4	12.33	12.42	0.09	2018Q4	9.02	9.07	0.05
2019Q1	12.60	12.64	0.04	2019Q1	9.29	9.33	0.04
2019Q2	13.30	13.18	-0.12	2019Q2	9.02	9.02	0.00
2019Q3	13.04	13.03	-0.01	2019Q3	9.14	9.15	0.01
2019Q4	13.04	13.10	0.06	2019Q4	9.14	9.13	-0.01
2020Q1	16.90	16.83	-0.07	2020Q1	8.70	8.67	-0.03
2020Q2	24.63	24.57	-0.06	2020Q2	7.92	7.94	0.02
2020Q3	17.32	17.38	0.06	2020Q3	8.78	8.78	0.00
Average revision			0.002	Average revision			0.011
Average absolute revision			0.047	Average absolute revision			0.018

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[7] Due to the conversion to euro, movements in exchange rates may affect the European Union key indicators.

Table 9: Revisions of quarterly investment rates and profit shares of non-financial corporations, for the EA-19 aggregates (seasonally adjusted) based on data for reference quarters from 2017Q3 to 2020Q3

EA-19 Non-financial corporations							
Investment rate (seasonally adjusted data)				Profit share (seasonally adjusted data)			
Quarter	Early release (t+94)	Final release (t+120)	Revision Final - Early	Quarter	Early release (t+94)	Final release (t+120)	Revision Final - Early
2017Q3	22.44	22.44	0.00	2017Q3	41.36	41.35	-0.01
2017Q4	22.80	22.89	0.09	2017Q4	41.09	41.11	0.02
2018Q1	23.10	23.10	0.00	2018Q1	40.62	40.60	-0.02
2018Q2	23.00	22.94	-0.06	2018Q2	40.56	40.82	0.26
2018Q3	23.34	23.44	0.10	2018Q3	40.34	40.41	0.07
2018Q4	23.72	23.66	-0.06	2018Q4	39.92	40.07	0.15
2019Q1	23.60	23.59	-0.01	2019Q1	39.75	39.96	0.21
2019Q2	25.67	25.53	-0.14	2019Q2	39.17	39.21	0.04
2019Q3	23.67	23.66	-0.01	2019Q3	39.19	39.22	0.03
2019Q4	25.80	25.81	0.01	2019Q4	39.50	39.45	-0.05
2020Q1	25.51	25.48	-0.03	2020Q1	37.92	38.07	0.15
2020Q2	23.18	23.19	0.01	2020Q2	39.80	39.88	0.08
2020Q3	23.28	23.20	-0.08	2020Q3	39.60	39.04	-0.56
Average revision			-0.014	Average revision			0.028
Average absolute revision			0.046	Average absolute revision			0.127

Table 10: Revisions of quarterly saving and investment rates of households and NPISH, for the EU aggregates (seasonally adjusted) based on data for reference quarters from 2017Q3 to 2020Q3

EU Households and NPISH ([1])							
Saving rate (seasonally adjusted data)				Investment rate (seasonally adjusted data)			
Quarter	1st trans-mission	2nd trans-mission	Revision 2nd - 1st	Quarter	1st trans-mission	2nd trans-mission	Revision 2nd - 1st
2017Q3	10.09	9.86	-0.23	2017Q3	8.19	8.18	-0.01
2017Q4	10.34	10.23	-0.11	2017Q4	8.14	8.25	0.11
2018Q1	10.01	9.84	-0.17	2018Q1	8.36	8.34	-0.02
2018Q2	10.00	9.87	-0.13	2018Q2	8.35	8.38	0.03
2018Q3	10.20	10.11	-0.09	2018Q3	8.41	8.34	-0.07
2018Q4	10.16	10.10	-0.06	2018Q4	8.26	8.39	0.13
2019Q1	10.35	11.16	0.81	2019Q1	8.58	8.29	-0.29
2019Q2	11.04	10.78	-0.26	2019Q2	8.30	8.35	0.05
2019Q3	10.46	12.11	1.65	2019Q3	8.43	8.82	0.39
2019Q4	12.14	11.47	-0.67	2019Q4	8.87	8.71	-0.16
2020Q1	15.85	15.56	-0.29	2020Q1	8.46	8.59	0.13
2020Q2	23.90	23.37	-0.53	2020Q2	7.85	7.82	-0.03
2020Q3	16.11	16.21	0.10	2020Q3	8.78	8.66	-0.12
Average revision			0.002	Average revision			0.011
Average absolute revision			0.392	Average absolute revision			0.118

(1) Due to the conversion to euro, movements in exchange rates may affect the European Union key indicators.

Table 11: Revisions of quarterly investment rates and profit shares of non-financial corporations, for the EU aggregates (seasonally adjusted) based on data for reference quarters from 2017Q3 to 2020Q3

| EU Non-financial corporations ([1]) | | | | | | | |
| Investment rate (seasonally adjusted data) | | | | Profit share (seasonally adjusted data) | | | |
Quarter	1st trans-mission	2nd trans-mission	Revision 2nd - 1st	Quarter	1st trans-mission	2nd trans-mission	Revision 2nd - 1st
2017Q3	22.60	22.65	0.05	2017Q3	40.11	40.17	0.06
2017Q4	22.78	22.90	0.12	2017Q4	40.15	40.00	-0.15
2018Q1	23.15	23.27	0.12	2018Q1	39.58	40.27	0.69
2018Q2	23.19	23.26	0.07	2018Q2	39.90	39.89	-0.01
2018Q3	23.52	23.26	-0.26	2018Q3	39.60	39.26	-0.34
2018Q4	23.42	23.33	-0.09	2018Q4	39.27	39.23	-0.04
2019Q1	23.40	23.59	0.19	2019Q1	39.14	38.44	-0.70
2019Q2	24.75	24.47	-0.28	2019Q2	38.42	38.51	0.09
2019Q3	23.53	24.70	1.17	2019Q3	38.36	39.91	1.55
2019Q4	25.79	25.32	-0.47	2019Q4	40.02	40.16	0.14
2020Q1	25.94	25.92	-0.02	2020Q1	38.71	38.69	-0.02
2020Q2	22.93	23.15	0.22	2020Q2	40.69	39.80	-0.89
2020Q3	24.03	23.91	-0.12	2020Q3	39.52	39.90	0.38
Average revision			0.054	Average revision			0.058
Average absolute revision			0.245	Average absolute revision			0.389

([1]) Due to the conversion to euro, movements in exchange rates may affect the European Union key indicators.

6 Timeliness and punctuality

Timeliness refers to the length of time between data availability and the event or phenomenon they describe.

Punctuality is the time lag between the actual delivery of data and the target date on which they were scheduled for release, as announced in an official release calendar, set out by regulations, or previously agreed among partners.

6.1 Timeliness

With the introduction of the ESA 2010 transmission programme in September 2014, new deadlines for countries' submission of data to Eurostat were introduced and allowed for more timely delivery of information to users. Most notably, data for regional accounts became available 12 months after the reference year.

In 2019, the preliminary flash estimates of GDP growth in the EU and the EA continue to be published at 30 days after the end of the quarter. The updated flash estimates of GDP growth for the EU/EA are subsequently published at t+45. Regular estimates of quarterly and annual main aggregates including employment are published after about 65 and 110 days.

The early release of EA quarterly sector accounts continue to be published at around t+94 days after the reference quarter. The early aggregation release of non-financial sector accounts is based on the preliminary data transmitted by EA Member States by t+85 days after the reference period. Complete sector accounts data for the both the EA and the EU are released at around t+120 days.

Eurostat has streamlined its news releases of GDP and employment at t+45 and t+65 days. The first flash estimate of European aggregates after 45 days combining GDP and employment data was published in February 2020. The regular estimates of European main GDP aggregates published after about 65 days were extended to include European employment and labour productivity estimates in December 2020. The employment flash estimates at t+30 days continue to be collected and regularly tested with a view of potential publication in the future.

6.2 Punctuality of ESA 2010 tables

Punctuality is calculated as the actual date of data delivery minus the scheduled date of transmission to Eurostat. It shows how many calendar days the first data transmission was after the legal deadline. Figure 39-Figure 41 in Annex 3 present in detail the information on punctuality for each national accounts domain for EU Member States as well as for Iceland,

Norway and Switzerland.

The ESA 2010 transmission programme specifies the deadlines for Member States' data deliveries. The analyses of punctuality in this section take into account country-specific legal deadlines. The information covers data deliveries made in 2020. The assessment of data transmissions according to this indicator showed high punctuality for most domains and tables (Annex 3).

6.2.1 Quarterly data

As defined in the ESA 2010 transmission programme, Member States must submit quarterly tables to Eurostat within the legal deadlines shown in Annex 1, Table 16.

The punctuality indicators for quarterly national accounts data provided by individual EU Member States, as well as Iceland, Norway and Switzerland, can be found in Annex 3. The punctuality for each country is calculated for each of the four reference quarters 2019Q4–2020Q3 which covered the quarterly submissions of all mandatory quarterly tables for each domain – quarterly main aggregates, sector accounts and government finance statistics – in 2020.

Seventeen Member States sent all data on time and five Member States (Denmark, Estonia, Malta, Austria and Sweden) provided data with minor delays. Countries (Bulgaria, Greece, Croatia, Iceland and Switzerland) with number of delayed tables over three are not shown in this chart.

Figure 8: Punctuality of national accounts quarterly tables reported in 2020
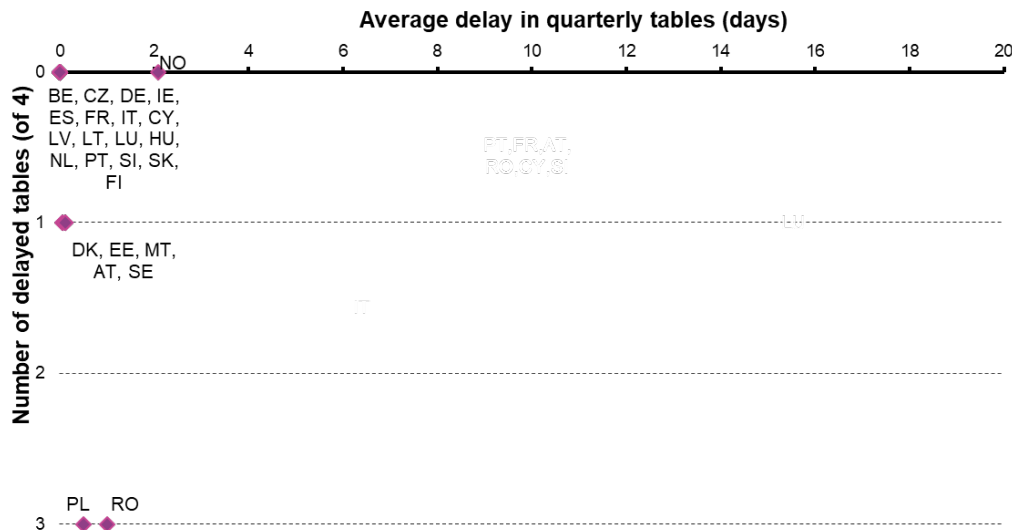
The **quarterly main aggregates** of national accounts must be submitted to Eurostat no later than 2 months after the reference quarter. For the eight sub-tables per quarter of the mandatory Table 1 on main aggregates, twenty-three EU Member States, as well as Norway submitted their quarterly data at or before the official transmission deadline. Longer delays occurred only for specific sub-tables for two EU Member States (Greece and Croatia).

Of those who submitted **quarterly non-financial sector accounts,** seventeen countries did so on time for all quarters. Quarterly data were generally transmitted on time or with very short delays. Regular delays were observed for two Member State (Bulgaria and Croatia).

The punctuality of **quarterly government finance statistics** was very high in 2020 and higher

than the punctuality of quarterly main aggregates and non-financial sector accounts. All countries transmitted data on time or in advance of the transmission deadlines, with the exception of Poland and Iceland.

6.2.2 Annual data

EU Member States must submit the annual national and regional accounts tables to Eurostat on the transmission deadlines shown in Annex 1, Table 17.

Figure 9: **Punctuality of national accounts annual tables reported in 2020 (excluding five-yearly use and input-output tables)**
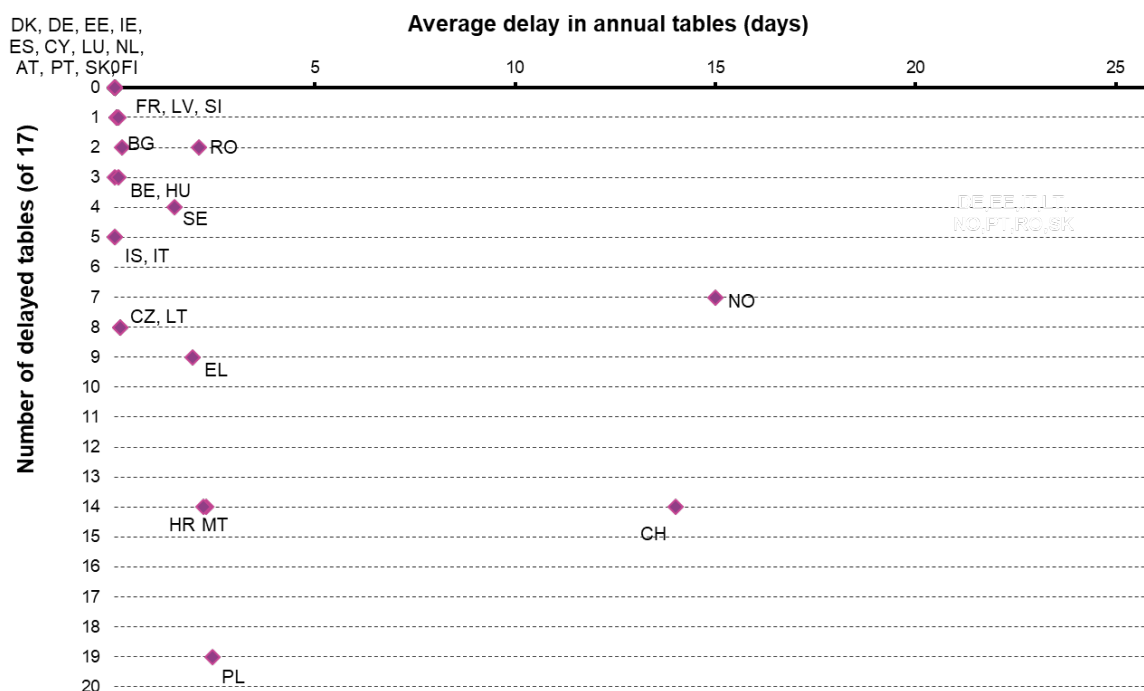
Twelve Member States sent all data on time for all tables (Denmark, Germany, Estonia, Ireland, Spain, Cyprus, Luxembourg, the Netherlands, Austria, Portugal, Slovakia and Finland). Six Member States (Belgium, Czechia, France, Latvia, Hungary and Slovenia) provided data with minor delays, while six Member States (Greece, Croatia, Malta, Poland, Romania and Sweden) had delays with one data set or transmission.

Seventeen countries submitted annual Table 1([8]) of **national accounts main aggregates** on time. For main aggregates data (Table 1A), delays in the first transmission of annual data for 2020 occurred for 3 EU Member States (Czechia, Greece and Croatia). The MIP headline indicator of unit labour cost is derived from Table 1 data. Late submissions of Table 1, in particular submissions more than 1 month past the deadline, would prevent full validation of the data for calculating unit labour cost.

The punctuality of **annual government finance statistics** tables was very high: for main aggregates of general government (Table 2); for detailed tax and social contribution receipts by type of tax and social contribution and receiving subsector, including the list of taxes and social

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[8] Including both the t+2 and t+9 submissions of tables T0101A, T0102A, T0103A, T0110A, T0111A, T0117A, T0120A, T0121A, and the submissions of T0301A, T0302A, T0303A, T0501A, T0502A, T2000A, T2200A, T2600A.

contributions according to national classification (Table 9)[9] and for general government expenditure by function (Table 11). Twenty-eight countries transmitted all data on time. Bulgaria provided both submissions of ESA Table 2 slightly late.

Twenty-two countries transmitted all data on time in 2020 for **annual non-financial sector accounts** (Table 8), due in September 2020 (see Annex 3). Two Member States (Croatia and Latvia) marked short delays in transmission, while two Member States (Poland and Malta) marked greater delays. One Member State (Bulgaria) provided 2019 data only in September 2021.

Annual financial accounts by sector (Table 6) and balance sheets for financial assets and liabilities (Table 7) were mostly transmitted on time or in advance, while two countries (Malta and Iceland) had short delays of several days. Three MIP headline indicators (private sector debt, private sector credit flow and total financial sector liabilities) are derived from financial accounts tables. Hence, punctuality in submitting these tables is of utmost importance for MIP purposes. In 2020, all EU Member States submitted the MIP-underlying data on time.

In 2020, twenty-five countries transmitted on time and one country with light delay their annual **supply and use tables** for reference year 2017: the supply table at basic prices, including transformation into purchasers' prices (Table 15) and the use table at purchasers' prices (Table 16). Three countries Bulgaria, Malta and Iceland) did not transmit data and one country (Switzerland) has a derogation to provide data in 2025.

The ESA 2010 transmission programme lays down the obligation for EU Member States to deliver five-yearly submissions for use tables (Tables 16XX) and for input-output tables (Table 17). These tables are compulsory, to be compiled at basic prices for the reference years ending with 0 and 5. The quality reporting exercise for 2016 was the first to look at the initial delivery of these tables following the ESA 2010 implementation, and this year's quality reporting exercise monitored the subsequent delivery of the data up to and including 2020 of both use tables and the symmetric input-output tables, for reference year 2015. The five additional **use tables** (Tables 16XX) are required every 5 years. They provide data with a higher granularity than annual tables.

The overall punctuality of **regional accounts** in 2020 was very high. Regional accounts data were generally transmitted in line or shortly before the transmission deadline with the exception of two Member States (Greece and Sweden) whose transmission marked delays for one table.

The overall punctuality of **pensions** in 2020 was very high with twenty-five counties transmitting data in line or shortly before the transmission deadline, with the exception of France and Iceland who delivered data with delay. Greece, Poland and Portugal did not transmit data till the time of data extraction (February 2021).

6.3 Punctuality of data underlying key indicators

6.3.1 MIP indicators

Each year in autumn, at the beginning of the European Semester process, the Commission publishes the Alert Mechanism Report (AMR) accompanied by a Statistical Annex on MIP indicators.

The cut-off date for extracting data from the Eurostat database to include it in the Statistical

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[9] The transmission of national tax lists is not separately reported. National tax lists were generally sent (as required) at the same time as the ESA 2010 Table 9.

Annex and prepare the Alert Mechanism Report analysis is fixed each year, usually at the end of October or the beginning of November. Data used in the preparation of the Statistical Annex to the AMR 2022 were those as available on the cut-off date of 22 October 2021. The timing of the cut-off date allows the analysis to include the most recent national accounts data submitted by EU Member States and validated by Eurostat in the autumn transmission cycle. MIP-underlying data are submitted by Member States according to the usual deadlines set in the financial accounts transmission guidelines.

The Statistical Annex of the AMR 2022 covered the reference years from 2011 to 2020. Data for 2020 have been submitted by EU Member States at t+9 months and successfully passed Eurostat's validation process. The timely submission of all relevant national accounts data underlying the main aggregates, financial and non-financial sector accounts as well as government finance statistics (as discussed in Section 6.2.2) made possible the smooth validation and timely use of this data for MIP purposes.

One consequence of a fixed cut-off date is that, for the timely submission of the latest year's data, some Member States resort to the provision of preliminary estimates, coupled with the extensive use of flags indicating their provisional or estimated nature.

In the context of the COVID pandemic, due to the particular situation, the infra-annual figures were also of particular interest in this period, despite the fact that the analysis of the AMR is based on annual data.

6.3.2 Principal European economic indicators (PEEIs)

PEEIs are the reference point for all users of official statistics dealing with short-term data. They comprise a set of statistical indicators giving an accurate and as timely as possible overview of economic trends in the EU, the EA, and individual EU Member States.

In order to supply business-cycle analysts, policymakers and other users with a comprehensive and high-quality set of information, Eurostat and the national statistical institutes publish quarterly national accounts news releases on:

- GDP flash estimates;

- GDP estimates, including GDP components and contributions to growth;

- quarterly sector accounts;

- quarterly government finance statistics – quarterly government deficit and quarterly government debt.

The transmission dates indicated in Figures 18 and 19 are for data submissions due in the first quarter of 2021 and relating to the reference fourth quarter of 2020. The transmission dates in Figure 20 are for submissions due in the last quarter of 2020 and relating to the reference third quarter of 2020.

FIRST GDP (FLASH) ESTIMATES

Eurostat currently publishes two news releases containing GDP flash estimates for the EU/EA: t+30 preliminary GDP flash estimates and updated t+45 GDP flash estimates, both containing published country estimates. Countries submit estimates to Eurostat on a voluntary basis. The news releases on GDP flash estimates are among Eurostat's most downloaded news releases.

Figure 10: Punctuality of first GDP flash estimate data transmissions for 2020Q4

EL: confidential

EU/EA
flash
estimates

EU/EA
preliminary
flash estimates

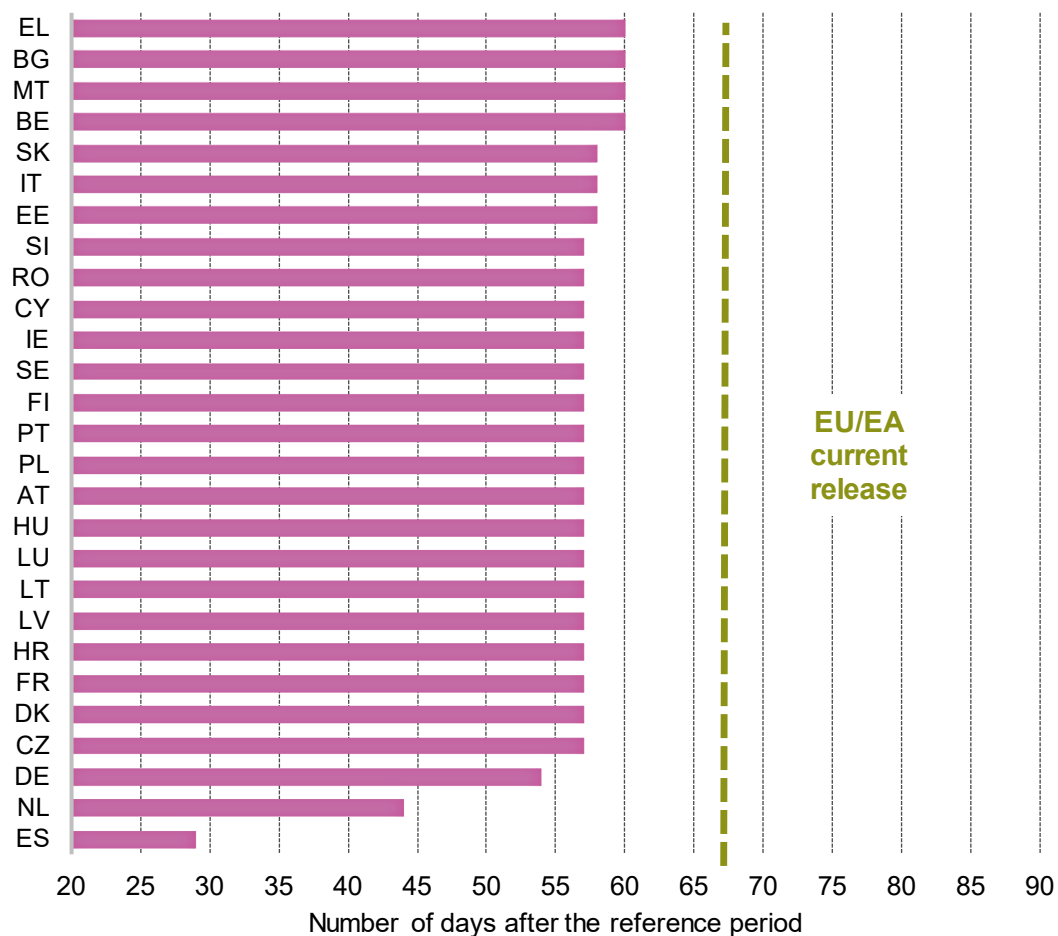Number of days after the reference period
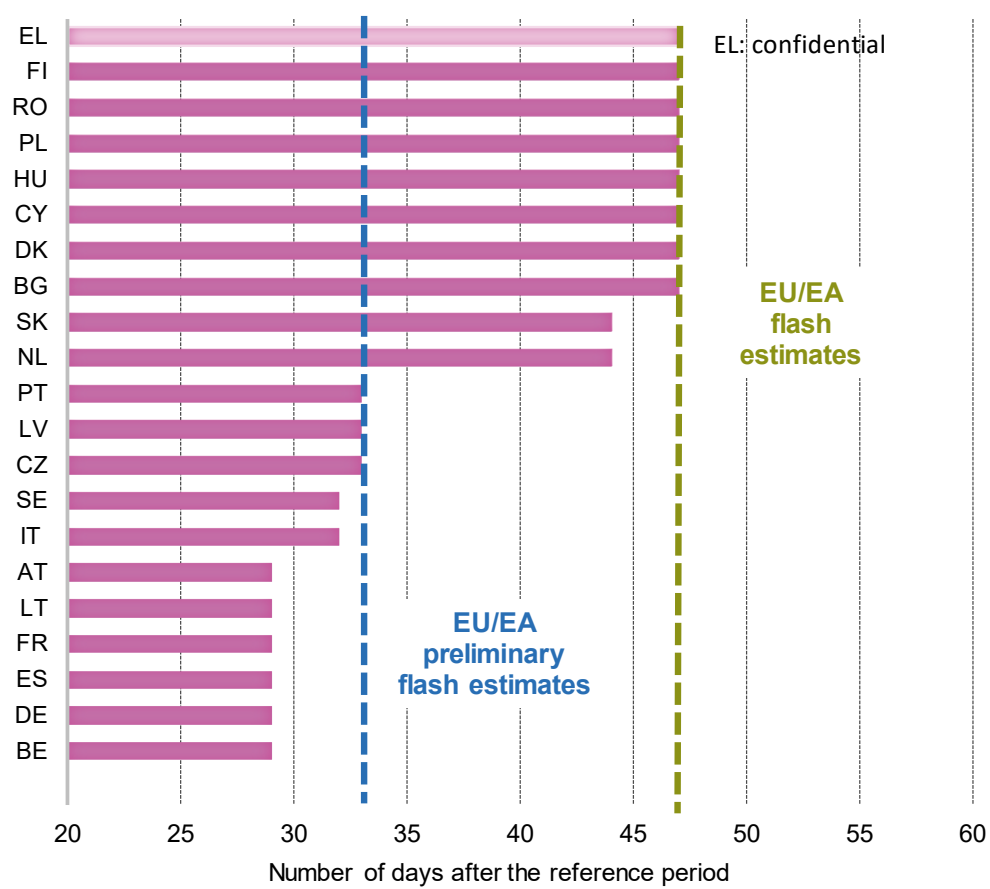
GDP ESTIMATES AND BREAKDOWNS

GDP estimates with breakdowns for the EU/EA are released at around t+65 days each quarter. The exact release dates vary slightly each quarter, depending on calendar constraints.

