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Fiscal Multipliers in the Maltese Economy

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BOX 5: FISCAL MULTIPLIERS IN THE MALTESE ECONOMY[1]

Abstract

A key consideration of the impact of fiscal policy is the size of fiscal multipliers. This article employs three approaches to estimate the latter in Malta: a structural vector-autoregression model, the Central Bank of Malta's macro-econometric model and a large-scale dynamic stochastic general equilibrium model calibrated for Malta. The results indicate that first-year multiplier estimates for government spending range between 0.73 and 0.97, whereas for taxation, the range is between 0.03 and 0.30. These are relatively small estimates compared with larger economies, possibly reflecting Malta's greater propensity to imports, which results in a higher demand leakage. The results suggest that a fiscal adjustment strategy based on a combination of expenditure and tax measures may have a lower short-run cost compared with purely expenditure-based consolidation. Moreover, to be growth friendly, the strategy should aim to minimise these short-run negative effects by being coherent, credible and well communicated so as to properly shape expectations.

Introduction

The recent global financial crisis has triggered a renewed interest in fiscal policy and its impact on economic activity. A key consideration of this impact is the size of the fiscal multiplier. The latter is generally defined as the ratio of a change in output to an exogenous change in the fiscal instrument, such as government spending or taxation, with respect to their respective baselines.[2] In addition to their importance for policy design, recent studies have shown that a better understanding of fiscal multipliers can play an important role in improving the accuracy of macroeconomic forecasts.[3]

Despite the extensive literature, however, there is still no consensus on the size of the fiscal multiplier. Generally, estimates of multipliers are found to differ across countries and fiscal instruments. In addition, estimates may also vary according to the methodology used.

The empirical and theoretical literature suggests that the size of the multiplier can be affected by the structural characteristics of the economy. For instance, countries with a high propensity to import tend to have lower multipliers as the demand leakage from imports is more pronounced. Similarly, multipliers are usually smaller for countries with a flexible exchange rate regime, as currency movements can offset the impact of fiscal policy on activity. Countries whose debt levels are high also tend to have lower multipliers since fiscal consolidation can exert positive credibility and confidence effects on private demand, and could even lower the risk premium on debt. On the contrary, countries with more rigid labour markets tend to have higher fiscal multipliers as less flexible wage setting usually amplifies the response of output to shocks. The size of automatic stabilisers also matters,

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The views expressed in this article are the authors' own and do not necessarily represent the views of the Bank.

[2] Batini, N., Eyraud, L., Forni, L. and Weber, A., "Fiscal Multipliers: Size, Determinants and Use in Macroeconomic Projections", *Technical Notes and Manuals*, 14/04, IMF, 2014.

[3] Blanchard, O. and Leigh, D., "Growth forecast errors and fiscal multipliers", *American Economic Review*, Vol. 103, No 2, 2013, pp. 446-65.

with larger stabilisers tending to lower multipliers as the response of transfers and taxes may offset part of the initial shock.

More recent studies have emphasised the role of conjunctural or cyclical factors, mainly focusing on the state of the business cycle and the degree of monetary accommodation. For instance, studies usually find that fiscal consolidation can be more contractionary if made during a recession than during an expansion.[4] Similarly, multipliers can potentially be larger when the transmission of monetary policy is impaired by, say, the zero lower bound (ZLB) on interest rates and, hence, the impact of fiscal contraction cannot be cushioned by accommodative monetary policy.[5]

Differences in the size of the multiplier also originate from the methodology used.[6] The spectrum of approaches employed ranges from empirical models, such as vector auto-regressions (VAR) to structural and theoretically-driven ones, such as dynamic stochastic general equilibrium (DSGE) models. A recent strand in the literature extended the analysis to allow for non-linearities or state-dependent multipliers. Finally, some studies employ a narrative approach, using information from budget documents to directly identify exogenous policy changes.[7]

