BANK ĊENTRALI TA' MALTA
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Economic Projections

2019 - 2022

2019:4

Outlook for the Maltese economy

Economic projections

2019-2022

The Central Bank of Malta expects economic growth over the coming years to remain strong, averaging 4.1% between 2019 and 2022. Growth in private consumption and government expenditure is expected to remain robust, while investment is expected to recover from the contraction recorded in 2018. Compared with the Bank's previous projections, GDP growth has been revised downwards in 2019, due to weaker than expected outturn in private consumption data in the first half of the year.

Over the projection horizon, GDP growth will be supported by domestic demand, mainly reflecting robust growth in private consumption and investment. Conversely, the net export contribution to growth is expected to be negative in 2019, reflecting the weak international environment, and a pick-up in import growth as a result of strong domestic demand. The contribution of net exports should turn positive in 2020, reflecting faster export growth and a deceleration in investment growth requiring lower capital goods imports.

The pace of job creation is set to moderate, but remain strong. The labour market is expected to remain tight, with the unemployment rate projected at 3.8% by 2022.

Annual inflation, based on the Harmonised Index of Consumer Prices (HICP), is projected to ease slightly in 2019, and to edge up to 1.9% by 2022, reflecting a pick-up in services and non-energy industrial goods inflation (NEIG).

Moreover, the government balance is expected to remain in surplus over the coming years, such that the debt-to-GDP ratio is projected to decline to just over 35% in 2022.

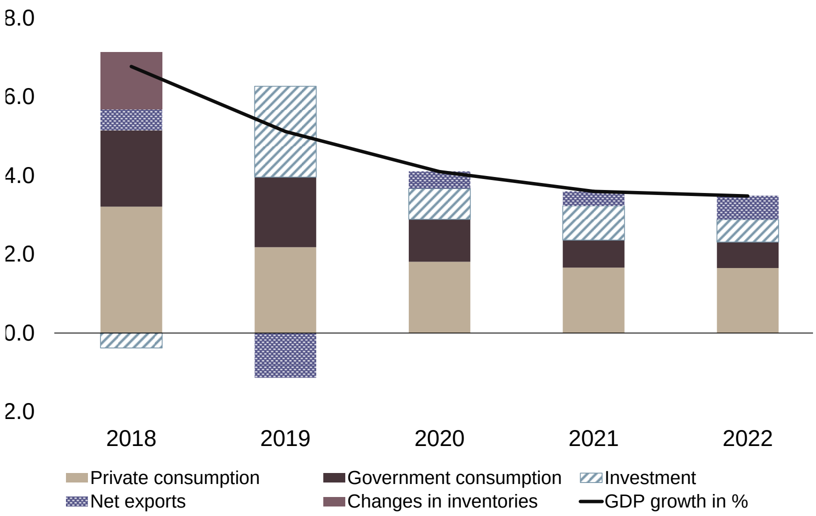
Looking ahead, the external environment poses downside risks to the projections of economic activity and inflation. At the same time, the recent escalation of domestic political uncertainty is likely to compound the downside risks emanating from the external environment, especially in the short-term, through the possible postponement of both private consumption and investment. The risks to public finances are tilted on the upside (balance-improving) in 2019, reflecting the possibility of higher than expected increases in tax revenue. Going forward, however, risks to public finances, especially in 2020, are tilted to the downside should the risks emanating from lower domestic demand materialise and if political uncertainty is prolonged.

1 Economic outlook

The latest economic projections produced by the Central Bank of Malta foresee economic activity in Malta to remain robust over the projection horizon, supported by both demand and supply factors. GDP growth in recent years exceeded markedly its historical average, and is thus expected to gradually normalise over the projection horizon. Moreover, the current weakness in the international environment is expected to limit export growth, particularly in 2019 (see Table 1).[1]

GDP growth should ease from 6.8% in 2018 to 5.1% in 2019, and further to 4.1% in 2020, 3.6% in 2021 and 3.5% in 2022. Compared with the Bank's previous projections, published in August 2019, GDP growth has been revised marginally downwards in 2019 due to weaker than expected outturn in private consumption expenditure in the first half of the year. Economic growth forecasts for the following years are revised down, due to a less favourable international environment affecting export growth and a weaker outlook for gross fixed capital formation.

Chart 1: GDP growth over the projection horizon
(percentage point contributions; annual percentage change)



Source: Central Bank of Malta

Domestic demand will be the dominant driver of economic growth over the projection horizon, underpinned by all its components (see Chart 1). Private consumption growth is envisaged to remain robust, in the context of favourable labour market conditions. Government consumption is also expected to lift domestic demand, as the Government is assumed to use some of its fiscal space. Investment is forecast to rebound in 2019 and to remain positive due to planned expenditure on infrastructure projects. Growth is set to slow down markedly in 2022, as a number of large projects reach completion. On the other

[1] The Bank's outlook for the Maltese economy is based on information available up to 27 November 2019 and is conditional on the December BMPE 2019 technical assumptions shown in Table 1, which are sourced from the European Central Bank (ECB). These projections were prepared by the Central Bank of Malta, and peer reviewed externally by both Eurosystem colleagues and ECB staff.

