

Luxembourg, 9 June 2020

Country specific metadata associated with national estimates for 2020Q1

The information below summarises metadata collected from countries in relation to the compilation and publication of European estimates. Due to differences in the national transmission and publication patterns, the information is presented in chronological order, starting with T+30 and T+45 flash estimates published end April and mid-May 2020.

The most recent metadata refer to data published in time for Eurostat's 9 June 2020 first regular estimate of main GDP aggregates. Updated estimates from a number of countries are also expected end of June. They will we incorporated in Eurostat's updated estimates of 2020Q1 main aggregates on 20 July 2020. For further details see: QNA prelease calendar

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	1. METADATA FOR PUBLISHED T+30 PRELIMINARY GDP ESTIMATES
Belgium	COVID-19 impact: large, since first mitigating measures started on 14 March 2020 (e.g. cancellation of sports events and cultural activities, etc.) were followed by lockdown (closing of non-essential stores, stay home policy, etc.) from 18 March 2020 onwards. Estimation techniques and quality: Estimates already aim to capture the COVID-19 impact by adaptations of the estimation (regression with correction factors by industry at NACE 5 digits level where possible) including the use of alternative sources (news releases, websites and contacts with companies, surveys). Results are however expected to be of lower quality than usual. National information: News release: https://www.nbb.be/doc/dq/e/dq3/histo/nefe20i.pdf
Spain	COVID-19 impact: large, due to lockdown from 16 March 2020 onwards. Estimation techniques and quality: Estimates already aim to capture the COVID-19 impact by incorporation of additional sources that have complemented those normally used (e.g. information on daily transactions with bank cards, advance data on sales of large companies and SMEs as well as VAT declarations and foreign trade of goods data and advanced information on spending by General Government). Results are however expected to be of lower quality than usual. National information: News release: https://www.ine.es/dyngs/INEbase/en/operacion.htm?c=Estadistica_C&cid=1254736164439&menu=ultiDatos&idp=1254735576581 Detailed news release (ES): https://www.ine.es/en/daco/daco42/daco4214/cntr0120a_en.pdf Impact on statistical activity: https://www.ine.es/en/daco/daco42/daco4214/cntr0120a_en.pdf Impact on statistical activity: https://www.ine.es/covid/covid_inicio_en.htm
France	COVID-19 impact: large, due to lockdown form 16 March 2020 onwards. Estimation techniques and quality: Estimates already aim to capture the COVID-19 impact by adaptations of the estimation (benchmarking with removed smoothing using the evolution using alternative sources such as estimates on the fall of consumption and activity (from the 9 April "Point de Conjoncture") or daily credit card data). Results are however expected to be of lower quality than usual. National information: News release: https://www.insee.fr/en/statistiques/fichier/4485040/Compte_m_PET12020.pdf https://www.insee.fr/fr/statistiques/fichier/4485040/Compte_m_PET12020.pdf

