This box describes the key features of the most recent update to the Banco de España's macroeconomic scenarios for the Spanish economy. In comparison with the previous scenarios, published on 11 December 2020,¹ the current ones incorporate the new information that has become available since then, including the preliminary Quarterly National Accounts estimates for 2020 Q4 and the changes in the technical assumptions underlying the construction of the scenarios (see Table 2).²

Following the slump in activity in the first half of 2020, the Spanish economy picked up notably in the second half of the year. This recovery lost momentum after the summer, against a background of the reintroduction of various containment measures as a result of fresh outbreaks of the pandemic. Despite this, adaptation to the restrictions by firms and households, the more focused nature of the restrictions in comparison with those in the spring and the easing of measures in December allowed GDP to increase slightly in Q4 (by 0.4% quarter-on-quarter, according to the INE's preliminary estimates). This growth rate was higher than in the baseline scenario published by the Banco de España in December, and was close to the rate in the mild scenario (the most favourable of the three considered).

Consequently, the starting point for the level of activity at the beginning of 2021 was somewhat higher than envisaged in the baseline scenario published in December. However, in the first two months of this year the fresh tightening of measures to contain the third wave of the pandemic appears to have once again adversely affected the economy's buoyancy (especially in tourism, transport and hospitality-related sectors). That said, the ongoing decline in new cases since the beginning of February has allowed an easing of restrictions that appears to have prompted a certain improvement in activity already in March, according to high-frequency indicators.³

The estimation of GDP growth in the current quarter is surrounded by a high degree of uncertainty, as it has been since the start of the pandemic, owing to the volatility of the data available (largely relating to the fluctuations in infections and in the measures to curb them) and the instability of the relationship between the indicators and activity. Given this situation, it was decided to formulate once again a baseline and two alternative scenarios that differ even in the short-term. The quarter-on-quarter growth rate of GDP is -0.4% under the baseline scenario, and -0.9% and 0.4% under the two alternative scenarios.

Beyond the current quarter, the scenarios diverge in two dimensions: the course of the pandemic and the mediumterm consequences of the crisis. These two dimensions are not mutually independent: the more unfavourable the future epidemiological developments, the more profound the expected consequences of the crisis. The differences between the scenarios in the first of these two dimensions are mainly in 2021 and are a consequence, in the next few quarters, of the assumptions regarding the severity of the COVID-19 outbreaks and, from the summer, of the progress made in vaccinating the population.

The baseline scenario envisages that in the next few months there will be new outbreaks of the disease similar in severity to those at the beginning of the year, necessitating the imposition of containment measures similar to those recently in force. In addition, the progressive administration of vaccines is projected to allow a gradual lifting of containment measures, until they have practically disappeared by the end of 2021. The mild scenario assumes a somewhat more favourable course of the pandemic from the second quarter of this year and a more rapid vaccine rollout, which will lessen the economic impact of any containment measures in the coming quarters. In contrast, the severe scenario envisages a sharper rise in cases in the short-term, requiring stricter containment measures than in the first two months of the year. Moreover, population immunity is achieved somewhat later under this scenario.

As regards the second dimension, the differences between the scenarios stem, in turn, from two different sources. First, the consequences that the health crisis may have for the productive system and employment, in terms of the destruction of firms and long-term unemployment.

¹ Macroeconomic projections for the Spanish economy (2020-2023): the Banco de España's contribution to the Eurosystem's December 2020 joint forecasting exercise.

² The December projections were based on the information available as at 18 November 2020. The cut-off date for the current exercise is 16 March 2021, except for the data relating to export markets and competitors' prices in domestic currencies, which have been taken from the *March 2021 ECB staff macroeconomic projections for the euro area,* with a data cut-off date of 16 February 2021.

³ Including card payments data (which approximate private consumption) and various personal mobility indicators.