The numbers in Figure 11 refer to the submission of data for the reference fourth quarter of 2020, which are usually published the next day. Validation problems and/or embargoes can, however, cause some additional delays.

Figure 11: Release containing components of GDP, transmission of data for 2020Q4

Note: The numbers in the table refer to the transmission of 2020 Q4 data to Eurostat. Data are usually published after validation taking up to 3 working days. Validation problems and/or embargos can cause some additional delays until dissemination.

GDP estimates with breakdowns for the EU/EA are released at about T+65 days. The exact release dates vary slightly each quarter depending on calendar constraints as some 5 working days are needed for the aggregation of national data, i.e. in 2020Q4 the publication was increased to T+68 after weekend.

QUARTERLY SECTOR ACCOUNTS (QSA)

Quarterly sector accounts for the reference third quarter of 2020 were due by 24 December 2020 (t+85 days) for EA Member States and by 31 December 2020 (t+3 months) for non-EA Member States. For Member States whose GDP at current prices is less than 1% of the corresponding EU total GDP, only data for selected items are compulsory.

Key indicators and selected transactions for the euro area aggregates are published at around t+94 days. Complete sector accounts data for the both the EA and the EU are released at around t+120 days.

Figure 12: Household and company accounts, transmission of 2020Q3
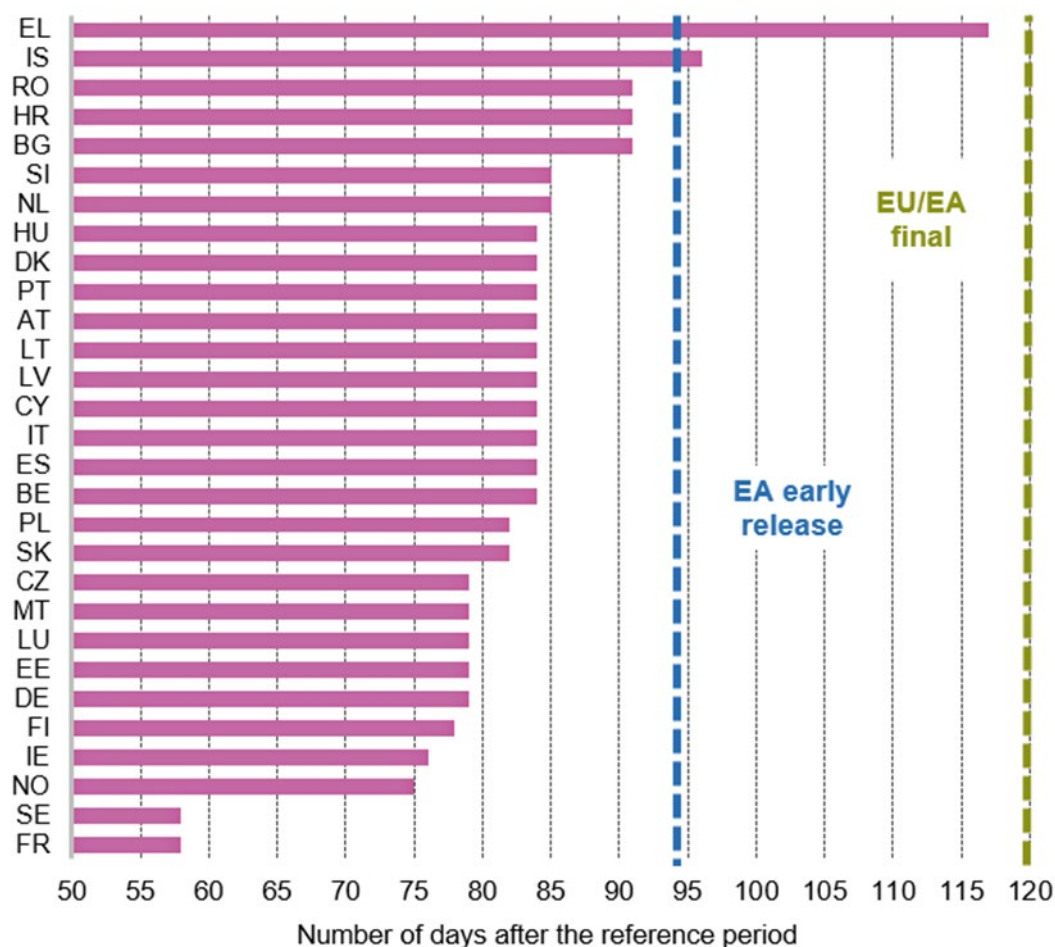
QUARTERLY GOVERNMENT FINANCE STATISTICS

Actual timeliness depends on the reference quarter, with data due on 31 March usually coming in later than in other quarters due to the incorporation of annual data. Submissions are due at t+3 months, except for quarterly financial accounts for general government, where provisional data are due at t+85 days for EA Member States. Releases are coordinated for the set of tables comprising quarterly government finance statistics and with EDP data. For this reason, no further improvement in timeliness is feasible in the medium-term. A use of provisional financial accounts data for release is also not feasible due to the high level of revisions in the transmission period.

7 Accessibility and clarity

Accessibility and clarity pertain to the conditions and terms under which users can obtain, use and interpret data.

They reflect the data's information environment, including whether data are accompanied by appropriate metadata and illustrations such as graphs and maps, and whether information on their quality is also available.

7.1 Dissemination by Eurostat

Eurostat disseminates ESA 2010 data via electronic publications. The data are accessible via predefined tables, extractions from Eurostat's database and through Statistics Explained articles. Key variables are also communicated through the Eurostat news releases on GDP, employment, the household saving rate, the business investment rate as well as seasonally adjusted quarterly government deficit, quarterly government debt, the structure of government debt, taxes and social contributions and general government expenditure by function (COFOG). Information from national and regional accounts as well as government finance statistics is also included in Eurostat's yearbook and regional yearbook. In 2020, all information was published on time.

Eurostat implements a policy of free dissemination to allow users the widest possible access.

Since December 2020, Eurostat publishes the European Statistical Recovery Dashboard. It currently contains twenty-seven monthly and quarterly indicators from a number of statistical areas, which are relevant for tracking the recovery across countries and time. The Dashboard was developed in cooperation with the statistical authorities in the Member States.[10] It is updated every month with the latest available data and includes a Eurostat commentary for an analysis of the indicators.

The recovery dashboard comprises the following indicators sourced from national accounts: quarterly GDP, the quarterly general government surplus/deficit and the quarterly general government gross debt expressed in percentage of GDP. Those are of particular relevance to assess the macroeconomic dimension of the recovery.

It also includes a number of innovative indicators such as excess mortality, number of commercial flights by reporting country, the labour market slack together with flows showing the

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[10] https://ec.europa.eu/eurostat/documents/2995521/11601997/1-17122020-BP-EN.pdf

movements of individuals between employment, unemployment and economic inactivity, and an air quality indicator.

Eurostat will continue to keep the ESS recovery dashboard at very high standards by enlarging the set of indicators if needed and by monitoring the multi-faceted impact of the pandemic on economic, social, and environmental fields. The recovery dashboard is published as a visualization tool with user-friendly functionalities including easy data navigation, access to source data, short indicator descriptions, etc.

7.2 ESA 2010 metadata

To make data easily interpretable, Eurostat maintains a rich depository of generic metadata, which can be found in RAMON, as well as metadata by ESA 2010 domain:

- Main aggregates (annual and quarterly);
- Government finance statistics -
    - Government revenue, expenditure and main aggregates;
    - General government expenditure by function (COFOG);
    - Main national accounts tax aggregates;
    - Quarterly non-financial accounts for general government;
    - Annual and quarterly financial accounts for general government;
    - Quarterly government debt;
    - Non-financial sector accounts;
    - Annual financial sector accounts;
    - Supply, use and input-output tables;
    - Regional accounts.

7.3 Inventories

In addition to regular metadata, EU countries also describe their compilation work in dedicated technical documentation. Some of it is produced for the needs of GNI for own resources or EDP verification processes. This documentation is fully or partially accessible through the Eurostat's website.

7.3.1 Mandatory inventories

GROSS NATIONAL INCOME (GNI)

GNI Regulation 2019/516 (the GNI Regulation)[11] requires EU Member States to provide Eurostat with an up-to-date inventory of the sources and methods used to calculate GNI and its components according to ESA (the GNI inventories). These inventories are one of the main instruments enabling Eurostat to assess the comparability, reliability and exhaustiveness of Member States' GNI data. The inventories also include process tables showing all stages of the national accounts compilation process, from the statistical sources to the published national accounts data.

Eurostat checks the GNI inventories and process tables using a GNI inventory assessment

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11 Replacing GNI Regulation 1287/2003

questionnaire approved by the GNI Committee[12]. The purpose of the questionnaire is to ensure a systematic, consistent and fair approach in assessing the quality of GNI data.

All EU Member States, the United Kingdom, Norway, Iceland and Switzerland submitted their GNI inventories to Eurostat. France's sources and methods for its GNI were still being assessed in 2020. It is the countries prerogative to make the GNI inventories publicly available. The GNI Inventories of twelve countries (see table 12 below) are available on the CIRCABC website 'Monitoring GNI for own resource purposes'.

EXCESSIVE DEFICIT PROCEDURE (EDP)

Eurostat receives and verifies EDP statistics under the legal provisions of Article 126 of the Treaty on the Functioning of the European Union and Protocol 12 and Council Regulation (EC) No 479/2009, as amended by Commission Regulation (EU) No 220/2014. In this legal context, Eurostat regularly and systematically reports to the Council (Economic and Financial Committee) and the European Parliament.

The availability of detailed and comprehensive EDP inventories is of vital importance for the quality assessment of EDP and government finance statistics data. Under Article 9 of Council Regulation (EC) No 479/2009, as amended, the new ESA 2010-based EDP inventory of the methods, procedures and sources used to compile actual deficit and debt data and the underlying government accounts was adopted in 2014. All EU Member States are required to complete this EDP inventory. The inventories are publicly available on the Eurostat website.

Table 12: Availability of mandatory and voluntary inventories on the Eurostat website and/or CIRCABC public website, as of 31 December 2020

	Mandatory inventories				Voluntary inventories		
	GNI	EDP	QFAGG	National tax lists	QNA	ASA	QSA
Belgium		✓	✓	✓			✓
Bulgaria		✓	✓	✓	✓		
Czechia		✓	✓	✓	✓		
Denmark	✓	✓	✓	✓	✓		
Germany	✓	✓	✓	✓	✓		
Estonia	✓	✓	✓	✓	✓**		
Ireland		✓	✓	✓			
Greece		✓	✓	✓	✓		
Spain		✓	✓	✓	✓		
France	✓*	✓	✓	✓			
Croatia		✓	✓	✓	✓		
Italy		✓	✓	✓		✓	
Cyprus		✓	✓	✓			
Latvia		✓	✓	✓	✓	✓**	
Lithuania		✓	✓	✓	✓	✓	
Luxembourg		✓	✓	✓			
Hungary		✓	✓	✓	✓	✓	

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12 Replaced by the GNI Expert Group

Malta	✓	✓	✓	✓			
Netherlands	✓	✓	✓	✓	✓	✓	
Austria	✓	✓	✓	✓	✓**		
Poland		✓	✓	✓	✓	✓	
Portugal		✓	✓	✓		✓	
Romania	✓	✓	✓	✓			
Slovenia		✓	✓	✓		✓	
Slovakia		✓	✓	✓		✓	
Finland	✓	✓	✓	✓	✓	✓	✓
Sweden	✓	✓	✓	✓	✓		✓
Iceland				✓		✓	
Norway	✓		✓	✓	✓	✓	
Switzerland	✓			✓			

(*) The French sources and methods for GNI were still being assessed in 2020.
(**) Inventories were made available in 2021.

QUARTERLY FINANCIAL ACCOUNTS FOR GENERAL GOVERNMENT (QFAGG) AND NATIONAL TAX LISTS

Under Annex B of the ESA 2010 Regulation, all European Economic Area countries (subject to derogations) must regularly submit metadata on major events and revisions for QFAGG to Eurostat. Data sources and compilation methods are described in the updated QFAGG manual. For taxes and social contributions, the transmission programme provides for the transmission of 'national tax lists'.

7.3.2   Voluntary inventories

To provide comprehensive information on sources and methods used for the compilation of national accounts data, Eurostat helps countries compile quarterly national accounts inventories as well as annual and quarterly sector account inventories. The compilation and publication of these inventories are voluntary.

QUARTERLY NATIONAL ACCOUNTS (QNA)

Quarterly national accounts inventories are a useful source of information for assessing the quality of QNA data. The methodology descriptions provided by reporting countries include references to relevant manuals, handbooks or guidelines such as the updated Eurostat QNA handbook, the handbook on price and volume measures or the seasonal adjustment guidelines. National statistical institutes indicate if they are in line with these handbooks/guidelines and/or provide explanations for the use of different approaches. QNA inventories follow a predefined structure and provide the following information:

- overview of the system of quarterly national accounts, including methods used for estimating volumes and seasonally adjusted figures;

- publication timetable, revisions policy and dissemination of QNA;

- overall QNA compilation approach;

- GDP components: the production approach;

- GDP components: the expenditure approach;

- GDP components: the income approach;

- population and employment;

- flash estimates;

- main data sources used.

Fifteen EU Member States – two more than last year (Spain and Latvia), plus Norway, submitted QNA inventories to Eurostat (see Table 12); these are publicly available on the Eurostat website. It is noted that the QNA inventories of Estonia and Austria were published in 2021.

ANNUAL AND QUARTERLY SECTOR ACCOUNTS (ASA / QSA)

Annual sector account inventories aim to provide a comprehensive overview of the national compilation procedures used for annual non-financial accounts by institutional sector, pursuant to ESA 2010. ASA inventories follow a standard structure and include the following information:

- organisation of annual sector account production;

- consistency with related data sets;

- data sources;

- compilation methods;

- detailed view by transaction and sector.

This information is also important for understanding the production of quarterly sector accounts, since most comprehensive data sources are collected annually; hence, the compilation of quarterly accounts relies on annual benchmarks whenever quarterly data are not available.

Twelve EU Member States – three more than last year (Italy, Poland, Slovakia), plus Norway and Iceland, submitted their ASA inventories for publication on the Eurostat website. It is noted that the ASA inventories of Latvia was published in 2021. No new QSA inventories were submitted in 2020 (see Table 12). Only 1 EU Member State (Finland) has submitted both inventories.

CLASSIFICATION OF THE FUNCTIONS OF GOVERNMENT (COFOG) AND QUARTERLY NON-FINANCIAL ACCOUNTS FOR GENERAL GOVERNMENT

Following the developments of the Classifications of the Functions of Government task force (COFOG TF) in 2019, Eurostat published an updated version of the COFOG manual. In comparison to previous editions, the manual was completely updated, most importantly to reflect the ESA 2010 (European System of Accounts) framework. Further guidance is given by the additional general guidance on the recording of consumption of fixed capital on own-account research and development (R&D) and correspondences among the COFOG classification and economic transactions used in the ESA 2010 framework as well as sixteen new case studies.

The manual for quarterly non-financial accounts for general government is currently being updated.

8 Comparability

Comparability is the measurement of the impact of differences in the applied statistical concepts, measurement tools and procedures where statistics are compared between geographical areas, sectoral domains, or over time.

8.1 Methodological soundness

ESA 2010 provides a harmonised methodological framework for compiling national and regional accounts throughout the EU, just as SNA 2008 does across the world.

Through its validation process, Eurostat ensures the methodological soundness of national accounts data submitted by EU Member States. It monitors the application of accounting rules defined in the ESA 2010 Regulation.

In addition, methodological soundness is monitored through two verification cycles:

- Gross national income (GNI) for the EU's own resources;
- Excessive deficit procedure (EDP).

These two verification procedures have their own legal basis (see GNI, EDP).

When methodological improvements resulting from the GNI own resources and EDP processes are introduced, Eurostat assesses whether they are applied to all sets of concerned accounts; it does so during the ESA 2010 data validation process.

8.1.1 Validation process for national accounts

The validation process for national accounts data follows the rules defined by the Task Force on Data Validation in its main deliverable — the ESA 2010 Validation Handbook. Some of the validation checks included in the handbook have already been added to the regular validation process for data submitted to Eurostat, while others are in the design and implementation phases. It is an ongoing project to automate validation in accordance with ESS guidelines implementing the pre-validation service STRUVAL (structural validation) and CONVAL (content validation). Chapter 4 of the handbook – *Pre-validation rulesets* – provides an overview of all the checks carried out by the Validation Task Force across the ESA 2010 transmission programme areas and the status of these checks and progress in implementing them. The validation rules will be updated if necessary as the pre-validation services STRUVAL and CONVAL are implemented.

The Task Force on Data Validation was created in 2014 to address frequent errors in the

transmission process, review validation checks performed by Eurostat when receiving data, clarify methodological or practical aspects underlying specific issues, propose validation rules for internal or external pre-validation tools and investigate possibilities for collecting and disseminating associated metadata. It followed guidance issued by the ESS Vision Infrastructure Project on Validation when reviewing and developing data validation rules for pre-validation tools. Main deliverables and detailed structural and methodological discussions of the Task Force are described in the ESA 2010 Validation Handbook. The Task Force created the handbook as a living document that is updated as each domain conducts regular reviews in their expert specific task forces and working groups.

The handbook provides a detailed description of the validation rules discussed and agreed in the Task Force for the national accounts domains, as a blueprint for the validation service. Based on the ESS Vision Infrastructure Project's suggested structure for an efficient validation process, checks are split into five main groups:

1. Structural checks focusing on compliance with the statistical data and metadata exchange standard (SDMX), which identifies valid file format, coding according to the DSD, mandatory fields present, correct usage of data types and dataflow definition;

2. Basic logic checks, which cover consistency between the sender ID and reference area country, ensuring that a table ID is present, correct use of flags for the observation status to accompany missing values, embargo dates, correct coding of the confidentiality status and a valid reference year price for the chain-linked volume series;

3. Basic content checks, which identify missing or unexpected series in the transmission along with holes in the series. This group also includes checks for zero and negative values;

4. General plausibility and consistency checks focusing on content within the file. These include checking for additivity of breakdowns, outliers, consistency between prices and comparison between unadjusted and adjusted series;

5. Advanced plausibility and consistency checks focusing on content within the file with information stored outside the file. Examples of these checks include revisions compared to a previous transmission, the sum of quarterly series compared to the annual transmission, and consistency in the value of the series submitted across different tables in the ESA 2010 transmission programme.

These checks are partially performed using automatic pre-validation services, and a subsequent stage of data validation is performed using the internal Eurostat production and validation system, in order to run additional checks. Domain experts then do further analysis in order to decide whether the file can be validated, or if corrections, additional explanations and/or metadata are needed.

8.1.2   Statistical cooperation and harmonisation

Cooperation and harmonisation of national and regional accounts in the ESS are coordinated through the National Accounts Working Group and the EDP Working Group under the guidance of Directors of Macroeconomic Statistics meetings. These groups prepared many manuals and guidance papers on a broad range of subjects before ESA 2010 was introduced, including in cooperation with international partners. This work is ongoing.

Regarding national accounts methodology, the challenging subjects of globalisation and digitalisation, and well-being and sustainability continued to be priority items on the agenda. The GNI multinational enterprises pilot exercise, which started in 2018, was completed in 2019 and suggested improvements to be introduced in national accounts. The project on global production and integrated global accounts, which provided general support covering all the globalisation topics, also completed its first phase in 2019, and planned new actions to address some outstanding issues from the pilot exercise. Technical discussions on digitalisation helped

to identify the cross-border transactions and the link to globalisation issues (internet purchases, online streaming, cloud computing), the discussion on 'free' digital services, the link to the welfare discussion and further guidelines on the price and volume measures for ICT and intellectual property products.

The 'Technical Compilation Guide for Pension Data in National Accounts' was made available in September 2020 in view of the data transmission that took place in December 2020.

Eurostat continued to follow up on and address quality and compliance issues together with the Member States. The fourth quality exercise for national and regional accounts for data transmitted in 2019 was implemented and concluded with the publication of the Eurostat assessment report. Eurostat cooperated with several Member States bilaterally, including in the context of the Eurostat-ECB Memorandum of Understanding in the area of MIP.

As a response to user needs for more indicators on globalisation, Eurostat has launched a new set of intra-EU supply, use and input-output tables (FIGARO tables) in 2021. The key aspect of the inter-country input-output tables is to interlink each of the EU economies with another and with non-EU partners and to be the reference point for national and international organisation in terms of analysis of trade, globalisation, socio-economic, macro-economic and environmental policies for EU countries. In 2022, Eurostat will take further steps to extend the country coverage to include also candidate and potential candidate countries. It will also start publishing new environmental indicators such as carbon footprints.

The work of the dedicated task force on productivity indicators continued. The aim was to support implementation of the new phase of the project on growth and productivity accounts for the period 2019-2021. The enlarged set of labour and productivity indicators is planned to be published by Eurostat by the end of 2021. Work continued on the compilation of data on distribution of income, consumption and wealth through micro-macro data-linking under the auspices of a joint OECD-Eurostat expert group, which resulted in the publication of experimental results at the end of 2020.

A majority of EU Member States performed benchmark revisions in 2019 while a few countries did so in 2020. A fully coordinated benchmark revision for all Member States is planned in 2024. Eurostat collected information on the benchmark revisions in 2019 and designed a communication strategy for users. Information on the 2019 coordinated benchmark revision was published on the Eurostat website in autumn 2019, including details on the published benchmark revisions. Some countries delayed the benchmark revision to 2020. Information on the 2020 benchmark and routine revisions was published on the Eurostat website in autumn 2020. In July 2021, Eurostat published the Benchmark revisions of national accounts — Impact on sector accounts, analysing the impact of the 2019 benchmark revisions in the institutional sector accounts, focusing on households and non-financial corporations.

8.1.3   Gross national income (GNI)

GNI at market prices is the main indicator by which the EU determines Member States' financing of its expenditure, and the GNI concept stems from the ESA definitions. Under the GNI Regulation[13], GNI equals the gross domestic product (GDP) minus primary income payable by resident units to non-resident units plus primary income receivable by resident units from the rest of the world. The specific rules for GNI quality assurance put the focus on the comparability, reliability and exhaustiveness of GNI data, including on the use of harmonised definitions and accounting rules, as well as appropriate sources and compilation methods. The Commission (Eurostat) verifies the sources and methods used by Member States[14] to calculate

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[13] GNI Regulation (EU) 2019/516 entered into force in March 2019, replacing GNI Regulation (EC, Euratom) No 1287/2003.

[14] Art 7(1) of the Agreement on the withdrawal of the United Kingdom of Great Britain and Northern Ireland from the European Union and the European Atomic Energy Community ('Withdrawal Agreement') states:

GNI and, to improve their quality, takes measures with the assistance of a dedicated group composed of representatives of Member States (GNI Expert Group)[15]. The GNI verification process is a stricter procedure compared with that for national accounts.

Based on the GNI inventories presented by Member States at the beginning of 2016, Eurostat examined, for the period 2016-2019 and individually by Member State, the implementation of the ESA 2010 methodology relevant to the GNI calculation. Core elements of the verification included desk checks, information-gathering visits, action points for improvements and, when needed, formal reservations on the quality of GNI data. During the verification cycle 2016-2019, these verification activities resulted in a significant number of action points: by the end of 2019, 1 204 action points had been issued.

The verification process resulted in a number of reservations that have to be addressed by Member States. The following reservations were issued:
- 158 transaction-specific reservations
- 140 (5 for each country) transversal reservations
- 1 general reservation (for France); and
- Process-specific reservations (for the UK for 2016-2019).

In terms of transaction-specific reservations (TSRs), in the ESA 2010 verification cycle, Eurostat issued 158 reservations. The breakdown of TSRs by country is presented in Table 13.

The deadline set for the countries to finalise the work is September 2021.

Table 13: Number of transaction-specific reservations by country

Country	TSR
BE	0
BG	9
CZ	3
DK	1
DE	0
EE	2
IE	6
EL	21
ES	4
FR	0
HR	16
IT	1
CY	1
LV	7
LT	4
LU	9
HU	2
MT	11
NL	1

"For the purposes of this Agreement, all references to Member States and competent authorities of Member States in provisions of Union law made applicable by this Agreement shall be understood as including the United Kingdom and its competent authorities"
Art. 136(1) of the Withdrawal Agreement states:
"The applicable Union law concerning the Union's own resources relating to financial years until 2020 shall continue to apply to the United Kingdom after 31 December 2020, including where the own resources concerned are to be made available, corrected or subject to adjustments after that date".

[15] In May 2019, the former GNI Committee was replaced by the GNI Expert Group (Commission Decision of 17.05.2019).

AT	1
PL	18
PT	0
RO	11
SI	0
SK	6
FI	3
SE	3
UK	18
Total	158

Under the GNI verification process, some areas of national accounts were verified through detailed cross-country comparisons (CCCs). In the ESA 2010 GNI verification cycle, the following CCCs were performed:

- exhaustiveness (absence and misreporting, statistical deficiencies, VAT fraud, use of tax audit information, Illegal activities) : 15 TSRs;
- balancing of GDP: 6 TSRs;
- dwelling services: 8 TSRs;
- financial services, including financial intermediation services indirectly measured:

5 TSRs;

- global production, balance of payments (exports and imports of goods and services, cross-border flows of income of labour, cross-border flows of property income, taxes and subsidies to/from the EU, special purpose entities, global production and relocation of multinational enterprises): 25 TSRs;
- changes between ESA 95 and ESA 2010;
- research and development: 7 TSRs;
- weapon systems: 2 TSRs.

Final reports on CCCs were presented to the GNI Expert Group.

Based on the results of the GNI verification, Eurostat also issued transversal reservations (TRs) for all Member States for the following issues:

- Globalisation;
- Margins on trading financial assets;
- Missing traders VAT fraud;
- Reinvested earnings on foreign direct investment; and
- Recording of daily allowances.

For these five issues, the deadline set for the countries to finalise the work is September 2021 for TR III - Missing traders VAT fraud and TR IV - Reinvested earnings on foreign direct investment and September 2022 for the three remaining transversal reservations.

Each year, the GNI Expert Group (GNIG) examines data supplied in reply to the GNI questionnaire, GNI quality reports and other reports and analyses. This examination takes into account the following:

- the results of work to improve GNI data (including GDP) carried out in previous years;
- the reliability of the sources and methods used to calculate GNI;
- the comparability of GNI data through the use of the same definitions and accounting rules; and
- the exhaustiveness of GNI estimates.

Based on this examination, the GNI Expert Group considers that improvements have been made in the harmonisation and quality of the 27 EU Member States' and the United Kingdom's GNI estimates. It considers that, taking due account of the GNI reservations set for the 27 EU Member States and the United Kingdom between April 2016 and November 2020, these data are appropriate for use for own resource purposes with respect to reliability, comparability and exhaustiveness in accordance with Article 5(2) of the GNI Regulation. The GNI Expert Group underlines that the improvement of the GNI calculations, and of national accounts in general, is a continuous process. It stresses that research and studies should be extended, and efforts pursued with an appropriate level of resources.

