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How do the revised National Accounts affect the interpretation of how the Spanish economy has fared since the pandemic?

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#### Rationale

The revision to the Annual and Quarterly National Accounts figures by the National Statistics Institute in September was more extensive than in previous years and has altered the interpretation of some aspects of Spanish economic developments since the pandemic.

### **Takeaways**

- The new figures entail upward revisions to GDP of 0.2 percentage points (pp) in 2020, 0.9 pp in 2021 and 0.3 pp in 2022. The Spanish economy therefore recovered its pre-pandemic level in 2022 Q3 (rather than in spring 2023, as per the previous information), one year later than the euro area overall. The main factors underlying these revisions are, on the demand side, the greater domestic demand momentum and, on the supply side, the greater strength of services.
- The new time series signal that productivity has fared somewhat better, tax revenues have been more consistent with macroeconomic developments, household expenditure has been more dynamic, in keeping with the improvement in real labour income, and unit labour costs have increased more than previously estimated, rising in Spain more than in the euro area overall since 2019, which could ultimately impact Spanish firms' competitiveness.

## **Keywords**

National Accounts, revision, GDP.

#### JEL classification

E01, E20.

#### Authors:

José Luis Fernández

Economic Developments Department Banco de España

Mario Izquierdo

Economic Developments Department Banco de España

José González Mínguez

International and European Relations Department Banco de España

Alberto Urtasun

Economic Developments Department Banco de España

# HOW DO THE REVISED NATIONAL ACCOUNTS AFFECT THE INTERPRETATION OF HOW THE SPANISH ECONOMY HAS FARED SINCE THE PANDEMIC?

#### Introduction

National Accounts (NA) provide a comprehensive and systematic quantitative framework that is extraordinarily useful for analysis of how a country's economy is faring. They comprise a series of mutually consistent accounts that describe various aspects of an economy, such as the breakdown of GDP from three different angles. On the demand side, GDP is the sum of consumption by domestic public and private agents, investment in various types of assets (such as capital goods, construction and intangibles) and exports (goods and services sold to the rest of the world) minus imports (goods and services that domestic agents acquire from the rest of the world). On the supply side, GDP is the sum of the value added of the different productive sectors.<sup>1</sup> NA also break down how GDP is allocated between compensation per labour input and gross operating surplus (GOS).<sup>2</sup> In addition, the supply and demand side components are calculated both in nominal terms and by volume, that is, in real terms, discounting the effects of inflation.

Complementary to the NA are the non-financial accounts of the institutional sectors (which include households, non-financial corporations, financial institutions and general government, as well as the rest of the world). These accounts describe how each of these sectors generate and spend their income. If their income exceeds their expenditure, the institutional sector in question has a net lending position, whereas if the opposite is the case it has a net borrowing position.

These accounts, which summarise the aggregate activity of an economy and of the various types of agents operating in that economy, can provide an excellent picture of economic developments in a country. In particular, the NA data have provided an extremely accurate description of the effects that recent shocks (such as the pandemic and the war in Ukraine) have had on economic developments in Spain, including aspects such as the uneven impact across the different productive and institutional sectors.

Nevertheless, the base data for preparation of the accounts are not all available at the same time. Barely 30 days after each quarter-end, the staff of the National Statistics Institute (INE, by its Spanish abbreviation) prepare the initial version of the accounts for that quarter. But these are subsequently revised and added to over the following three years, as more data become available. The recent shocks (especially the pandemic) made it considerably more difficult to compile base statistics and, therefore, the subsequent revisions to the initial data have been particularly extensive. In consequence, the interpretation of how the Spanish economy has fared in recent

<sup>1</sup> Plus taxes on products, net of subsidies.

<sup>2</sup> More strictly speaking, GOS is GDP less compensation of employees and less net taxes on production and imports received by general government. Accordingly, GOS includes all other income generated in the production process (together with consumption of fixed capital).

years has changed over time, in particular following the release, in September, of new NA data. Moreover, the revised time series also affect the macroeconomic projections, insofar as they change the starting point, which in this case makes it difficult to compare the projections published today with those published in September.<sup>3</sup>

The revision methodology and calendar are harmonised at European level, according to Eurostat guidelines (Eurostat, 2019). As the factors responsible for the revisions observed in Spain were also present in other European economies, in some cases their national accounts have also seen substantial revisions, although in the euro area aggregate the revision has been relatively minor.