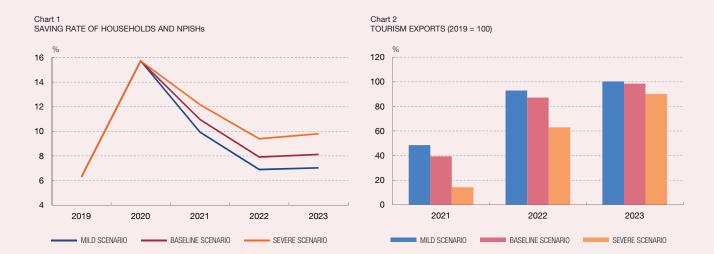
The greater these effects, the more acute and persistent will be the impact on activity; in these circumstances, this impact may also be exacerbated by a larger volume of loan write-offs, so that less financing is available to the private sector, and at a higher cost. The second source relates to the degree of persistence of the COVID-induced changes in agents' behaviour. For these purposes, different assumptions have been considered regarding the spending decisions of households, in Spain and in the rest of the world, and both their direct impact on various demand aggregates (private consumption, housing investment and tourism exports) and their indirect impact on the economy as a whole.

Household saving increased considerably in 2020, as a consequence of the restrictions that the containment measures in force during the year imposed on the realisation of certain types of spending and, to a lesser extent, on account of the more cautious behaviour of consumers, given the high degree of uncertainty. The savings built up as a result may, when the health crisis is resolved, be allocated by these agents at least partly to spending.⁴

In the baseline scenario, the saving rate declines over the projection horizon, although at the end of the horizon it remains above its pre-pandemic level (see Chart 1). By contrast, under the mild scenario, the fall is greater and the saving rate comes very close to its pre-pandemic level. Finally, under the severe scenario, the persistently more cautious behaviour of households leads to a slower consumption recovery.

The rate of recovery of tourism exports also varies in the different scenarios. Under the baseline scenario, the incompleteness of the vaccination process in the coming quarters means that inbound tourism flows will not have largely normalised until 2022 (see Chart 2). Under the mild scenario, this demand component recovers somewhat sooner, while under the severe scenario the later immunisation of the populations of Spain and of the main countries providing tourists for Spain and the more cautious behaviour of households mean that in 2023 this demand component is still below its pre-pandemic levels.

In comparison with the December baseline scenario, the changes in the external assumptions have generally been modest (see Annex 1) and have also tended to offset one another, so that their overall effect on the outlook for economic activity is also limited: it is negative in 2021 and approximately neutral over the next two years. Contributing to the slightly negative impact this year are higher oil prices, a somewhat higher euro exchange rate, somewhat higher long-term interest rates and a slightly later implementation of the Next Generation EU (NGEU) projects. These changes broadly cancel out the positive effect of the somewhat more dynamic performance of external markets in the short term.



SOURCES: Banco de España and INE.

4 See Box 4 of this report "Household saving during the pandemic and its possible effects on the future recovery in consumption".

Under the baseline scenario, GDP grows at an annual average rate of 6% in 2021; following a weak first half, this is a consequence of an acceleration in activity in the second half, prompted by vaccination progress and NGEU programme implementation (see Chart 3 and Table 1). Also, the pronounced buoyancy of GDP in the second half of 2021 has a powerful carry-over effect in 2022, so that the economy's output also grows at a high rate (5.3%), before slowing in 2023 (1.7%). In terms of average GDP growth rates, the differences between scenarios are greater in 2021 than in the last two years of the projection horizon, reflecting the fact that the recovery takes place earlier under the mild scenario and later under the severe one.

Under the baseline scenario, GDP does not return to prepandemic levels until 2023 (see Chart 4). This occurs slightly more than a year earlier in the mild scenario, while in the severe scenario, at the end of the projection horizon GDP is still slightly below the level observed before the health crisis.

The worsening of the economic outlook in the short term means that the average rate of growth of GDP in 2021 under the present baseline scenario is 0.8 percentage points (pp) lower than envisaged in the December baseline scenario, even though the subsequent recovery is stronger (see Table 1). Compared with the December projections, the gap between the GDP levels under the different scenarios in 2023 Q4 is somewhat narrower. This reflects the lower purely epidemiological uncertainty, so that the remaining differences are more attributable to the extent of the medium-term consequences of the crisis and to the lower or higher level of caution in agents' spending decisions.

Main aggregates

Following the sharp contraction in 2020, both the different components of private domestic demand and external trade flows are expected to pick up notably in 2021 overall, albeit with varying intensity according to the scenario considered (see Table 2).

Private consumption will probably have decreased slightly in Q1, owing to the greater stringency of the measures needed to contain the pandemic in the first two months of the year. Over the course of 2021 this aggregate is expected to recover significantly, as the vaccination process gradually progresses, allowing for an easing of restrictions (and, therefore, of limitations on spending on some goods and services) and a reduction in uncertainty regarding both the health and the economic situation (and, therefore, a decline in the precautionary saving component). In consequence, private consumption grows in 2021, by 8.8% under the baseline scenario, compared with 10.7% under the mild scenario and 6.1% under the severe scenario. Once the health crisis is fully over and normal spending levels have been restored, consumption growth rates will also tend to moderate. But they should still be relatively high on average in 2022, owing to the positive carry-over effects originating in the second half of this year.