Table 1: Projections for the main macroeconomic aggregates for Malta[1]

	2018[2]	2019	2020	2021	2022
Real economic activity (% change)					
GDP	6.8	5.1	4.1	3.6	3.5
Private consumption expenditure	7.3	5.0	4.1	3.8	3.8
Government consumption expenditure	12.6	10.9	6.3	4.0	3.7
Gross fixed capital formation	-1.8	12.2	3.8	4.2	2.8
Exports of goods and services	2.6	1.2	1.6	2.0	2.1
Imports of goods and services	2.6	2.4	1.5	2.0	1.9
Contribution to real GDP growth (in percentage pts)					
Final domestic demand	6.2	6.3	3.7	3.2	2.9
Net exports	0.5	-1.1	0.4	0.4	0.6
Changes in inventories	1.5	0.0	0.0	0.0	0.0
Real disposable household income[3]	5.3	4.4	3.5	2.9	2.5
Household saving ratio[3]	18.7	18.2	17.7	16.9	15.9
Balance of payments (% of GDP)					
Goods and services balance	20.9	18.7	18.4	18.1	18.0
Current account balance	11.3	8.1	7.9	7.6	7.5
Labour market (% change)[4]					
Total employment	5.4	5.0	4.0	2.9	2.5
Unemployment rate (% of labour supply)	3.7	3.4	3.5	3.7	3.8
Prices and costs (% change)					
GDP deflator	2.1	1.9	2.0	2.1	2.1
RPI	1.2	1.6	1.5	1.7	1.8
Overall HICP	1.7	1.5	1.6	1.8	1.9
HICP excluding energy	1.8	1.5	1.7	1.9	2.1
Compensation per employee	2.3	2.3	2.8	3.1	3.5
ULC	1.0	2.2	2.7	2.4	2.5
Business cycle					
Potential output (% change)	6.3	5.4	4.6	4.1	3.8
Output gap (% of GDP)	1.4	1.1	0.6	0.1	-0.2
Technical assumptions					
EUR/USD exchange rate	1.18	1.12	1.11	1.11	1.11
Oil price (USD per barrel)	71.1	63.2	58.2	56.7	56.4

[1] Data on GDP were sourced from NSO News Release 145/2019 published on 6 September 2019, while HICP and RPI data were sourced, respectively, from NSO News Release 186/2019 and 190/2019 (released on 15 and 22 November 2019).
[2] Actual data.
[3] Central Bank of Malta estimates.
[4] Employment data are consistent with the national accounts. The unemployment rate is based on the number of unemployed and employed as reported in the Labour Force Survey.

hand, net exports are set to dampen GDP growth in 2019 due to a weaker international environment and a pick-up in imports of capital goods. The net export contribution turns positive in 2020.

The robust growth on the demand side should be supported by the supply side of the economy. In particular, the labour supply is expected to increase further, reflecting continued positive but decelerating net migrant flows and an increase in the capital stock contribution. Potential output is projected to grow more than real GDP throughout the projection horizon. As a result, while a positive output gap is seen to persist, it is expected to close and turn marginally negative by 2022.

Looking at the expenditure components in more detail, private consumption growth is set to decelerate from 7.3% in 2018 to 5.0% in 2019. It is then projected to slow down to 4.1% in 2020, and 3.8% in both 2021 and 2022. The fast rate of growth of private consumption mirrors the large savings ratio estimated by the Bank, and expectations that labour market conditions remain favourable over the medium-term. The savings ratio reached 18.7% in 2018, which is considered high from a historic and cross-country perspective. In the projection horizon, it is expected to decline further, while remaining relatively elevated, to around 16.0% in 2022. At the same time, private consumption is set to decelerate, reflecting the profile of real disposable income over the projection horizon, whose growth rate is set to taper off to around 2.5% by 2022, from 5.3% in 2018.

The profile of government consumption is heavily influenced by the projected growth in intermediate consumption and compensation of employees, and the expected decline in inflows from the Individual Investor Programme (IIP), which are netted against consumption expenditure. More details on projected developments in public consumption can be found in section 4.

Moreover, investment is projected to rebound in 2019 driven by large-scale outlays on infrastructure and health-related projects, before slowing down in 2020. It is then expected to accelerate slightly in 2021, before easing further in 2022 as some one-off projects reach completion. Residential investment is foreseen to grow at a progressively slower pace, following the strong expansion seen in recent years. This view is also conditioned by the expectation of some deceleration in the issuance of building permits and in migrant flows. Compared to the Bank's earlier projections, however, investment growth has been revised upwards in 2019, and downwards in 2020, due to changes in the assumed timing of outlays in private sector investment projects.

In view of the softening international economic environment and elevated uncertainty, export growth is expected to remain muted and recover only gradually over the forecast horizon. In particular, goods exports are projected to contract again in 2019, reflecting the ongoing weakness in industrial production and the less benign external demand conditions this year. Although goods exports are expected to recover in 2020, they are set to grow less rapidly than foreign demand. Furthermore, growth in services exports is expected to moderate slightly from the very high rates recorded recently.