## September 2023 revisions to the NA series

Every year the INE releases revised Annual National Accounts (ANA) time series for the three previous years, finalising the estimates for the first of those three years, while the data for the two most recent years remain subject to possible future revision. On 18 September the INE released the annual time series for this year's revision, which affects the period 2020-2022. Following this release, the ANA estimates for 2020 became final, while the estimates for 2021, which were previously flash estimates, became provisional. Lastly, the first flash estimates for 2022 were released (the only data previously available being the Quarterly National Accounts (QNA) estimate).

Further, on 22 September, the INE released the quarterly time series consistent with these new annual data. These time series also include changes to the data available previously for the first two quarters of 2023. Subsequently, on 29 September, the INE released the quarterly non-financial accounts for the institutional sectors (QNFAIS) consistent with the new annual and quarterly national accounts time series, also up to 2023 Q2. Lastly, on 27 October, the flash estimates for 2023 Q3 were released. This article does not include analysis of 2023 Q3, but it does consider the data up to 2023 Q2 that were included in the October data release.

The main changes are in the 2021 figures, the year for which the information used has changed the most. Specifically, the change from flash estimates to provisional estimates has fleshed out the information previously available – from conjunctural indicators – that is used subsequently to construct the structural indicators. A second source of the changes observed in the annual time series for 2021 is the inclusion of revised data from other statistical sources. Lastly, on this occasion and as an exception, the INE has made a provisional estimate of the supply and use tables for year t-2, where t is the year of release (in this case, 2023). This makes it possible to balance at a disaggregated level the estimates by sector with the demand component estimates. In year t this estimate is generally only made for year t-3, meaning that had the INE

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<sup>3</sup> https://www.bde.es/f/webbe/SES/Secciones/Publicaciones/InformesBoletinesRevistas/BoletinEconomico/23/T3/Files/be2303-it-Proye.pdf and https://www.bde.es/f/webbe/SES/Secciones/Publicaciones/InformesBoletinesRevistas/BoletinEconomico/23/T4/Files/be2304-it-Proye.pdf

<sup>4</sup> For instance, Structural Business Statistics and the Construction Industry Structure Survey.

followed usual practice, it would not have made any estimate of the 2021 supply and use tables until 2024.

## Main changes in the annual accounts

As described above, these new annual accounts are released as part of the routine revisions to the Spanish National Accounts. These revisions are procedures standardised across Europe, following Eurostat guidelines. However, on this occasion, the ANA revision, both in Spain and in other countries, was more extensive than in previous years, such that the new figures released are considerably different from the data previously available. This is explained by the sharp shock to economic activity in 2020 and 2021 caused by the pandemic, which had a unique impact on conjunctural statistics. First, the health crisis made it more difficult to compile the data used to construct the corresponding indicators. Second, the scale and speed of the changes in the variables were unprecedented in the history of the time series. These conditions severely undermined the capacity of the indicators to correctly estimate the underlying macroeconomic aggregates.

The availability of structural statistics, and their reconciliation by economic sector that has made it possible to have at this stage a preliminary estimation of the supply and use tables for 2021, has revealed a higher level of activity. Specifically, on the new estimates, real GDP growth was 0.2 pp higher than previously estimated in 2020, 0.9 pp higher in 2021 and 0.3 pp higher in 2022 (see Table 1). Some other European countries have also seen high upward revisions, at least for 2021. For instance, the current estimated rate of growth of GDP in 2021 is 1.3 pp higher than before in Italy and the Netherlands, 1.1 pp higher in the United Kingdom and 0.6 pp higher in Germany. This contrasts with the downward revision of 0.4 pp in France.

In Spain, the sharper increases in domestic demand are, from the demand angle, the main cause of the stronger growth in the period. The contribution of the net external balance to output growth shows less change in cumulative terms, as the downward revision for 2021 is offset by the higher contribution in 2022.