8.1.4 Excessive deficit procedure (EDP) and government finance statistics

Government finance statistics play a key role in the EU's economic monitoring. They include, in particular, data on government debt and deficit reported under the excessive deficit procedure (EDP). On behalf of the Commission, Eurostat is responsible for assessing the quality of the EDP statistics submitted by EU Member States and for providing the statistics to be used for the EDP (see also other legal basis). It is solely responsible for interpreting the methodology underlying these statistics. This methodology is based on ESA 2010 and on Eurostat's Manual of Government Deficit and Debt, as well as Eurostat's EDP decisions and guidance notes and GFS interpretations. The methodology was developed based on a broad consensus of the EU statistical community.

For the EDP and government finance statistics (GFS), Eurostat's mission is to be the guardian of the EU Member States' implementation of ESA 2010 and to develop, when necessary, sound interpretations of the ESA 2010 rules based on advice from the EU statistical community. In carrying out this responsibility, Eurostat abides by the principles of equal treatment of Member States and of the European statistics Code of Practice, in particular professional independence, objectivity and impartiality. It maintains a continuous dialogue with all relevant institutions in the Member States, and provides in particular bilateral advice for specific past and future transactions.

In its assessment of the quality of EDP statistics submitted by Member States, Eurostat is committed to verifying:

- national reporting authorities' compliance with ESA accounting rules;
- the exhaustiveness of the coverage of the general government sector, in particular by means of a register of government-controlled entities;
- the quality of Member States' 'EDP Inventories of Methods, Procedures and Sources';
- the reliability, timeliness and consistency of statistical data;
- the consistency, sustainability, transparency, documentation and control of the EDP compilation processes within national statistical authorities;
- the conformity of these processes with the European statistics Code of Practice; and
- the degree of assurance provided by internal controls and external audits by supreme audit institutions or other external audit bodies of the quality of public accounts used as inputs to the EDP compilation processes.

Eurostat reports on EDP data in the context of its regular and exhaustive reports to the Council (Economic and Financial Committee) and European Parliament.

For GFS data reported in the ESA 2010 transmission programme, Eurostat, in close cooperation with Member States, ensures the consistency of data within the data set,

consistency with other GFS data, and consistency with EDP data. In the context of regular transmission reports[16], Member States and Eurostat ensure data coherence and accuracy.

Results, including on data comparability (methodological interpretation), are reported in the GFS and COFOG task forces in the context of progress reports as well as ad hoc studies and discussions. These task forces routinely report their findings to the working group on EDP statistics for validation.

A revision analysis of deficit and debt is published alongside the EDP press releases.

In 2019, a new addition of the COFOG manual was published. In comparison to previous editions, the manual was completely updated, most importantly to reflect the ESA 2010 (European System of Accounts) framework. Further guidance is given by the additional general guidance on the recording of consumption of fixed capital on own-account research and development (R&D) and correspondences among the COFOG classification and economic transactions used in the ESA 2010 framework as well as of sixteen new case studies.

8.2 Comparability over time

The availability of consistent historical data on national and regional accounts is essential for the needs of economic analysis. Depending on the ESA 2010 data set, countries provide time series back to reference years 2000 and even 1995.

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[16] Covering completeness, coherence, basis and advance plausibility checks, revisions, growth rates, unexpected amounts, etc. and providing for Member States' explanations.

9 Coherence

Coherence is the measurement of the adequacy of the data to be reliably combined in different ways and for various uses.

The sufficiency of statistics that are produced for different primary purposes to be used jointly is assessed through checking for cases where there is lack of coherence between these statistics.

Coherence is a key quality criterion to assess the national and regional accounts data. This year's edition of quality reporting introduces an assessment of the coherence between non-financial and financial accounts data from EU Member States based on an analysis of new quality indicators. The new indicator complements the three quality indicators, already calculated in the past. The remaining six coherence indicators will be employed in the assessments carried out in the quality reports from 2021.

The evaluation of consistency within this quality report is based on the following coherence indicators:

- coherence between totals and sum of components;
- coherence between quarterly and annual data;
- cross-domain coherence, between non-financial sector accounts and financial accounts: net lending / net borrowing;
- coherence of identical variables across national accounts main aggregates tables.

9.1 Cross-domain coherence

ESA 2010, paragraph 5.18, states that: 'The balancing item of the financial account is conceptually identical to the balancing item of the capital account. In practice, a discrepancy is usually found between them because they are calculated on the basis of different statistical data'. In other words, ESA 2010 acknowledges that non-financial and financial accounts require different source data, so discrepancies (known as 'vertical' discrepancies because of the sequence of accounts) are likely. Furthermore, ESA 2010 paragraph 5.244 instructs not to locate the discrepancy in other accounts receivable/payable.

9.1.1 Coherence between non-financial sector accounts and financial accounts – net lending / net borrowing

When considering discrepancies between net lending / net borrowing of the non-financial accounts (B9) and the financial accounts (B9F), it might be assumed that, generally, the larger the discrepancy, the more questionable the data quality of the non-financial and/or financial accounts. However, the interpretation of this inconsistency should be more nuanced.

The differences between net lending / net borrowing in the non-financial and financial accounts can be broken down by institutional sector: S.1: total economy; S.11: non-financial corporations; S.12: financial corporations; S.13: general government; S.14: households; and S.15: non-profit institutions serving households. The absolute differences as a percentage of GDP are shown in Figure 13 for 27 EU Member States. These are based on the data extractions for annual financial accounts and annual non-financial sector accounts.

Figure 13: Average of EU countries - absolute differences in net lending / net borrowing of non-financial account (B9) and financial account (B9F) as a percentage of GDP
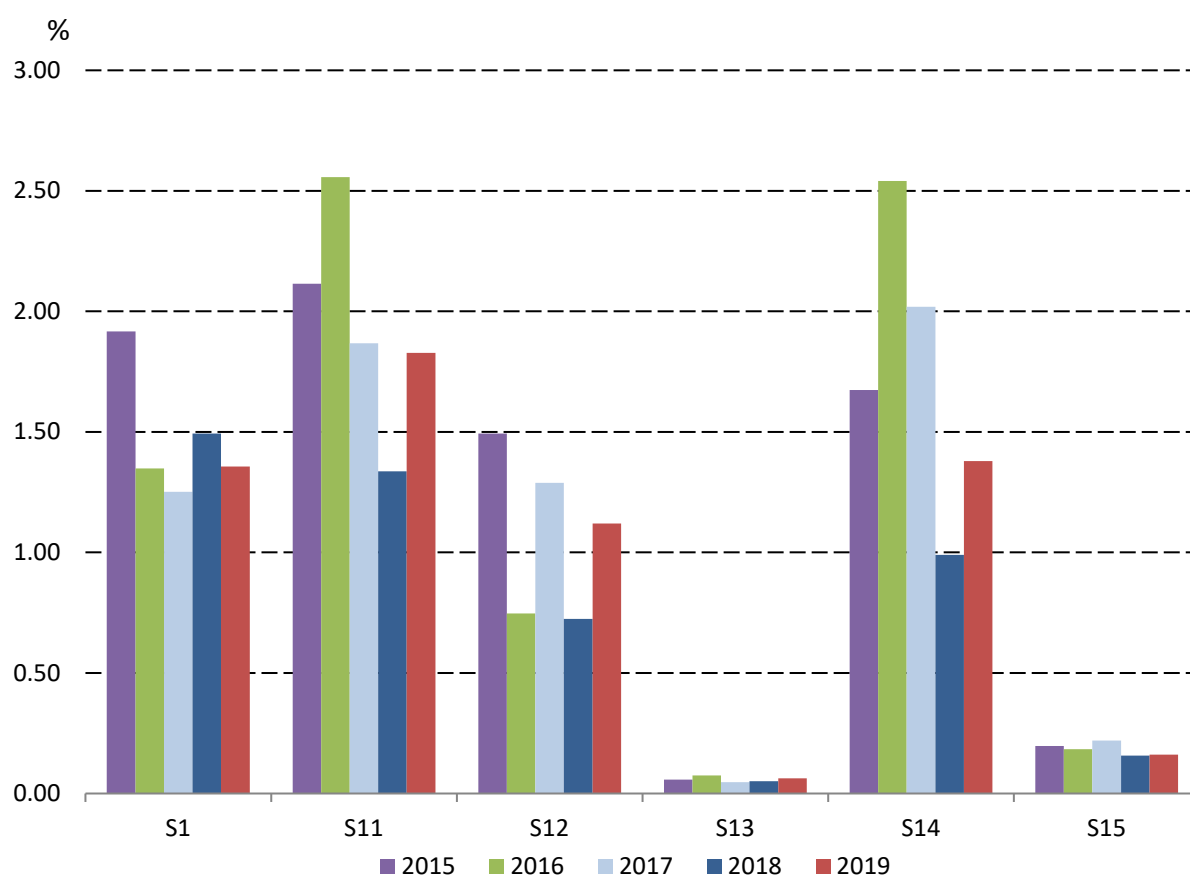
Note: Bulgaria missing for 2018 and 2019, Luxembourg missing for 2019.

The differences shown in the chart are clearly significant in size. The absolute discrepancies range from around 2% in the non-financial corporation sector (S.11) and 1.5% in the household sector (S.14), sectors where data sources tend to be less complete or reliable, to below 0.2%

for the general government sector (S.13). Moreover, there is no indication that the differences diminish over time as data for earlier years become finalised. Indeed, an examination of a much longer time series indicates that similarly large differences persist in many countries over the whole period.

In addition, there are large variations in size of vertical discrepancies between countries, depending on the institutional sector. The boxes in Figure 14 show the distribution of the differences among 27 EU Member States (26 for year 2018) for each sector, taking an average of countries' data for reference years 2015-2019. Very extreme values for Malta have been removed from the chart.

Figure 14: Average of EU countries - differences in B9 / B9F as a percentage of GDP, box plots (average of reference years 2015-2019)
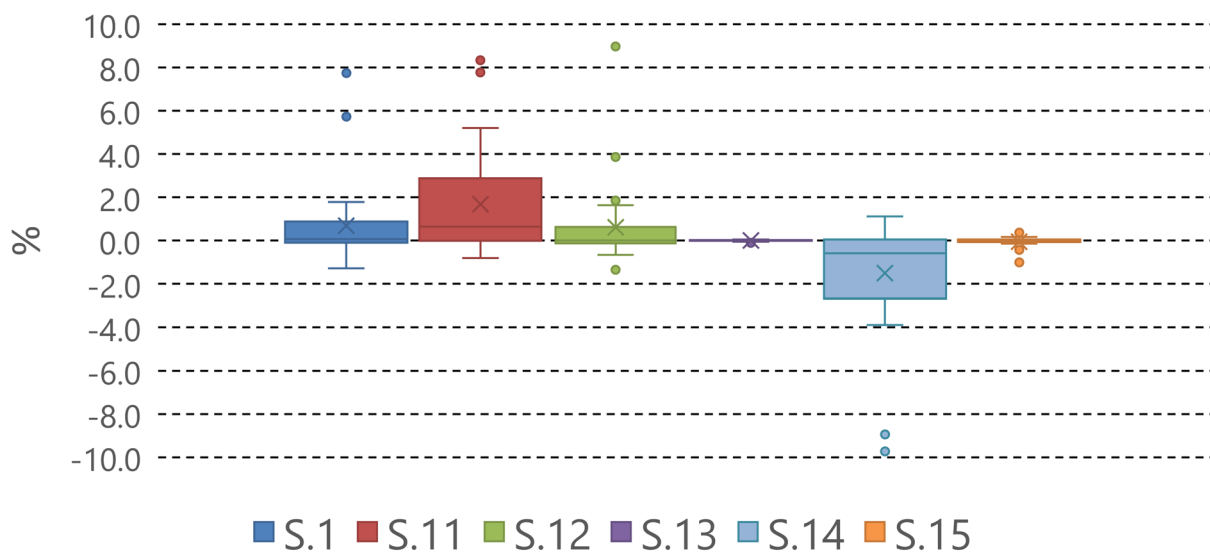
Note: Bulgaria missing for 2018 and 2019, Luxembourg missing for 2019.

One feature, which is apparent, is the wide range of differences (variability) across sectors. Additionally, the discrepancies tend to be negative in the case of S.14, (meaning that net lending of the financial accounts is higher, or net borrowing lower, than the non-financial accounts), whereas the discrepancy tends to be positive in the case of S.11 and to a lesser extent S.12. This is a sectoral bias in the results of at least some countries.

Table 14 shows the cases of vertical balancing to zero by sector, showing a variety of approaches across countries. Seven countries reduce the discrepancies to zero for the financial corporation sector and for the household sector, while five countries reduce the discrepancies to zero for the non-financial corporation sector. Twelve countries reduce the discrepancies to 0% of GDP for the non-profit institutions serving households sector, which is however also due to the small size of the sector.

Table 14: Vertical balancing to zero (maximum discrepancy 0.1% of GDP), average of reference years 2015-2019

	S.1	S.11	S.12	S.14	S.15
CZ, DK, LU, SK	✓	✓	✓	✓	✓
HU, IE, LT					✓
AT, PT				✓	✓
DE			✓	✓	✓
ES	✓		✓		
IT		✓			✓
NL			✓		✓

Note: S.13 is not shown.

EU Member States mentioned in Table 14 eliminate the discrepancy for the sectors concerned. This involves adjusting one or more transactions, in either domain, to ensure that net lending / net borrowing matches in the financial and non-financial accounts. The differences are allocated to data considered of lesser quality, typically accounts receivable/payable, or unlisted shares, but it could be other transactions. However, such adjustments may have little statistical justification, so there is a risk of reducing the quality of the affected data. Moreover, the adjustments make it more difficult to reconcile the accounts with data sources.

Nonetheless it is clearly good practice to reduce vertical discrepancies as much as possible without resorting to arbitrary decisions or techniques. The check of coherence between non-financial sector accounts and financial accounts in the national quality reports, through a comparison of net borrowing /net lending, showed a wide variability in terms of results by country and institutional sector. The absolute values of vertical discrepancies as a percentage of GDP, averaged over the period 2015 to 2019, are presented in Table 15.

The table presents the vertical discrepancies for all sectors. The average absolute discrepancies were largest in S.11 and S.14, where the average of EU Member States was 2% and 1.83% of GDP, respectively. The national practices of vertical balancing to zero can also be clearly seen for the countries presented in Table 14. Average absolute discrepancies of between 2% and 5% of GDP are shown in pale mauve colour, while discrepancies above 5% of GDP are shown in darker purple.

Apart from vertical balancing, on average over the 2015 to 2019 period, absolute vertical discrepancies were less than 0.5% of GDP in all sectors for Czechia, Denmark, France, Luxembourg, the Netherlands, Portugal and Slovakia.

Some Member States had high absolute discrepancies in percentage of GDP (Bulgaria, Malta, Romania), with Malta showing very high values for S.11, S.12 and S.14. By contrast, some Member States (Austria, Belgium, Cyprus, Germany, Estonia, Spain, Croatia, Italy, Sweden and Slovenia) managed to keep the averages below 2% of GDP for all sectors, even if their vertical discrepancies are not close to zero.

Comments by EU Member States in their national quality reporting tended to underline that vertical discrepancies were being monitored, and in some cases there was specific mention of work to reduce them.

Table 15: Average absolute vertical discrepancy over 2015-2019, by sector (as % of GDP)

Institutional sector	S. 1	S. 11	S. 12	S. 13	S. 14	S. 15
AT	0.73	0.81	0.22	0.03	0.01	0.00
BE	0.00	0.78	0.57	0.26	0.69	0.13
BG	2.14	6.42	3.85	0.11	8.94	0.22
CY	0.94	0.46	0.57	0.06	0.58	0.22
CZ	0.00	0.00	0.00	0.00	0.00	0.00
DE	1.61	1.61	0.00	0.00	0.06	0.06
DK	0.00	0.00	0.00	0.00	0.00	0.00
EE	0.68	1.66	0.70	0.07	1.85	0.11
ES	0.00	0.95	0.00	0.03	0.93	0.11
FI	2.76	4.26	1.54	0.11	1.11	0.44
FR	0.18	0.23	0.19	0.03	0.22	0.10
HR	0.74	1.69	0.85	0.12	1.82	0.36
HU	1.30	2.75	0.81	0.08	2.21	0.04
IE	1.89	0.88	1.03	0.10	0.74	0.07
IT	0.63	0.04	0.84	0.05	0.32	0.04
LT	0.92	3.11	1.36	0.03	3.08	0.09
LU	0.00	0.00	0.00	0.00	0.00	0.00
LV	0.56	2.03	1.11	0.05	2.68	0.16
MT	12.98	8.33	9.20	0.11	11.42	0.48
NL	0.29	0.16	0.00	0.03	0.38	0.08
PL	1.09	4.94	0.80	0.02	3.63	0.67
PT	0.26	0.13	0.16	0.00	0.00	0.00
RO	5.72	7.76	1.63	0.06	3.89	0.17
SE	1.37	0.93	1.20	0.02	0.55	0.21
SI	0.89	1.07	1.34	0.02	1.16	0.11
SK	0.05	0.08	0.07	0.09	0.08	0.05
GR	2.07	2.87	1.93	0.11	2.91	1.01
Average	1.47	2.00	1.11	0.06	1.83	0.18

Note: Bulgaria missing for 2018 and 2019, Luxembourg missing for 2019.

9.2 Coherence between quarterly and annual data

When both quarterly and annual data are submitted to Eurostat, it is important to ensure that the quarterly data are consistent with the annual data. Small differences may be tolerated, but not major ones, especially in the case that data are transmitted at close or coinciding deadlines.

Consistency between annual data and the sum of the data for the four individual quarters was

analysed for certain key EU aggregates in the context of this quality reporting exercise. The analysis covered the differences between annual data and the sum of the four respective quarters of data over the period 2016 to 2020, for GDP (current prices, non-seasonally adjusted), total employment (in thousands of persons, non-seasonally adjusted), gross operating surplus, gross mixed income, and gross disposable income.

9.3 Coherence between totals and sum of components

When data submitted to Eurostat can be broken down by activity (i.e. NACE Rev. 2 divisions), it is important to ensure that the figures add up and are consistent in terms of expected additivity rules (except in cases where additivity does not apply, like the case of chain-linked volumes).

The consistency checks performed in the 2020 quality reporting exercise covered:

- gross domestic product in current prices, non-seasonally adjusted, total and sum of expenditure components (quarterly and annual data), Table 1;

- gross value added, current prices, total and NACE Rev. 2, level A*10 breakdowns (quarterly and annual data), Table 1;

- total employment in thousands of persons, non-seasonally adjusted, total and sum of employees and self- employed (quarterly and annual data), Table 1;

- total employment, in thousands of persons, total and sum of NACE Rev. 2, level A*10 breakdowns (annual data), Table 1.

In the analysed period from 2015 to 2019, for national accounts main aggregates and for the most recent four quarters, the overall results of consistency checks between totals and sums of components were good, with only very minor differences due to rounding.

9.4 Coherence of identical variables across national accounts main aggregates tables

National accounts main aggregates data for some key variables are sent in various tables of the ESA 2010 transmission programme. This is the case, for example, for: GVA, compensation of employees, and employment which are sent in Tables 1 and 3; GDP, which is sent in Tables 1 and 8; gross fixed capital formation data, which are included in Tables 1, 3 and 22.

Theoretically, these data should be the same across tables. However, for practical reasons, they may differ for some tables and in some countries. While differences due to different vintages are usually limited, there are also cases where significant revisions are introduced, notably in the context of the EDP or GNI verification process. Until these revisions can be incorporated into the full set of national accounts, more substantial differences can be observed across tables.

In the context of this quality reporting exercise, the average and absolute maximum difference for the following variables were analysed:

- GDP in current prices for quarterly and annual data within Table 1 (GDP according to production, expenditure and income approach);

- gross value added in current prices for annual data between Tables 1 and 3;

- compensation of employees in current prices for annual data between Tables 1 and 3;

- gross fixed capital formation in current prices for annual data between Tables 1 and 3 and Tables 1 and 22;

- exports of goods and services in current prices for quarterly and annual data within Table 1 (taken from expenditure components of gross domestic product and from the detailed exports breakdown);

- imports of goods and services in current prices for quarterly and annual data within Table 1 (taken from expenditure components of gross domestic product and from the detailed imports breakdown);

- total employment, employees and self-employed for annual data in thousands of persons between Tables 1 and 3.

In the analysed data for reference years from 2015 to 2019, the internal coherence across national accounts main aggregates tables for both annual and quarterly frequencies was very good.

10 Overall quality assessment and recommendations

This chapter summarises the results of the quality assessment of the national and regional accounts data submitted by the EU Member States, Iceland, Norway and Switzerland in 2020.It also summarises the assessment of Eurostat's publications of European aggregates. It is the fourth such assessment since the introduction of ESA 2010 in September 2014.

As has been the case since 2016, the data sent in 2020 were broadly in line with the quality standards of the ESS and the ESA 2010 Regulation. Many Member States have been able to comply with the new data requirements and methodology, while the process of adapting national data compilation systems continued in 2020. There have been improvements in both data completeness and punctuality since the first quality report on data submissions in 2016. Based on the quality criteria used in the assessment, the overall results are presented below.

10.1.1 Conclusions

RELEVANCE

National and regional accounts data are highly relevant to users as demonstrated by Eurostat's latest user satisfaction survey conducted in 2020. The domains included in the survey are in accordance with the ESA 2010 'Economy and Finance' theme and grouped as 'National accounts' data (including GDP, main aggregates, sector accounts, input-output tables and regional accounts), 'Financial accounts and monetary indicators' and 'Government finance statistics'.

Eurostat aims to compile a harmonised overview of the evaluation results across all the tables of the ESA 2010 transmission programme. Nevertheless, the results for certain countries might still not be entirely appropriate or comparable, notably with respect to the counting of missing data - flagged as not applicable (M). As data flagging practices still vary across countries, further efforts will be made towards harmonisation.

Eurostat finds it important to acknowledge the efforts made by all countries to submit additional data on a voluntary basis for the benefit of users. However, the voluntary transmissions have not been taken into account in the national quality report assessment.

ACCURACY

The analysis of revision rates for GDP and employment flash estimates for European aggregates showed that the accuracy of estimates in the analysed period was high, as was the accuracy of releases of aggregate data from quarterly sector accounts.

Most Member States implemented the benchmark revisions in 2019, whereas some carried them out in 2020. This was the case for Czechia, Malta, Poland and partly for Lithuania (second

phase for back series). In addition, Latvia, Ireland and Romania carried out further major revisions in 2020. Greece conducted a staged benchmark revision covering the time-series back to 2010. Luxembourg conducted a benchmark revision for government finance statistics and (partially for) financial accounts in 2020, but for other national accounts' domains the benchmark revision was further delayed.

The content of available information on national revisions varies substantially among the countries for which the information is publicly available. Nearly all countries publish information on the national revision policy for quarterly national accounts. However, information on revisions for financial accounts, regional accounts and supply use input-output tables is still missing on most national websites.

TIMELINESS AND PUNCTUALITY

With most countries submitting all mandatory quarterly accounts on time or with a short delay on only one table, the punctuality of transmission of quarterly national accounts was overall high in 2020.

The assessment of timeliness is based on a punctuality indicator calculated by subtracting the due delivery date from the first delivery date of data, taking into account derogations. This means that data received in accordance with the official deadline are reported with a timeliness of 0 days, indicating that data were delivered on time. A positive number of days indicates a delayed delivery, whereas a negative number of days indicates an advanced delivery.

Data transmissions assessed according to this indicator showed high punctuality for most domains and tables (Annex 2).

Thanks to the punctuality of data submitted by Member States, Eurostat's flash estimates and news releases of the European aggregates underlying the principal European economic indicators (PEEIs) remained timely.

ACCESSIBILITY AND CLARITY

All EU Member States and EFTA countries publish online documentation on national accounts methodology and compilation methods. However, the content of the available information varies substantially across countries and could be enriched where appropriate. A comprehensive set of documentation is accessible online.

COHERENCE

The analysis of coherence in this quality report is limited, as only the internal coherence of certain main aggregates tables was subject to detailed analysis. The coherence between non-financial sector accounts and financial accounts for net lending and net borrowing has been assessed in this report.

Overall internal coherence within tables (Table 1) and between tables (Tables 1 and 3, 1 and 22) was very high for nearly all countries in 2020. Very minor discrepancies were noted for a small number of countries, which were mainly caused by vintage issues or rounding practices.

The internal coherence indicators cover: (i) consistency checks between selected annual and quarterly data series transmitted in main aggregates tables and sector accounts; (ii) consistency checks of GDP series transmitted in different sub-tables; and (iii) consistency of the sums against the components for main aggregates. Based on these checks, discrepancies were generally zero for most countries.

Based on the quality assessment, Eurostat makes the following **general recommendations** to countries, encouraging them to strive to:

1. Improve compliance in terms of the **completeness** of certain tables

2. Improve compliance in terms of the **punctuality** of certain tables

3. Improve quality aspects regarding the **accuracy** of statistics

4. Improve quality aspects regarding the **accessibility and clarity** of statistics

5. Improve quality aspects regarding the **coherence** of statistics.

In addition, based on national quality reports and analysis of submitted data, Eurostat provided country-specific recommendations. The specific recommendations given to Member States are then linked to and examined under each generic recommendation. Each specific recommendation is evaluated from zero to three, with zero meaning no recommendation and three indicating major data gaps or a recommendation with high priority. The evaluation scores are presented below:

0 - No recommendation
1 - Minor gap/Lower priority
2 - Significant gap/Medium priority
3 - Major gap/High priority.

The country-specific recommendations are summarised in Table 16.