Mainly mirroring the investment and export projections, import growth is set to pick up in 2019 before decelerating slightly in 2020. Goods imports then accelerate in line with recovering goods exports. This profile is also driven by a substantial rise in goods imports, which in turn mirrors the strong pick-up in private investment growth. Conversely, services imports are foreseen to decelerate slightly in 2019 and 2020, reflecting the expected path of services exports. Services imports then pick up in the last two years of the projection horizon. Overall imports are projected to slow down in 2022, though, reflecting the deceleration in private investment growth foreseen that year. Import shares are projected to decline marginally over the projection horizon, but the pace of decline is expected to slow down following the strong declines in the last few years.

The trade surplus is expected to narrow over the projection horizon. This partly reflects the fact that the net export contribution is set to be negative in 2019. Furthermore, outflows related to primary income are envisaged to rise due to increasing profits of internationally-oriented firms.

2 Labour market

As economic activity moderates over the projection horizon, the pace of job creation is foreseen to slow down, while remaining well above the historical average.

The LFS unemployment rate is expected to edge up marginally from record lows, ending the projection horizon at 3.8%. A low unemployment rate is expected to persist in spite of continued increases in net migration flows and increased activity among Maltese nationals, as the envisaged deceleration in employment growth is foreseen to be broadly matched by an expected slowdown in labour supply growth.

As regards wages, surveys and the Bank's contacts with industry continue to highlight that labour market tightness and wage pressures are gaining pace. In this context, and reflecting also an expected pick-up in consumer prices, nominal compensation per employee should accelerate over the projection horizon.

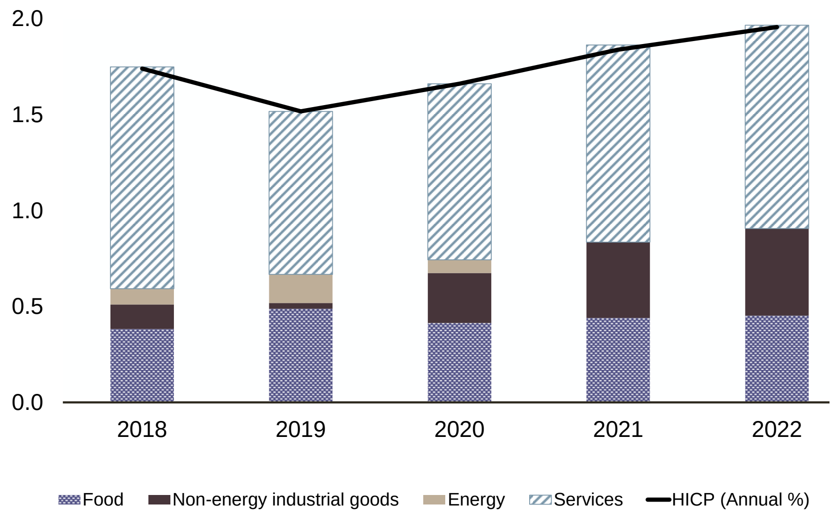
3 Prices

HICP inflation in Malta is set to moderate to 1.5% in 2019, from 1.7% in 2018. Thereafter, consumer price inflation is expected to pick-up gradually, reaching 1.9% in 2022. (see Chart 2).

Lower inflation in 2019 mainly reflects a smaller contribution from services inflation, which had been boosted by a large increase in the weight of accommodation services in 2018. Furthermore, weakness in external price pressures is expected to act as a drag on prices for non-energy industrial goods (NEIG), with NEIG inflation expected to weaken slightly during 2019. The contribution of energy to inflation is also set to increase slightly in 2019, due to the effect of transport fuel prices, which follow international oil prices through a lagged and partial pass-through.

The pick-up in HICP inflation over 2020 to 2022 is largely driven by expected movements in HICP excluding energy. The latter is projected to accelerate from 1.5% in 2019 to 2.1% by 2022. This is mainly underpinned by faster growth in services prices, reflecting some intensification of demand and wage pressures. NEIG inflation is also set to pick up, mirroring a recovery in imported inflation. Food inflation is projected to remain robust over the projection horizon.

Chart 2: HICP inflation over the projection horizon
(percentage point contributions; annual percentage change)



Source: Central Bank of Malta

4 Public finance

Government finances are expected to remain in surplus throughout the forecast horizon, sustained by positive headline primary balances (see Table 2). However, the surplus is expected to decline from 1.9% of GDP in 2018 to 1.5% of GDP in 2019, and to remain stable at 1.4% of GDP thereafter. This profile is driven by the narrowing and subsequent recovery in gross savings, which is offset by a deterioration in the balance of capital revenue net of capital expenditure.

Compared with the Bank's earlier projections, the surplus profile was revised up throughout the projection horizon. Estimates for 2019 were primarily revised to take into account stronger than expected growth in tax revenue, and a higher take up of EU funds for capital projects. Forecasts for 2020 and beyond reflect the impact of revised Government targets and measures announced in the Budget 2020 (see Box 1).

Overall, the share of tax revenue items in GDP is expected to increase compared with the ratio in 2018. This is due to an expected increase in the share of current taxes on income and wealth in GDP, buoyed by higher income taxes levied on households and corporations. On the other hand, the ratio of taxes on production and imports is expected to decline, driven by slower growth in consumption. Revenue from social contributions is also expected to increase at a smaller pace than GDP, in line with the provisions of Maltese law which limit these contributions.