Within domestic demand, estimated growth rates for both government and private consumption are now higher, although the revised GDP figures are mainly on account of the changes in private consumption. Gross capital formation is another component that has been revised upwards, albeit with heterogeneous changes across its different headings, with lower momentum for investment in capital goods and greater dynamism for all other components, especially housing. By economic sector, the revisions have had a significant downward impact in agriculture (in this case especially in 2022) and a significantly upward impact in services (with the most extensive revisions in professional activities, real estate activities and financial and insurance activities).

Meanwhile, the employment figures have remained practically unchanged, with a very slight downward revision to the total number of persons employed and a small upward revision to the

Table 1

GDP and demand components: Spain (update of accounting time series 2020-2022)

Annual rate of change in volume terms (%) and % of GDP

		2020			2021			2022		
	New	Old	Change	New	Old	Change	New	Old	Change	
GDP	-11.2	-11.3	0.2	6.4	5.5	0.9	5.8	5.5	0.3	
Private consumption	-12.3	-12.2	0.0	7.1	6.0	1.1	4.7	4.4	0.3	
Government consumption	3.6	3.5	0.1	3.4	2.9	0.5	-0.2	-0.7	0.5	
Gross capital formation	-12.5	-13.2	0.7	9.4	5.9	3.5	1.4	3.5	-2.0	
Gross fixed capital formation	-9.0	-9.7	0.7	2.8	0.9	1.8	2.4	4.6	-2.3	
Exports	-20.1	-19.9	-0.1	13.5	14.4	-0.9	15.2	14.4	0.7	
Imports	-15.0	-14.9	-0.2	14.9	13.9	1.0	7.0	7.9	-0.9	
Contribution to GDP growth										
Domestic demand (a)	-9.0	-9.1	0.1	6.6	5.2	1.4	2.9	3.1	-0.1	
Net external demand (a)	-2.2	-2.2	0.0	-0.2	0.3	-0.6	2.9	2.4	0.5	
Memorandum items	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Employment	-4.2	-4.2	0.0	2.3	2.5	-0.2	2.7	2.8	-0.1	
Nominal GDP	-10.2	-10.2	0.1	9.2	7.9	1.3	10.2	10.0	0.2	
GDP deflator	1.1	1.2	-0.1	2.7	2.3	0.4	4.1	4.3	-0.1	
Nominal private consumption	-12.2	-12.2	0.0	9.5	8.2	1.3	11.6	11.5	0.1	
Consumption deflator	0.1	0.0	0.1	2.3	2.1	0.2	6.6	6.8	-0.3	
Compensation per employee	1.2	0.5	0.8	4.5	2.7	1.8	4.1	3.2	0.9	
Unit labour cost	9.2	8.6	0.6	0.4	-0.3	0.7	1.0	0.6	0.5	
Nominal GDP (€bn)	1,119.0	1,118.0	1.0	1,222.3	1,206.8	15.4	1,346.4	1,327.1	19.3	
ΔNominal GDP (updated/old) (%)	0.1	_	-	1.3	_	_	1.5	_	_	
Budget balance (% of GDP)	-10.1	-10.1	0.0	-6.7	-6.9	0.1	-4.7	-4.8	0.1	
Government debt (€bn)	1,345.8	1,345.8	0.0	1,428.1	1,427.2	0.9	1,502.8	1,502.5	0.3	
Government debt (% of GDP)	120.3	120.4	-0.1	116.8	118.3	-1.4	111.6	113.2	-1.6	

SOURCES: Banco de España and INE.

a Contributions to GDP growth.

total number of hours worked. In consequence, given that estimated GDP growth is now higher, apparent labour productivity growth has been revised upwards, both in terms of hours worked and persons employed.

The revised nominal GDP is slightly higher than real GDP, as it adds to the latter a small upward revision to the deflator (0.1 pp, concentrated in 2021). Accordingly, nominal GDP in 2022 is 1.5 pp higher than previously estimated. From the income angle, this revision is mainly explained by higher compensation of employees, which in 2022 is 3.3 pp higher than previously calculated. This change stems from the higher estimated growth in compensation per employee, which has shown greater dynamism throughout the period while, as indicated above, the employment figures are practically unchanged. In all other income headings the changes are minor. Thus, in 2022, GOS is 0.2 pp below the level estimated previously, while net taxes on products are 0.3 pp higher.