Table 16: Country-specific recommendations

Table 16: Country-specific recommendations based on data and metadata transmissions in 2020			
Recommendations	**Countries**		
	Minor gap / Lower priority	**Significant gap / Medium priority**	**Major gap / High priority**
Improve compliance in terms of the completeness of certain tables			
NAMA	BE, BG, DK, EE, IT, CY, LV, LT, HU, PL, PT	EL, FR, LU, RO, FI, NO, CH	HR, MT, IS
GFS	DK, DE, EE, IE, HU, PT, SI, SK	BG, HR, PL	IS, CH
NFSA	CZ, DK, DE, EE, EL, FR, LV, HU, PL, RO, SK	HR, MT, NO	BG, IS
AFA	CZ, DK, LV, NO	EE	IS, CH
RA		SE	FR, PL, NO
SUIOT	EL	FI	BG, HR, MT, IS, NO
PENS	CZ, DE, ES, CY, AT, SI, SE, IS	DK, IT, LU, RO	EL, PL, PT
Improve compliance in terms of the punctuality of certain tables			
NAMA	CZ, EL		HR
GFS		BG, PL, IS	
NFSA		EL, MT, RO, PL, CH	BG, HR
AFA	MT	IS	
RA	EL	SE	NO

SUIOT			BG, MT, IS, NO
PENS	IS		FR

Improve compliance in terms of the methodological adherence to ESA 2010

GNI country specific reservations	CZ, DK, EE, IT, CY, HU, NL, AT, FI, SE	IE, ES, LV, LT, SK	BG, EL, HR, LU, MT, PL, RO

Improve quality aspects regarding accuracy of statistics

Develop and publish or update information on the national revision policy for national accounts	SK	FR, LV, HR, AT	DK, EL, IE, LU, MT
Ensure the integration of annual financial accounts into the national revision policy for national accounts		IT	CZ, EL, HR, LV, SK
Foster efforts towards alignment of the national revision policy to the harmonized European revision policy endorsed by the CMFB	RO, SK	BG, CZ, HU, HR, PL, CH	DK, EL, MT, IE, FR
Improve aspects of the routine revisions practice	DE, SE	HU, IE, IS, CH	EL, HR, LU, MT, NO
Improve aspects of the benchmark revisions practice		BE, EE, IE, RO, NO	BG, EL, HR, MT

Improve quality aspects regarding accessibility and clarity of statistics

Widen the scope of the methodological documentation available online		BG, PL, SK	HR, LU, MT, RO
Pursue the development/update of the voluntary inventories (ASA, QNA, etc.)	BE, BG, CY, CZ, DE, EE, ES, HR, IE, FR, LV, LU, MT, RO, SI, SK, CH		
Implement accurately the recommendations of the ESA 2010 Validation Handbook regarding data flags			BG, ES, EL, HR, LU, NL IS

Improve quality aspects regarding coherence of statistics

Address systematic difficulties in delivering NFSA data to Eurostat	CH	IE, PL	BG, HR, LU
Ensure the consistency of reported data internally within the data set and/or between the frequencies		LU	BG, HR, IS, NO
Continue to improve the consistency of NFSA with GFS and/or NAMA where needed	RO	EL, IE, SK, LU, PL	BG, HR, IS, NO
Monitor and reduce the discrepancies between financial and non-financial sector accounts	SE		BG, EL, HR, LT, LV, IE, MT, PL, RO

Annexes

Annex 1: ESA 2010 transmission programme

Table 17: Transmission programme of data — Overview of the tables

Table No	Subject of the tables	Frequency	Deadline t + months (days where specified)	Period covered
T1Q	Main aggregates	quarterly	2	1995Q1 onwards
T1A	Main aggregates	annual	2/9	1995 onwards
T2	Main aggregates of general government	annual	3/9	1995 onwards
T3	Tables by industry	annual	9/21	1995 onwards
T5	Household final consumption expenditure by purpose	annual	9	1995 onwards
T6	Financial accounts by sector (transactions)	annual	9	1995 onwards
T7	Balance sheets for financial assets and liabilities	annual	9	1995 onwards
T8	Non-financial accounts by sector	annual	9	1995 onwards
T801	Non-financial accounts by sector	quarterly	85 days[17,18]	1999Q1 onwards
T9	Detailed tax and social contribution receipts by type of tax and social contribution and receiving subsector including the list of taxes and social contributions according to national classification	annual	9	1995 onwards
T10	Tables by industry and by region, NUTS level 2	annual	12/24	2000 onwards
T11	General government expenditure by function	annual	12	1995 onwards
T12	Tables by industry and by region, NUTS level 3	annual	24	2000 onwards
T13	Household accounts by region, NUTS level 2	annual	24	2000 onwards
T15	Supply table at basic prices incl. transformation into purchasers' prices	annual	36	2010 onwards
T16	Use table at purchasers' prices	annual	36	2010 onwards
T17	Symmetric input-output table at basic prices	five-yearly	36	2010 onwards
T20	Cross classification of fixed assets by industry and by asset	annual	24	2000 onwards
T22	Cross classification of gross fixed capital formation by industry and by asset	annual	24	1995 onwards
T26	Balance sheets for non-financial assets	annual	24	1995 onwards
T27	Financial accounts of general government	quarterly	85 days[17]	1999Q1 onwards
T28	Government debt (Maastricht debt) for general government	quarterly	3	2000Q1 onwards
T29	Accrued-to-date pension entitlements in social insurance	three-yearly	24	2012 onwards

[17] The deadline of 85 days is applicable to Member States whose currency is the euro. For Member States whose currency is not the euro, the data transmission deadline is 3 months. If a Member State transmits the complete data set within 85 days, data does not need to be transmitted at 3 months.
[18] For Member States whose gross domestic product at current prices is less than 1 % of the corresponding Union total GDP, only data for selected items is compulsory.

Annex 2: Completeness rates per ESA 2010 domain and table

**Figure 15: Table 1Q - Main aggregates - quarterly
(period covered: 1995Q1–2020Q3, data reported in 2020)**
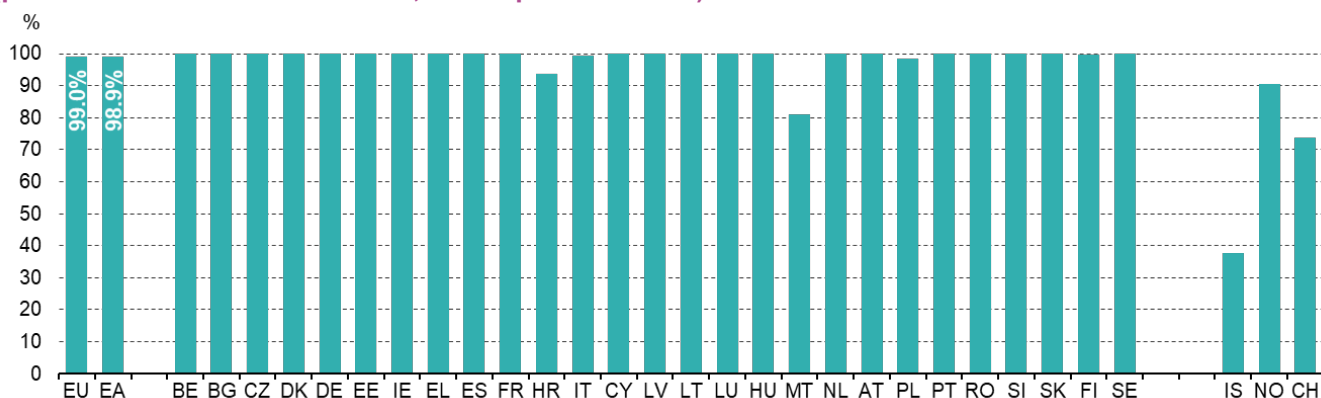
**Figure 16: Table 801 - Non-financial accounts by sector - quarterly
(period covered: 1999Q1–2020Q3, data reported in 2020)**
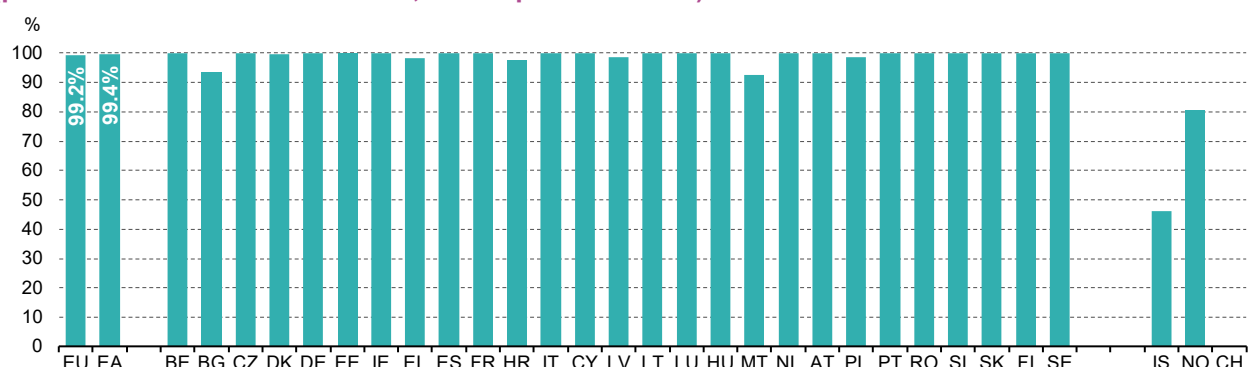
**Figure 17: Table 27 - Financial accounts of general government - quarterly
(period covered: 1999Q1–2020Q3, data reported in 2020)**
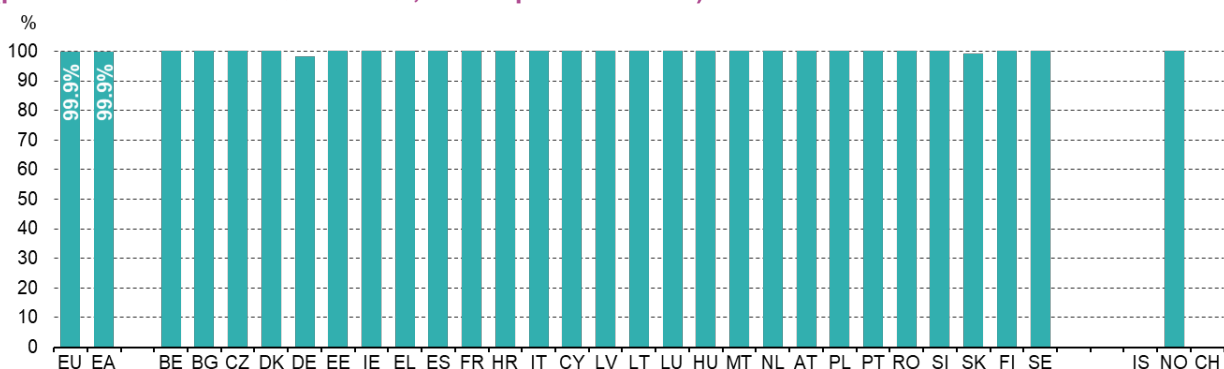
Figure 18: Table 28 - Government debt (Maastricht debt) for general government - quarterly (period covered: 2000Q1–2019Q3, data reported in 2020)
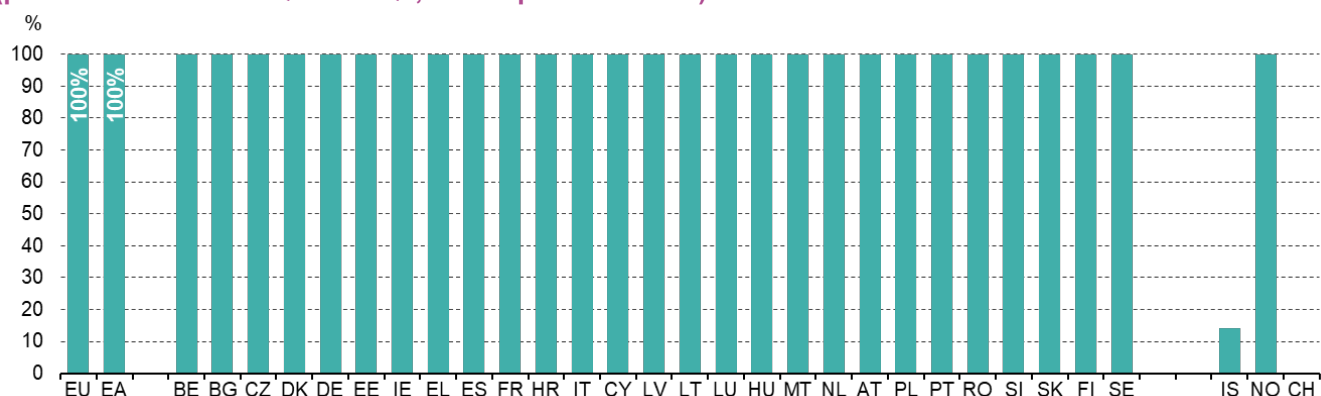
Figure 19: Table 1A - Main aggregates - annual (period covered: 1995–2019, data reported in 2020)

Figure 20: Table 3 - Tables by industry - annual (period covered: 1995–2019, data reported in 2020)
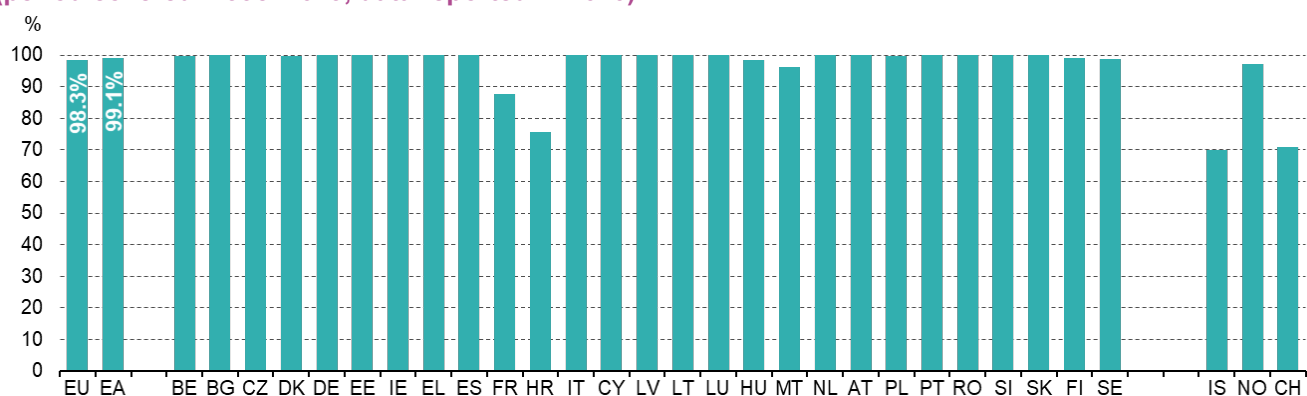
**Figure 21: Table 5 - Household final consumption expenditure by purpose - annual
(period covered: 1995–2019, data reported in 2020)**
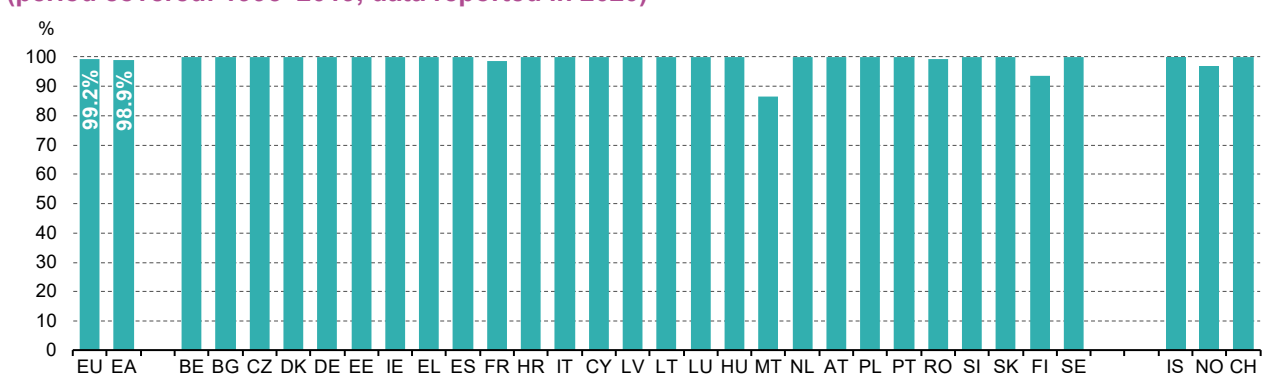
**Figure 22: Table 20 - Cross classification of fixed assets by industry and by asset - annual
(period covered: 2000–2018, data reported in 2020)**
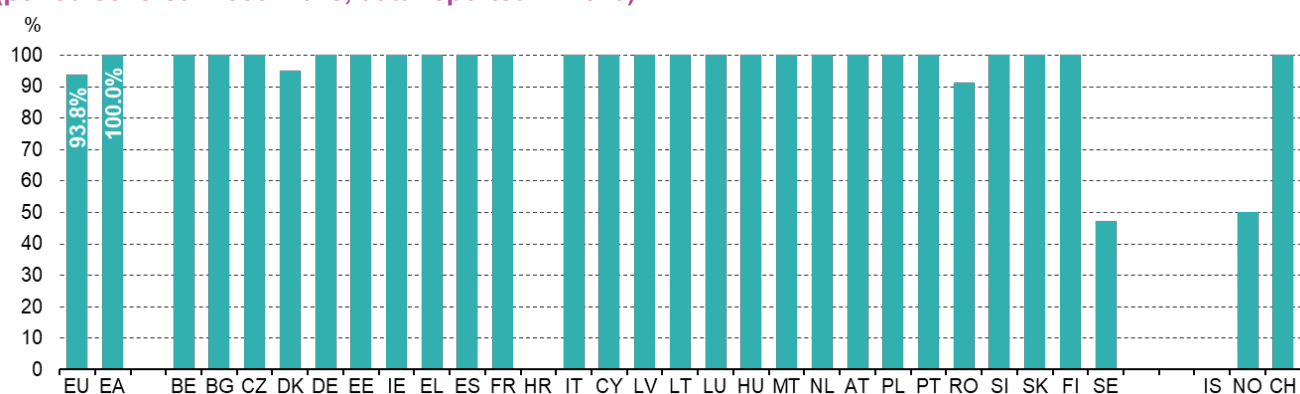
**Figure 23: Table 22 - Cross classification of gross fixed capital formation by industry and by asset – annual
(period covered: 1995–2018, data reported in 2020)**
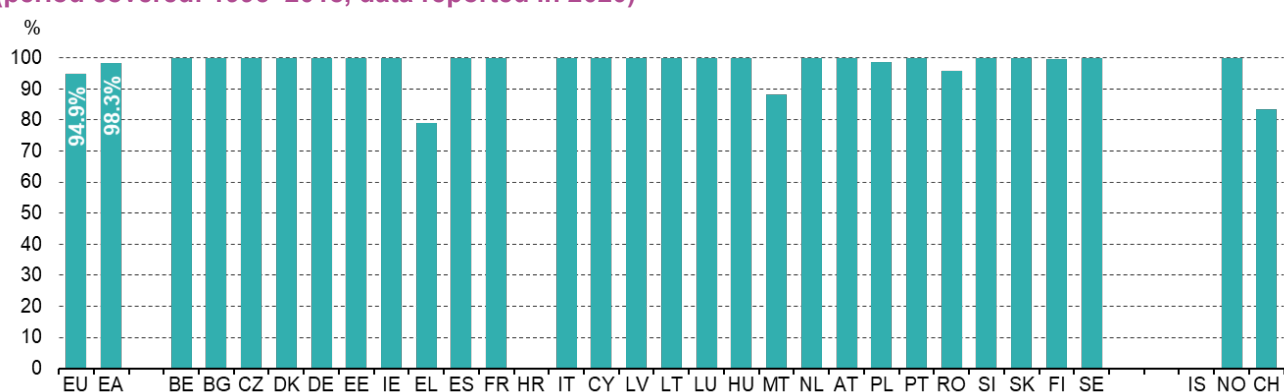
**Figure 24: Table 26 - Balance sheets for non-financial assets - annual
(period covered: 1995–2018, data reported in 2020)**
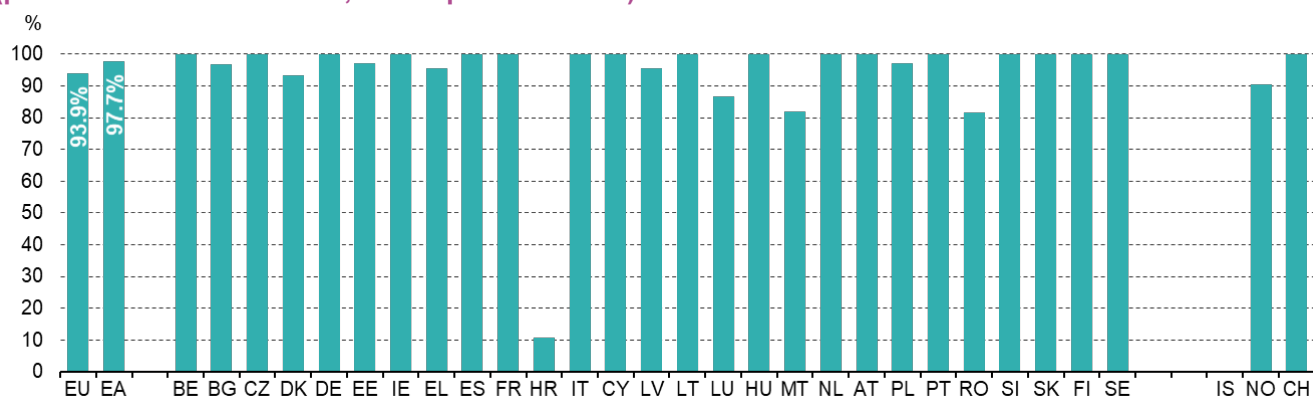
**Figure 25: Table 2 - Main aggregates of general government - annual
(period covered: 1995–2019, data reported in 2020)**
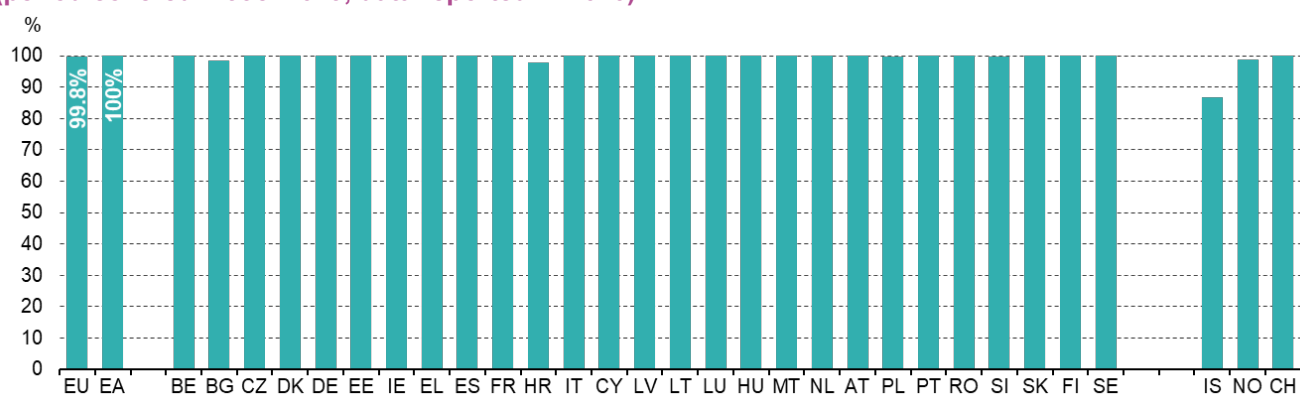
**Figure 26: Table 9 - Detailed tax and social contribution receipts by type of tax and social
contribution and receiving subsector including the list of taxes and social contributions according to
national classification – annual
(period covered: 1995–2019, data reported in 2020)**
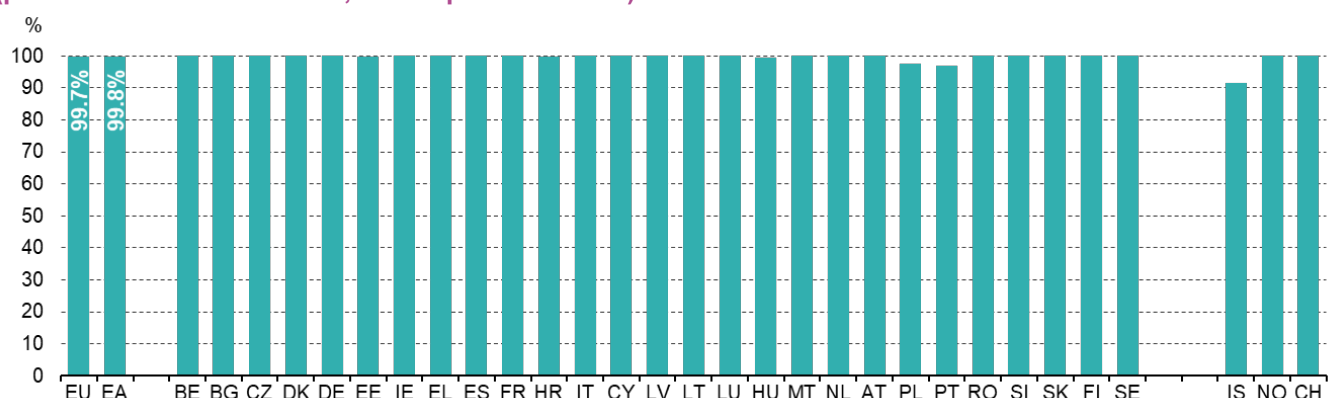
Figure 27: Table 11 - General government expenditure by function - annual (period covered: 1995–2019, data reported in 2020)
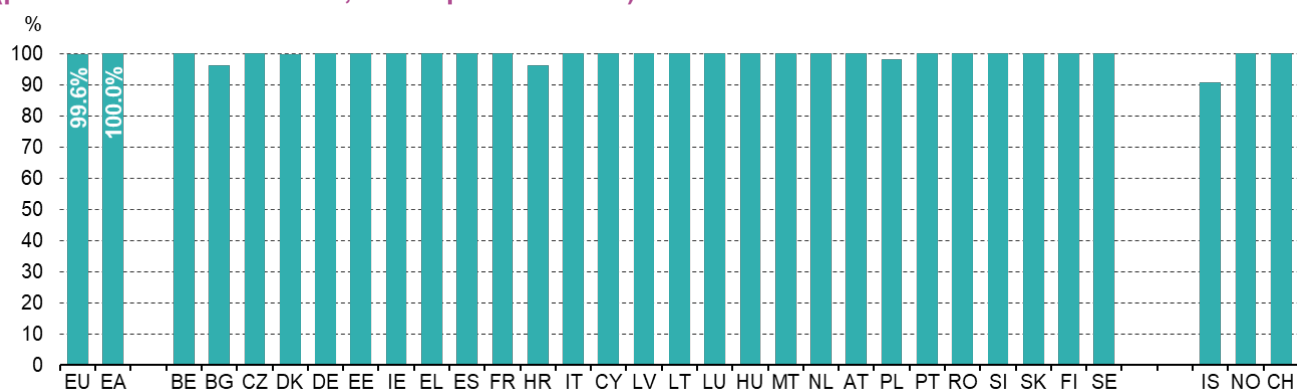
Figure 28: Table 8 - Non-financial accounts by sector - annual (period covered: 1995–2019, data reported in 2020)