Meanwhile, the share of other current revenue in GDP is set to decline in 2019 and remain broadly stable thereafter. This is in line with the forecast profile of inflows from the IIP as well as dividend income.

On average, the share of current spending items in GDP throughout the forecast horizon is expected to be in line with the 2018 level. However, the profile of individual spending items varies considerably. Outlays on compensation of employees, subsides and 'other' current expenditure are set to grow broadly in line with nominal GDP. Meanwhile, the share of intermediate consumption in GDP is set to increase, driven by higher health-related costs. On the other hand, the ratio of interest payments in GDP is expected to decrease, reflecting lower financing needs as well as the prevailing low interest rate environment.

By contrast, social payments are meanwhile set to increase more slowly than GDP, owing to measures aimed at reducing dependence on social assistance and still favourable labour market developments. The ratio of interest payments in GDP is also expected to decrease, reflecting lower financing needs as well as the prevailing low interest rate environment.

Overall, social payments are expected to increase more slowly than GDP, owing to favourable labour market developments, the retention of measures aimed at reducing dependence on social assistance and an increase in the statutory retirement age in 2022. However, outlays are set to increase more strongly than GDP in 2020, reflecting the impact of higher pensions and other benefits as announced in the latest Budget.

The Central Bank of Malta also estimates the structural balance, i.e. the underlying budgetary position corrected for temporary government measures and the economic cycle. The impact of the latter is based on the output gap, and estimated using a methodology applied within the ESCB. The parameters for estimating the structural balance are based on the Bank's own estimates and thus differ from those used by the European Commission and the Government of Malta.

The shortfall in the balance between capital revenue and capital expenditure is expected to stabilise and

Table 2: Projections for main fiscal items (% of GDP) [1]

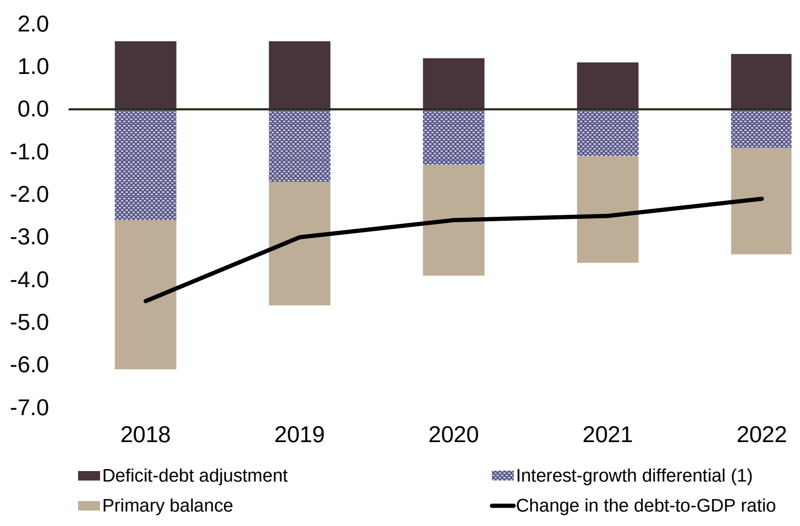
	2018[2]	2019	2020	2021	2022
Headline Aggregates					
Total revenue	38.7	39.0	38.8	38.6	38.5
Total expenditure	36.7	37.4	37.4	37.2	37.1
General Government Balance	1.9	1.5	1.4	1.4	1.4
of which: Primary Balance	3.5	2.9	2.6	2.5	2.5
General Government Debt	45.8	42.8	40.2	37.7	35.6
Detailed Breakdown					
Current Revenue	37.5	36.8	36.9	37.0	37.1
Current taxes on income and wealth	13.4	13.7	13.9	14.1	14.2
Taxes on production and imports	12.8	12.6	12.5	12.5	12.5
Social contributions	6.2	6.1	6.1	6.0	6.0
Other current revenue[3]	5.1	4.4	4.5	4.4	4.4
Current Expenditure	32.5	32.3	32.6	32.4	32.2
Compensation of Employees	11.1	11.1	11.1	11.1	11.2
Social benefits	9.6	9.4	9.5	9.4	9.2
Intermediate Consumption	6.6	7.1	7.4	7.4	7.4
Interest payments	1.5	1.3	1.2	1.1	1.1
Subsidies	1.4	1.4	1.4	1.3	1.3
Other current expenditure[4]	2.3	2.1	2.1	2.1	2.1
Gross savings	5.0	4.5	4.3	4.6	4.8
Capital Revenue	1.2	2.1	1.9	1.6	1.5
Capital taxes	0.2	0.2	0.2	0.2	0.2
Other capital revenue[5]	1.0	2.0	1.7	1.4	1.3
Capital Expenditure	4.3	5.1	4.8	4.7	4.9
Investment	3.1	4.2	4.0	3.9	4.0
Capital transfers	1.4	1.0	0.9	0.9	1.0
Other capital expenditure[6]	-0.2	-0.1	-0.1	-0.1	-0.1
Capital Revenue Net of Capital Expenditure	-3.1	-3.0	-2.9	-3.2	-3.4
Underlying Budgetary Position					
Cyclical component	0.7	0.6	0.4	0.1	0.0
Temporary government measures	0.0	0.0	0.0	0.0	0.0
Structural balance	1.2	1.0	1.0	1.3	1.5