## Changes in the interpretation of Spanish economic developments in recent years as a result of these revisions

As indicated earlier, the release of the new ANA time series was followed, some days later, by the release of the QNA data up to 2023 Q2.5 This section compares the time series now available up to that date with those available before the release of the revised QNA figures.

### GDP and aggregate demand components

According to the time series prior to the revision, it was estimated that Spanish GDP had not recovered its pre-pandemic level until 2023 Q2. However, the greater economic momentum revealed by the new information indicates that it had returned to its pre-pandemic level in 2022 Q3 and that, by the end of 2023 Q2, GDP was 1.8 pp above that level (see Chart 1). In any event, the euro area as a whole recovered its pre-pandemic GDP level earlier, in 2021 Q3.

Activity in Spain from end-2019 (before the health crisis broke) to date had, according to the prior time series, fared worse than in the euro area overall: in 2023 Q2 Spanish GDP was 0.4% higher than its pre-crisis level, and the gap relative to the euro area as a whole was 2.6 pp. According to the new time series, the gap is still negative but has narrowed to 1.2 pp, as Spanish and euro area GDP are 1.8% and 3.0%, respectively, above their pre-pandemic levels.

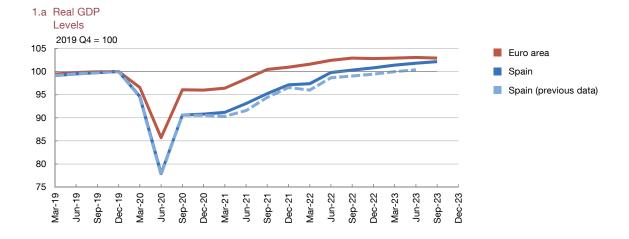
The earlier NA time series estimated that, in addition to the steep drop in activity in 2020 H1 (at the onset of the pandemic), Spanish GDP had also fallen in 2020 Q4 and 2021 Q1 (in the latter quarter activity was not only adversely affected by the resurgence of the pandemic, but also by the disruption triggered by the bad weather in January of that year). Moreover, according to the earlier estimates, activity had also contracted in 2022 Q1 as a result of the outbreak of the war in Ukraine. However, compared with those three quarters of shrinking GDP included in the earlier time series, the new data show positive growth in all quarters from 2020 Q3 onwards.

By demand component, the most significant change is in household consumption, estimated by the earlier time series to have performed particularly poorly of late (see Chart 1.b). In real terms, the 2022 level of this aggregate has been revised up by 1.3 pp. Nonetheless, even with the new data, in 2023 Q2 household consumption is still 1.1 pp below its pre-pandemic level. The upward revision to household spending on consumer goods and services is consistent with the more favourable developments now estimated in real disposable income. However, the revision to this latter time series is significantly more marked. On the new data, in Q2 this variable stood 3.3% above its end-2019 level, despite the adverse effects of the pandemic and the energy crisis triggered by the war in Ukraine.

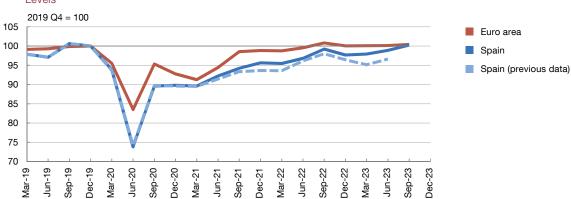
<sup>5</sup> To obtain the quarterly aggregate series, the INE applies temporal disaggregation techniques to the annual aggregate series (essentially the general method proposed by Chow and Lin, 1971). It thus obtains a first version of the gross current quarterly estimates, which are subsequently fine tuned in a process that includes supply-demand reconciliation. Lastly, the INE uses signal extraction to obtain seasonally adjusted series.