Italy	COVID-19 impact: large, due to lockdown form 09 March 2020 onwards.
	Estimation techniques and quality: Estimates already aim to capture the COVID-19
	impact by adjustments to extrapolations with trends coming from alternative
	indicators (e.g. business survey data, electronic payments, monthly electronic
	invoicing data from fiscal authority, monthly indicators of air and road
	transportations) as well as a correction of volume output of non-market health
	services. Results are however expected to be of lower quality than usual.
	National information:
	News release: https://www.istat.it/en/archivio/242087
	Methodological note: https://www.istat.it/it/files//2020/04/FLASH_20q1_EN.pdf
Latvia	COVID-19 impact: some impact, due to containment measures from 12 March 2020
	onwards.
	Estimation techniques and quality: Estimates already aim to capture the COVID-19
	impact by adaptations of the estimation method using administrative data that were
	made available a little earlier so they could be used for imputations. Results are
	however expected to be of lower quality than usual.
	National information:
	News release: https://www.csb.gov.lv/en/statistics/statistics-by-
	theme/economy/gdp/search-in-theme/2675-flash-estimate-gdp-1st-quarter-2020
	COVER 10 investors and investors to the terror and investors are a 10 March 2020
Lithuania	COVID-19 impact: some impact due to quarantine measures since 16 March 2020.
	Estimation techniques and quality: Estimates already aim to capture the COVID-19
	impact by testing different regressors to choose from according to the current economic situation and no outliers were added to the 2020 Q1 for seasonal
	adjustment. Results are however expected to be of lower quality than usual.
	National information:
Austria	National information: News release: https://osp.stat.gov.lt/informaciniai-pranesimai?articleId=7526586
Austria	National information: News release: https://osp.stat.gov.lt/informaciniai-pranesimai?articleId=7526586 COVID-19 impact: large, due to shutdown form 16 March 2020 onwards.
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	2. METADATA FOR PUBLISHED T+45 GDP ESTIMATES
Bulgaria	COVID-19 impact: some, since state of emergency was declared on 13 March 2020 by decision of the Parliament (so far until 13 May). Estimation techniques and quality: while estimation techniques or source data were not changed to capture the COVID-19 effect, it is already present in the results (due to some drop of input data). Results are expected to be of similar quality as usual. National information: News release: https://www.nsi.bg/sites/default/files/files/pressreleases/FlashEstGDP2020q1_en_PB1PNPP.pdf
Czechia	COVID-19 impact: large, from second half of March Estimation techniques and quality: For March 2020, the effect of quarantine on working days - shutdown in some industries was estimated. Estimates were prepared for cases of non-response of data providers, by using autoregressive models. The quality of the estimates is expected to be lower than usual. National information: News release: https://www.czso.cz/csu/czso/ari/gdp-preliminary-estimate-1st-quarter-of-2020
Denmark	National information: National website: https://www.dst.dk/en/Statistik/emner/nationalregnskab-og-offentlige-finanser/kvartalsvist-nationalregnskab/bnp-indikator
Germany	COVID-19 impact: large, from second half of March. Estimation techniques and quality: Whenever possible, the hypothetical value based on the time series with no effects due to COVID-19 was forecasted. This value is used as a reference for the first half of March. For the second half of March, additional information from different data sources (e.g. scanner-data, administrative data, additional official data, etc.) was incorporated. The results were then reaggregated. The quality of the estimates is expected to be lower than usual. National information: News release: https://www.destatis.de/EN/Press/2020/05/PE20 169 811.html Press conference (DE): https://www.destatis.de/DE/Presse/Pressekonferenzen/2020/wirtschaft corona/corona-uebersicht.html ; jsessionid=8A6DD123C043D47599FD3097202ED66A.internet8732 Additional info (DE): https://www.destatis.de/DE/Themen/Querschnitt/Corona/ inhalt.html

Cyprus	COVID-19 impact: large, from 16 March 2020 onwards. The preventive measures
	applied concerned, amongst others, the restriction of citizen movements and the
	closure of enterprises of certain economic activities.
	Estimation techniques and quality: Some imputations were made for the short-term
	indicators used for the month of March. These imputations were based on
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	information collected from additional sources (such as the weekly credit cards
	transactions and the preliminary results of the Labour Force Survey).
	The quality of the estimates is expected to be lower than usual.
	National information:
	News release:
	https://www.mof.gov.cy/mof/cystat/statistics.nsf/economy_finance_11main_en/ec
	onomy finance 11main en?OpenForm⊂=1&sel=2
Hungary	COVID-19 impact: some, from 11 March 2020 onwards
	Estimation techniques and quality:
	The estimation methods were not changed, no imputations were made for missing
	source data. Adminstrative data (VAT data) for the third month of the quarter was
	used for the estimation. The quality of the estimates is uncertain.
	National information:
	News release: http://www.ksh.hu/gyorstajekoztatok/#/en/document/gde2003
	Data table: http://www.ksh.hu/stadat_egde
Netherlands	COVID-19 impact: large, from 14 March 2020 onwards
	Estimation techniques and quality: Some changes were implemented for estimating
	health services. Imputations were used for cultural and recreational services due to
	missing source data. The quality of estimates is expected to be as usual, however
	with higher uncertainty.
	National information:
	News release: https://www.cbs.nl/en-gb/news/2020/20/economic-contraction-of-1-
	7-percent-in-q1-2020
	Data: https://www.cbs.nl/en-gb/figures/detail/84106ENG
	Data. Intips.//www.cbs.m/en-gb/ngures/detail/84100ENG
Poland	COVID-19 impact: some, from 15 March 2020 onwards, with partial lockdown
	measures
	Estimation techniques and quality: The estimation methods were not changed,
	imputations were not used for missing source data. The quality of the estimates is
	uncertain.
	National information:
	News release:
	https://stat.gov.pl/download/gfx/portalinformacyjny/en/defaultaktualnosci/3299/1/
	30/1/flash estimate of gross domestic product in the 1st quarter of 2020.pdf
Portugal	COVID-19 impact: large, from 16 March 2020 onwards, while State of Emergency
	was declared 18.03.2020
	Estimation techniques and quality: The same methodology and the same source
	information were used. Administrative data from the fiscal authorities (e-invoices)
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	complemented usual data sources. Results are expected to be of similar quality as
	usual.
	National information:
	News release:
	https://www.ine.pt/xportal/xmain?xpid=INE&xpgid=ine_destaques&DESTAQUESdest
	boui=415337469&DESTAQUESmodo=2