Figure 29: Table 6 - Financial accounts by sector (transactions) - annual (period covered: 1995–2019, data reported in 2020)
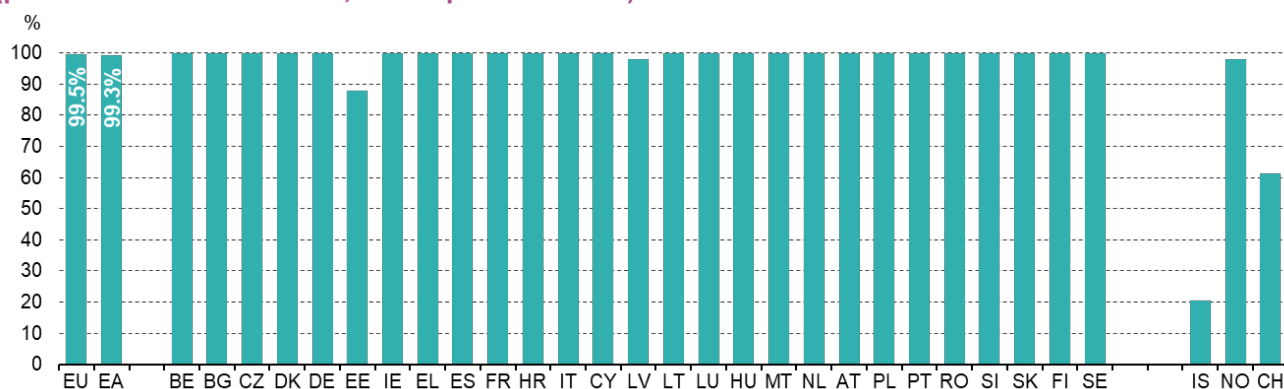
**Figure 30: Table 7 - Balance sheets for financial assets and liabilities - annual
(period covered: 1995–2019, data reported in 2020)**
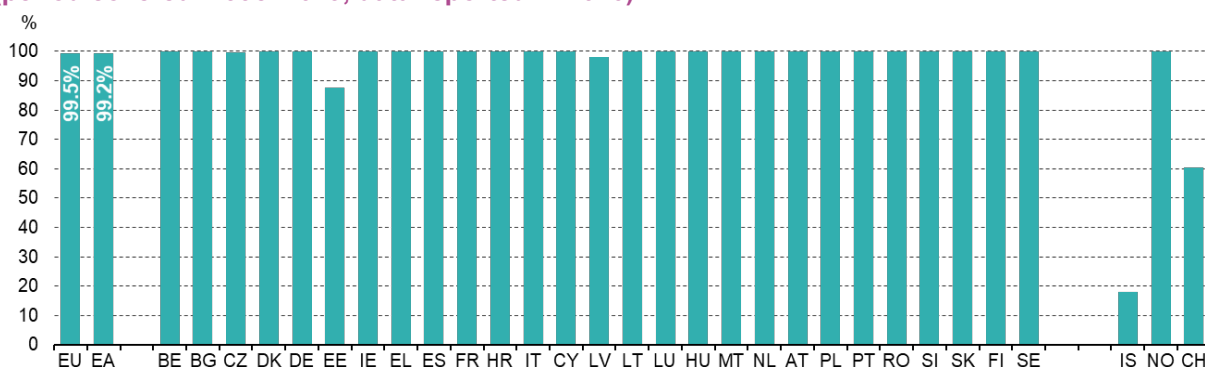
**Figure 31: Table 10.1 (t+12) - Tables by industry and by region (NUTS level 2) - annual
(period covered: 2000–2019, data reported in 2020)**
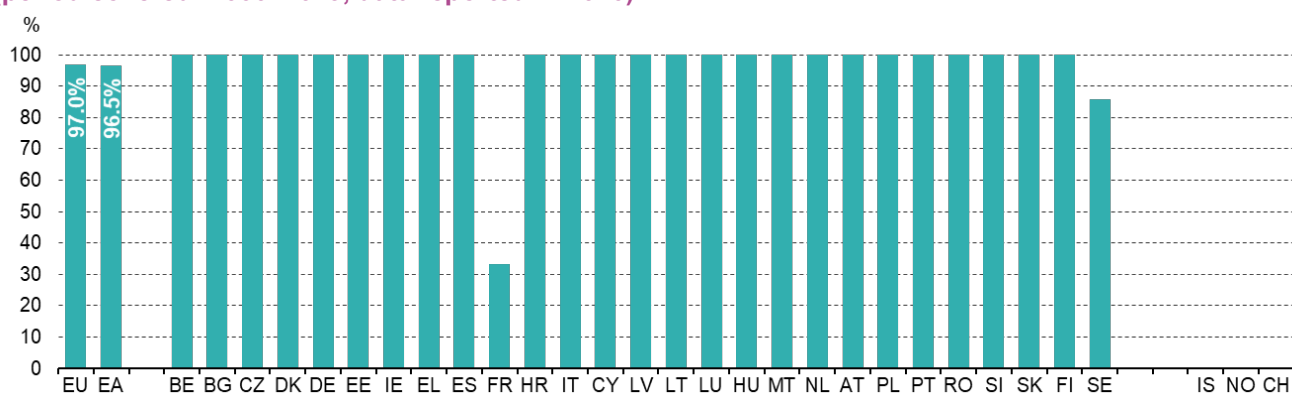
**Figure 32: Table 10.2 - Tables by industry and by region (NUTS level 2) - annual
(period covered: 2000–2018, data reported in 2020)**

Figure 33: Table 12 - Tables by industry and by region (NUTS level 3) - annual (period covered: 2000–2018, data reported in 2020)
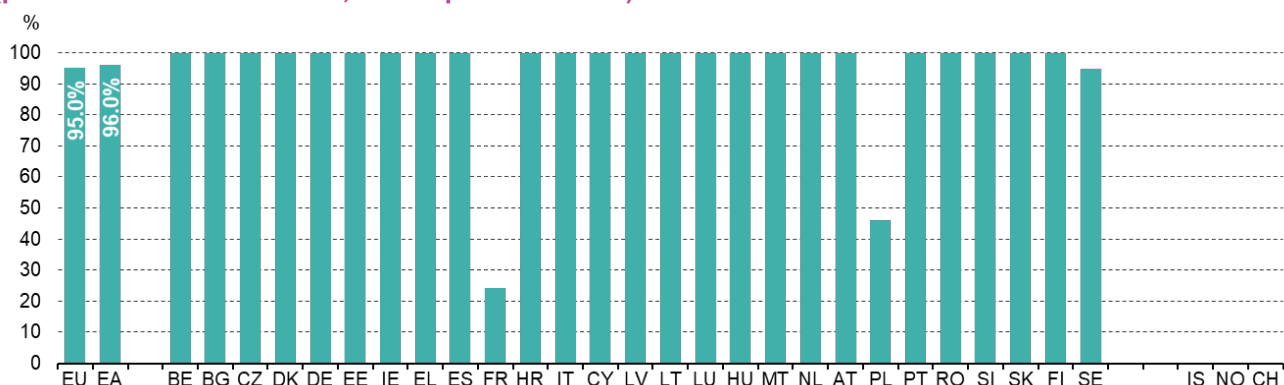
Figure 34: Table 13 - Household accounts by region (NUTS level2) - annual (period covered: 2000–2018, data reported in 2020)
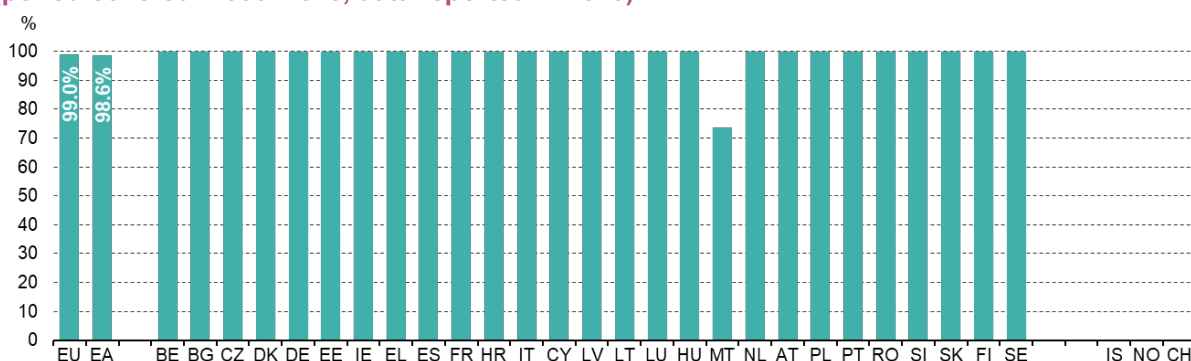
Figure 35: Table 15 - Supply table at basic prices incl. transformation into purchasers' prices - annual (period covered: 2010–2017, data reported in 2020)
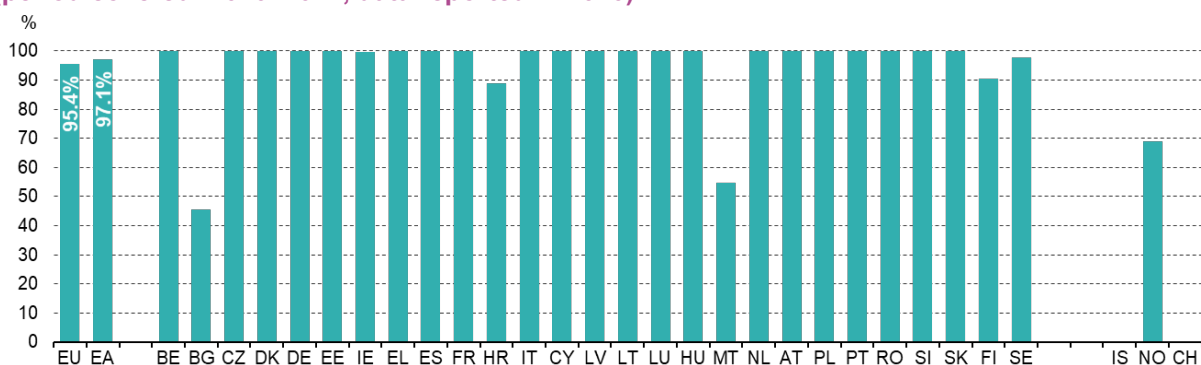
**Figure 36: Table 16 - Use table – annual & five-yearly
(period covered: 2010–2017, data reported in 2020)**
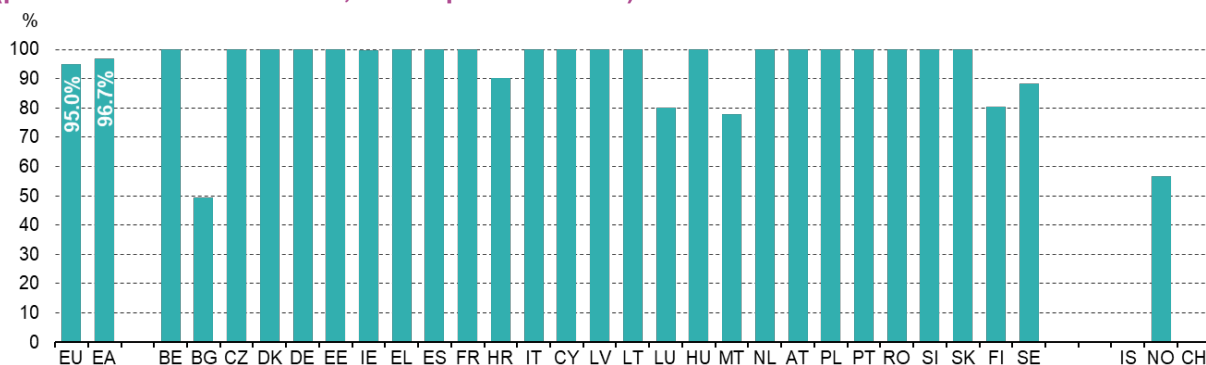
**Figure 37: Table 17 - Symmetric input-output table at basic prices - five-yearly
(period covered: 2010–2015, data reported in 2018)**

**Figure 38: Table 29 - Accrued-to-date pension entitlements in social insurance – three yearly-annual
(period covered: 2015 and 2018, data reported in 2019)**
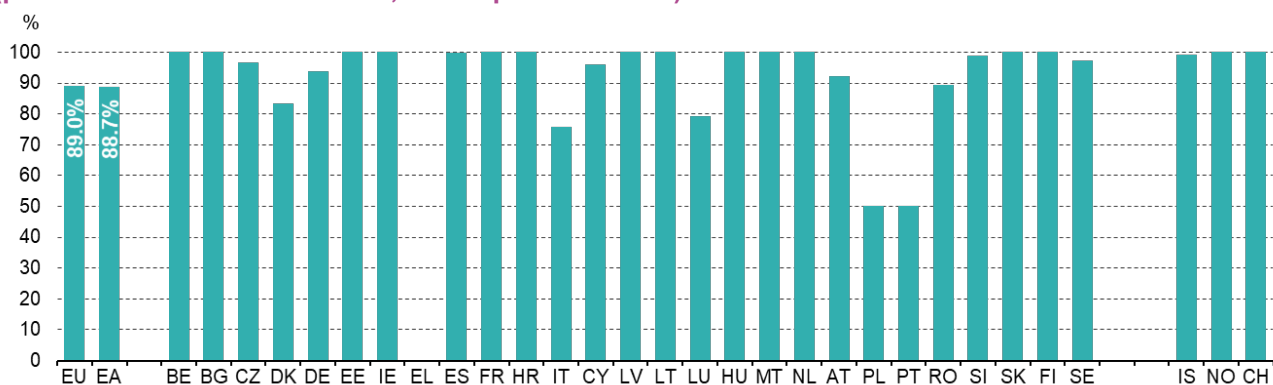
Annex 3: Punctuality indicators per ESA 2010 domain and table

Figure 39: Punctuality of national accounts quarterly tables reported in 2020

Reference quarter	Table 1Q Main aggregates				Table 801 Non-financial accounts by sector				Table 27 Financial accounts of general government				Table 28 Government debt (Maastricht debt) for general government			
	2019 Q4	2020 Q1	2020 Q2	2020 Q3	2019 Q4	2020 Q1	2020 Q2	2020 Q3	2019 Q4	2020 Q1	2020 Q2	2020 Q3	2019 Q4	2020 Q1	2020 Q2	2020 Q3
# on time	26	28	30	26	25	28	23	26	27	28	27	28	28	28	29	28

Legend: On time | 1-3 days delay | 4-7 days delay | More than 1 week or not delivered | Not delivered

Figure 40: Punctuality of annual tables for national accounts main aggregates and government finance statistics reported in 2020[19]

	Table 1A Main aggregates		Table 3 Tables by industry	Table 5 Household final consumption expenditure by purpose	Table 20 Cross classification of fixed assets by industry and by asset	Table 22 Cross classification of gross fixed capital formation by industry and by asset	Table 26 Balance sheets for non-financial assets	Table 2 Main aggregates of general government		Table 9 Detailed tax and social contribution receipts by type of tax and social contribution and receiving subsector incl. NTL	Table 11 General government expenditure by function
Ref. year	2019	2019	2019	2018	2018	2018	2018	2019	2019	2019	2019
Deadline (months)	t + 2	t + 9	t + 9	t + 9	t + 24	t + 24	t + 24	t + 3	t + 9	t + 9	t + 12
BE											
BG											
CZ											
DK											
DE											
EE											
IE											
EL											
ES											
FR											
HR											
IT											
CY											
LV											
LT											
LU											
HU											
MT											
NL											
AT											
PL											
PT											
RO											
SI											
SK											
FI											
SE											
IS											
NO											
CH											
# on time	25	24	21	28	26	27	26	28	29	30	29

■ On time　　□ <= 1 week　　■ 1 week → 1 month　　■ 1 → 6 months　　■ > 6 months

■ Not delivered　　▨ Transmission not required, due to existing derogation

[19] T2 at t+3 months was timely but incomplete for DK. CH has derogation for T2 at t+3 months.

Figure 41: Punctuality of annual tables for sector accounts, supply, use and input-output tables, regional accounts and pension entitlements reported in 2020

	Table 6 Financial accounts by sector (transactions)	Table 7 Balance sheets for financial assets and liabilities	Table 8 Non-financial accounts by sector	Table 15 Supply table at basic prices incl. transformation into purchasers' prices	Table 16 Use table at purchasers' prices	Table 10 Tables by industry and by region (NUTS level 2)		Table 12 Tables by industry and by region (NUTS level 3)	Table 13 Household accounts by region (NUTS level2)	Table 29 Accrued-to-date pension entitlements in social insurance
Ref. year	2019	2019	2019	2017	2017	2019	2018	2018	2018	2018
Deadline (months)	t + 9	t + 9	t + 9	t + 36	t + 36	t + 12	t + 24	t + 24	t + 24	t + 24
# on time	27	27	23	25	25	26	27	27	26	9

On time   **<= 1 week**   **1 week → 1 month**   **> 6 months**   **Not delivered**

* T+36 or later, according to deadlines specified in derogations. The first deadline under ESA 2010 was 31 December 2014.

Annex 4: Data production and conceptual aspects under COVID-19

Analysis of key variables from quarterly main aggregates

While the COVID-19 pandemic is still affecting EU and the world, the compilation of QNA estimates remained stable in relation to timeliness and coverage. Some Member States still report that there is some effect on the reliability of the estimates in some areas (10 countries), but the (18 countries) state that their estimates are equally reliable as previously, according to metadata collection of 2020Q4.

Changes in GDP estimates

Revisions for GDP estimates remained indeed limited so far. The graphs below show that only few countries significantly revised their initial estimates for 2020Q1 and 2020Q2 between the first flash or regular estimates, and subsequent estimates published in October 2020 or mid-April 2021. However, more significant revisions may, of course, be observed after annual estimates are updated based on more complete source data.

GDP growth rates published for 2020Q1 - initial to mid-April 2021 estimates
% change over the previous quarter, based on seasonally adjusted data

GDP growth rates published for 2020Q2, initial to mid-April 2021 estimates
% change over the previous quarter, based on seasonally adjusted data
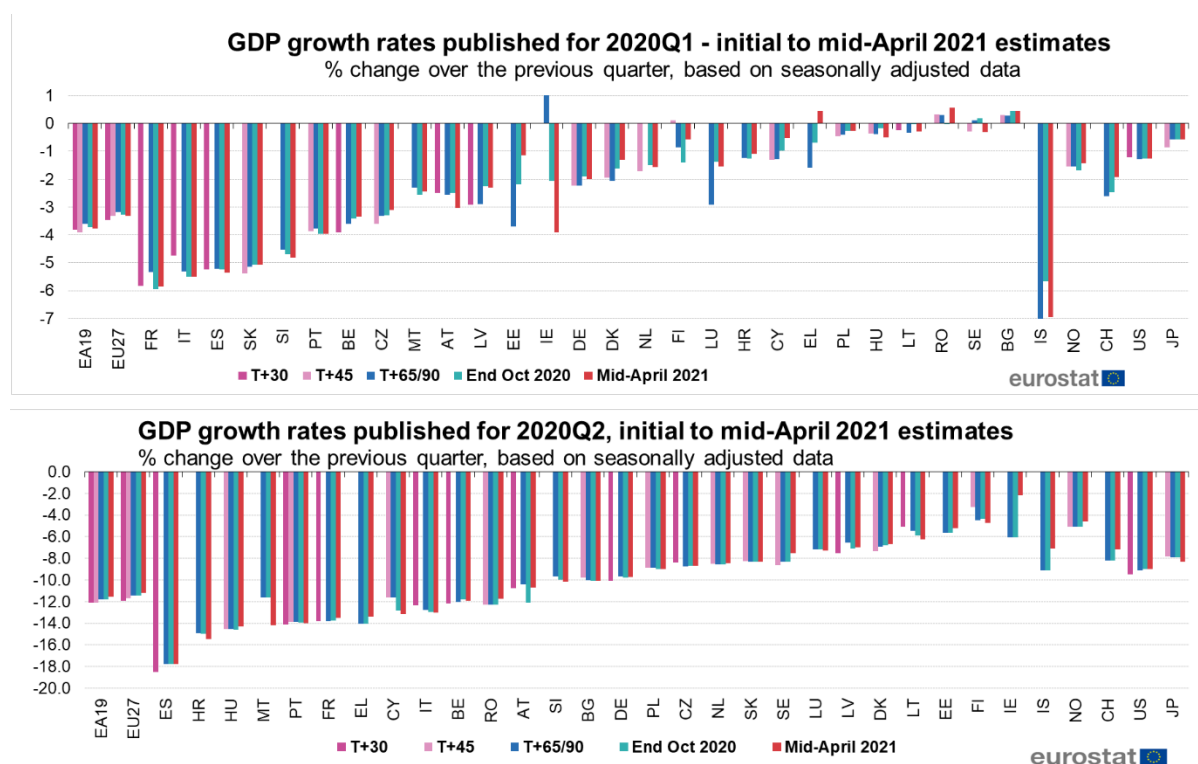
Source: Eurostat (online datacode: (namq_10_gdp))

Contributions to Eurostat's preliminary flash T+30, as well as T+45 flash GDP remained the same. In addition to 10 already published countries (Belgium, Czechia, Germany, Spain, France, Italy, Latvia, Lithuania, Austria and Portugal) also Sweden advanced its publication further to publish T+30 in 2020Q4.

For the regular T+2 months data transmissions, timeliness and completeness continued to be respected, which allowed Eurostat to produce regular estimates as usual. All Eurostat estimates of GDP continued to be published on time, in accordance with the pre-announced release schedule.

Collection and publication of QNA related COVID-19 metadata for users

With the 2020Q1 reference quarter, and with start of COVID-19 pandemic, Eurostat began to collect metadata for the quarterly main aggregates on the timing and severity of the COVID-19 impact on economy, estimation techniques used, as well as on the quality and reliability of the estimates. The collected metadata are much appreciated by users and enables full transparency on how the pandemic has affected national accounts. Latest available metadata for 2020Q4, 2020Q3, 2020Q2 and 2020Q1 are provided in Eurostat's website on national accounts.

In this respect, Eurostat would like to particularly thank national compilers for their contributions to provide metadata, which helps to support data validation and inform users. The following improvements were introduced:

- In addition to Member Stated and EFTA countries, candidate countries are also now voluntary providing metadata to Eurostat.

- Since 2020Q3, Eurostat has facilitated the collection of the metadata using an EU-Survey tool, which allows Member States to submit metadata easier and which can be processed faster internally.

Due to time constraints, the collection of metadata is rather limited and covers only the main aspects. A summary of the main questions provided by 29 countries (Member States, EFTA and candidate countries) for the 2020Q4 T+65 regular estimates is presented below.

Summary of QNA metadata responses in 2020Q4

Question	Yes	Some	No
Has your government implemented measures to support the economy?	20	8	0
Has your government implemented measures to limit the layoff of employees?	22	2	4
Can you please inform briefly if there COVID-19 related particularities affecting your estimates for the reference quarter in terms of:			
Methods	5	7	17

Sources	9	8	12
Comparability	0	3	25
Reliability	1	10	18
Question	**Strong impact**	**Some impact**	**No impact**
Can you indicate if COVID-19 had a significant (negative) impact on your volume estimates for non-market services for the reference quarter	3	15	9
Explanations on impact on volume estimates:			
Health services	6	12	9
Education services	3	10	13
Public administration	1	5	19

Note: Some question answers do not add up to 29, due to non-response.

Evolution of main output aggregates

The decomposition of GDP growth from the production/output approach side shows that total GVA is the main driver of quarter on quarter GDP growth (the curves of the growth rates for the two variables almost overlap). However, the variation of taxes less subsidies on products (D21X31) has also significantly influenced GDP growth in some quarters, as the COVID-19 pandemic impacted both taxes and subsidies in opposite ways. With regards to specific GVA components, the largest swings in 2020Q2 and 2020Q3 came from trade, transport, accommodation and food service activities (NACE GTI). Next followed industry (NACE BTE), professional and support service activities (NACE M_N), as well as administration and other public services (OTQ) as the main drivers for quarter on quarter GVA declines or growth at the EU or euro area level.

Decomposition of GDP growth by GVA aggregates,contributions to growth (over the previous quarter) in percentage points, 2020Q1 -2020Q4
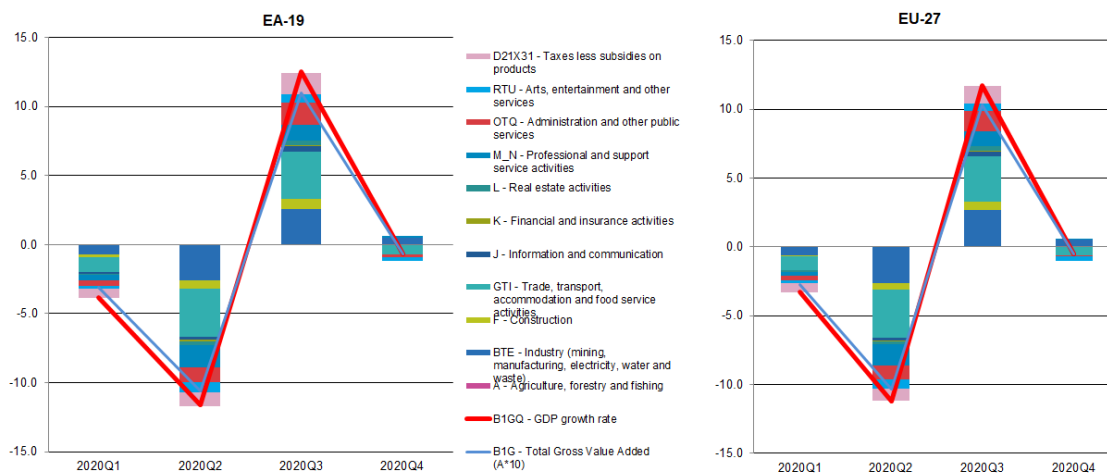
Source: Eurostat (online data code: namq_10_gdp)

Source: Eurostat (online datacode: (namq_10_gdp))

An analysis of country specific decomposition of GDP declines by main output aggregates for the entire year 2020 confirms that trade, transport, accommodation and food service activities (NACE GTI) was generally most affected, followed by industry (NACE BTE). Ireland and Norway were main outliers from this pattern in terms of positive growth driven by strong industry contributions. The contributions from professional and support activities (NACE M_N) and arts, entertainment and other services (NACE RTU) were also generally negative (except for DK N_N and MT for RTU). Most diverse trends were observed for administration and other public services (NACE OTQ), i.e. including public administration (O), Education (P) and human health services (Q).There, contributions were positive in some countries and negative in others, indicating some heterogeneity in non-market services estimates across countries. Finally, contributions of taxes less subsidies on products were negative for all countries, albeit to different extends (e.g. particularly large for Croatia, Malta and Portugal).

Decomposition of GDP growth by output approach in 2020
Contributions to growth (over the previous year) in percentage points
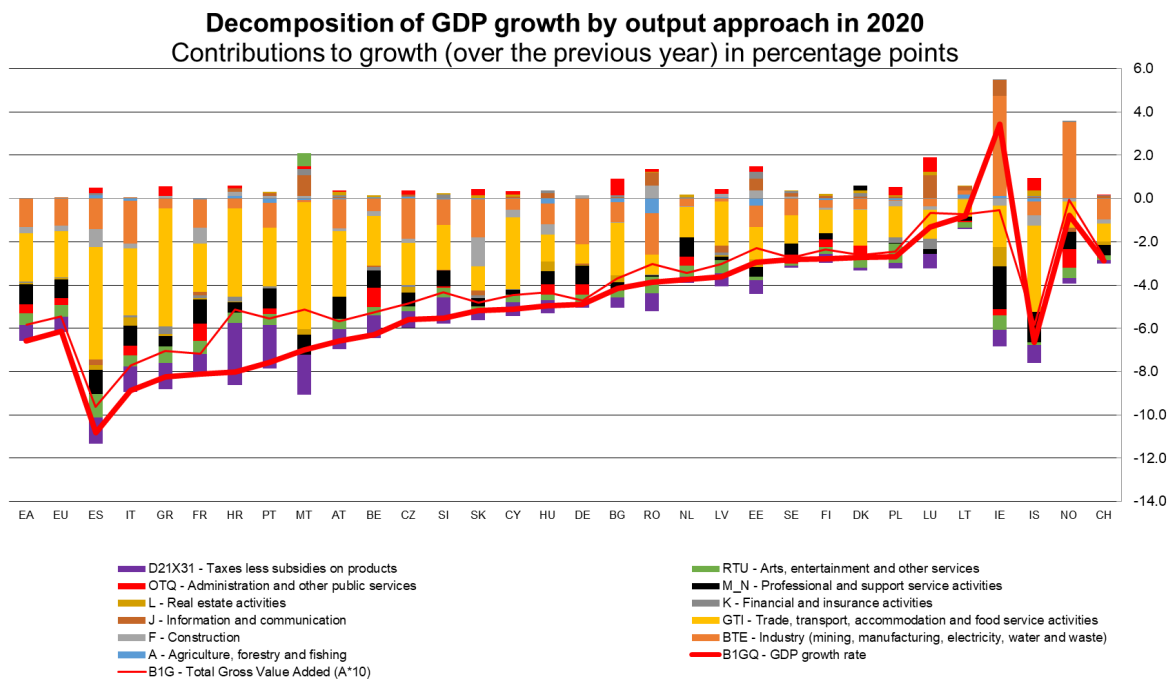
Source: Eurostat (online datacode: (namq_10_gdp))

Evolution of main expenditure aggregates

The decomposition of GDP growth from the expenditure side shows that household (and NIPISH) final consumption, which were strongly affected by temporary government COVID-19 containment measures in most Member States (such as the closure of shops, restaurants and re-creation activities), was by far the main driver for quarter-on-quarter declines in 2020Q1, 2020Q2 and 2020Q4, and the rebound in 2020Q3, but gross-fixed capital formation and the external balance also showed significant swings.