[1] CBM calculations based on NSO News Release 145/2019 (published on 6 September 2019) and News Release 170/2019 (published on 21 October 2019).
[2] Actual data.
[3] Mainly includes revenue from dividends, rents and sales.
[4] Mainly includes spending on education and contributions to the EU budget.
[5] Mainly includes grants from EU Programmes.
[6] Mainly reflects the value of changes in inventories and in the net acquisition of valuables and other assets.

decline somewhat by 2020, before deteriorating in the outer years of the forecast horizon. The share of investment outlays in GDP is expected to surge in 2019, before declining in 2020 and remaining broadly stable thereafter. This profile reflects higher spending on domestically-funded road building and other infrastructural projects, and on other projects which are part-financed by EU funds under the 2014-2020 funding framework. Work on the latter is expected to peak in 2019, before levelling off and declining in subsequent years as projects are eventually completed. Meanwhile, the share of capital transfers in GDP is expected to decline in 2019 mainly due to a base effect (expenditure in 2018 was boosted by transfers to a new government owned firm in the airline industry). It is then set to remain broadly unchanged throughout the forecast period.

The Central Bank of Malta also estimates the structural balance, i.e. the underlying budgetary position corrected for temporary government measures and the economic cycle. The impact of the latter is based on the output gap, and estimated using a methodology applied within the ESCB. The parameters for estimating the structural balance are based on own estimates and thus differ from those used by the European Commission and the Maltese Government.

Chart 3: Contribution to change in the debt ratio
(percentage point contributions; percentage of GDP)



Source: Central Bank of Malta

The Central Bank expects a positive cyclical component which declines over time. In addition, no significant temporary measures are expected to take place throughout the forecast period. Overall, the structural balance is set to decline from a surplus of 1.2% of GDP in 2018 to 1.0% of GDP in 2019 and in 2020, before improving to 1.5% by 2022. This reflects the expected closure of the output gap during this period. Overall, the structural balance is expected to remain above the medium-term budgetary objective of a balanced budget in structural terms.

The general government debt-to-GDP ratio is forecast to decline from 45.8% in 2018 to 35.6% by 2022, driven by high primary balances and a favourable interest-growth differential (see Chart 3).

Box 1: The impact of Budget 2020 targets on the Bank's fiscal projections [i]

This Box assesses the impact of Government fiscal targets as announced in the Budget 2020 and the Draft Budgetary Plan 2020, on the Bank's latest projections.

Revised targets

The Budget 2020 envisages a drop in the general government surplus in 2019, compared with the surplus in 2018. The surplus is then set to remain broadly stable thereafter. In structural terms, this indicates an expansionary fiscal policy in 2019 and a restrictive policy in the following years.

This policy is unchanged compared with government targets published in April's Stability Programme Update. However, the Budget for 2020 now targets a higher surplus level (see Table A). On average, Government expects to post a surplus of 1.5% of GDP between 2019 and 2022. The Stability Programme targeted an average surplus of 1.0% of GDP in this period.

The new targets are mainly due to revised estimates for the revenue-to-GDP ratio in 2019, which carry over into 2020 and offset an upward revision in the forecast share of expenditure in GDP. Targets for tax revenue were revised up substantially, in line with higher than expected growth in intakes in 2019. According to the Economic Survey 2019, published together with the Budget for 2020, tax receipts in 2019 were supported by a positive labour market environment, higher tourism earnings (which underpin growth in indirect taxes) as well as increased efficiency in tax collection.

Compared with the Stability Programme's targets, expenditure targets for 2019 and 2020 are also revised upward. Revisions to current spending items primarily reflect estimates for intermediate consumption, due to higher spending on health and care for the elderly. Capital spending targets are also revised up significantly, mainly reflecting strong expected outlays on infrastructure, particularly on road construction. Overall, spending on gross fixed capital formation is expected to exceed 4.0% of GDP in 2019 and 2020. This threshold was exceeded only once in the previous ten years – in 2015 – when Government sought to make full use of EU funds under the 2007-2013 financing framework.

Budget 2020 measures

The Budget features a number of new measures, as well as the extension of existing initiatives, which are set to mostly have a surplus-reducing impact. According to the Draft Budgetary Plan, the main measures affecting government expenditure amount to 0.4% of GDP in 2020. These include increases in pensions and allowances, assistance for affordable housing and the construction of new social housing units.

Measures on the revenue side are expected to have a largely neutral impact on the budget balance. An expected pick up in inflows from the Individual Investor Programme (IIP) is expected to be partly offset by the impact of a reduction in income tax on the first 100 hours of overtime by low-income taxpayers. The Budget also introduces other, administrative changes which are not expected to have a direct impact on revenue, but are set to facilitate payment of tax obligations. These include new online services for VAT registrations, regular provisional tax statements (to avoid that taxpayers accumulate large tax obligations and thus late submissions of tax statements) and settling of tax refunds within six months.

Impact on bank's fiscal forecasts

This section compares the Bank's latest fiscal forecasts, which reflect all the above mentioned measures and revised government targets, with an 'initial' forecast run which only included the impact of new data available since the August exercise, and revised macroeconomic projections.

