Box 1.3: Does the Ricardian Equivalence Theorem capture the consumption behaviour of Maltese households? (WP01/2018)

The working paper examined the validity of the Ricardian Equivalence Theorem (RET) for the Maltese economy. It analysed the relationship between public debt and private consumption over a period of thirty-seven years, via the application of a univariate cointegrating framework and the application of a VAR generalized impulse response function.

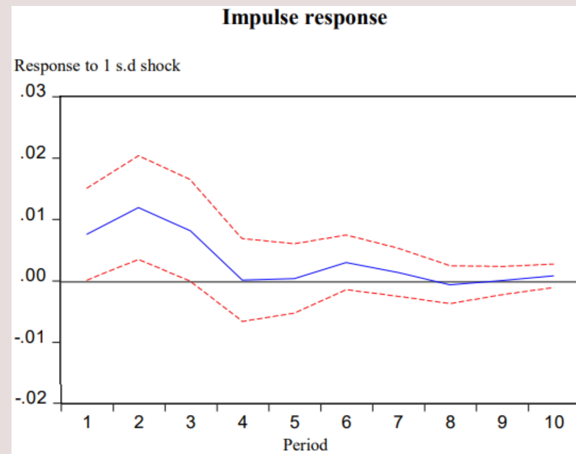
The RET, as put forward by Barro (1974), suggests that it does not matter how governments finance additional expenditure, whether through higher taxation or by issuing bonds, as this in the long run, does not alter household's consumption patterns. Under this framework, the issue of bonds by the government is simply tantamount to postponing taxes which need to be paid at a later stage. A reduction in taxation accompanied by the issue of bonds would, according to the RET, induce economic agents to save by purchasing bonds, in anticipation of a future increase in taxation. Therefore, private savings would increase by the exact amount of the tax cut, implying that overall consumption remains constant. The issue of government bonds would have no effect on the net wealth of households. Although government bonds are a form of asset for those holding them; they also represent a future liability to taxpayers, which need to redeem them at a future date.

Although the RET is more commonly explained in terms of the effect of higher or lower debt on private savings, given the unavailability of data on real private savings in Malta real household consumption was used as a close proxy. This is justified since lower private savings should be reflected into higher private consumption and vice versa, by assuming that household income and wealth remains constant.

The study aimed to examine the potential short-run and long run linkages between government debt and private consumption expenditure based on a univariate cointegrating framework. The empirical results suggest that household consumption behaviour in Malta is not Ricardian. The lack of evidence supporting the presence of a cointegrating relationship between private consumption and public debt indicates that there is no long run relationship amongst these two variables. However, the results obtained from a subsequent application of a vector auto regressive generalized impulse response function suggests that in the short-term, a

rise in public debt does positively influence private household consumption (see Chart A). This implies that in the short term, Keynesian theory may be better suited at explaining the behaviour of Maltese households in response to changes in the level of public debt.

Chart A: Impulse response of private consumption to a shock in public debt



The results suggest that in response to a rise in public debt, households may not necessarily perceive that they will have to pay more in taxes at some point in the future. In fact, one of the most important implications which stems from the failure of the RET relates to the possible rejection of the theory's assumption of intertemporal linkages across generations.

These results support the view that on aggregate Maltese households may exhibit myopic behaviour with the possibility that increases in public debt translate into a positive stimulus for consumption expenditure, at least in the short-run. This implies that at least in the short-run policy makers can take advantage of the underlying effectiveness of an expansionary fiscal stance to stimulate the economy through higher aggregate consumption. Caution is however warranted as in the longer-term this effect may vanish. At the same time, the non–presence of the RET may not necessarily imply a high level of effectiveness of Keynesian policy. Malta being a small and very open economy has a very high propensity to import, thus implying a high volume of leakages, which implicitly weaken the expansionary effect of the fiscal stimulus. Another factor that needs to be taken into consideration relates to the EU fiscal rules, which limit the permissible deficit and debt levels in a country.