<sup>6</sup> In the case of the QNFAIS, the time series were only available up to 2023 Q1.

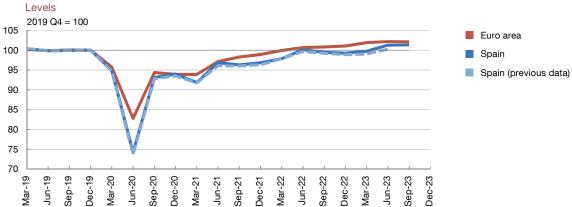
Chart 1
On the revised ANA and QNA figures, Spanish GDP recovered its pre-pandemic level in 2022 Q3



## 1.b Private consumption Levels







SOURCES: Eurostat and INE.



In nominal terms, household income has been boosted by the increase in labour income (up 16.5% in cumulative terms to 2023 Q2 (see Chart 2)), with growth in compensation per employee and dependent employment of 13.9% and 2.3%, respectively. In real terms, once the increase in inflation has been stripped out, real wages have grown by 1.6% since end-2019.7 Overall, consumption and real income have fared worse since the onset of the pandemic when these variables are measured per capita, as the population has grown by 1.4% in this period. Specifically, in per capita terms, in 2023 Q2 consumption and real income stood 2.5% below and 1.9% above, respectively, their end-2019 levels.

As private consumption has been revised up less than income, the estimated saving rate is now significantly higher. Specifically, the saving rate was 10% of disposable income in cumulative four-quarter terms in 2023 Q2, up almost 2 pp on the pre-pandemic rate (8.2%).

The new time series also revise up gross fixed capital formation over almost the entire period since the outbreak of the pandemic. However, in the most recent quarters, the revisions have been downwards. As a result, the level of investment in 2023 Q2 is now somewhat lower and, on the new data, down 2 pp on the pre-pandemic level. By sub-component, non-construction investment has been revised down and is proving slightly sluggish, despite the impetus that this type of expenditure has received from the Recovery and Resilience Facility.

As regards foreign trade, in 2023 Q2 exports and imports of goods and services stood 8 pp and 6 pp, respectively, above their pre-pandemic level, meaning that with the new data they are both virtually unchanged.

## Public finances and the nation's net lending

Spanish public finances were already on a poor footing before the pandemic. A high budget imbalance, manifesting in high structural deficit and debt ratios, makes the economy more vulnerable. The debt ratio in particular soared as a result of the health crisis. That said, the budget deficit and public debt are calculated as a percentage of GDP. Therefore, as the economy is bigger according to the current time series, these ratios have improved slightly. Specifically, there has been a minor improvement in general government's net borrowing (0.1 pp of GDP in 2021 and 2022), resulting in a budget deficit of 6.7% and 4.7%, respectively, of GDP in each of those two years (see Chart 3).8

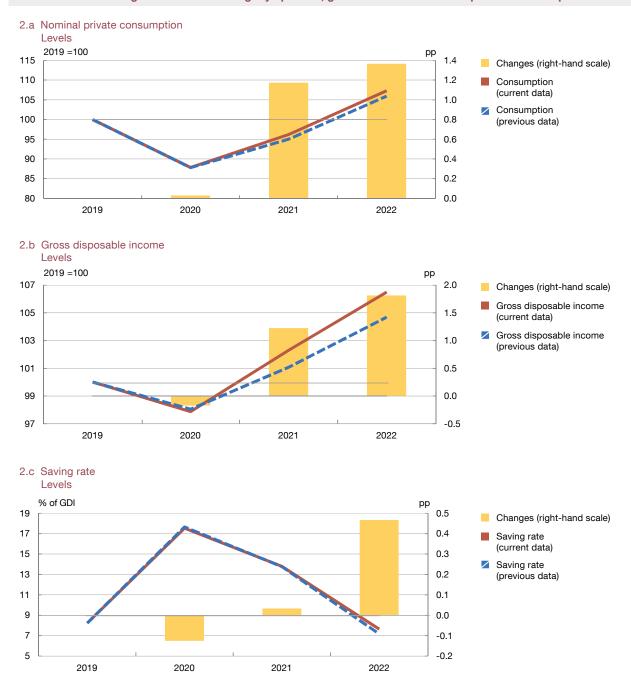
One difficult-to-explain feature of economic developments since the pandemic broke has been the decoupling of the high growth in tax revenue from the comparatively less dynamic macroeconomic aggregates that are more closely related to the corresponding tax bases. The upward revision to the main macroeconomic aggregates has helped mitigate this apparent