Despite these differences, some of the findings from the literature are fairly robust across a variety of models. Studies generally report first-year multipliers to be lower than one in normal times but could potentially be above unity in abnormal circumstances, such as when the economy is in severe recession or when monetary policy is constrained by the ZLB. Multipliers associated with government spending are generally higher compared with taxes, as part of the impact of tax changes is dampened by private saving behaviour. In a recent survey of the literature, one study reports an average multiplier of 0.75 for government spending and 0.25 for government revenues in advanced economies.[8] Finally, there is broad consensus that medium to long-term benefits from well-designed fiscal consolidation strategies usually come at the expense of temporary losses in output.[9]

Against this background, this article employs three approaches to estimate the size of fiscal multipliers in Malta. It also investigates selected topics from the literature, such as differences in the size of multipliers arising from temporary and permanents shocks, the role of the ZLB and of liquidity-constrained households. Finally, the article compares estimates of Malta's multipliers with those from other EU economies and provides policy recommendations based on the main findings.

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4 Auerbach, A. J. and Gorodnichenko, Y., "Fiscal multipliers in recession and expansion", in *Fiscal Policy after the Financial Crisis*, edited by Alesina, A. and Giavazzi, F., 2012.

5 Christiano, L., Eichenbaum, M. and Rebelo, S., "When is the government spending multiplier large?" *Journal of Political Economy*, Vol. 119, 2011, pp. 78–121. Using a DSGE model with the ZLB constraint, these authors have shown that the fiscal multiplier can exceed three.

6 For an outline of the main methodologies employed in the literature, the interested reader is referred to Spilimbergo, A., Symansky, S. and Schindler, M., "Fiscal Multipliers," *Staff Position Note* SPN/09/11, IMF, 2009, and Leeper, E.,Traum, N. and Walker, T. "Clearing up the fiscal multiplier morass", *NBER Working Papers 17444*, 2011.

7 Romer, C. and Romer, D., "The macroeconomic effects of tax changes: estimates based on a new measure of fiscal shocks", *American Economic Review*, Vol. 100, No 3, 2010, pp. 763-801.

8 Mineshima, A., Poplawski-Ribeiro, M. and Weber, A., "Fiscal multipliers", in *Post-Crisis Fiscal Policy*, edited by Cottarelli, C., Gerson, P. and Senhadji, A., 2014.

9 Kilponen, J. et al., "Comparing fiscal multipliers across models and countries in Europe", *Working Paper*, 1760, ECB, 2015.

2. The models used

The first approach is based on a structural vector auto-regression (SVAR) using the Blanchard-Perotti method.[10] In this approach, the estimation of spending and tax multipliers requires the modelling of two basic blocks. The first is a fiscal block that includes government consumption and net taxes. The latter are defined as total revenues less transfers, subsidies and interest payments. The second is the macroeconomic block, which consists of GDP and its deflator as a measure of output and prices, respectively. The model controls for demand and prices in Malta's main trading partners as exogenous variables to reflect the small and open features of the Maltese economy.

The main advantage of the SVAR approach is that it requires minimum restrictions on the part of the econometrician, and hence, results are more data-driven. On the other hand, the primary limitation is that very few variables can be included in the model to maintain its statistical robustness.

The second approach relies on the Central Bank of Malta's macro-econometric model, which is a medium-sized traditional structural model.[11] Behavioural equations are mostly estimated, rather than calibrated, in error-correction form. Economic agents are assumed to have adaptive expectations, and thus the model is backward looking. The model includes a relatively detailed endogenous fiscal block, which disaggregates the government sector into a number of revenue and expenditure categories.[12] The use of a detailed structural model allows for a better understanding of the channels through which fiscal policy shocks are transmitted to the real economy.

The third approach relies on simulations using a DSGE model calibrated for Malta.[13] The latter class of models are derived from micro-foundations with forward looking expectations. In this case, estimates of the size of fiscal multipliers are derived from a multi-country model with nominal and real rigidities, and a detailed fiscal block in which Malta is modelled as a small and open economy in a monetary union.

In all three approaches, we consider shocks to government consumption and taxation. Each shock is scaled such that it amounts to 1.0% of GDP to facilitate the comparability of the results. To ensure consistency across all approaches, we report the average multiplier for the first year.