Decomposition of GDP growth by expenditure aggregates, contributions to growth (over the previous quarter) in percentage points, 2020Q1-2020Q4

Source: Eurostat (online data code: namq_10_gdp)
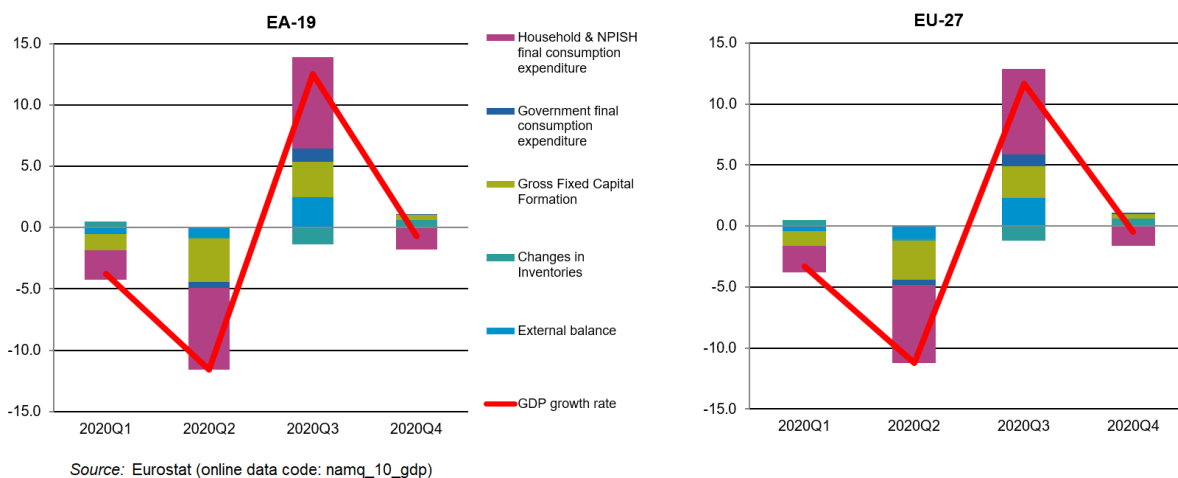
Source: Eurostat (online datacode: (namq_10_gdp))

For the entire year 2020, the decomposition of contributions to growth from the expenditure are also interesting. While most significant negative contributions came usually either from the external balance or household and NIPISH final consumption expenditures, exceptions could be noted for Estonia and Ireland where gross-fixed capital formation had the largest positive and negative contributions respectively. Changes in inventories had large positive contributions in Cyprus and Ireland, and negative in Estonian, Latvia and Slovakia while government final consumption expenditure had larger positive contributions for Malta and Cyprus.

Decomposition of GDP growth by expenditure approach in 2020
Contributions to growth (over the previous year) in percentage points
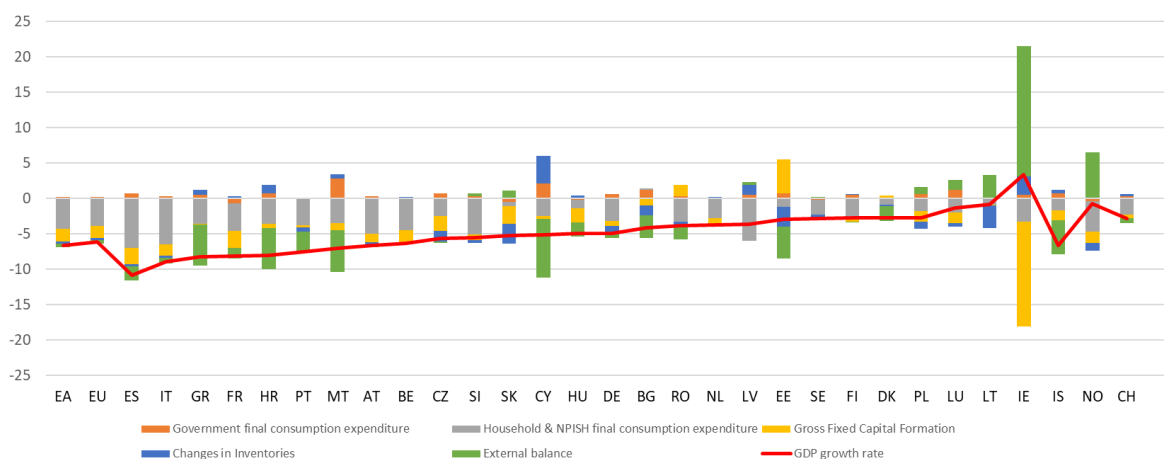
Source: Eurostat (online datacode: (namq_10_gdp))

Income components estimates under COVID-19

Finally, a decomposition of GDP growth from the income side (based on current prices) shows that gross operating surplus and mixed income were the components most affected by the temporary government COVID-19 containment measures, but was the main driver of the rebound in 2020Q3. Over the four quarters, compensation of employees was the less impacted component, and was the main driver of the slight increase of GDP in 2020Q4.

Decomposition of GDP growth by income components, contributions to growth (over the previous quarter) in percentage points, 2020Q1 to 2020Q4, based on current prices

EA - 19

EU - 27

Legend:
- Compensation of employees
- Taxes on production and imports less subsidies
- Gross operating surplus and mixed income
- GDP

Source: Eurostat (online datacode: (namq_10_gdp))

Employment estimates under COVID-19

The coverage of the employment flash estimates was not affected by the COVID-19 pandemic. Twelve Member States provided the T+30 employment flash test estimates (66% of the euro area and 58% of the EU) for each quarter in 2020. The coverage of the T+45 flash estimates remained stable, with 23 Member States sending data on time (96% of the euro area and 93% of the EU).

The revisions of the European estimates were limited. The table below presents quarter–on-quarter seasonally adjusted estimates.

EA 19	t+45	t+65	t+110	t+155	EU	t+45	t+65	t+110	t+155
2019Q1	0.34	0.35	0.37	0.37	**2019Q1**	0.35	0.37	0.39	0.37
2019Q2	0.24	0.25	0.24	0.23	**2019Q2**	0.23	0.27	0.25	0.26
2019Q3	0.13	0.12	0.13	0.15	**2019Q3**	0.10	0.10	0.07	0.08
2019Q4	0.27	0.29	0.29	0.26	**2019Q4**	0.20	0.24	0.28	0.23
2020Q1	-0.24	-0.20	-0.20	-0.28	**2020Q1**	-0.18	-0.11	-0.12	-0.21
2020Q2	-2.83	-2.92	-2.90	-2.95	**2020Q2**	-2.64	-2.72	-2.75	-2.78
2020Q3	0.93	1.01	1.01	0.98	**2020Q3**	0.92	0.93	0.87	0.89
2020Q4	0.34	0.34	0.36		**2020Q4**	0.25	0.38	0.40	

Source: Eurostat (online datacode: (namq_10_lp_ulc))

COVID-19 had a large impact on the employment data, especially for hours worked, which in 2020Q2 decreased to the lowest level since the start of the time series in 1995. The employment in persons decreased less, due to the government support measures to preserve employment.
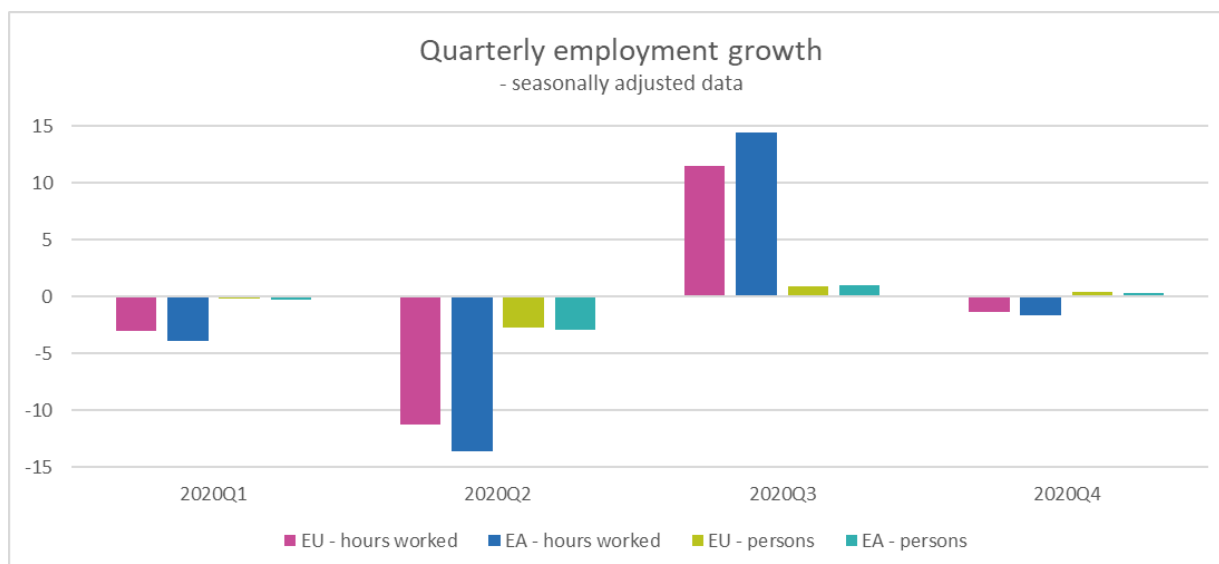
Source: Eurostat (online datacode: (namq_10_lp_ulc))

The graphs below show that the impact on countries varied across countries in 2020. Employment in hours worked decreased in all Member States (for which data are available), while

declines in employed persons were mitigated by government support schemes. Still, employment in persons decreased in all countries except Luxembourg, Malta and Poland in 2020.
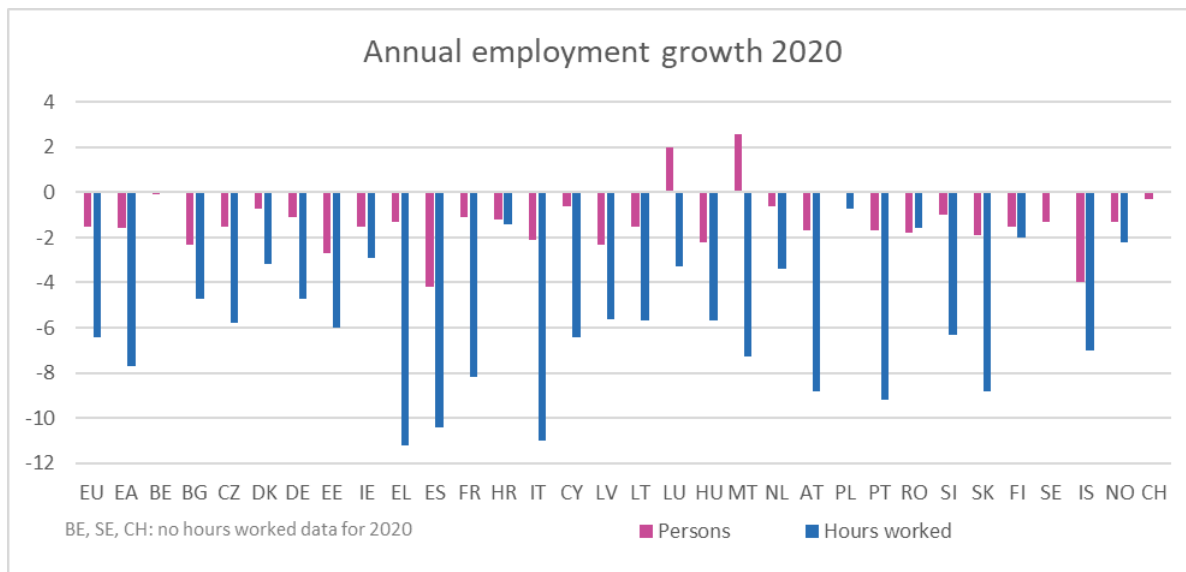
Source: Eurostat (online datacode: (namq_10_lp_ulc))

Labour productivity

Diverging trends of employment in persons, and hours worked in relation to government support schemes, are also reflected in labour productivity. Obviously, the interpretation of labour productivity based on persons is distorted by labour support schemes in 2020 as the indicator does not take into account payroll taxes and wage subsidies (such as some furlough schemes).

The graph below shows that labour productivity (based on hours worked) fluctuated around 1% for both zones between 2013 and 2019. Then, in relation to the COVID-19 pandemic, labour productivity shows a difference between EA and EU, with a peak for EA in 2020Q2 when hours dropped significantly more than GDP, while in EU, the decreases were more similar. Series based on persons show higher developments in 2020 (up to -12%) in comparison with the same indicators based on hours worked (see negative peaks). Subsidies granted during the pandemic allow many employees keeping their jobs (number of persons decreased far less than hours worked) even if they did not work for a temporary period(s). Consequently, series based on persons should be analysed with caution.

Labour productivity (LP) growth rates
% change over the same quarter of the previous year, based on seasonally adjusted data
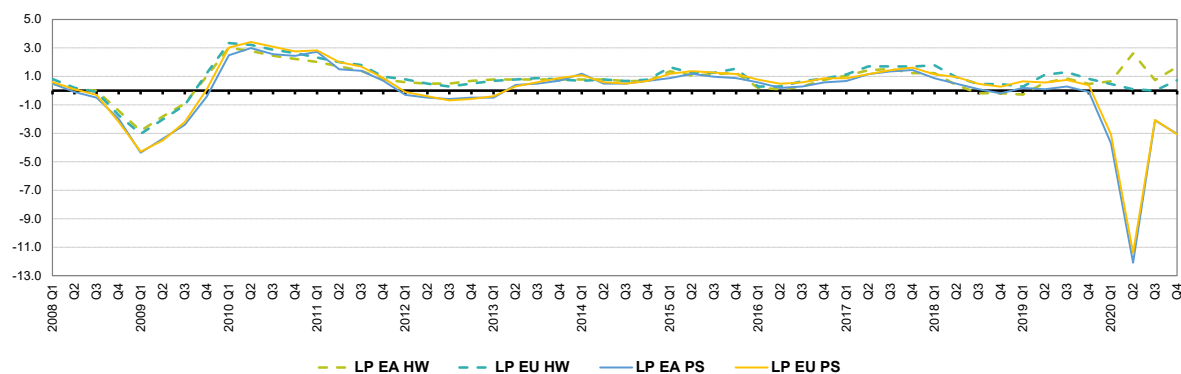
Source: Eurostat (online data code: namq_10_lp_ulc)

eurostat

Source: Eurostat (online datacode: (namq_10_lp_ulc))

The graph below shows annual developments by country and emphasizes the volatile developments in 2020 in most countries (+6.5% in IE and -6.7% in HR).

Labour productivity (LP) annual growth rates based on hours worked
% change over the previous year
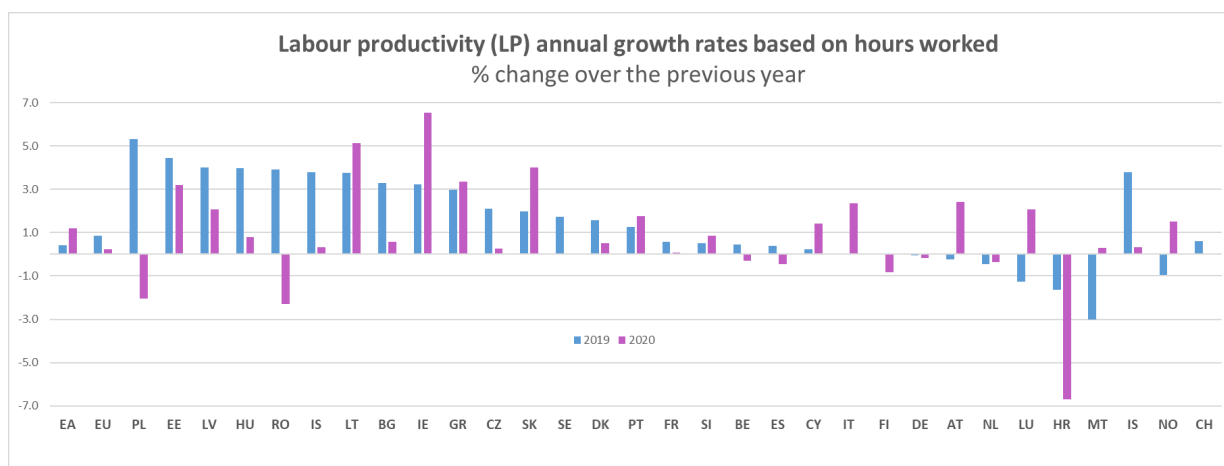
Source: Eurostat (online datacode: (namq_10_lp_ulc))

Analysis of key variables from quarterly sector aggregates

Impact on the key indicators for HHs and NFCs

Household gross disposable income, saving and investment rates

The household <u>saving rate</u> at EU and EA level continued with a large year-over-year increase (2020Q4 vs 2019Q4, non-seasonally adjusted data), at +6.6 and +7.1 percentage points (pp)

respectively. The main reason is the large year-over-year decrease of <u>household final consumption expenditure</u> (-7.0 % in the EU and -7.5 % in the euro area), in stark contrast with its increases above 2 % in the previous years.

Change of household saving rate, consumption and income in the EU
year-over-year, based on non-seasonally adjusted data
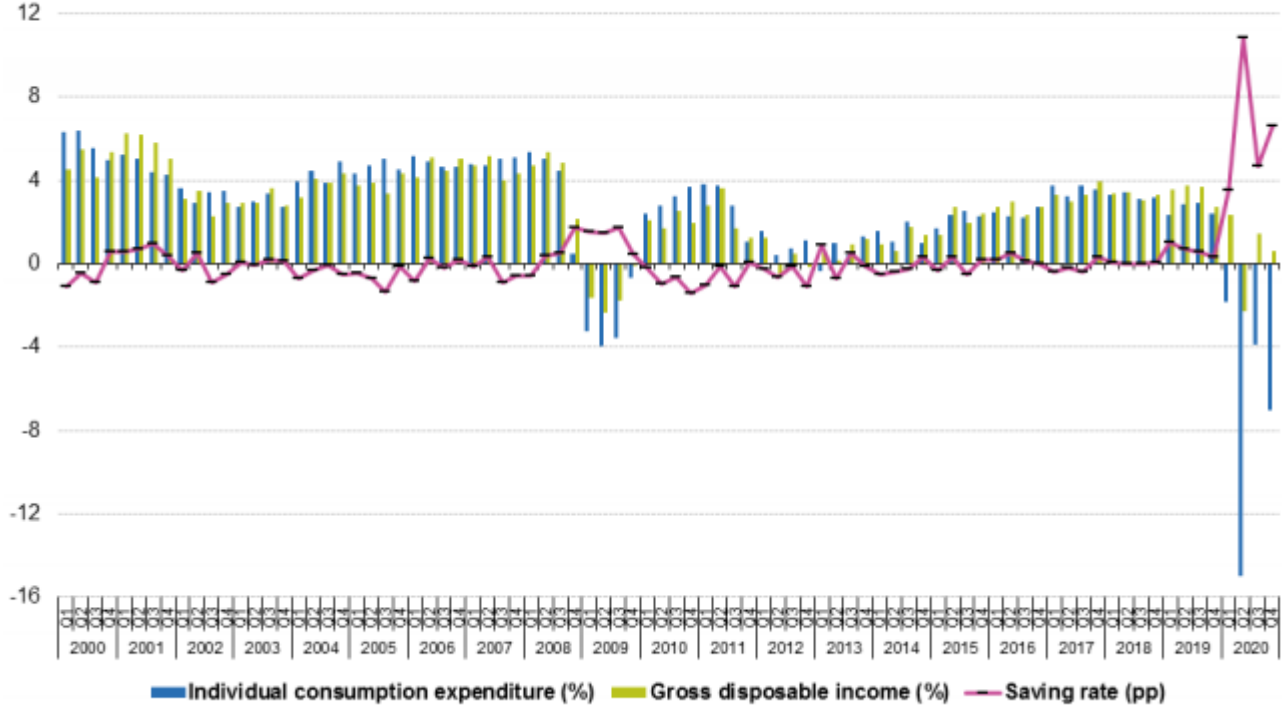
Source: Eurostat (online data codes: nasq_10_ki, nasq_10_nf_tr)

ec.europa.eu/**eurostat**

Figure 1: Change of household saving rate, consumption and income in the EUSource: Eurostat (nasq_10_ki, nasq_10_nf_tr)

Change of household saving rate, consumption and income in the EA
year-over-year, based on non-seasonally adjusted data
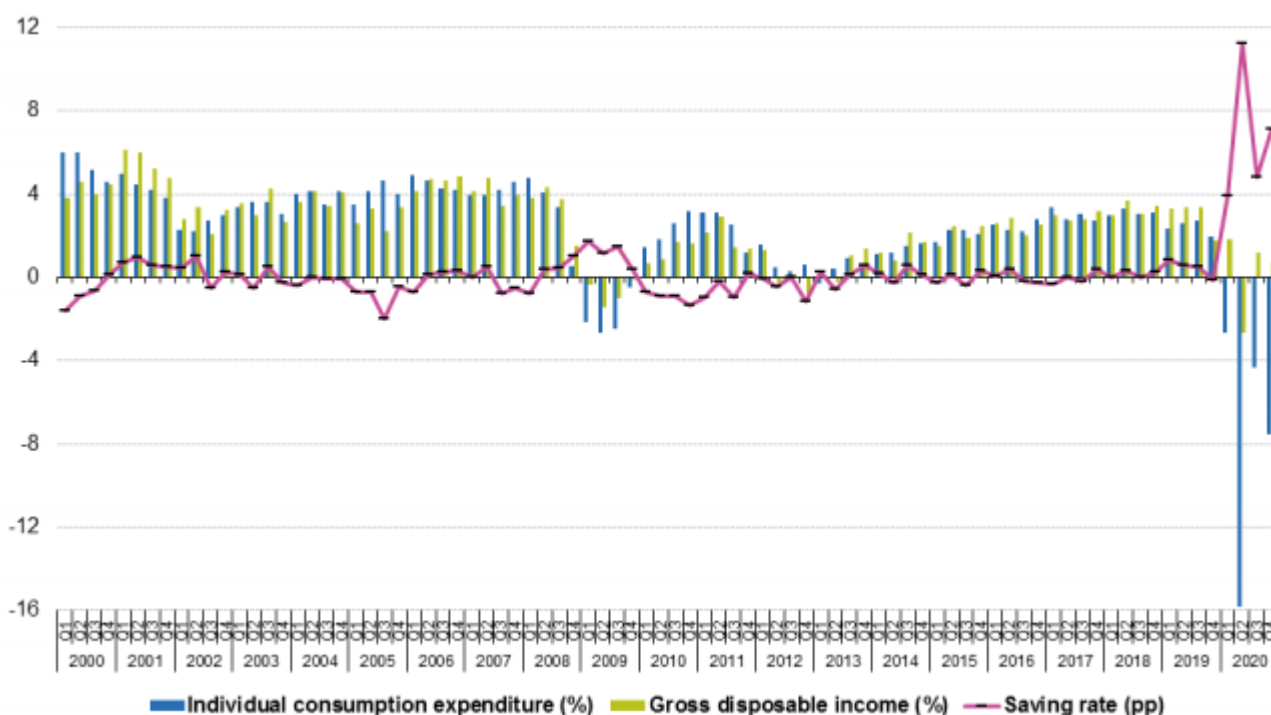
Source: Eurostat (online data codes: nasq_10_ki, nasq_10_nf_tr)

Figure 2: Change of household saving rate, consumption and income in the EA
Source: Eurostat (nasq_10_ki, nasq_10_nf_tr)

The household saving rate has increased in all but one of the Member States for which data are available for the fourth quarter of 2020. The highest year-over-year increase is observed for Slovenia (+20.8 pp), followed by Ireland (+12.8 pp). On the other hand, the household saving rate decreased in Denmark (by -2.7 pp). In the thirteen remaining countries, it increased from +4 pp to +12 pp.

The increase in the household saving rate in the majority of the countries with available data is mainly explained by the large decrease in year-over-year household individual consumption expenditure. The largest decreases in household consumption were observed for Slovenia and Spain (-15.4 % and -11.2 % respectively). Denmark was the only country where household consumption increased (by +0.2 %).

Change of household saving rate, consumption and income in 2020Q4
year-over-year, based on non-seasonally adjusted data
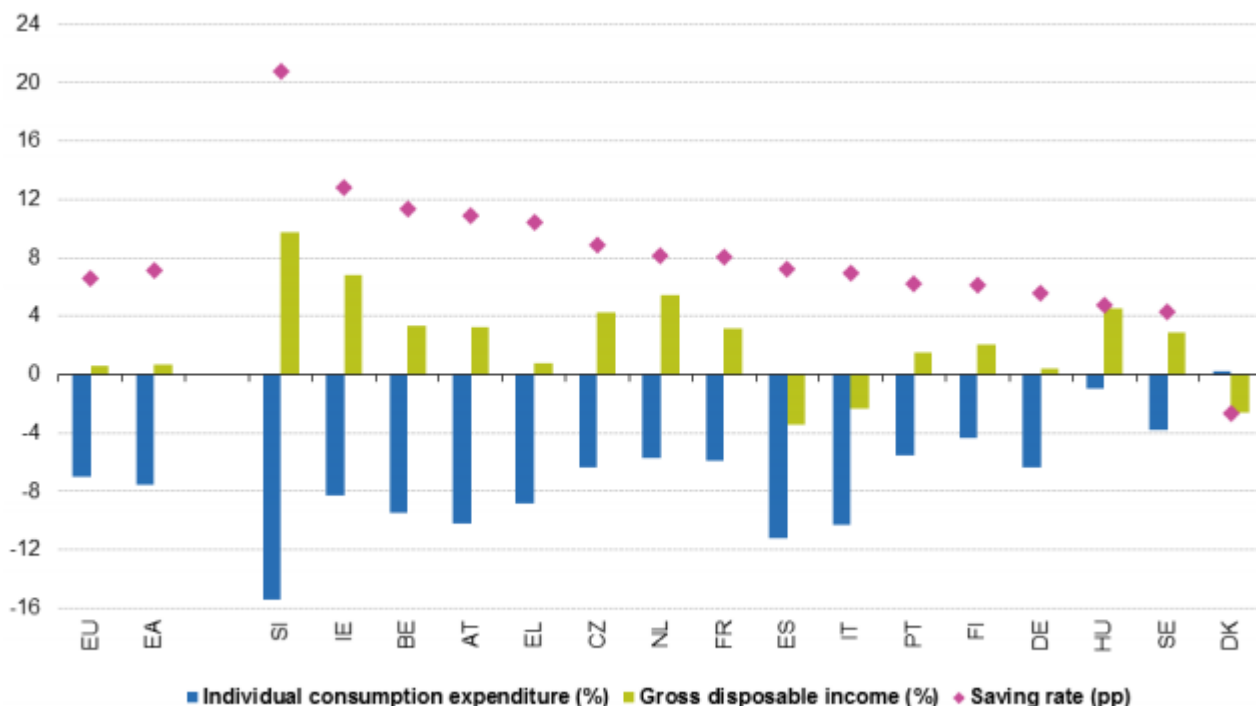
Source: Eurostat (online data codes: nasq_10_ki, nasq_10_nf_tr)

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Figure 3: Change of household saving rate, consumption and income in 2020Q4
Source: Eurostat (nasq_10_ki, nasq_10_nf_tr)

Household investment rate recovers in both the euro area and the EU

The household investment rate increased slightly year-over-year by +0.2 pp in the EU and +0.2 pp in the euro area, in contrast with its large decrease in 2020Q2. This decrease is explained by the year-over-year increase in household gross fixed capital formation (+3.0 % in the EU and +2.2 % in the euro area), higher than the year-over-year increase in gross disposable income of households (+0.6 % in the EU and +0.7 % in the euro area).