<sup>7</sup> This calculation was performed using the cumulative increase in the consumption deflator between end-2019 and 2023 Q2 (12.1%). If consumer price inflation were measured using the consumer price index, the improvement in real wages would be smaller.

<sup>8</sup> The ratio's numerator has barely changed, meaning that the minor decrease in the budget deficit as a percentage of GDP is on account of the higher denominator.

Chart 2

## The household saving rate was revised slightly upwards; gross income and consumption also saw upward revisions



SOURCE: INE.

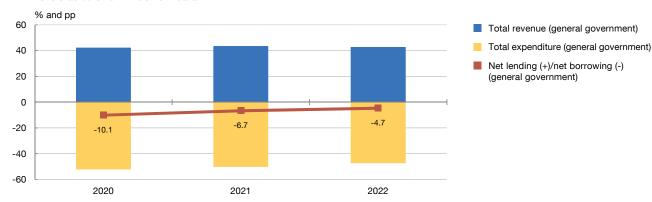


discrepancy somewhat. Specifically, according to the current estimates, the tax burden as a percentage of GDP increased by 2.9 pp between 2019 and 2022, rather than by the 3.4 pp reflected in the earlier time series. There are imperfect explanations for this increase. For example, the structure of GDP growth, the introduction of discretionary measures, and taxation and certain tax deductions not being deflated. In particular, after the NA revision, approximately one-half of

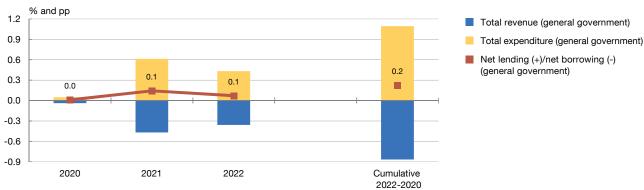
Chart 3

On the new data, the budget deficit improved by 0.2 pp over the period 2020-2022, owing to the larger downward revision in expenditure than in revenue





#### 3.b General government balance Levels as % of GDP. Changes



SOURCE: INE.



the increase in the tax-to-GDP ratio in these years is due to developments in the macroeconomic bases and the tax measures adopted, whereas prior to the revision both factors combined explained only one-third of such increase (García-Miralles and Pagés, 2023). Consequently, to 2022, tax revenues remain high relative to the performance of the bases. The technical term for this is positive "tax residuals".

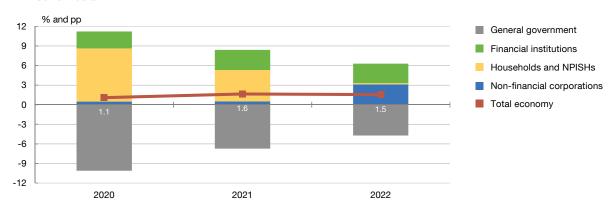
However, the NA revision has also affected recent quarters (2022 Q4 and 2023 Q1 and Q2), in which, even before the revision, tax revenues were heading in the opposite direction, with lower growth than that which would be inferred from a model based on the macroeconomic bases and

<sup>9</sup> In particular, the higher growth now estimated in household nominal income helps explain a larger proportion of the increase in personal income tax revenue and social security contributions. Meanwhile, the stronger increase in the real component of consumption is, in the new time series, more closely aligned with the strength of VAT revenue.