SOURCES: Banco de España and INE.

Among the components of gross capital formation, there was a particularly sharp contraction in investment in housing in 2020. Over the projection horizon this component is not expected to start to recover until the present uncertainty has faded and households' future income expectations, which have been weakened by the deterioration in the labour market outlook, have strengthened.

Investment by non-financial corporations will continue to be weighed down in the first half of 2021 by the high level of uncertainty. But it is expected to pick up significantly in the second half as this uncertainty eases, final demand recovers and project execution under the NGEU framework provides additional support for business investment. Recovery in this demand component could be affected by the deterioration in the financial position of certain segments of the corporate base, which have had to increase their indebtedness to meet the liquidity needs stemming from the fall in income as a consequence of the crisis and the lockdown measures.

The restrictions on the movement of goods and persons introduced in response to the pandemic have had a considerable impact on foreign trade. These restrictions, which are much more stringent and persistent in the case of the movement of persons, have meant that tourism exports and imports have been especially hard hit. In the most recent period, the emergence of new variants of the virus, which are more contagious than the initial ones, has led to increased restrictions on the entry of travellers from other countries where there is a higher incidence of these variants. This has set back the expectations for a recovery in inbound tourism flows. Under the baseline scenario, exports and imports of goods and services overall return to pre-pandemic levels in mid-2023.

At the start of the year, it seems likely, on the data available, that the recent moderation in economic activity is being accompanied by a certain decline in hours worked. This is against the backdrop of a resurgence in the pandemic, which has led to containment measures being reimposed and, as a result, to fresh increases in the numbers of furloughed workers and self-employed individuals whose activity has been suspended. From Q2, hours worked are expected to head up again, in keeping with the recovery in GDP. Under the baseline scenario, this variable grows by 7.5% in 2021, compared with just 5% and 1.7%, respectively, in 2022 and 2023. As a result of employment developments, the unemployment rate

Table 1

PROJECTIONS FOR THE MAIN MACROECONOMIC AGGREGATES OF THE SPANISH ECONOMY (a)

Annual rate of change

	March 2021 and December 2020 projections															
	GDP			HICP			HICP excluding energy and food			Unemployment rate (% of labour force) (b)						
	2020	2021	2022	2023	2020	2021	2022	2023	2020	2021	2022	2023	2020	2021	2022	2023
March 2021																
Mild scenario	-11.0	7.5	5.5	1.6	-0.3	1.4	0.9	1.3	0.5	0.6	1.1	1.3	15.5	15.9	13.9	12.8
Baseline scenario	-11.0	6.0	5.3	1.7	-0.3	1.4	0.8	1.2	0.5	0.5	1.0	1.1	15.5	17.0	15.1	14.1
Severe scenario	-11.0	3.2	4.6	2.2	-0.3	1.3	0.6	1.0	0.5	0.4	0.7	0.9	15.5	18.3	17.2	16.1
December 2020																
Mild scenario	-10.7	8.6	4.8	1.9	-0.3	0.7	1.3	1.4	0.5	0.6	1.1	1.3	15.7	17.1	14.0	12.4
Baseline scenario	-11.1	6.8	4.2	1.7	-0.3	0.6	1.2	1.3	0.5	0.5	0.9	1.1	15.8	18.3	15.6	14.3
Severe scenario	-11.6	4.2	3.9	1.5	-0.3	0.5	0.9	1.1	0.5	0.2	0.6	0.8	16.2	20.5	18.1	17.6

SOURCES: Banco de España and INE. NOTE: Latest QNA figure published: 2020 Q4.

a Projections cut-off date: 16 March 2021.

b Annual average.

starts to fall in 2021 under the baseline scenario, although it remains above its pre-pandemic levels until mid-2023.

In the realm of public finance, the general government balance is expected to improve considerably over the projection horizon, as a result of both the temporary nature of the discretionary measures adopted in response to the pandemic and the cyclical improvement. However, at the end of the projection horizon, the budget deficit will still be very high (4.4% of GDP under the baseline scenario) and public debt will be at similar levels to those seen in 2020.