Romania	COVID-19 impact: some, from 15 March 2020 onwards Estimation techniques and quality: Usually estimations are based on the average of the first two months of the quarter. For 2020Q1 separate estimates for March were made using assumptions on the impact of the measures taken by government and stipulated in military ordinances. Results are expected to be of similar quality as usual. National information:
	News release: https://insse.ro/cms/sites/default/files/com_presa/com_pdf/pib_tr1e2020.pdf
Slovakia	COVID-19 impact: large, from 13 March 2020 onwards Estimation techniques and quality: The estimation methods were not changed. An increase in the number of missing data was recorded when estimating GDP for the period 2020Q1. Some imputations were used for missing source data. The quality of the estimates is expected to be lower than usual. National information: News release: Weblink to the website
Finland	COVID-19 impact: some, from 18 March 2020 Estimation techniques and quality: The estimation methods were not changed, imputations were not used for missing source data. Estimates do not yet capture COVID19 effect. The quality of the estimates is uncertain. National information: News release: http://tilastokeskus.fi/til/ktkk/2020/03/ktkk 2020 03 2020-05-15 tie 001 en.html Additional info: https://vnk.fi/artikkeli/-/asset_publisher/10616/hallitus-totesi-suomen-olevan-poikkeusoloissa-koronavirustilanteen-vuoksi? 101 INSTANCE iemYRQDn9G8r languageId=en_US
Sweden	COVID-19 impact: some, from mid-March Estimation techniques and quality: Some estimation methods were changed to avoid using time series models. All source data usually used was available. The quality of the estimates is expected to be lower than usual. National information: News release: https://www.scb.se/en/finding-statistics/statistics-by-subject-area/national-accounts/national-accounts-first-quarter-2020/
United Kingdom	National information: News release: https://www.ons.gov.uk/economy/grossdomesticproductgdp/bulletins/gdpfirstquarterlyestimateuk/januarytomarch2020

Norway

COVID-19 impact: large, from 12 March 2020 onwards

Estimation techniques and quality: The estimation methods were not changed, however March was treated as an outlier in the seasonal adjustment routines. Additional data sources were used, e.g. public data from the Tax Administration on specific business support measures. These data contained information on turnover in March 2020 for each enterprise that applied for support. The quality of the estimates is expected to be lower than usual.

National information:

News release: https://www.ssb.no/en/nasjonalregnskap-og-konjunkturer/artikler-og-publikasjoner/preliminary-figures-show-a-6.4-per-cent-decline-in-mainland-gdp-for-march

	3. METADATA FOR PUBLISHED T+2 GDP AND EMPLYOMENT ESTIMATES
Belgium	COVID-19 impact: large impact, from 14 March 2020 Estimation techniques and quality: GDP: Estimations of non-market output and most expenditure components were most affected and complemented by the use of alternative source data. Imputation techniques were applied for missing sources on government consumption and investment data and household investment. Employment: Estimates include forecasting method (ARIMA modelling) and adjustments were based on administrative data from the social security scheme. Government implemented the measures to limit the layoff of employees to keep employees on the payroll with government support. The quality of estimates are expected to be lower for GDP and uncertain for EMP. National information: News release: https://www.nbb.be/en/statistics/general Other worful informations between the payroll informations or metadata: https://www.nbb.be/en/statistics/general
Bulgaria	Other useful information: https://www.nbb.be/en COVID-19 impact: some impact, from 13 March 2020 through 13 May 2020 Estimation techniques and quality: GDP: while estimation techniques or source data were not changed to capture the COVID effect, it is present in the results (due to some drop of input data). Employment: Government measures: 60% subsidies on wages and salaries and social security contributions for the most affected sectors. Estimates are expected to be of the similar quality as usual. National information: News release: https://www.nsi.bg/sites/default/files/files/pressreleases/GDP2020q1 en OHA4M1K O.pdf
Czechia	COVID-19 impact: large, from second half of March, while on 12 March 2020 state of emergency was declared Estimation techniques and quality: GDP: Some changes to the estimation methods were made, e.g. adjustments for the effect of quarantine on working days and the shutdown of some industries; estimates for cases of non-response of data providers, using autoregressive models. Due to increased expenditures (intermediate consumption), COVID-19 generally affected the sum of cost based current price estimates. Employment: The Czech government implemented employment support program which compensates employers for the economic difficulties. The quality of the estimates is expected to be lower than usual for GDP and same quality for EMP. National information: News release: https://www.czso.cz/csu/czso/hdp_ts