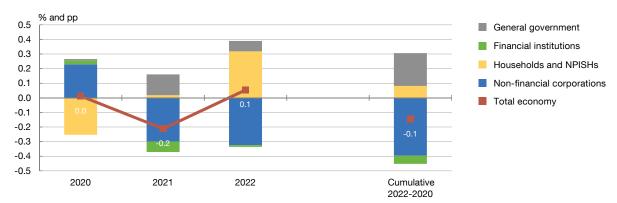
#### Chart 4

The nation's net lending was revised down slightly over the period 2020-2022, reflecting the improvement in households' net lending and the reduction in the general government deficit, and despite the decline in firms' net lending

## 4.a Net lending (+)/net borrowing (-). Institutional sectors Current data



## 4.b Net lending (+)/net borrowing (-). Institutional sectors Changes



SOURCE: INE.

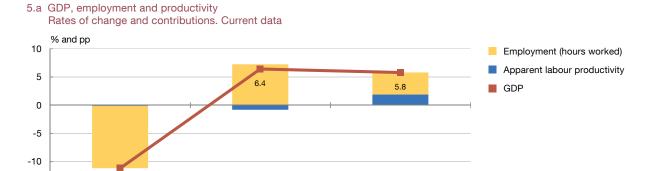


the measures applied to each tax (i.e. negative tax residuals). This behaviour has intensified with the latest NA revision, such that the cumulative fiscal residuals since the onset of the pandemic are now clearly smaller. Meanwhile, the government debt-to-GDP ratio in 2022 stood at 111.6%, 1.6 pp less than previously estimated.

Overall, the new data revise up gross savings as a percentage of GDP. The ratio of investment to GDP has undergone a similar revision. As a result, the nation's net lending has not seen major changes (see Chart 4). Specifically, according to the current estimates, this aggregate is revised down by 0.2 pp of GDP in 2021 (to 1.6%) and revised up by 0.1 pp in 2022 (to 1.5%). By sector, firms reduced their net lending by 0.3 pp in 2021 and 2022, to 0.5% and 3.1% of GDP, respectively, and households increased theirs by 0.3 pp in 2022, to 0.2% of GDP (it was unchanged in 2021).

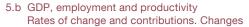
Chart 5

The main reason for the cumulative improvement in GDP on the revised ANA data is the higher productivity per hour worked



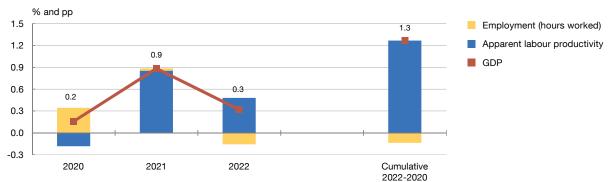
2022

2021



-11.2

2020



SOURCE: INE.

-15



#### **Employment and productivity**

As mentioned above, changes in employment data have been quantitatively small. As a result, the greater economic momentum has translated into higher growth in apparent labour productivity (see Chart 5), which, on the previous estimates, was proving sluggish. Specifically, the level of productivity per person employed (hours worked) in 2023 Q2 calculated with the new time series is 1.8 pp (0.7 pp) higher than previously estimated. In any event, compared with the end-2019 data, productivity remains sluggish, more so when this variable is measured per person than per hour worked. In particular, in 2023 Q2 productivity per person employed had not yet reached its pre-pandemic level.

Employment (hours worked and persons employed) has been slightly less dynamic in Spain than in the euro area as a whole. Specifically, in Spain in 2023 Q2 total hours worked were 1.3 pp above their end-2019 level, while this gap was 2.2 pp in the euro area. In both cases, employment has fared better when measured by the number of persons employed, which has given rise to a similar reduction in hours per worker in this period in Spain and the euro area.

Consistent with the new GDP figures, the estimated level of national income is higher following the revision to the time series. In the revision, this increase in income has been allocated to labour income. Specifically, labour income in 2023 Q2 is now 4.1% higher than the previous estimate. Meanwhile, GOS and taxes on products, net of subsidies have been revised down slightly.

### Prices, labour costs and profit margins

On the nominal side, the upward revision to compensation per employee is noteworthy. This variable grew by more than 4% in both 2021 and 2022 (compared with 2.7% and 3.2% estimated previously). In cumulative terms, it is estimated that the level of compensation per employee in 2023 Q2 was 4% higher than that calculated before the time series were revised. The unit labour cost (ULC), defined as the ratio of compensation per employee to productivity, is, on the new figures, 1.8% higher than according to the earlier estimates, given the larger upward revision to compensation per employee than to productivity.