Core inflation has eased very significantly since the start of the pandemic. In the short term, interpreting consumer price fluctuations will pose certain technical difficulties associated with COVID-19. This is because the considerable changes in the structure of household spending in 2020 significantly altered the weights of the different groups of goods and services. In addition, during the months of severe lockdown in spring 2020 price checking was not possible, so imputations had to be made instead. Core inflation is expected to follow a moderately upward path over the projection horizon, as demand gradually strengthens, to reach 1.1%, on average, in 2023. Increased momentum in the prices of tourismrelated items, which were particularly disinflationary in 2020 as a result of the slump in demand, is expected to make a significant contribution to this pick-up in core inflation.

In the opening months of 2021, the energy component of inflation is rising sharply. This stems partly from the recent

Table 2

MACROECONOMIC PROJECTIONS FOR THE SPANISH ECONOMY. 2021-2023 (a)

Annual rate of change in volume terms and % of GDP

		March 2021 projections								
		Mild scenario			Bas	eline scen	ario	Severe scenario		
	2020	2021	2022	2023	2021	2022	2023	2021	2022	2023
GDP	-11.0	7.5	5.5	1.6	6.0	5.3	1.7	3.2	4.6	2.2
Private consumption	-12.4	10.7	4.9	1.1	8.8	4.8	1.1	6.1	4.3	1.3
Government consumption	4.5	0.9	-0.4	1.6	1.4	-0.4	1.7	1.8	-0.6	1.5
Gross fixed capital formation	-12.4	9.2	10.3	1.6	7.1	9.5	1.5	4.8	8.3	3.4
Exports of goods and services	-20.9	13.1	9.3	4.9	11.1	8.2	5.3	5.8	9.5	6.0
Imports of goods and services	-16.8	14.7	8.4	4.0	12.4	7.2	4.5	10.2	8.6	4.6
National demand (contribution to growth)	-9.1	7.8	5.1	1.3	6.2	4.9	1.4	4.4	4.3	1.7
Net external demand (contribution to growth)	-1.9	-0.3	0.4	0.3	-0.2	0.4	0.3	-1.2	0.3	0.5
Nominal GDP	-10.0	8.6	6.9	3.2	7.0	6.6	3.1	3.9	5.6	3.5
GDP deflator	1.1	1.0	1.3	1.6	0.9	1.2	1.4	0.7	0.9	1.2
Harmonised index of consumer prices (HICP)	-0.3	1.4	0.9	1.3	1.4	0.8	1.2	1.3	0.6	1.0
HICP excluding energy and food	0.5	0.6	1.1	1.3	0.5	1.0	1.1	0.4	0.7	0.9
Employment (hours)	-10.4	9.0	5.1	1.7	7.5	5.0	1.7	5.3	4.6	2.2
Unemployment rate (% of labour force). Annual average	15.5	15.9	13.9	12.8	17.0	15.1	14.1	18.3	17.2	16.1
Net lending (+)/net borrowing (-) of the nation (% of GDP)	1.4	1.8	2.9	2.7	1.9	3.0	2.8	1.0	2.1	2.0
General government net lending (+)/net borrowing (-) (% of GDP)	-10.5	-6.8	-3.9	-3.4	-7.7	-4.8	-4.4	-9.1	-6.5	-5.8
General government debt (% of GDP)	117.1	115.4	112.7	112.8	117.9	116.4	117.6	122.6	123.6	125.5

SOURCES: Banco de España and INE. NOTE: Latest QNA figure published: 2020 Q4.

a Projections cut-off date: 16 March 2021.

oil price increase and partly from the base effect of the decline a year earlier. On the current assumptions, this price increase is expected to reverse in the second half of the year, when the energy component is expected to follow a downward path, with pass-through to the average level of the consumer price index in 2022. In terms of annual average rates, under the baseline scenario the HICP is expected to increase from -0.2% in 2020 to 1.4% in 2021, 0.8% in 2022 and 1.2% in 2023. On average in 2023, the inflation rate is somewhat higher under the mild scenario (1.3%) and somewhat lower under the severe scenario (1%).

Risks to the baseline scenario

Macroeconomic developments continue to be subject to high uncertainty. The risks surrounding the economic growth projections under the baseline scenario remain on the downside in the near term, until such time as more severe outbreaks of infection linked to the new more infectious variants of the disease can be ruled out. In addition, the vaccine manufacturing process is experiencing some delays; if this problem is not solved, there could be deviations from the immunisation timeline considered in the baseline scenario.