Denmark	National information:
	News release (DK): https://www.dst.dk/en/Statistik/emner/nationalregnskab-og-
	offentlige-finanser/kvartalsvist-nationalregnskab/bnp-indikator
6	COVID 10 insurants laura fuerra canand half of Manah
Germany	COVID-19 impact: large, from second half of March.
	Estimation techniques and quality:
	GDP: Some changes to the estimates were made and whenever possible, the
	hypothetical value based on the time series with no effects due to COVID-19 was
	forecasted. This value is used as a reference for the first half of March. For the
	second half of March, additional information from different data sources (e.g.
	scanner-data, administrative data, additional official data, etc.) was incorporated.
	The results were then re-aggregated.
	Employment: One of the government implemented measures to limit the layoff of
	employees, e.g. mainly partially unemployed working with subsidized wage
	adjustments.
	The quality of the estimates is expected to be lower than usual.
	National information:
	News release (GDP):
	https://www.destatis.de/EN/Press/2020/05/PE20_180_811.html
	News release (EMP):
	https://www.destatis.de/EN/Press/2020/06/PE20_196_132.html
	Press conference (DE):
	https://www.destatis.de/DE/Presse/Pressekonferenzen/2020/wirtschaft_corona/cor
	ona-
	uebersicht.html;jsessionid=8A6DD123C043D47599FD3097202ED66A.internet8732
	Other useful information (DE):
	https://www.destatis.de/DE/Themen/Querschnitt/Corona/_inhalt.html
Fatania	COVID 10 imments across due to leaded our from 12 March 2020 acrossed
Estonia	COVID-19 impact: some, due to lockdown from 12 March 2020 onwards
	Estimation techniques and quality:
	GDP: Some estimates aim to capture the COVID-19 impact and some estimation
	methods were changed. No imputations for missing source data or alternative source
	were used. However, source data has been more compared to other sources in order
	to validate the quality.
	Employment: Estimates do not aim to capture the COVID-19 impact, however person
	interviews (CAPI) technique has been fully replaced with telephone interviews(CATI).
	Estimates are expected to be of the same quality. Government implemented
	measures to limit the layoff of employees, e.g. covering part of the wages,
	permission to postpone of payment of taxes to state.
	Estimates are expected to be of the same quality.
	National information:
	News release: https://www.stat.ee/news-release-2020-067

Ireland

COVID-19 impact: some, from 13 March 2020 onwards

Estimation techniques and quality:

<u>GDP:</u> No changes of estimation methods, but some data sources were impacted in 2020Q1 (greater impact on sources expected for 2020 Q2). Complementary sources (credit & debit card data) used to supplement/verify certain estimations (personal consumption expenditure).

<u>Employment:</u> No impact is expected of COVID on employment data for the 2020Q1. The quality of estimates is expected to be as usual.

National information:

News release:

https://www.cso.ie/en/releasesandpublications/er/na/quarterlynationalaccountsquarter12020provisional/

COVID-19 related information(1):

https://www.cso.ie/en/csolatestnews/pressreleases/2020pressreleases/pressstatementcovid-19pandemicandtheproductionofofficialstatistics/

COVID-19 related information(2):

https://www.cso.ie/en/releasesandpublications/in/na/informationnote-implicationsofcovid-19onthequarterlynationalaccounts/

Data: https://statbank.cso.ie/px/pxeirestat/Database/eirestat/National%20Accounts
%20Quarterly/National%20Accounts%20Quarterly National%20Accounts %20Quarterly National%20Accounts 20Quarterly 20Quarterly 20Quarterly 20Quarterly 20Quarterly 20Quarterly<

Greece

COVID-19 impact: some, from 13 March 2020 onwards to 31 March 2020 **Estimation techniques and quality:**

<u>GDP:</u> Methods have not been modified. No impact on estimates of non-market services.

<u>Employment:</u> Methods have not been modified. Some measures to limit the layoff of employees were implemented.

Estimates are expected to be of the same quality as previously.

National information:

News release - Weblink

Data: https://www.statistics.gr/en/statistics/-/publication/SEL84/-

Spain

COVID-19 impact: large, due to lockdown from 16 March 2020 onwards.

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(published for T+30)

Estimation techniques and quality:GDP: Some adaptations of methods with the incorporation of additional sources (e.g.