On average, the initial projections anticipate a higher surplus-to-GDP ratio than the August exercise (see Table B). This is partly due to higher expected growth in tax revenue, in line with actual developments in 2019. At the same time, expenditure is set to reach a lower share in GDP, mainly reflecting initial forecasts for intermediate consumption, which are set to grow broadly in line with nominal GDP.

The 'final' surplus forecast by the Bank is, on average, lower than the initial run and in line with the latest Government estimates. The average forecast share of revenue in GDP is revised up to account for higher expected take up of EU funds for capital projects. At the same time, on average, the Bank expects a lower revenue-to-GDP ratio compared with the Government's estimates. This is mainly due to different assumptions underpinning forecast for tax revenue – namely the expected profile of underlying macro items and their respective elasticities with respect to tax items.

Compared with the initial run, the average forecast share of expenditure in GDP is also revised up. This reflects a significant upward revision in the profile of intermediate consumption, which is now set to grow at a stronger pace than GDP in line with revised government targets. Similarly, forecasts for gross fixed capital formation are also revised up. Compared with the Budget targets, the Bank projects a lower expenditure-to-GDP ratio on average, mainly due to differences in the profile of capital expenditure. The Bank expects that the Government's ambitious capital spending plan is largely adhered to. However, some capital spending is assumed to be implemented over a longer time frame.

Table A : Government revenue and expenditure targets (% of GDP)

	Budget / Draft Budget Plan 2020					Stability Programme 2019 Update				
	2018	**2019**	**2020**	**2021**	**2022**	**2018**	**2019**	**2020**	**2021**	**2022**
General government balance	**1.9**	**1.4**	**1.4**	**1.5**	**1.5**	**2.0**	**0.9**	**1.0**	**1.1**	**1.1**
Revenue	38.7	39.3	39.1	NA	NA	38.8	38.1	36.7	35.7	35.2
Tax revenue	32.5	33.3	33.5	NA	NA	32.9	32.2	31.7	31.2	30.7
Other revenue	6.1	6.0	5.6	NA	NA	5.9	5.9	5.0	4.5	4.5
Expenditure	**36.7**	**37.9**	**37.8**	**NA**	**NA**	**36.8**	**37.2**	**35.7**	**34.7**	**34.1**
Compensation of employees	11.1	11.2	11.1	NA	NA	11.2	11.1	10.8	10.7	10.5
Intermediate consumption	6.6	7.2	7.5	NA	NA	6.8	7.0	6.8	6.6	6.4
Social payments	9.6	9.3	9.3	NA	NA	9.5	9.5	9.1	8.9	8.7
Other current expenditure	5.2	4.8	4.8	NA	NA	5.0	4.5	4.4	4.3	4.2
Gross fixed capital formation	3.1	4.4	4.1	NA	NA	3.0	3.9	3.3	3.1	3.2
Other capital expenditure	1.2	1.0	1.1	NA	NA	1.3	1.2	1.3	1.1	1.1
Structural balance	1.0	0.8	1.3	NA	NA	1.6	0.7	1.1	1.3	1.4
General government debt	**45.8**	**43.1**	**40.4**	**37.6**	**34.9**	**46.0**	**42.7**	**39.4**	**36.2**	**33.2**

Table B : CBM fiscal projections (% of GDP)	Aug. 2019*	Dec. 2019 (Initial - No Budget)**	Dec. 2019 (Final - With Budget)**
General government balance	1.0	1.6	1.4
Revenue	38.1	38.3	38.7
Tax revenue	32.4	32.7	32.7
Other revenue	5.7	5.6	6.1
Expenditure	37.0	36.6	37.3
Compensation of employees	11.3	11.1	11.1
Intermediate consumption	7.0	6.7	7.3
Social payments	9.3	9.4	9.4
Other current expenditure	4.8	5.0	4.6
Gross fixed capital formation	3.5	3.5	4.0
Other capital expenditure	1.1	1.1	0.9

*Averages for period 2019-2021.
**Averages for period 2019-2022.

[i]Prepared by John Farrugia, a principal economist within the Economic Analysis Department of the Central Bank of Malta.

5 Risks to the projections

Risks to the GDP growth projections are tilted to the downside. In the short to medium-term, the main downside risks remain external. In particular, economic growth in some of Malta's trading partners has surprised on the downside in recent quarters, and if weaknesses persist it is likely to affect negatively Malta's export performance. Trade tensions and uncertainty about Brexit remain, which could lead to lower foreign demand and, consequently, lower than anticipated export growth (see Box 2). Domestic risks are also tilted to the downside. The downward revision to private consumption growth in this projection round due to a weak outturn in first half data may not necessarily be reflected in the annual figures, given that employment growth remained strong and has actually surprised on the upside. Nevertheless, the heightened political uncertainty towards the end of 2019 could offset this effect although at the current juncture the Bank does not have as yet sufficient information to gauge this impact. Although the savings ratio remains elevated from a historical perspective, and hence there is room for private consumption to grow faster than the baseline suggests, the channels through which the heightened current political uncertainty is likely to operate is through postponement of private consumption and investment, the extent of which depends on how prolonged such political uncertainty remains. Other potential downside domestic risks relate to possible supply-side constraints becoming binding after a prolonged period of above-average economic growth.