Beyond the short term, uncertainty has tended to ease in recent months as the vaccines have proved effective, and this has reduced the likelihood of the most adverse scenarios materialising. In consequence, the risks surrounding the economic growth projections under the baseline scenario are more balanced in the medium term than they were some months ago. Other factors that have also contributed to this are the Brexit agreement and the stimulus package ratified by the United States Congress on 11 March which should provide a boost to global growth. The stimulus package is not considered in these projection scenarios, as it was approved after the cut-off date for the assumptions used regarding the international setting of the Spanish economy.

The risks to inflation are also more balanced now. Although the increase in oil and other commodity prices is no more than a return to normal after the sharp falls recorded at the start of the pandemic, increasing cost pressures could give rise to some second-round inflationary effects on final goods prices. Yet the high level of slack in the use of factors of production could lead to the disinflationary patterns observed throughout 2020 becoming more persistent.

ANNEX 1

Projection assumptions

The construction of the scenarios is shaped by certain assumptions as to the trajectory of a set of variables. The assumptions regarding the paths of interest rates, exchange rates, and oil and other commodity prices are based on the prices observed in the respective markets in the ten working days prior to the cut-off date of the projections (in this case, 16 March). The trajectories for the export markets and competitors' prices in domestic currencies were taken from the March 2021 ECB staff macroeconomic projections for the euro area, which use information up to 16 February.

There are two key changes compared with the December scenarios. The first is the significant rise in oil prices since the cut-off date for the previous projections, amid oil supply cuts and greater dynamism in the world economy (see Table 3). The oil futures curve shows a declining slope. Consequently, in annual average terms, oil prices are expected to increase sharply in 2021, and to then decrease in the following two years. In contrast, three months ago oil prices were expected to head upward slightly in the three-year period from 2021 to 2023. The second key change is the projected path for export markets in the near term under the baseline scenario, which is now more encouraging than that expected three months ago. This is reflected in an upward revision of 0.8 pp in 2021 compared with the December baseline scenario.

Further, the recent rise in ten-year sovereign bond yields has resulted in somewhat higher levels for this variable over the projection horizon. Conversely, no major changes have been observed in market expectations of short-term interest rates or, therefore, in the cost of bank financing to firms and households, which is mostly linked to one-year market rates.

The euro exchange rate (assumed in the projection horizon using its spot market rate) has appreciated slightly compared with three months ago. Specifically, the exchange rate appreciation over the projection horizon, compared with the assumption used in December, amounts to around 0.5% in nominal effective terms and close to 1% against the dollar.

In the realm of fiscal policy, the public finance projections are based on the latest budget outturn data with the National Accounts' criteria published by the IGAE (National Audit Office). As regards the assumptions considered, the new development for 2021 vis-à-vis the December projections is the latest extension, until May 2021, of the benefits for the self-employed and workers on furlough schemes associated with the effects of the pandemic.⁵

Overall, it is estimated that the measures approved in 2020 to combat the fallout from COVID-19 increased

expenditure by around 3.5 pp of GDP. The corresponding increases over the projection horizon are expected to be 1.4 pp in 2021 and 0.3 pp in both 2022 and 2023.⁶

Lastly, the assumptions relating to the NGEU programme have scarcely changed vis-à-vis those prepared in December, given the lack of new information, pending the submission of the Recovery and Resilience Programme to

Table 3

INTERNATIONAL ENVIRONMENT AND MONETARY AND FINANCIAL CONDITIONS (a)

Annual rate of change, unless otherwise indicated

			March	n 2021 proje	octions	Difference between the currer projections and those of the corresponding scenario of December 2020 (b)		
		2020	2021	2022	2023	2021	2022	2023
International environment								
Spain's exports markets (c)	Mild scenario		10.1	5.7	3.2	-2.1	0.3	-0.1
	Baseline scenario	-11.3	7.7	5.4	3.2	0.8	0.1	-0.3
	Severe scenario		3.6	3.0	3.6	3.4	-1.1	-1.5
Oil price in dollars/barrel (level)		42.3	64.9	61.3	58.9	20.9	15.7	11.9
Monetary and financial conditions								
Dollar/euro exchange rate (level)		1.14	1.20	1.19	1.19	0.01	0.01	0.01
Nominal effective exchange rate against the non-euro area (d) (2000=100)		117.8	121.8	121.6	121.6	0.8	0.6	0.6
Short-term interest rates (3-month Euribor) (e)			-0.5	-0.5	-0.5	0.0	0.0	0.1
Long-term interest rates (10-year Spanish government bond yield) (e)		0.4	0.3	0.6	0.8	0.2	0.2	0.3

SOURCES: Banco de España and ECB.