<u>GDP:</u> Some adaptations of methods with the incorporation of additional sources (e.g bank card transactions, sales from the VAT declaration and foreign trade of goods systems spending by General Government provided by the Audit Office).

<u>Employment:</u> Imputations for missing source data were not used, neither alternative sources. Government implemented measures to limit the layoff of employees are explained here (ES).

Results are however expected to be of uncertain quality.

National information:

News release:

https://www.ine.es/dyngs/INEbase/en/operacion.htm?c=Estadistica C&cid=125473 6164439&menu=ultiDatos&idp=1254735576581

News release full (ES):

https://www.ine.es/en/daco/daco42/daco4214/cntr0120a en.pdf

COVID-19 related explanations or metadata:

https://www.ine.es/en/daco/daco42/daco4214/nota_tecnica_avance_cntr012020_e_n.pdf

Government implemented measures for employment (ES):

https://www.boe.es/boe/dias/2020/03/28/pdfs/BOE-A-2020-4152.pdf

Impact on statistical activity: https://www.ine.es/covid/covid inicio en.htm

France

COVID-19 impact: large, due to lockdown from 16 March 2020 onwards.

Estimation techniques and quality:

<u>GDP:</u> Usual estimation and bencharking techniques have been adapted to reflect the strongevolution of the situation. Imputation techniques were applied for missing sources e.g. estimates of the fall of consumption and activity from the 9 April "Point de Conjoncture" were used to estimate the missing data for March. Comparing to flash estimates, the number of missing indicators have greatly decreased, with notably the inclusion of VAT data and BoP indicators.

<u>Employment:</u> Alternative method to adjust LFS data to obtain average employment during the period. For hours worked, some data survey source missing. Most decreases from "sick leave" and partial activity scheme. The numbers of hours lost because of sick leave and partial activity schemes estimated using indicators from social declarations.

Estimates are expected to be of lower quality than usual.

National information:

News release: https://www.insee.fr/en/statistiques/4485646

Methodological note:

https://www.insee.fr/fr/statistiques/fichier/4485040/Compte m PET12020.pdf

https://insee.fr/fr/statistiques/documentation/compte_m_RDT120.pdf

Croatia

COVID-19 impact: some, from mid-March 2020 onwards

Estimation techniques and quality:

<u>GDP</u>: No changes to the methodology of the estimates neither imputations were done, some alternative source data were used: implementation of ad-hoc adjustment of VAT for April with this amount of deferred obligation received from Ministry of Finance-Tax Administration.

<u>Employment:</u> Some adjustment using correction factors were done. Government measures include support for saving jobs in affected industries.

Estimates are expected to be the same quality for GDP and uncertain for EMP.

National information:

News release: https://www.dzs.hr/Hrv_Eng/publication/2020/12-01-01 01 2020.htm

COVID-19 related explanations or metadata: https://www.dzs.hr/Hrv/Covid-19/bdp.html

Italy

COVID-19 impact: large, due to lockdown from 11 March 2020 onwards **Estimation techniques and quality:**

<u>GDP</u>: Some changes in seasonal adjustment techniques. No real imputations were necessary since all sources were available but analysis was deeper than in 'normal' circumstances; new sources used to make adjustments to usual indicators when necessary.

<u>Employment:</u> no real imputations since all sources were available. However, the analysis was deeper than in 'normal' circumstances to understand directions and size of variations from an enlarged set of sources.

Estimates are expected to be of similar quality as usual.

National information:

News release: https://www.istat.it/en/archivio/243610

COVID-19 related explanations or metadata: https://www.istat.it/en/archivio/240106
Data: https://www.istat.it/en/national-accounts

Cyprus

COVID-19 impact: large, from 16 March 2020 onwards. The preventive measures applied concerned, amongst others, the restriction of citizen movements and the closure of enterprises of certain economic activities.

Estimation techniques and quality:

<u>GDP</u>: Some imputations were made for the short-term indicators used for the month of March. These imputations were based on information collected from additional sources (such as the weekly credit cards transactions and the preliminary results of the Labour Force Survey).

<u>Employment:</u> A specific package of governmental measures were issued, e.g. partial and full suspension scheme for businesses, special sickness allowance, etc.

The estimates are expected to be of lower quality.

National Information:

News release:

https://www.mof.gov.cy/mof/cystat/statistics.nsf/All/2F3BE63FEC87C562C22585000 03F73AD?OpenDocument&sub=1&sel=1&e=&print

Data:

https://www.mof.gov.cy/mof/cystat/statistics.nsf/economy finance 11main en/economy finance 11main en?OpenForm&sub=1&sel=2

Latvia

COVID-19 impact: some, due to lockdown from 12 March 2020 onwards.