Change of household investment rate, capital formation and income in the EU
year-over-year, based on non-seasonally adjusted data
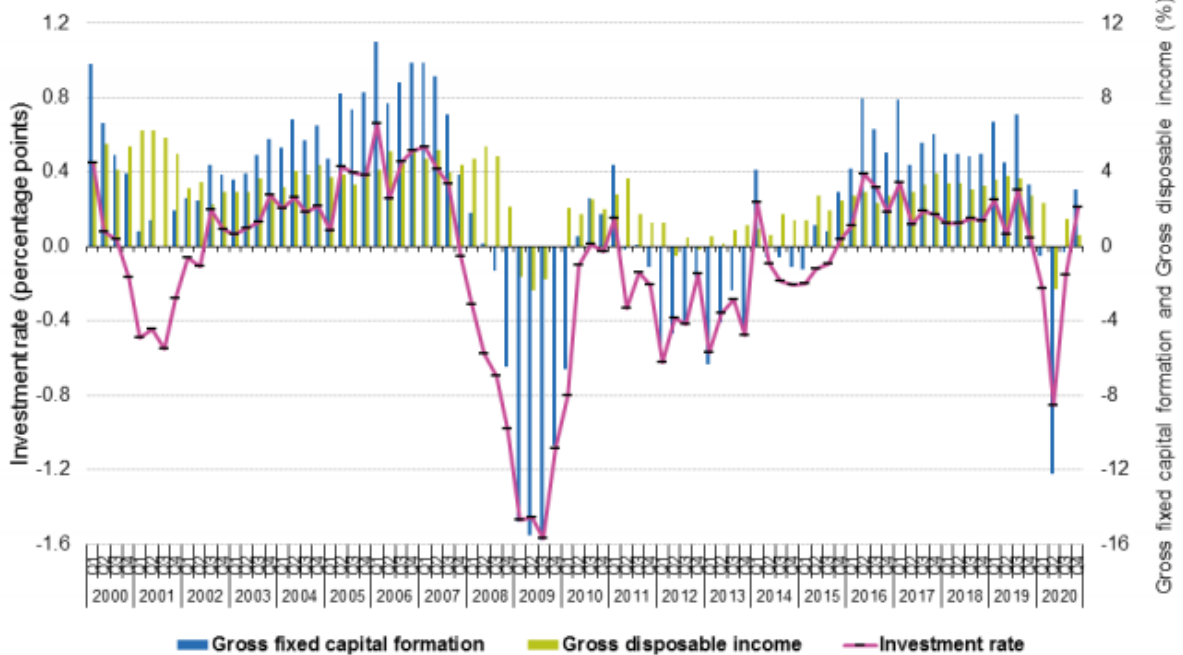
Source: Eurostat (online data codes: nasq_10_ki, nasq_10_nf_tr)

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Figure 4: Change of household investment rate, capital formation and income in the EU
Source: Eurostat (nasq_10_ki, nasq_10_nf_tr)

Change of household investment rate, capital formation and income in the EA
year-over-year, based on non-seasonally adjusted data
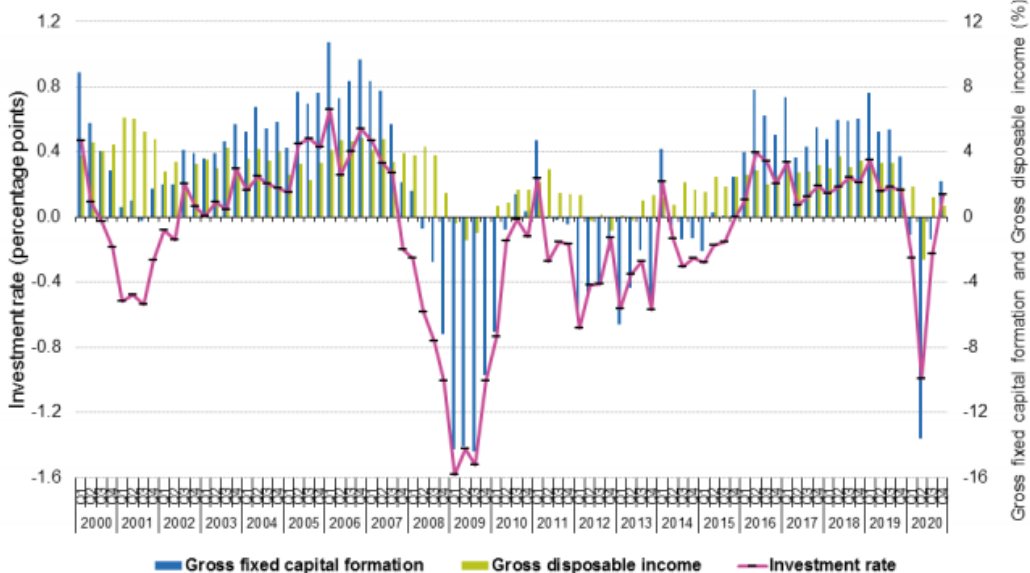
Source: Eurostat (online data codes: nasq_10_ki, nasq_10_nf_tr)

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Figure 5: Change of household investment rate, capital formation and income in the EA
Source: Eurostat (nasq_10_ki, nasq_10_nf_tr)

The year-over-year change of the household investment rate varied among Member States for which data are available for the fourth quarter of 2020, with ten Member States recording an increase and five recording a decrease. The largest increase in the household investment rate was observed for Hungary (+2.0 pp), followed by Denmark (+1.1 pp), due to the appreciable increase in gross fixed capital formation of households (+21.6 % and +9.1 % respectively). On the other hand, Czechia and Finland recorded the largest decreases (-1.6 pp and -0.8 pp respectively), due to their important decreases in gross fixed capital formation (-11.4 % and -4.8 % respectively).

Change of household investment rate, capital formation and income in 2020Q4
year-over-year, based on non-seasonally adjusted data
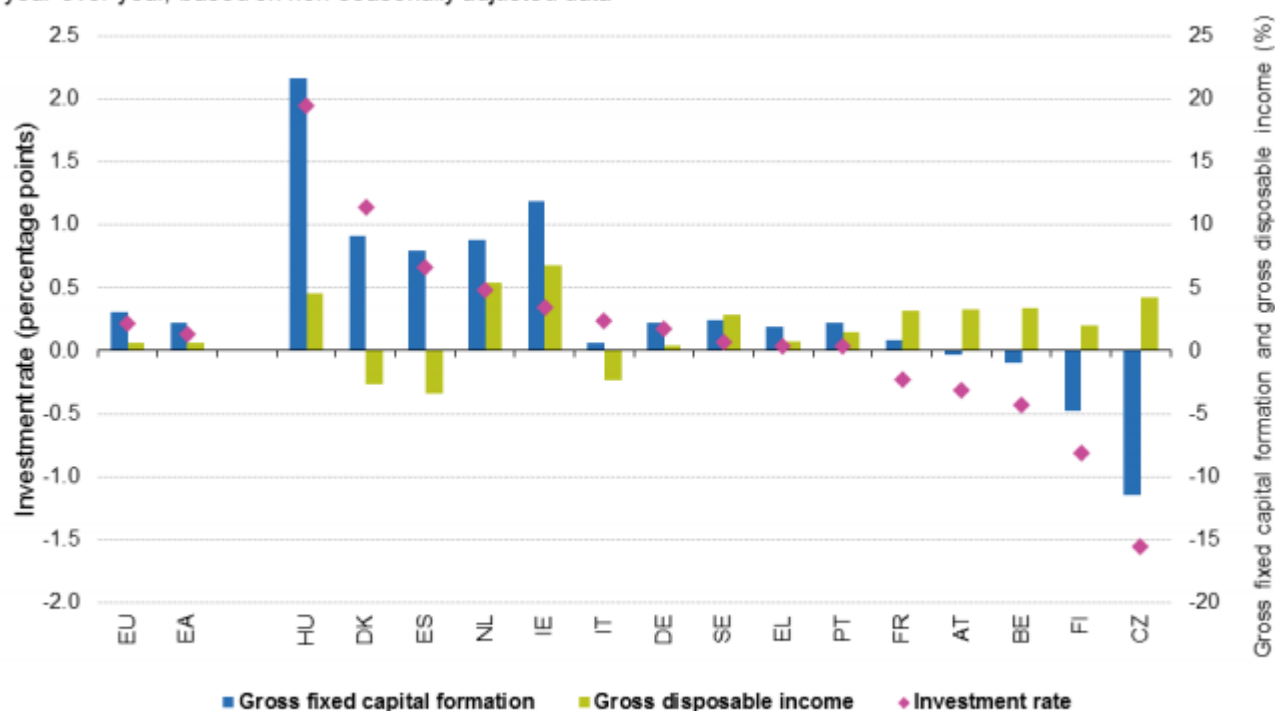
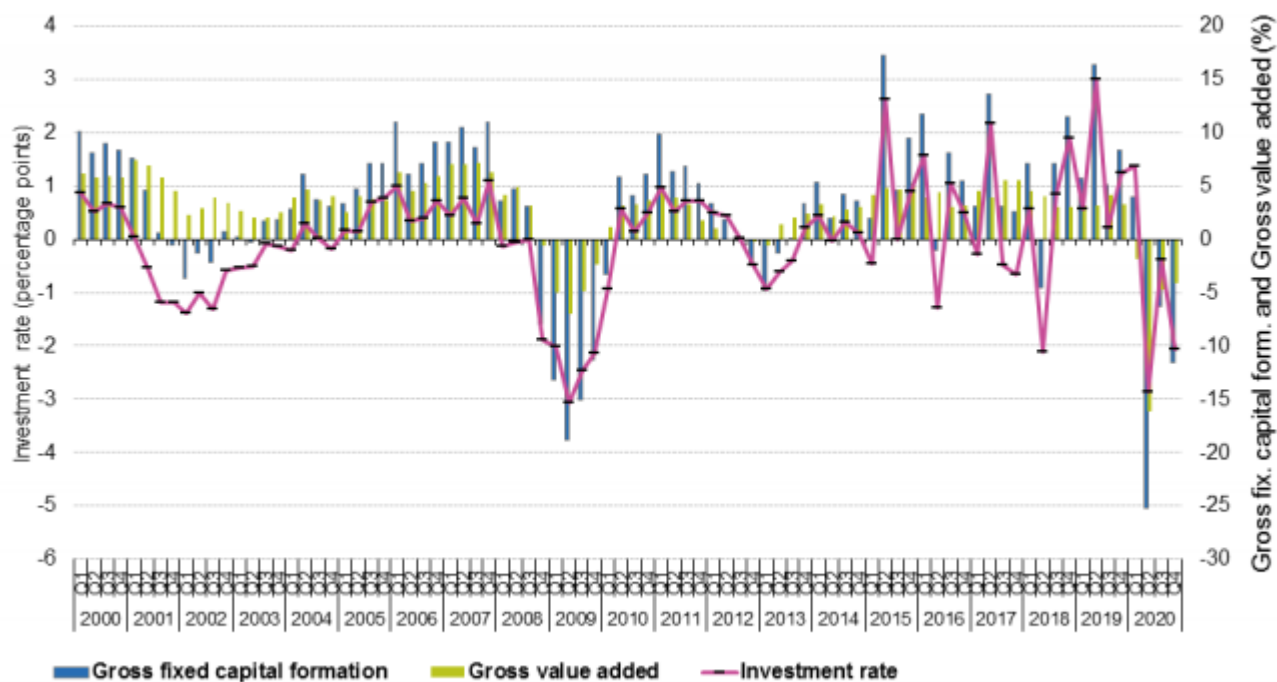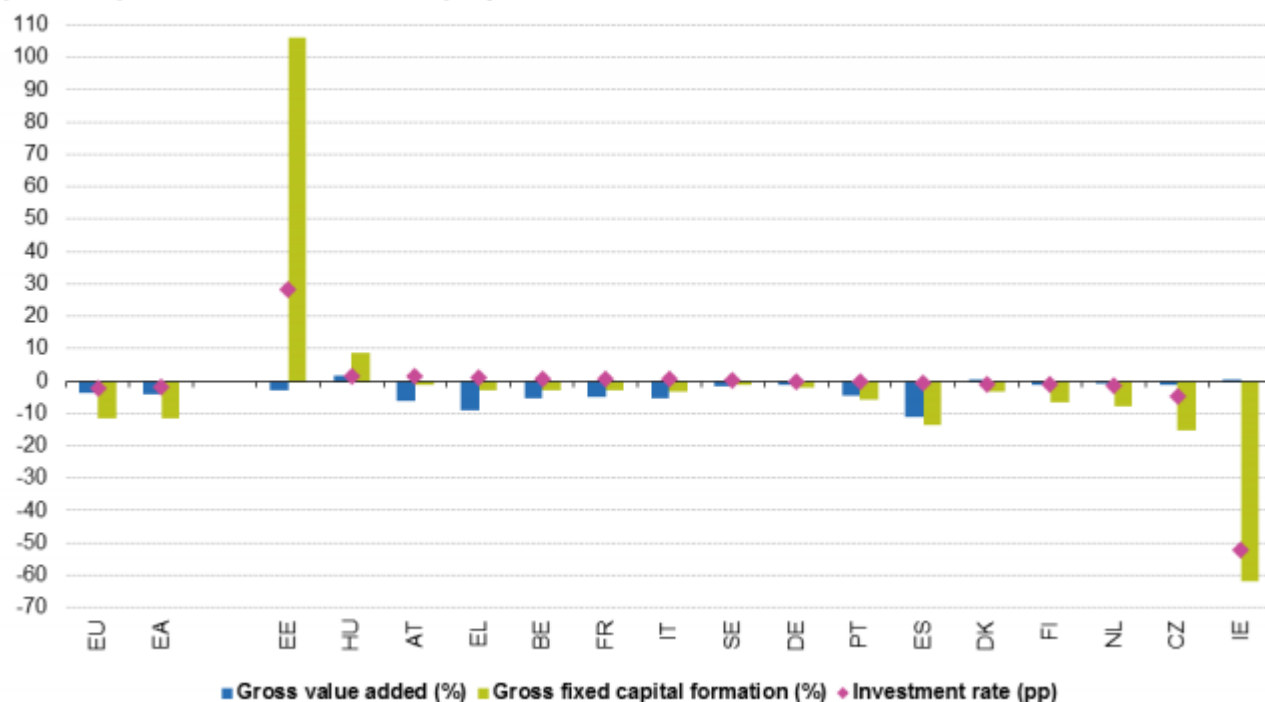*Source:* Eurostat (online data codes: nasq_10_ki, nasq_10_nf_tr)

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Figure 6: Change of household investment rate, capital formation and income in 2020Q4
Source: Eurostat (nasq_10_ki, nasq_10_nf_tr)

Household gross disposable income remains in year-over-year increase due to social benefits

Household disposable income in the UE and the euro area increased year-over-year in 2020Q4 (+0.6 % and +0.7 % respectively), in contrast with 2020Q2 when it had a year-over-year decrease. As in the two previous quarters, the contributions to that growth (both the positive and negative ones) were very different to the 2011-2020 period. Social benefits (other than social transfers in kind) provided the largest positive contribution (+2.5 pp and +2.6 pp respectively). On the other hand, property income was the largest negative contributor (-0.9 pp and -1.0 pp respectively).

Contribution of components to growth of household gross disposable income in the EU
year-over-year (%), based on non-seasonally adjusted data

Compensation of employees
Property income (net)
Net social contributions
Other current transfers (net)

Gross operating surplus and mixed income
Current taxes on income, wealth, etc.
Social benefits other than social transfers in kind (net)
Gross disposable income
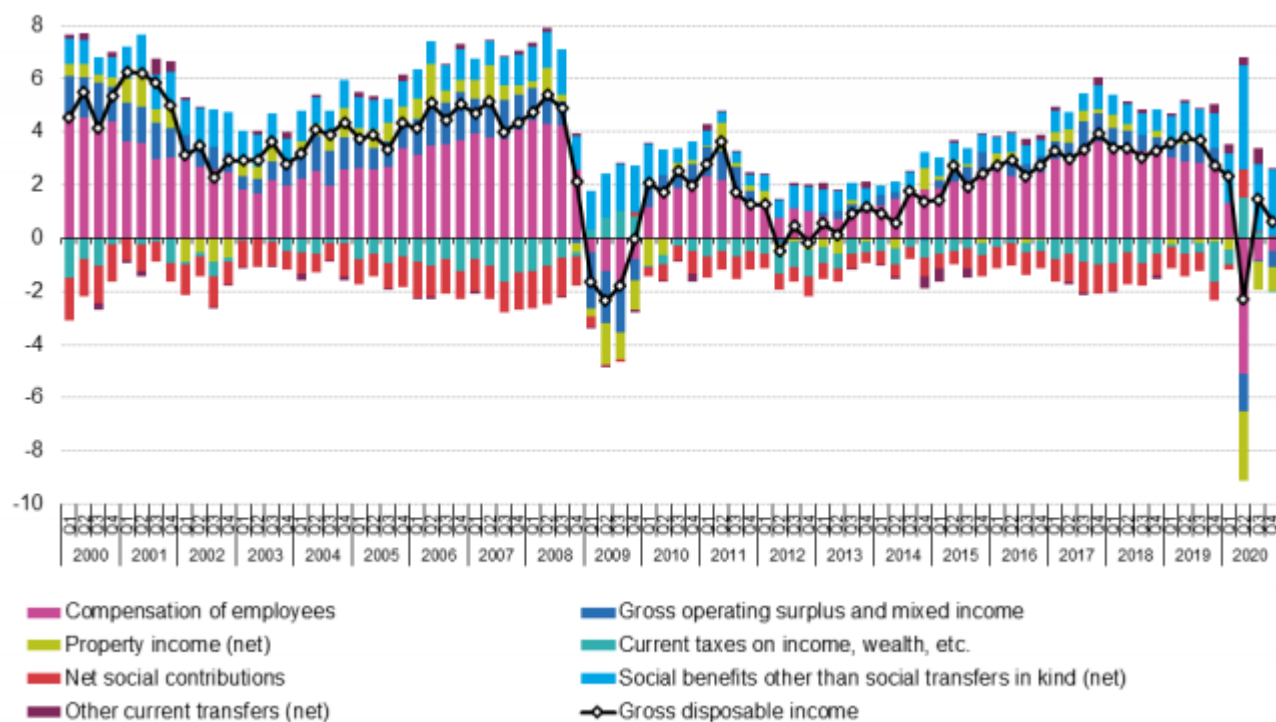
Source: Eurostat (online data codes: nasq_10_ki, nasq_10_nf_tr)

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Figure 7: Contribution of components to change of household gross disposable income in the EU
Source: Eurostat (nasq_10_ki, nasq_10_nf_tr)

Contribution of components to growth of household gross disposable income in the EA
year-over-year (%), based on non-seasonally adjusted data
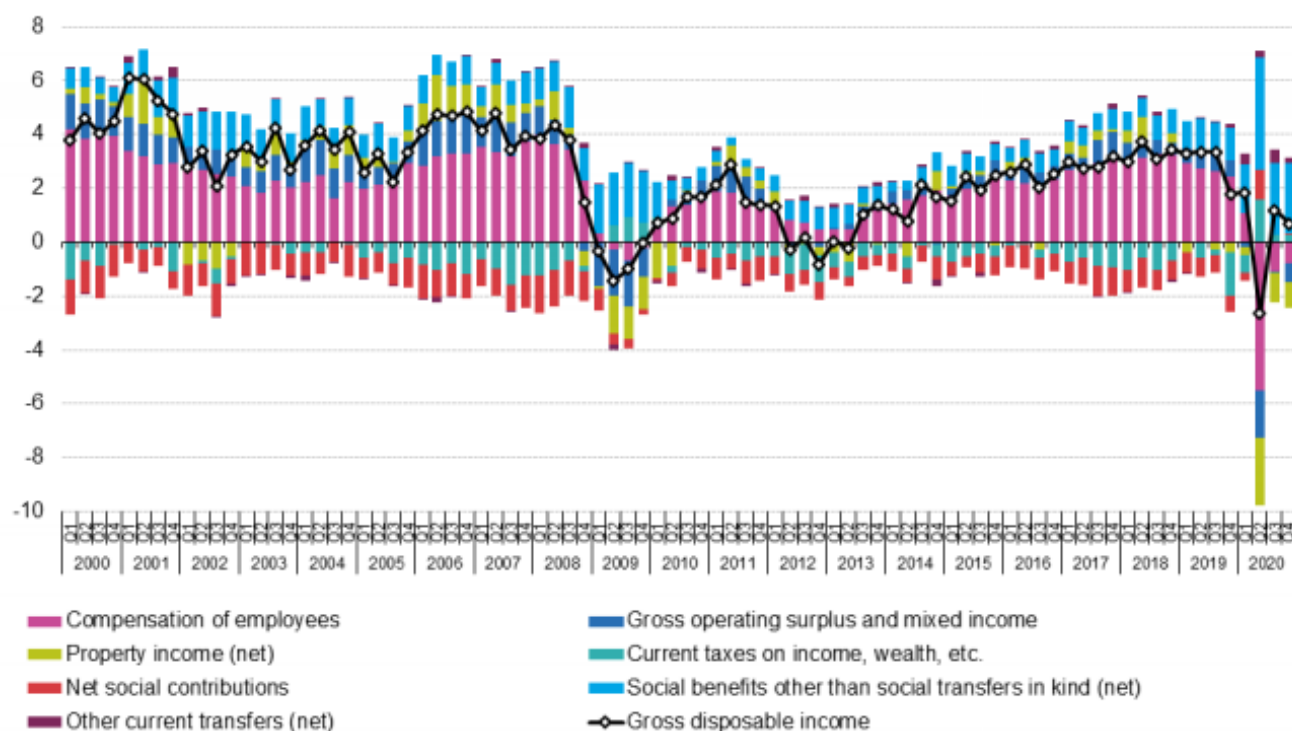
Figure 8: Contribution of components to change of household gross disposable income in the EA
Source: Eurostat (nasq_10_ki, nasq_10_nf_tr)

In 2020Q4, Gross disposable income of households increased year-over-year in thirteen of the countries for which data was available, while decreased in three countries. The largest increases were recorded in Slovenia (+9.8%) and Ireland (+6.8%). The three countries with year-on-year decreases were Spain (-3.4%), Denmark (-2.6%) and Italy (-2.4%). In all the countries the contribution of social benefits was positive and among the largest ones. The main contributor to the decrease in Spain and Italy was compensation of employees, while in Denmark, it was other current transfers, taxes on income, wealth, etc.

Contribution of components to growth of household gross disposable income in 2020Q4
year-over-year change, based on non-seasonally adjusted data
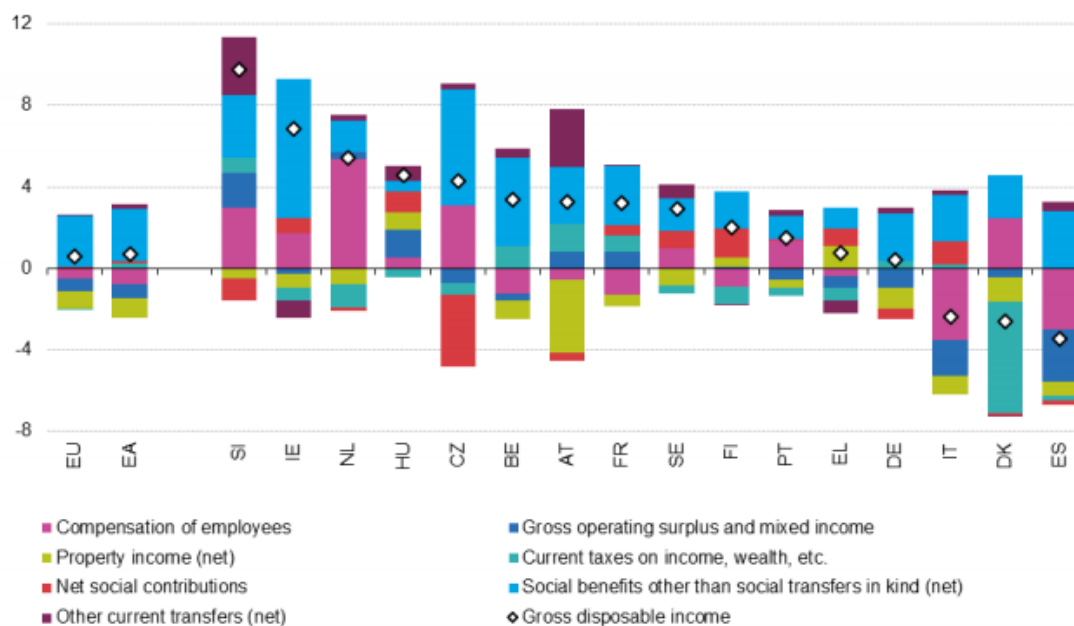
Figure 9: Contribution of components to change of household gross disposable income in 2020Q4
Source: Eurostat (nasq_10_ki, nasq_10_nf_tr)

Non-financial corporation gross operating surplus, profit share and business investment rate

Business profit share increases

Both the EU and the euro area experienced a year-on-year increase in profit share in 2020Q4 (by +0.5 pp and +0.6 pp respectively), in contrast with the year-on-year decreases of the first three quarters of the year. The reason was that, even when gross value added decreased (by -3.6 % and -4.1 % respectively), compensation of employees decreased as well (by -2.1 % and -2.5 % respectively), while other subsidies on production hugely increased year-on-year (by +65.1 % and +70.1 % respectively).