- a Cut-off date for assumptions: 16 March 2021. Figures expressed as levels are annual averages; the figures expressed as rates are calculated on the basis of the related annual averages.
- **b** The differences are in rates for world output and export markets, in levels for oil prices and the dollar/euro exchange rate, in percentages for the nominal effective exchange rate and in percentage points for interest rates.
- c The assumptions regarding the behaviour of Spain's export markets presented in the table are obtained from the March 2021 ECB staff macroeconomic projections for the euro area.

d A positive percentage change in the nominal effective exchange rate denotes an appreciation of the euro.

e For the projection period, the figures in the table are technical assumptions, prepared following the Eurosystem's methodology. These assumptions are based on futures market prices or on proxies thereof and should not be interpreted as a Eurosystem prediction as to the course of these variables.

⁵ Also, on 12 March the Spanish Council of Ministers approved a support programme for firms with viability problems arising from the pandemic, for a total amount of €11 billion. This programme has not been included in the scenarios, as the date of its approval was very close to the cut-off date for the projections, and the degree of detail of the measures calls for a rigorous and detailed analysis. Of the total volume of funds approved, around €7 billion will be granted in the form of direct aid to firms in the hardest-hit sectors (tourism, food service activities and small retailers) and will therefore increase the general government deficit. The rest will be used to restructure the debt of firms operating in those sectors (€3 billion), with the latter entailing increases in the financial assets and debt of general government.

⁶ Further, the projections for 2021 retain a set of measures already considered in December, the foremost of which are those stemming from the State and Social Security Budget Law. These include an estimation of the revenue impact of the new taxes entering into force this year, and the increases in pensions and the public sector wage bill (0.9%), contributory benefits (1.8%) and the Multipurpose Public Indicator of Income (IPREM, by its Spanish abbreviation) (5%).

the European Commission. In any event, the expenditure timeline has been reviewed, with the result that, compared with the December scenarios, a delay of one quarter is now assumed in the investment expenditure financed by the programme. As a result, 100% of current spending and 55% of the investment expenditure announced by the Government for 2021 are included in that year.⁷ Over the 2021-2023 projection horizon as a whole, 80% of the total grants available, for both current consumption and investment, are included.

For the period 2022-2023, the projections are based on the usual technical assumptions for the items for which there is no specific information. First, those items subject to greater discretionality – such as public investment and procurement, in particular, given their volume – are assumed to move in line with the growth potential of the Spanish economy. Second, in the absence of specific measures, the trajectory of the remaining items of the general government accounts is assumed to be governed by their usual determinants.⁸

Given this set of budgetary projections and the output gap estimated in a manner consistent with the other macroeconomic projections, the fiscal policy stance, measured by the change in the primary structural balance net of European funds,⁹ is expected to be expansionary in 2020 and 2021 (2.1 pp and 1.2 pp of GDP, respectively) and approximately neutral over the rest of the projection horizon.

⁷ The December scenarios included 70% of the investment announced for 2021. See Box 2 "The impact of the NGEU initiative on the scenarios for the Spanish economy", in *Macroeconomic projections for the Spanish economy (2020-2023): the Banco de España's contribution to the Eurosystem's December 2020 joint forecasting exercise* for further details on these assumptions and the possible alternative scenarios.

⁸ Specifically, it is assumed that government revenue will grow in line with tax bases, which mainly depend on the macroeconomic context. Something similar applies to pension expenditure (which is determined by demographic trends and the expected indexation of its amount to the CPI), spending on unemployment benefits (which depends mainly on developments in unemployment) and interest expense (the changes in which reflect developments in public debt and interest rates).

⁹ The increase in European funds to be received entails a smaller structural deficit, but not a more contractionary fiscal policy stance, as they do not result from taxes collected from resident agents. Consequently, to correctly measure the fiscal policy stance, the change in the primary structural balance must be adjusted for this effect by subtracting the change in the net balance of funds from the European Union.