The simulated shocks to the policy instrument are dictated by the relative richness of the fiscal block of each model. The parsimonious structure of the SVAR model implies that

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[10] Blanchard, O. and Perotti, R., "An empirical characterization of the dynamic effects of changes in government spending and taxes on output", *Quarterly Journal of Economics*, Vol. 117,(4), 2002, pp. 1329-68. Borg, I., "Fiscal multipliers in Malta", *Working Paper* WP/06/2014, Central Bank of Malta 2014, provides a detailed discussion on the choice of Blanchard-Perotti type restrictions as opposed to the other identification restrictions available in the literature.

[11] Grech, O. and Micallef, B., "A structural macro-econometric model of the Maltese economy", *Working Paper* WP/04/2014, Central Bank of Malta, 2014. The model is built around the neoclassical synthesis, with sluggish adjustment of wages and prices in the short run and also some inertia of real variables in response to shocks.

[12] Further details are available in Grech, O., "A fiscal block for the Bank's structural macro-econometric model of the Maltese economy", *Quarterly Review* 2014:3, Central Bank of Malta, pp. 60-67.

[13] Micallef, B., Measuring the effects of structural reforms in Malta: an analysis using the EAGLE model, *Working Paper* No 01/2013, Central Bank of Malta, 2013. A detailed description of the EAGLE model is available in Gomes, S., Jacquinot, P. and Pisani, M., "The EAGLE: a model for policy analysis of macroeconomic interdependence in the euro area", *Working Paper* No 1195, European Central Bank, 2010.

only shocks to aggregate variables (i.e. government consumption and net taxes) are presented. In a separate specification of the SVAR model, however, a distinction is also made between public consumption and investment. The other two models have a more detailed fiscal block and, hence, the simulations are implemented on disaggregated fiscal instruments. For instance, in the macro-econometric model, the government consumption shock refers to real intermediate consumption, whereas on the revenue side a distinction is made between direct and indirect taxes.[14] Simulations using the DSGE model are applied to government consumption on the expenditure side, and to households' labour income tax and the consumption tax rate on the revenue side.

3. Estimates of multipliers for Malta

Table 1 summarises the first year multipliers from the three different approaches. The main channels in each model are described in detail below.

3.1 Expenditure multipliers

Despite the differences in methodology, the range of estimates for the short-term government consumption multiplier presented in Table 1 is quite narrow, ranging from 0.73 to 0.97. In each case the average multiplier for the first year is lower than one, in line with findings in the literature, which implies that a €1 change in government consumption would lead to crowding out effects, such that the rise in output is lower than the initial shock.[15]

In the SVAR approach, a positive shock to government consumption leads to a contemporaneous response in GDP, which exhibits hump-shaped dynamics that peak in

Table 1
FISCAL MULTIPLIERS FOR MALTA USING THREE DIFFERENT METHODS
Impact on GDP in Year 1 to a 1.0% of GDP increase in the different fiscal variables
Per cent deviation from baseline

	SVAR	Macroeconometric model	DSGE
Expenditure			
Government consumption	0.97	0.78	0.73
Government investment	0.61	0.18	
Revenue			
Total taxation	-0.30		
Direct taxes		-0.03	-0.09
Indirect taxes		-0.12	-0.15

Source: Authors' calculations.

[14] The shock to direct taxes is distributed proportionately between households, corporations and social security contributions. Similarly, the shock to indirect taxes is distributed proportionately between VAT, excise taxes and other indirect taxation.