Estimation techniques and quality:

<u>GDP:</u> Estimates already aim to capture the COVID-19 impact, which is seen in decreasing value added of affected industries, for example, tourism, accommodation, catering, event management, service industries and others. The estimation methods were not changed. No imputations for missing source data and no alternative source data were used.

<u>Employment</u>: Government implemented measures to limit the layoff of employees by paying idle benefits to employees of sectors affected by the COVID-19. Estimates are expected to be of the same quality.

National information:

News release: https://www.csb.gov.lv/en/statistics/statistics-by-

theme/economy/gdp/search-in-theme/2692-changes-gdp-1st-quarter-2020

Lithuania

COVID-19 impact: some impact due to quarantine measures from 16 March 2020 **Estimation techniques and quality:**

<u>GDP</u>: No changes in the estimation methods; but testing of different regressors; no imputations for missing sources needed. Imputation methods were not used, data was received without missing values and in time. Some economic industries (art, recreation and entertainment, retail trade, transportation, accommodation and food services affected more than others.

<u>Employment</u> estimates include some of the COVID-19 effects and some additional adjustments for estimation of non-residents by activities were made. Government measures were taken, e.g. to preserve jobs during the idle time due to quarantine, to provide the enterprises with subsidies in order to compensate the paid salaries. Estimates are however expected to be of lower quality than usual.

National information:

News release: https://osp.stat.gov.lt/informaciniai-pranesimai?articleId=7644044
New release (COVID 19 Impact on business): https://osp.stat.gov.lt/covid-19-itaka-verslui-naujienos

Other useful information (COVID 19 statistics for Lithuania):

https://registrucentras.maps.arcgis.com/apps/opsdashboard/index.html#/becd01f2fade4149ba7a9e5baaddcd8d

Hungary

COVID-19 impact: some, from 11 March 2020 onwards

Estimation techniques and quality:

<u>GDP</u>: The estimation methods were not changed, while some imputations were made for missing source data. VAT data has been taken into account in the imputation process of STS data. As additional source, administrative data was used for validation.

<u>Employment:</u> There was minimal impact on LFS data, e.g. after restrictions personal interviews changed to telephone interviews.

Government have implemented measures to limit the layoff, e.g. exemption of taxes on employees for limited time, some salaries free of taxes, social contribution tax reduced, wage subsidies, etc.

Estimates are expected to be of uncertain quality.

National information:

News release:

http://www.ksh.hu/gyorstajekoztatok/#/en/document/gde2003

Data: http://www.ksh.hu/stadat_egde

Malta

COVID-19 impact: some impact with some restrictions starting already as from 28 February 2020.

Estimation techniques and quality:

GDP: In the absence of traditional sources, assumptions were made about industries, which were fully, or partially 'closed' using alternative or complementary information, such as business and consumer surveys, information from professional federations and administrative data, in order to fill in for gaps in the established data

Employment: the new measures to support businesses in retaining their employees in the context of COVID-19 by financing wages (partly or fully), were recorded as subsidies on production (D.39) to employers.

Results are expected to be of about same quality for GDP but lower for EMP estimates.

National information:

News release:

https://nso.gov.mt/en/News Releases/Documents/2020/05/News2020 091.pdf

Netherlands

COVID-19 impact: large, from 16 March2020 onwards

(published for T+45)

Estimation techniques and quality:

<u>GDP:</u> Some changes were implemented for estimating health services. Imputations were used for cultural and recreational services due to missing source data. Some complementary sources were used as additional information. Volume estimates of health services and other non-market services were reduced.

Employment: estimates include COVID effects but government implemented various measures to limit the layoff of employees including NOW (Tijdelijke noodmaatregel overbrugging werkgelegenheid). Estimates for hours worked delayed to 5 June 2020 in relation to source data.

The quality of estimates is expected to be as usual, however with higher uncertainty for GDP and lower quality for EMP.

National information:

News release: https://www.cbs.nl/en-gb/news/2020/20/economic-contraction-of-1-7-percent-in-q1-2020

COVID-19 related explanations or metadata: https://www.cbs.nl/engb/uitgelicht/message-to-users-of-cbs-data-and-those-providing-data-to-cbs

Data: https://www.cbs.nl/en-gb/figures/detail/84106ENG

Austria

COVID-19 impact: large, due to shutdown form 16 March 2020 onwards.