The price inflation of an economy's output, measured as the rate of change of the GDP deflator, can be broken down into the contributions of ULC and unit profits. The new time series revise up the GDP deflator (by 0.9 pp between end-2019 and 2023 Q2). That said, changes in the respective contributions of ULCs and unit profits are notably larger since, as mentioned above, the level of the former is, according to the new time series, 2.6 pp higher than estimated previously whereas, by contrast, the level of unit profits is 2.0 pp lower. In sum, the contribution of unit profits to domestic inflationary pressures has been revised down.

A related matter is how output is allocated among the incomes of the different factors of production. The above-mentioned revisions mean that the share of employee compensation as a percentage of GDP in 2023 Q2 has increased to 47.2%, compared with the 46.5% estimated previously, due to real compensation per employee being revised up more than apparent labour productivity. The current level of such share is now somewhat higher than at end-2019 (46.7%). Meanwhile, the ratio of GOS to gross value added (GVA) stood slightly below its pre-pandemic level in 2023 Q2, at 46.7% compared with the 47.5% previously estimated (see Chart 6). Taking non-financial corporations as a whole, this ratio has performed similarly, steadying in recent quarters at levels somewhat lower than those observed at end-2019.

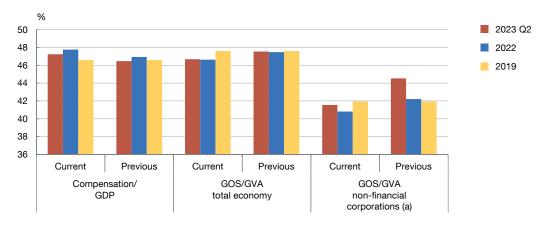
#### Activity: sectoral breakdown

Lastly, from a sectoral perspective, stronger growth in value added is now estimated in most sectors. This is the case, in particular, of manufacturing and market services, where the level of value added estimated in 2023 Q2 is, on the current data, 2.6 pp and 6.1 pp, respectively, higher than in 2019 Q4. By contrast, the value added of construction and agriculture has been revised down. Among market services, greater momentum is observed in professional, scientific and technical activities, administrative and support service activities, financial and insurance activities, information and communication, and trade, transportation and accommodation and food service activities.

#### Chart 6

#### The new ANA figures have slightly reduced the contribution of profit margins to domestic inflationary pressures

#### 6.a Compensation/GDP and GOS/GVA ratios



SOURCE: INE.

a The latest figures for this ratio are calculated on 2023 Q1 data.



#### **Conclusions**

In short, the revisions to the national accounts have prompted some reinterpretations of recent economic developments in Spain. In particular, in terms of activity levels, the Spanish economy recovered from the pandemic crisis earlier than previously estimated, although it was still slower than the euro area as a whole. The greater economic momentum in the new time series, together with employment data remaining virtually unchanged, means that since the onset of the pandemic apparent labour productivity has not performed as poorly as the earlier time series suggested. Similarly, tax revenues are now somewhat more consistent with their macroeconomic bases. This is also the case for household spending on consumer goods and services, which fared better than signalled by the data prior to the publication of the QNA, and has become more consistent with developments in employment and, in general, labour income, given the significant upward revision to real wages. Lastly, ULCs have fared somewhat worse, which has translated into a loss of competitiveness against the euro area since the onset of the pandemic.

#### **REFERENCES**

Chow, G., and A. L. Lin. (1971). "Best Linear Unbiased Interpolation, Distribution, and Extrapolation of Time Series by Related Series". *The Review of Economic and Statistics*, 53(4), pp. 372-375. https://doi.org/10.2307/1928739

Eurostat. (2019). Practical guidelines for revising ESA 2010 data. https://doi.org/10.2785/921890

García-Miralles, Esteban, and Jorge Martínez Pagés. (2023). "Government revenue in the wake of the pandemic. Tax residuals and inflation". *Economic Bulletin - Banco de España*, 2023/Q1, 16. https://doi.org/10.53479/29791

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