Risks to inflation are to the downside. On the upside, risks include stronger than expected increases in wage pressures. To the downside, a further weakening of external price pressures could delay the expected pick-up in NEIG inflation, while stronger competition in accommodation rates could offset the impact of wage pressures on services inflation.

Public finance risks are tilted on the upside (balance-improving) in 2019, reflecting the possibility of higher than expected increases in tax revenue. Going forward, risks to public finances, especially in 2020, are tilted to the downside. While cost savings may be achieved from possible slippages in the implementation of domestically-financed capital projects. However, current expenditure overruns may also take place while tax revenues could be lower than expected if risks emanating from lower domestic demand materialise and if political uncertainty is prolonged.

Box 2: The Exit of the United Kingdom from the European Union: Its short-to-medium term impact on the Maltese economy [i]

The European Union (EU) is the United Kingdom's (UK) largest trading partner and attracts around half of UK exports. The EU also exports a significant amount of goods and services to the UK, mostly originating from Germany, France and the Netherlands. In light of these trading ties, both the EU and the UK are expected to lose economically from Brexit, with the UK expected to be impacted to a larger degree. Apart from the trade channel, the UK economy is also likely to be negatively affected by expected drops in foreign direct investment (FDI) and inward migration flows.

In the light of the considerable number of alternative arrangements that the UK can negotiate with the EU, there is still no consensus on the magnitude of these negative effects. Indeed at the current juncture, the UK parliament is still required to choose whether to enter a transition period by accepting a deal that has been struck between the two negotiating teams. In case no agreement is reached, the UK would immediately start to deal with its EU counterparts under the WTO/MFN (Most Favoured Nation) rules. In case a transition period is agreed on, the UK and EU would still need to agree on the type of relation the two parties wish to have in the future. The final outcome of the Brexit process thus depends both on the agreement (or lack of) reached at the current juncture as well as on the future negotiations which are likely to take place in the following years. Amidst all this uncertainty, international studies have repeatedly tried to estimate the effects Brexit is likely to have on both the EU and UK economies. Bisciari (2019)[ii] provides a comprehensive literature review on this subject, taking in consideration studies that focus solely on trade disruption effects as well as others that also take in consideration the negative productivity effects and unfavourable FDI and migration flows that might result from the UK's exit from the EU.

Given its openness, the Maltese economy is likely to be affected in two ways. First, foreign demand for Maltese exports is likely to slow down both due to direct effects caused by subdued economic growth in the UK, as well as due to indirect effects caused by the likely slowdown in EU as well as US economic growth. Secondly, the real effective exchange rate (REER) for Malta is likely to be negatively affected by the depreciation of the Pound Sterling vis-à-vis the euro, and positively affected by the appreciation of the US dollar vis-à-vis the euro.[iii]

To quantify the effects of these shocks, this study conducts a scenario analysis using the re-estimated version of

STREAM, the Central Bank of Malta's macro-econometric model.[iv] In the light of the uncertainty surrounding the negotiation process between the UK and the EU, and the heterogeneity in the results found in literature, we estimate a best and worst-case scenario for each set of results:

- *Scenario 1* is the best case (or limited) scenario and assumes that both during the transition period and at the end of the Brexit process the UK will have access to a free-trade or customs-union-like agreement with the EU.
- *Scenario 2* is the worst case scenario and assumes unsuccessful negotiations between the UK and the EU, so that the trade agreement between the two parties defaults to the WTO rules.

The scenarios are constructed as follows. The direct and indirect effects on Maltese foreign demand are based on an average of the studies reviewed in Bisciari (2019) and results published in NIESR (2019)[v] which also take in consideration the latest agreement struck between the Johnson government and the EU negotiating team. Moreover, we simulate an appreciation of the US dollar vis-à-vis the Pound Sterling and to a lesser extent vis-à-vis the euro. This in turn implies an appreciation of the euro vis-à-vis the Pound Sterling. The magnitude of the exchange rate shocks is equal to the change in bilateral exchange rates that happened on the night of the Brexit referendum. Assuming that the markets were not expecting the exit vote to win, the change in the exchange rate that followed the referendum result should in theory price in the UK's decision to exit the EU. The projections used in this study are summarised in Table A.

Table A: Impact on key foreign variables
percentage deviation from baseline

		Trade effects only			Trade and Productivity effects only		
UK GDP							
	Scenario 1	-0.38	-1.17	-1.68	-0.57	-1.44	-2.00
	Scenario 2	-0.91	-3.26	-3.58	-1.25	-4.06	-5.60
EU-27 GDP							
	Scenario 1	-0.06	-0.19	-0.27	-0.06	-0.19	-0.27
	Scenario 2	-0.17	-0.62	-0.69	-0.17	-0.62	-0.69
Exchange rate							
	GBP/EUR	6.19	6.19	6.19	6.19	6.19	6.19
	USD/EUR	-2.35	-2.35	-2.35	-2.35	-2.35	-2.35

Once weighted for their relative importance in the Maltese trade basket, these projections result in a peak fall of 0.7% on Maltese foreign demand under the worst case scenario, as opposed to a fall of around 0.3% under the best case scenario. The NEER for Malta from the import side is assumed to appreciate by around 2.5% while that on the export side is assumed to appreciate by around 3.5%.