Figure 10: Change of non-financial corporation profit share, gross value added and wages + other taxes less subsidies in the EU
Source: Eurostat (nasq_10_ki, nasq_10_nf_tr)

Change of non-financial corporation profit share, gross value added and wages + other taxes less subsidies in the EA
year-over-year, based on non-seasonally adjusted data
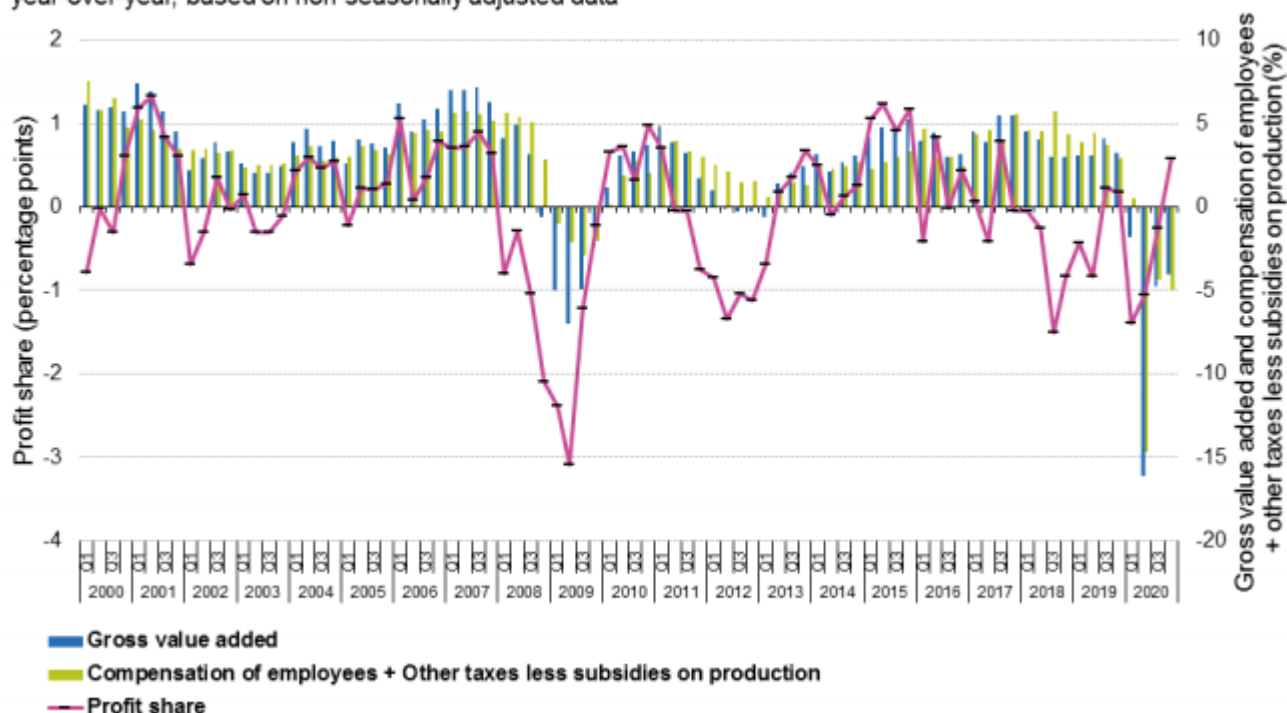
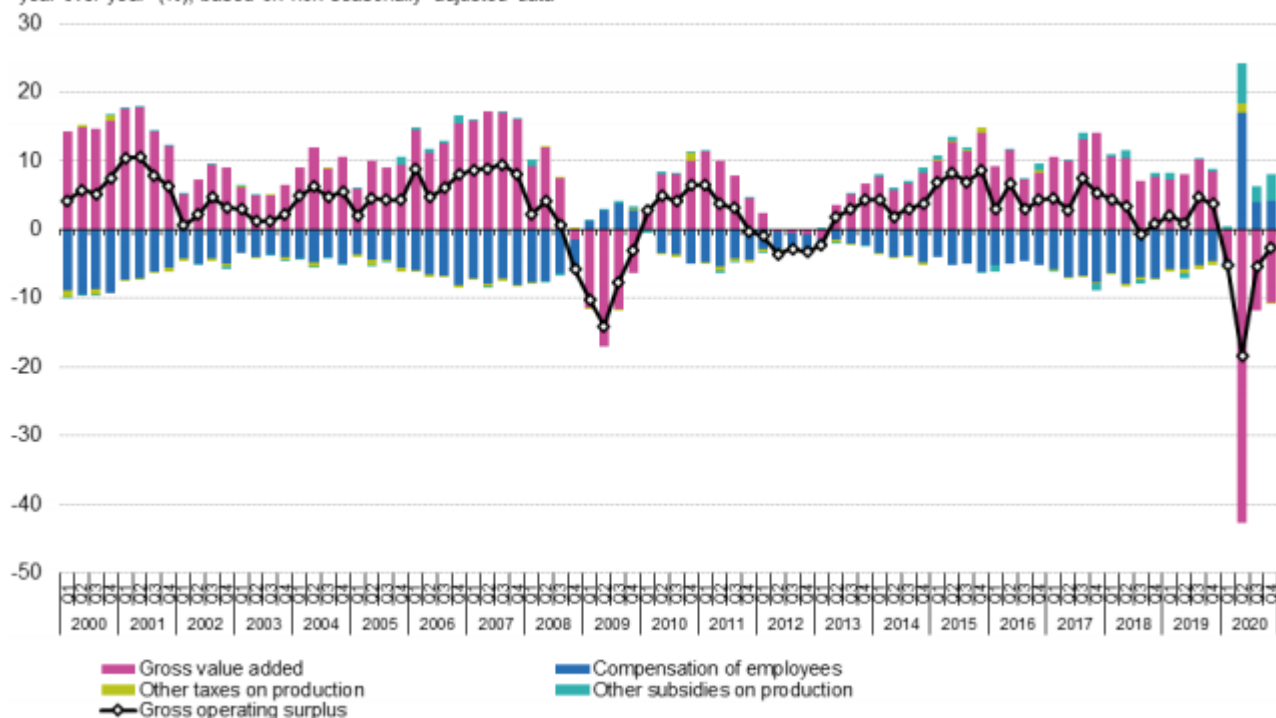Source: Eurostat (online data codes: nasq_10_ki, nasq_10_nf_tr)
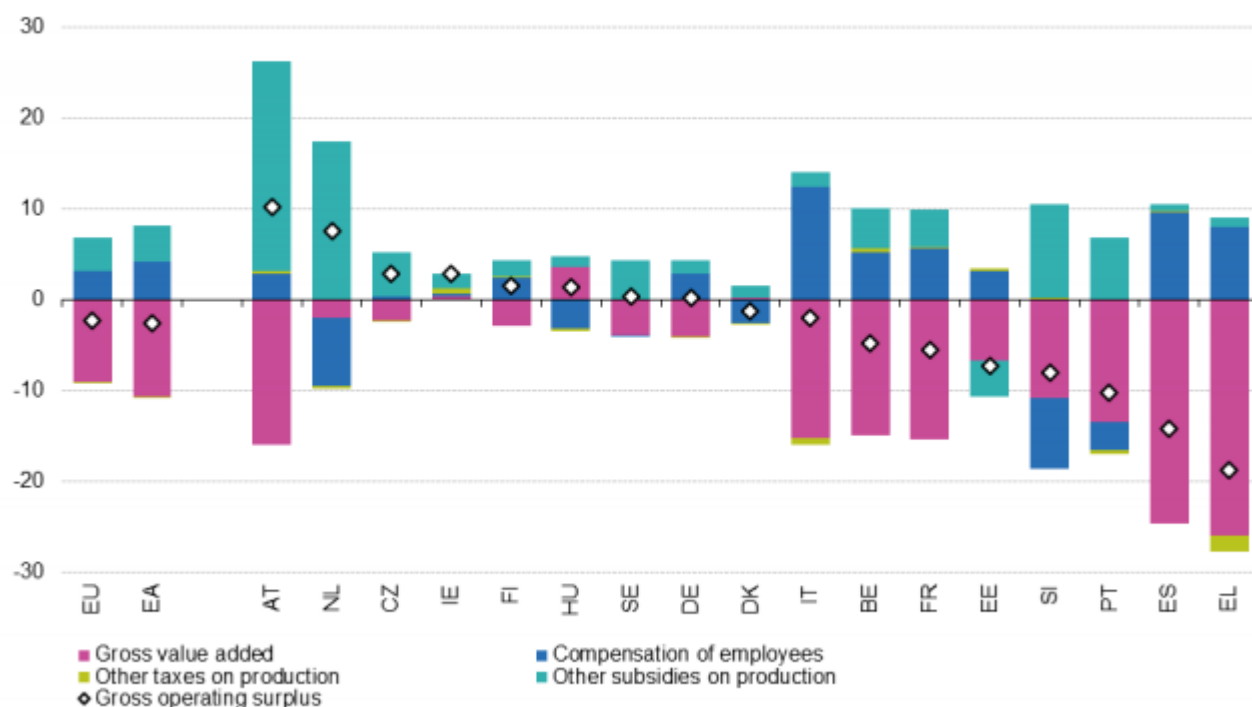
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Figure 11: Change of non-financial corporation profit share, gross value added and wages + other taxes less subsidies in the EA

Source: Eurostat (nasq_10_ki, nasq_10_nf_tr)

Nine Member States, for which data are available, observed an increase in non-financial corporation profit share in 2020Q4 compared with 2019Q4, while eight other countries observed a decrease. The largest increase was observed in Austria (+7.0 pp), followed by the Netherlands (+3.3 pp). In both cases, the main reason was the large increase of other subsidies on production. On the other hand, the largest year-over-year decreases were observed in Greece (-3.7 %), Portugal and Estonia (both at -2.0%), being the main reason their decrease of gross value added.

Change of non-financial corporation profit share, gross value added and wages + other taxes less subsidies in 2020Q4
year-over-year, based on non-seasonally adjusted data
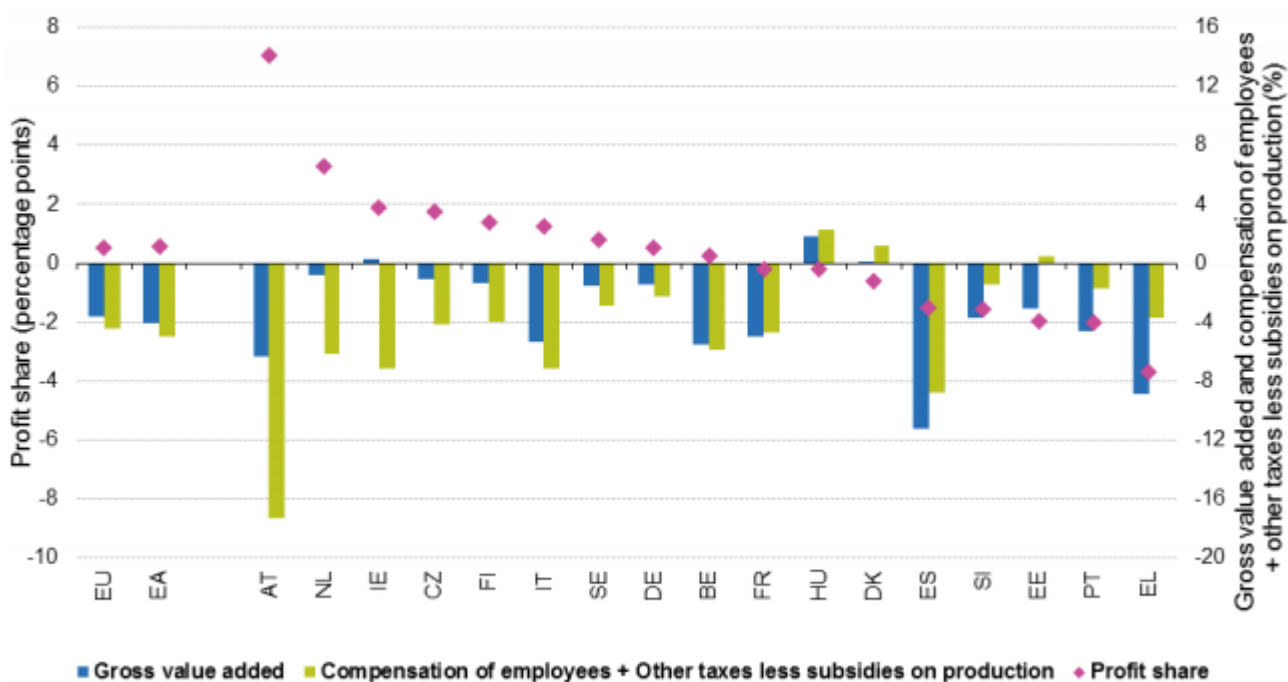
Source: Eurostat (online data codes: nasq_10_ki, nasq_10_nf_tr)

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Figure 12: Change of non-financial corporation profit share, gross value added and wages + other taxes less subsidies in 2020Q4

Source: Eurostat (nasq_10_ki, nasq_10_nf_tr)

Non-financial corporation investment rate decreases

The business investment rate of non-financial corporations decreased year-on-year in the EU (-2.2 pp) and the euro area (-2.0 pp), due to the large decrease in gross fixed capital formation in most countries, especially in Ireland (due to large imports of intellectual property products reflecting globalisation effects in 2019Q4, the reference quarter). Excluding that country, the investment rate would have remained stable in the EU and the euro area, since both the gross value added and gross fixed capital formation would have decreased at a similar rate (around -4 % year-on-year).

Change of non-financial corporation investment rate, capital formation and gross value added in the EU
year-over-year, based on non-seasonally adjusted data
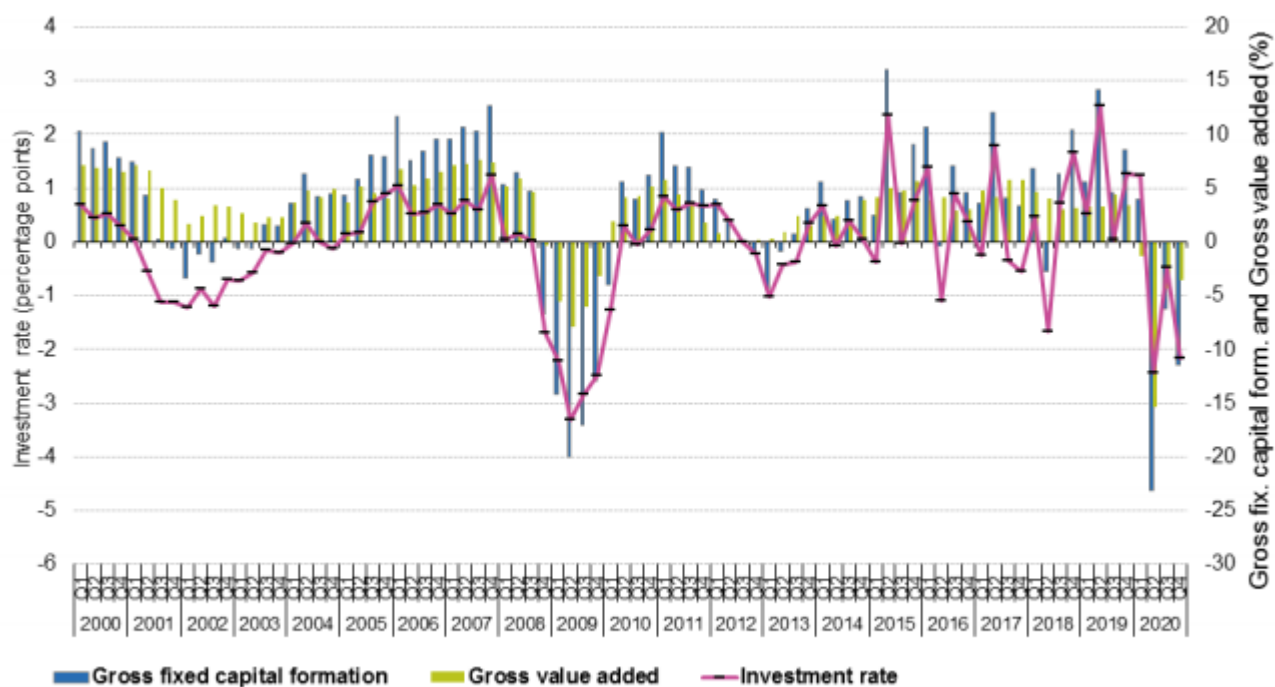
Source: Eurostat (online data codes: nasq_10_ki, nasq_10_nf_tr)

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Figure 13: Change of non-financial corporation investment rate, capital formation and gross value added in the EU

Source: Eurostat (nasq_10_ki, nasq_10_nf_tr)

Change of non-financial corporation investment rate, capital formation and gross value added in the EA
year-over-year, based on non-seasonally adjusted data

Source: Eurostat (online data codes: nasq_10_ki, nasq_10_nf_tr)

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Figure 14: Change of non-financial corporation investment rate, capital formation and gross value added   in   the   EA

Source: Eurostat (nasq_10_ki, nasq_10_nf_tr)

Eight Member States, for which data are available, recorded an increase in the investment rate of non-financial corporations in 2020Q4 compared with 2019Q4. The largest increase was observed in Estonia (+28.3 pp), due to the very large increase in non-financial corporation gross fixed capital formation (+106.0 %). On the other hand, the largest decrease was observed in Ireland (-52.2 pp), explained by the large drop in gross fixed capital (-61.9 % year-on-year).

Change of non-financial corporation investment rate, capital formation and gross value added in 2020Q4
year-over-year, based on non-seasonally adjusted data

Source: Eurostat (online data codes: nasq_10_ki, nasq_10_nf_tr)

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Figure 15: Change of non-financial corporation investment rate, capital formation and gross value added in 2020Q4

Source: Eurostat (nasq_10_ki, nasq_10_nf_tr)

Gross operating surplus of non-financial corporations still on year-over-year decrease due to the decrease of gross value added

In 2020Q4, non-financial corporation gross operating surplus still had a year-over-year decrease in the EU (-2.3 %) and the euro area (-2.6 %), though at a lower negative rate than in previous quarters. The main reason was the negative contribution of gross value added (normally positive). Conversely, both compensation of employees (whose contribution is normally negative) and other subsidies on production contributed positively, as in the three previous quarters, but still they did not compensate fully for the loss in gross value added.

Contribution of components to gowth of non-financial corporation gross operating surplus in the EU

year-over-year (%), based on non-seasonally adjusted data
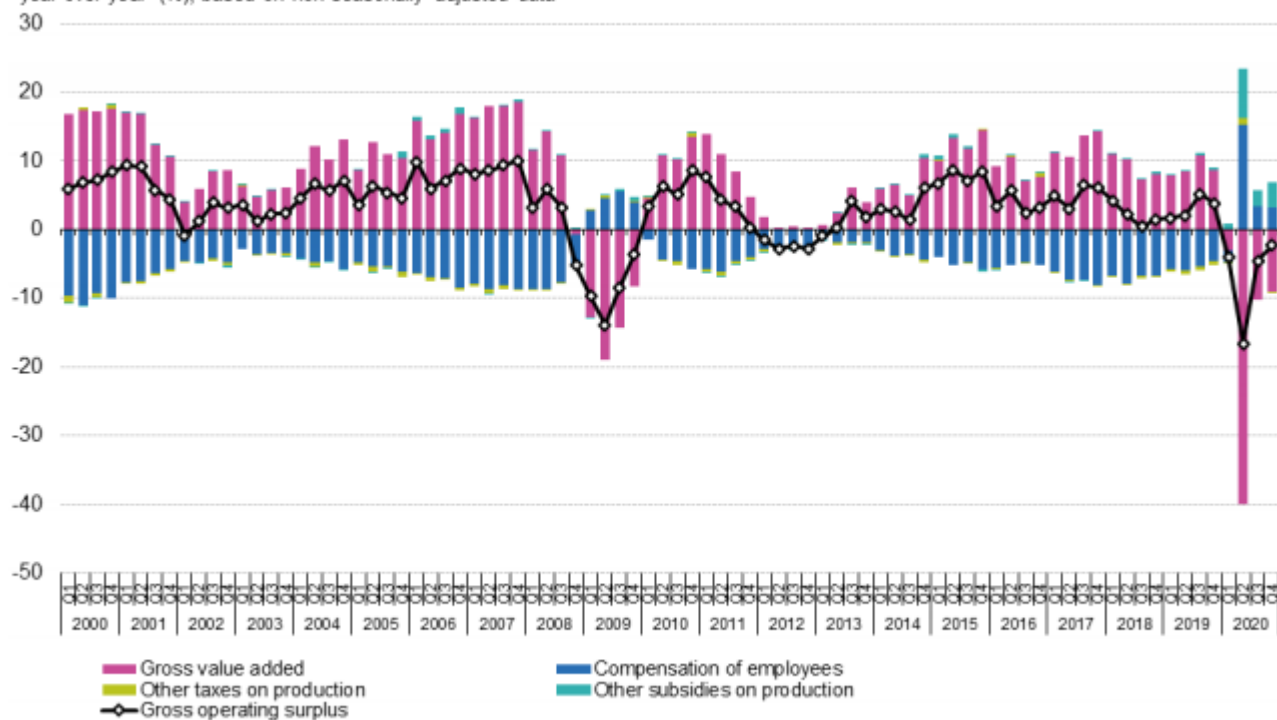
Figure 16: Contribution of components to change of non-financial corporation gross operating surplus in the EU

Source: Eurostat (nasq_10_ki, nasq_10_nf_tr)

Contribution of components to gowth of non-financial corporation gross operating surplus in the EA

year-over-year (%), based on non-seasonally adjusted data

Gross value added
Other taxes on production
Gross operating surplus
Compensation of employees
Other subsidies on production

Source: Eurostat (online data codes: nasq_10_ki, nasq_10_nf_tr)

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Figure 17: Contribution of components to change of non-financial corporation gross operating surplus   in   the   EA

Source: Eurostat (nasq_10_ki, nasq_10_nf_tr)

Nine Member States for which data are available recorded an increase in gross operating surplus of non-financial corporations in 2020Q4 compared with 2019Q4. Austria (+10.2 %) and the Netherlands (+7.5%) had the largest increases, with the enormous increase in other subsidies on production being the main reason. On the other hand, ten Member States recorded a decrease in gross operating surplus of non-financial corporations on a year-by-year basis, the highest being in Greece (-18.8%) and Spain (-14.2%), being the main reason the negative contribution of gross value added.

Contribution of components to growth of non-financial corporation gross operating surplus in 2020Q4

year-over-year (%), based on non-seasonally adjusted data

Source: Eurostat (online data codes: nasq_10_ki, nasq_10_nf_tr)

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Figure 18: Contribution of components to change of non-financial corporation gross operating surplus in 2020Q4

Source: Eurostat (nasq_10_ki, nasq_10_nf_tr)

Impact of COVID-19 lockdown on the collection, compilation and dissemination of quarterly sector accounts data

Since the beginning of the COVID-19 outbreak, Eurostat has been in close cooperation with National Statistical Institutes (NSIs) to ensure the timeliness and quality of quarterly sector accounts (QSA). The publication of QSA data for the reference period 2019Q4 in April 2020 was already impacted by the lockdown in the majority of Member States, even though the impact was mostly due to organisational aspects (many NSIs had to change their working arrangements) rather than due to source data availability and changes in compilation methods.

Based on the discussions of possible issues and solutions with NSIs, Eurostat released first guidance notes on COVID-19 related compilation processes. This included two notes on QSA compilation and transmission aspects.

As part of the data transmission of QSA data for the reference period 2020Q1-2020Q4, NSIs sent supplementary information to Eurostat on the availability of data sources and possible adaptations in sources and methods related to data compilation for 2020Q1-2020Q4. The main observations are:

- The majority of Member States had put in place government schemes to support enterprises and households by the end of March 2020. They had limited impact on 2020Q1 for the majority of Member States, a larger impact in 2020Q2 and the majority of the government schemes were also in place in 2020Q3 and 2020Q4.

- The vast majority of NSIs had access to their regular data sources and were able to use their standard estimation methods, even if for seasonal adjustment there was a need to make adjustments for outliers in the latest quarter of some time-series, according to Eurostat's guidelines. In certain cases, the data availability for some variables was lower and estimation methods had to be adapted accordingly.

- For certain variables (e.g. taxes and social contributions), also related to support schemes put in place by Member States, it is expected that subsequent routine revisions may be higher than usual.

- Based on the above, for the majority of Member States, the QSA results for 2020Q1-2020Q4 are of the same quality as usual. However, for certain Member States, the availability of data sources had an adverse impact on the overall quality of QSA statistics.

List of figures

List of tables

List of acronyms

- AFA: annual financial accounts
- ASA: annual non-financial sector accounts
- CIRCABC: a collaborative platform of the European Commission, which offers an easy distribution and management of documents
- CMFB: Committee on Monetary, Financial and Balance of Payments Statistics
- EA: Euro area
- ECFIN: Directorate-General for Economic and Financial Affairs of the European Commission
- ECB: European Central Bank
- EDP: Excessive deficit procedure
- EFTA: European Free Trade Association
- ESA 2010: European System of National and Regional Accounts 2010
- ESS: European Statistical System
- EU: European Union
- Eurobase: Statistical data base of Eurostat
- FIGARO: Full International and Global Accounts for Research in Input-Output Analysis project
- GDP: Gross domestic product
- GFS: Government finance statistics
- GNI: Gross national income
- GVA: Gross value added
- HERP: Harmonised European revision policy
- IMF: International Monetary Fund
- MIP: Macroeconomic Imbalance Procedure
- NACE: Statistical classification of economic activities in the European Community

  (FR: Nomenclature statistique des activités économiques dans la Communauté européenne)
- NAMA: National accounts main aggregates
- NFSA: non-financial sector accounts
- NPISH: Non-profit institutions serving households
- NSI: National statistical institute
- NUTS: Nomenclature of territorial units for statistics

  (FR: Nomenclature des Unités territoriales statistiques)
- PEEIs: Principal European economic indicators
- OECD: Organisation for Economic Cooperation and Development
- QFAGG: Quarterly financial accounts for general government

- QNA: Quarterly national accounts
- QSA: Quarterly non-financial sector accounts
- RA: regional accounts
- S.1: Total economy institutional sector
- S.11: Non-financial corporations institutional sector
- S.12: Financial corporations institutional sector
- S.13: General government institutional sector
- S.14: Households institutional sector
- S.15: Non-profit institutions serving households institutional sector
- S.1M: Households and non-profit institutions serving households institutional sectors
- SDMX: Statistical metadata and data exchange standard
- SGP: Stability and Growth Pact
- SNA 2008: System of National Accounts 2008
- SUIOT: Supply and use, input-output tables
- TSR: transaction-specific reservations
- ULC: Unit labour cost

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Quality report on National and Regional Accounts

2020 DATA

This document presents Eurostat's assessment of the quality of the national and regional accounts transmitted in the year 2020 by the EU Member States, Iceland, Norway and Switzerland, and information on Eurostat's publications of European aggregates. The quality report contains the fifth assessment of results since the start of data transmission according to the European System of Accounts (ESA 2010) on 1 September 2014. In general, data sent in 2020 were in line with the ESS quality standards and the ESA 2010 Regulation, and Member States have shown improvements in complying with the new data requirements and methodology.

For more information
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