Estimation techniques and quality:

<u>GDP</u>: For missing quarterly inputs January and February values were estimated under no COVID-19 restrictions and the March estimate adapted in two parts (pre and post shut-down) to estimate missing monthly inputs.

<u>Employment:</u> COVID-19 had some impact for persons and large impact for hours worked. One of the measures implemented by government to limit the layoff of employees was – short time work.

Results are expected to be of lower quality than usual for GDP and same quality for EMP.

National information:

News release (GDP): https://www.wifo.ac.at/en/news/covid-

19 pandemic gdp decline of 29 percent year-on-

year in the first quarter of 2020

News release (EMP):

https://www.wifo.ac.at/en/news/decline in employment and rise in unemployment continued in april

Data: https://www.oenb.at/en/Statistics/Standardized-Tables/Economic-and-Industry-Indicators/Economic-Indicators/gdp-growth.html

Poland

COVID-19-impact: some impact, from 15 March 2020

Estimation techniques and quality:

interviews, information from the websites.

<u>GDP:</u> There were no changes to the estimation methods. There were imputations used to calculate price indices, which are applied for volumes calculations. Alternative data sources have been used for missing data such as: e-mails, telephone

<u>Employment</u> estimates and methodology were not changed. Measures have been taken by the government of preventing the effects of the negative impact of coronavirus on the economy, mostly to prevent the laying off the employees and the liquidation of units, such as: subsidies to employees' remuneration paid by the employer for selected legal entities that meet certain criteria and exemptions from some mandatory contributions for selected units.

The quality of the estimates are expected to be the same.

National information:

News release (GDP): https://stat.gov.pl/en/topics/national-accounts/quarterly-national-accounts/gross-domestic-product-in-the-1st-quarter-of-2020-preliminary-estimate,2,45.html

News release (EMP): https://stat.gov.pl/en/topics/labour-market/working-unemployed-economically-inactive-by-lfs/information-regarding-the-labour-market-in-the-first-quarter-of-2020-preliminary-data,8,34.html

Portugal

COVID-19 impact: large, from 16 March 2020 onwards, while State of Emergency was declared 18 March 2020

Estimation techniques and quality:

<u>GDP</u>: The same methodology as usually were used; complemented by some additional sources (e.g. administrative data from fiscal authorities, payment systems. Current prices estimates based on the sum of costs were impacted by increases in intermediate consumption and compensation of employees notably in health as a response to tackle the pandemic. Some measures to contain COVID-19 reduces non-market production, in volume.

<u>Employment</u> estimates were obtained using the same methodology and the same basic information (Labour Force Survey data). Measures have been taken to protect workers' jobs, such as the new layoff regime with simpler rules. These measures were announced already in March but only implemented in April.

Results are expected to be of similar quality as usual.

National information:

News release:

https://www.ine.pt/xportal/xmain?xpid=INE&xpgid=ine_destaques&DESTAQUESdest_boui=415337469&DESTAQUESmodo=2

Romania

COVID-19 impact: some impact, from 15 March 2020. State of emergency was established between 16 March 2020 -14 May 2020 and a state of alert starting with 15 May 2020

Estimation techniques and quality:

<u>GDP</u>: Same sources of information and the same methodology were used. Some additional sources (e.g. STS) to complement other (administrative) sources. <u>Employment</u>: The estimation and methodology were not changed. The measures were implemented to limit the layoff of employees.

Estimates are expected to be same quality for GDP and of uncertain quality for EMP.

National information:

News release: https://insse.ro/cms/en/content/gross-domestic-product-first-quarter-2020-provisional-data-1

COVID-19 related explanations or metadata: https://insse.ro/cms/en/content/gross-domestic-product

Slovenia

COVID-19 impact: some impact due to lockdown measures, from 13 March 2020 onwards

Estimation techniques and quality:

<u>GDP</u>: No changes in estimation methods, but e.g. use of additional source to estimate compensation of employees. Current prices estimates were affected and government budget data used for it. No alternative sources were used, however additional data source by tax administration was taken into account for the employed persons not working.

<u>Employment:</u> The government implemented various measures to limit the layoff of employees, like co-financing of salaries, financing of sick leaves, payment of social contributions. Adjustments on estimates for hours worked were used on number of persons on temporary wait for work.

The quality of estimates is expected to be lower.

National information:

News release: https://www.stat.si/StatWeb/en/News/Index/8865

Employment news release: https://www.stat.si/statweb/en/News/Index/8872

Data: https://www.stat.si/StatWeb/en/Field/Index/1

Slovakia

COVID-19 impact: large, from 13 March 2020 onwards

Estimation techniques and quality:

<u>GDP</u>: The estimation methods were not changed. An increase in the number of missing data was recorded when estimating GDP for the period 2020Q1. Some imputations were used for missing source data.