Table B: Impact on Maltese variables
percentage deviation from baseline unless otherwise stated

	Scenario 1			Scenario 2		
	2019	2020	2021	2019	2020	2021
Economic Activity						
Real GDP	-0.04	-0.12	-0.19	-0.04	-0.17	-0.39
Private consumption	0.02	-0.01	-0.05	0.02	-0.02	-0.11
Government consumption	-0.01	-0.03	-0.05	-0.01	-0.05	-0.12
Gross fixed capital formation	-0.01	-0.07	-0.14	-0.01	-0.09	-0.27
Exports	-0.08	-0.20	-0.28	-0.08	-0.29	-0.63
Imports	-0.04	-0.13	-0.19	-0.04	-0.20	-0.44
Contributions to real GDP Growth (in percentage pts)						
Domestic Demand	0.00	-0.02	-0.06	0.00	-0.04	-0.13
Net exports	-0.04	-0.09	-0.12	-0.04	-0.13	-0.27

The peak effects on Malta's baseline GDP are projected to lie between -0.19% to -0.39% (see Table B). As expected given the nature of the shocks under consideration, the main contributor behind these falls emanate from the external sector. The fall in aggregate demand brought about by a slowdown in exports causes a slack in the labour market which leads to negative pressures on wage growth which eventually leads to slowdown in private consumption and investment, leading to a fall in domestic demand.

The impacts of Brexit on the Maltese economy discussed in this note are slightly lower than those published in Rapa (2017). The latter study had estimated a peak effect on the Maltese economy of around 0.5%. The reduction in the expected impact of Brexit on the Maltese economy is attributable to three factors. First, this study utilises a newly estimated version of STREAM, which attributes a lower role to foreign demand in the determination of exports when compared to the model as estimated in Grech and Rapa (2016).[vi] Moreover, a lower sensitivity of Maltese exports to foreign relative prices estimated in the new model, helps to reduce the impact that the expected devaluation of the pound sterling vis-à-vis the euro is likely to have on Maltese exports. Furthermore, the re-estimation of STREAM has been consistent with lower error-correction terms implying a slower adjustment of Maltese macro-variables to their equilibrium levels.[vii] Secondly, Malta's dependence on the UK market (most notably the tourism sector) has continued to fall, implying that for a given reduction in UK demand, the contraction in Malta's trade-weighted foreign demand is expected to be lower. These two factors imply that even under the most pessimistic of scenarios the effects of Brexit on the Maltese economy are expected to remain contained. Finally, the latest international studies have suggested that Brexit might have a lower effect on the UK and EU economies, when compared to the earlier reports used in Rapa (2017).

The results presented in this note should be treated with caution given the high degree of uncertainty surrounding the terms of the UK's exit from the EU. The simulations in this study focus mainly on the impact on economic activity from exchange rate movements and foreign demand, using assumptions from international institutions. On the downside, international studies could be underestimating the economic impact of the exit process. On the upside, Malta could also benefit if it manages to attract UK companies that seek to relocate.

[i] Box prepared by Noel Rapa, principal research economist in the Research Department which was finalised prior to the UK general election held on 12 December 2019. This box provides a discussion of the estimated impact an eventual exit of the United Kingdom (UK) from the European Union (EU) might have Malta's economic performance in the short-to-medium run. This updates a previous study undertaken by the Central Bank of Malta in 2017 (Rapa, 2017, 'The exit of the United Kingdom from the European Union – Its short-to-medium term impact on the Maltese economy,' Central Bank of Malta, Policy Note, March 2017) with new foreign demand assumptions that take in consideration the latest news surrounding the terms at which the UK is likely to exit the EU. In

this respect, the foreign assumptions used as a basis for this study reflect the author's outlook on the external environment. On the other hand the official projections of the Central Bank of Malta are based on the official foreign assumptions computed internally within the ESCB and do not therefore include the assumptions or results discussed in this box.

[ii] See Bisciari, P. (2019), 'A Survey of the long-term impact of Brexit on the UK and the EU27 economies,' National Bank of Belgium, Working paper 366.

[iii] The REER is also expected to appreciate due to an increase in import prices should the EU start imposing import duties on UK exports. This scenario has not been explored in this note.

[iv] See Borg, I., B. Micallef and N. Rapa (2019), 'STREAM – A macro-econometric model of the Maltese economy,' Central Bank of Malta, Research Bulletin 2019.

[v] See Hantzsche A., A. Kara and G. Young (2019), 'The Economic impact of Prime Minister Johnson's new Brexit deal,' NIESR Review No. 250, November 2019.

[vii] See Grech, O. and N. Rapa (2016), 'STREAM: A Structural Macro-Econometric Model of the Maltese Economy,' Central Bank of Malta Working Paper, WP/01/2016.

[viii] See Borg, I., B. Micallef and N. Rapa (2019), 'STREAM – A macro-econometric model of the Maltese economy,' Central Bank of Malta, Research Bulletin 2019, for a discussion of the main changes in model elasticities following the re-estimation of STREAM.