[15] These results are broadly in line with Cordina, G., "A structural econometric model of the Maltese economy", *Quarterly Review* 1996:4, Central Bank of Malta, pp. 44-61. He reports a government consumption multiplier of slightly above one in the first year that falls to 0.5 in the second year, and tapers off in later years owing to the substantial leakages from imports. Another recent study that provides estimates of fiscal multipliers for Malta is Arpa, E. and Vella, K., "Economic growth and debt dynamics", *Economic Policy Department*, Ministry for Finance, 2015. Using a large scale traditional econometric model, these authors reported short-term multipliers that usually ranged from 0.4 to 0.7 although they note that there were specific cases when the multiplier exceeded 0.9.

the second quarter. The response of output, which remains statistically significant for around two years, causes a persistent increase in the price level. Estimates from a disaggregated VAR model, that substitutes GDP with private consumption and investment, show that while private investment declines following a government consumption shock, private consumption increases. The latter implies that there is a relatively high share of liquidity-constrained households.

In the Bank's macro-econometric model, the rise in government consumption results in an immediate increase in GDP. This leads to higher employment and wages, and hence disposable income, which, in turn, raises private consumption. Moreover, heightened economic activity also stimulates investment. These developments bring about a further rise in GDP, which is offset to some degree by higher imports. The increase in economic activity raises the output gap which, in turn, exerts upward pressure on prices. With foreign prices unchanged, higher domestic prices lead to a loss in competitiveness and, thus, to a decline in exports. Still, on balance, the effect on GDP is positive, which translates into lower unemployment. On the fiscal side, as a result of the increase in government consumption, government expenditure rises. Owing to higher macroeconomic bases, government revenue also rises, but the net effect is for the government-balance ratio to fall – which implies a deterioration in the deficit ratio – and consequently the government debt ratio increases.

The positive shock to government consumption in the DSGE model also leads to an increase in GDP. The higher demand for factor inputs leads to a rise in hours worked and, to a lesser extent, in real wages. These induce a positive income effect that only partially offsets the negative wealth effect associated with higher government spending. Both private consumption and investment are adversely affected by the negative wealth effect as households and firms expect future fiscal policy to be tightened. The response of overall consumption masks differences in the behaviour of two types of households in the model. Higher government expenditure leads to an increase in consumption by liquidity-constrained households, given the rise in real wages, which is, however, offset by the decline in consumption of non-constrained households due to the negative wealth effect as households anticipate higher taxes in future. The effects of government expenditure on inflation are small and, given the small country assumption, have no effect on the monetary policy stance of the monetary union central bank. With unchanged nominal interest rates, there is a small reduction in the real interest rate, which partially compensates for the negative wealth effect of optimising households.

Model estimates point to significant differences between government consumption and investment shocks. Estimates for the response of output owing to a government consumption shock from the Bank's macro-econometric model and the SVAR range between 0.78 and 0.97, whereas the range is somewhat wider for public investment, between 0.18 and 0.61. Differences between the two shocks can be attributed to the relatively higher import share of government investment relative to government consumption.

3.2 Revenue multipliers

Estimates for tax multipliers in Table 1 range from -0.03 to -0.30. Tax multipliers are not only smaller than one but also lower than those for government consumption, in line with most studies in the literature.[16]

In the SVAR model, an increase in net taxes of 1.0% of GDP leads to a contemporaneous decline in output. The response of the latter is hump-shaped, peaking in the second quarter and slowing down monotonically thereafter. Government consumption also declines, although with a lag. The reaction of prices to the shock is negative and becomes statistically significant in the third quarter, exhibiting a prolonged hump-shaped response.

Estimates from the macro-econometric and DSGE models suggest that the negative impact on economic activity arising from an increase in indirect taxation is more pronounced than that from higher direct taxes. In the former, the multiplier estimates range between 0.03 and 0.09, whereas in the latter, they are between 0.12 and 0.15. This reflects the fact that the rise in indirect taxes has a positive effect on prices, which leads to a deterioration in price competitiveness. On the contrary, higher direct taxes exert lower price pressures, which, in the absence of changes in foreign prices or the exchange rate, lead to an improvement in price competitiveness and, hence, exports of goods and services.

4. Selected topics in the literature

The use of a DSGE framework allows for an in-depth investigation of a number of potential factors that could affect the size of the fiscal multiplier. Differences in multiplier estimates can depend on the policy adopted by the authorities, such as the degree of monetary accommodation by the central bank, the state of the business cycle and the nature of the fiscal adjustment making a distinction, for instance, between temporary and permanent shocks.

4.1 Distinction between temporary and permanent shocks

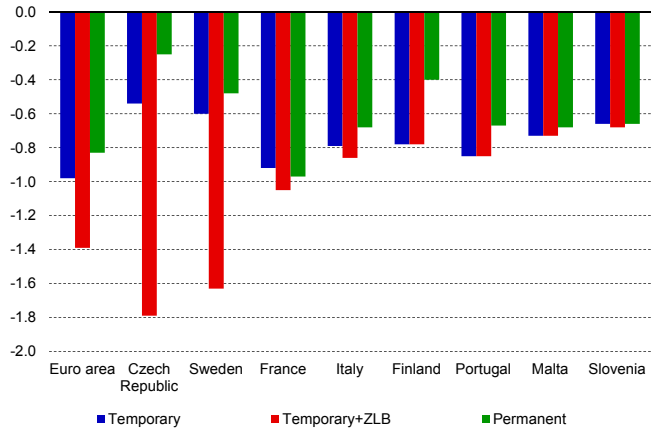
Chart 1 compares the fiscal multiplier for a number of EU countries from a tightening of government consumption – both temporary and permanent – with the impact of the ZLB on nominal interest rates. A temporary shock is defined as a tightening of government consumption of 1.0% of GDP for two years, which then returns to baseline. In this case we make a distinction between situations when the ZLB is operational and when it is not. Theoretically, a situation of constrained monetary policy could lead to higher fiscal multipliers compared with normal times. In the case of permanent shocks, the change in the fiscal variable continues indefinitely and does not return to baseline. This can be interpreted to constitute a "fiscal reform", which permanently alters the fiscal structure of the economy.

Chart 1 shows that the ZLB on nominal interest rates only has a small effect on the multiplier for countries that belong to the euro area, especially small Member States

[16] Cordina, G., "A structural econometric model of the Maltese economy", *Quarterly Review* 1996:4, Central Bank of Malta, pp. 44-61, also reports relatively low income tax multipliers. Following a permanent 2 percentage point increase in the personal income tax rate, real GDP settles at a lower level compared with the baseline as the decline in consumption and investment offsets the positive contribution of the expansion in exports and the drop in imports. These findings are also similar to those in Grech, A. G., "An evaluation of the possible macroeconomic impact of the income tax reduction in Malta", *Quarterly Review* 2015:2, Central Bank of Malta, pp. 41-47.

like Malta. The effect on small economies is negligible because country-specific developments, such as GDP and inflation, only have a minor impact on aggregate activity and on inflationary pressures at euro area level. In contrast, the ZLB can have an important effect for the euro area as a whole and for countries outside the monetary union with an independent monetary policy. In the latter cases the multiplier rises above one, as the constant nominal interest rate and the fall in inflation lead to a strong increase in the real interest rate that depresses private spending. This is in line with DSGE-based literature findings, which suggest that the ZLB is one of the most important reasons for a higher than normal short-term multiplier.

Chart 1
REDUCTION IN GOVERNMENT CONSUMPTION IN SELECTED ECONOMIES
(per cent of GDP; impact on GDP in Year 1)



Source: Kilponen et al. (2015).

A permanent adjustment leads to slightly smaller short-run multiplier compared with a transitory reduction. This is due to the large positive wealth effect on households and firms, in which the permanent reduction in public consumption frees resources for private spending on a permanent basis, thereby inducing a larger crowding-in effect on private consumption and investment. Short-run multipliers are even lower when the fiscal room is used to reduce labour income taxes as the anticipation of lower future taxes induces households to gradually increase their labour effort.

Permanent fiscal shocks allow for an assessment of both short and long-run multipliers. In a permanent fiscal scenario, the long-run response of GDP depends critically on the instrument that is determined by the fiscal rule.[17] This is illustrated in Table 2, which compares two different simulations. In the first case the fiscal rule, that is, the instrument that adjusts

Table 2
SHORT AND LONG-RUN MULTIPLIERS WITH DIFFERENT FISCAL INSTRUMENTS
Impact on GDP; per cent deviation from baseline

	Year 1	Year 2	Long-run
Reduction in government consumption			
Fiscal rule: Lump-sum transfers	-0.68	-0.37	-0.51
Fiscal rule: Labour income tax	-0.62	-0.21	0.30

Source: Authors' calculations.

[17] The fiscal rule is a technical instrument used in econometric models aimed to replicate, in a mechanical fashion, the Government's behaviour in managing fiscal policy to prevent public debt from following an unstable path that will lead to insolvency.

in the long run after the fiscal space is created by the consolidation, is specified in terms of non-distortionary lump-sum taxes. In the second case, the fiscal rule depends on distortionary labour income tax.

Financing matters a lot in the long run: when the fiscal space from the reduction in government consumption is used to permanently lower distortionary labour income taxes, the long-run multiplier becomes positive. The reduction in the labour tax rate provides an incentive to increase employment, thereby raising the productivity of capital, leading to relatively large supply-side effects on production and economic activity.

4.2 The role of liquidity-constrained consumers

The results presented so far are based on the baseline calibration of EAGLE for the Maltese economy.[18] In this section we analyse the sensitivity of the results with respect to some changes in the model's calibration aimed to mimic conditions along the business cycle. More specifically, the sensitivity analysis tries to replicate a recessionary environment, reflected by a higher share of liquidity-constrained households, with the latter share being raised from 25% in the baseline case to 55%. It focuses on two scenarios, a permanent reduction in government consumption and a permanent increase in labour income taxes.

Table 3 shows that both the short and long-run multipliers become larger in absolute terms when there are more liquidity-constrained households, reflecting the fact that these households are less able to smooth consumption than unconstrained ones. In both scenarios, however, the multipliers remain smaller than one in absolute terms.

Table 3
SENSITIVITY TO A HIGHER SHARE OF LIQUIDITY CONSTRAINED
Impact on GDP

	Baseline	Higher share of liquidity constrained households + 30 percentage point from baseline
Permanent reduction in government consumption		
Lump-sum transfers in fiscal rule		
Year 1	-0.68	-0.74
Year 2	-0.37	-0.41
Long-run	-0.51	-0.65
Permanent increase in labour taxes		
Lump-sum transfers in fiscal rule		
Year 1	-0.14	-0.19
Year 2	-0.33	-0.36
Long-run	-0.72	-0.80

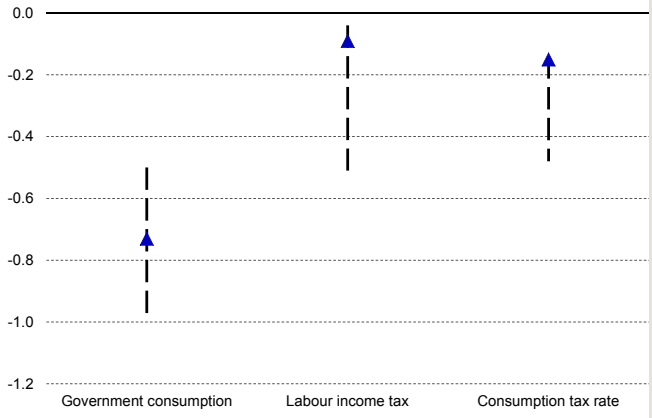
Source: Authors' calculations.

[18] Micallef, B., "Measuring the effects of structural reforms in Malta: an analysis using the EAGLE model", *Working Paper* No 01/2013, Central Bank of Malta.

4.3 Cross-country comparison

Finally, we compare the estimates of fiscal multipliers for different spending and tax instruments with those in other EU economies. All results are obtained from DSGE models maintained within the European System of Central Banks using a harmonised exercise. The simulations consist in a reduction in government consumption and increases in households' labour income tax and the consumption tax rate. In all cases, the change in the policy instrument amounts to 1.0% of baseline GDP.

Chart 2
RANGE OF FISCAL MULTIPLIERS IN SELECTED EU ECONOMIES
(per cent on GDP; impact on GDP in Year 1)



Source: Authors' calculations based on Kilponen et al. (2015).

Chart 2 plots the first-year fiscal multiplier in Malta, together with the range of estimates for 14 other EU economies. A number of interesting conclusions emerge. First, short-term multipliers are smaller than one in absolute terms for all models, irrespective of the countries considered and the nature of the fiscal shock. Second, reductions in government consumption are typically associated with larger short-run GDP effects compared with increases in taxation. Third, multiplier estimates for small and open economies, such as Malta, are generally smaller than in larger economies. This could be due to a higher propensity for importation in small open economies, which tends to lower the multiplier as the demand leakage from imports is more pronounced.

5. Conclusion and policy recommendations

This article provided estimates of multipliers in Malta for alternative fiscal instruments using three different methods. This exercise confirmed a common finding in the literature that there is no "single" fiscal multiplier: in addition to differences originating from the methodology used, multipliers are generally found to be country, time and instrument dependent. They are likely to differ depending on the structural characteristics of the economy and on conjunctural factors, such as the state of the business cycle or the degree of monetary accommodation to fiscal shocks.

Despite these differences, we are able to arrive at a number of conclusions that are in line with the stylised facts that emerge from the literature. Short-run multipliers are smaller than one in absolute terms, irrespective of the methodology used or the nature of the fiscal shock. Spending multipliers, such as those related to a reduction in government consumption, tend to be larger than revenue multipliers. The short-term multipliers presented in this article for government spending range between 0.73 and 0.97, whereas for taxes,

the range is between 0.03 and 0.30. Multipliers from indirect taxes tend to be larger than those from direct taxation owing to their impact on prices, and the latter's impact on output. Multipliers can become larger in a recessionary environment compared with normal times but estimates of multipliers for Malta still remain lower than one.[19] The ZLB has a negligible impact on the multiplier for a small economy like Malta in a monetary union as country-specific shocks have little impact on euro area wide aggregates.

Short-run multipliers are generally lower if the reduction in government consumption is permanently, instead of temporarily, implemented. In the case of permanent shocks, the long-run impact on GDP depends on how the budgetary room for manoeuvre is used following fiscal tightening. Long-run multipliers are negative when the fiscal space materialising after the tightening is used to adjust non-distortionary lump-sum taxes but become positive if distortionary taxation, such as the households' labour income tax rate, is reduced in the medium to long term. Given the anticipation effects, short-run multipliers are even lower when the fiscal space is used to lower distortionary taxes.

These findings lead to a number of policy recommendations. First, a fiscal adjustment strategy based on a combination of expenditure and tax measures may potentially have a lower short-run cost compared with purely expenditure-based consolidation. This is especially the case when there is ample spare capacity or when the economy is financially distressed. Second, once the public debt is permanently stabilised at a new lower level, the fiscal room created by the fiscal consolidation strategy should be exploited to reduce distortionary taxation on labour and capital. This should help to boost the economy's growth potential. Finally, a growth-friendly fiscal consolidation strategy would reduce the short-run negative effects of fiscal measures on economic activity. For this purpose, any fiscal consolidation plan needs to be coherent, credible and well communicated to properly shape the expectations of households and businesses.

[19] This should not be interpreted to construe that fiscal policy is not an appropriate instrument to stabilise demand, especially during times of heightened uncertainty and slack in the economy. For instance, following the collapse of international trade in 2009, the Maltese government intervened at a micro-level by tailoring state assistance directly to those companies in difficulties, mostly in manufacturing and tourism. This temporary and targeted approach was deemed more appropriate than a broad-based fiscal stimulus package, which, in a small and open economy, would have leaked abroad through imports with a reduced effect on the domestic economy. Tailor-made assistance mainly took the form of financial aid for training concerning new business lines and the conversion of tax credits into investment aid. More generally, these measures were aimed at improving the competitiveness of the companies involved and to avoid mass redundancies.