<u>Employment:</u> The results of LFS, quarterly business surveys for 2020Q1 and administrative sources were at disposal on time. The government subsidies to limit the layoff of employees for firms and self-employed which were forced to temporarily close or reduce their businesses.

The quality of the estimates is expected to be lower than usual.

National information:

News release (GDP): Weblink
News release (EMP): Weblink

Finland

COVID-19 impact: some, from 18 March 2020

Estimation techniques and quality:

<u>GDP</u>: Some estimation methods were modified, as ARIMA estimates were not any more appropriate. No impact on estimates of health and education services but some impacts on other non-market services due to weak data source. Imputations were not used for missing source data. The quality of the estimates is expected to be lower than usual.

<u>Employment:</u> no significant impact of COVID-19. Methods have not been changed and estimates are of the same quality as previously. No measure to limit the layoff of employees.

Quality is expected to be lower for GDP and similar for EMP estimates.

National information:

News release: http://tilastokeskus.fi/til/ntp/2020/01/ntp_2020_01_2020-05-

29_tie_001_en.html

Other useful information: https://vnk.fi/artikkeli/-/asset_publisher/10616/hallitus-

totesi-suomen-olevan-poikkeusoloissa-koronavirustilanteenvuoksi? 101 INSTANCE iemYRQDn9G8r languageId=en US

Sweden	COVID-19 impact: some, due to lockdown from 16 March 2020 onwards. In the end of March, some large motor vehicle industries closed their business. Estimation techniques and quality: GDP: Estimates already aim to capture the COVID-19 impact. Sweden has changed the volume measures for pre-school, school and health care. All these activities got lower growth rates. For preschool imputations on absence were made. Data from regions for health care were used. Employment: Government has make it possible to make redundancies, e.g. government program offers wage subsidies to companies who keep workers on payrolls. National information: News release: <a <a="" comments-on-quartely-gdp="" covid-19="" en="" explanations="" finding-statistics="" href="https://www.scb.se/en/finding-statistics/coronavirus/press-releases-relating-to-coronavirus-covid-19/" https:="" metadata:="" national-accounts="" national-accounts-quarterly-and-annual-estimates="" or="" pong="" publications="" related="" statistics-by-subject-area="" www.scb.se="">https://www.scb.se/en/finding-statistics/coronavirus/press-releases-relating-to-coronavirus-covid-19/
United	National information:
Kingdom	News release:
(published	https://www.ons.gov.uk/economy/grossdomesticproductgdp/bulletins/gdpfirstquarterlyestimateuk/januarytomarch2020
for T+45)	erryestimateur/januarytomarch2020
Iceland	COVID-19 impact: some, from 16 March 2020 onwards Estimation techniques and quality:
	GDP: There were no changes to the estimation methods, neither imputations were
	used for missing source data. Credit card turnover was used an alternative data
	source for some indicators.
	Employment: no changes to the methods were done.
	Estimates are expected to be lower quality than usual. National information:
	News release: https://statice.is/publications/news-archive/national-
	accounts/national-accounts-1st-quarter-2020/
	Other useful information: https://www.covid.is/english

Norway

COVID-19 impact: large, from 12 March 2020 onwards

(published for T+45)

Estimation techniques and quality:

<u>GDP</u>: Estimation methods were not changed, but March was treated as an outlier in the seasonal adjustment routines. Additional data sources were used, e.g. public data from the Tax Administration on specific business support measures. These data contained information on turnover in March 2020 for each enterprise that applied for support.

<u>Employment:</u> Measures has been undertaken, but implemented too late to have any impact on employment 2020Q1.

The quality of the estimates is expected to be lower than usual.

National information:

News release: https://www.ssb.no/en/nasjonalregnskap-og-konjunkturer/artikler-og-publikasjoner/preliminary-figures-show-a-6.4-per-cent-decline-in-mainland-gdp-for-march

Switzerland

COVID-19 impact: large, from 03 March 2020 to 27 April 2020 **Estimation techniques and quality:**

<u>GDP:</u> some changes to estimates were made, but no imputations for missing source data. Alternative source data were used: e.g. credit and debit card data to make private consumption expenditure plausible. The quality of the estimates is expected to be the same.

<u>Employment:</u> adjusted employment figures (indicators on production and expenditure side) by amount of short-time work used.

Estimates are expected to be same quality for GDP and uncertain for EMP.

National information: