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ASSESSING THE MACROECONOMIC IMPACT OF EXTENDING HOTEL HEIGHT LIMITATIONS

BOX 2: ASSESSING THE MACROECONOMIC IMPACT OF EXTENDING HOTEL HEIGHT LIMITATIONS[1]

This Box quantifies the macroeconomic impact of the revised policy framework by the Malta Environment and Planning Authority (MEPA) to facilitate the vertical extension of hotels, which are rated as three-star or above by the Malta Tourism Authority (MTA), and are operative all year round.

The Hotels Height Limitation Adjustment Policy was initially approved by the Government in May 2013 to upgrade the tourism product and facilities of existing bed stock, thereby ensuring a more competitive tourism sector. In 2014 MEPA published a revised policy framework. This followed a previous version, which had been considered too restrictive as it had rendered unfeasible a significant number of proposals for the upgrade and extensions of hotels.[2]

The revised policy applies exclusively to hotels, which are not located in a scheduled area, outside development zones, on a ridge edge or within the urban conservation area. Eligible hotels may apply to vertically extend their establishments to not more than two additional floors above the height limitation permitted in the Local Plan. MEPA may also consider the extension of a hotel to more than two floors above the height limitation provided that:

(i)   the hotel premises are not less than 5,000 m^2;
(ii)   the site is surrounded by existing or planned road infrastructure;
(iii)   the site accommodates stand-alone buildings.

In all cases, applications will be assessed against three main criteria, namely, to improve the overall product, to address the issue of seasonality and to target markets and new product niches.[3]

Design of policy simulation

The simulations are based on the Central Bank of Malta's structural econometric model, which has been recently updated to include fiscal, financial and macro-linkages.[4]

While the model is mainly focused on the aggregate macroeconomic variables, it also contains considerable sectoral disaggregation. For instance, overall investment is divided into

three categories, residential and government investment, and non-dwelling public investment. Similarly, the model makes a distinction between tourism and non-tourism exports. Given these features, the model is ideally suited to quantify and trace the impact of policy measures on overall economic activity and on the main macro-variables, namely, employment, trade and the fiscal balance.

Table 1 outlines a number of hotel statistics for the three categories under consideration, which form the basis of the policy simulation as at the end of the second quarter of 2014.

The simulation concerning the economic impact of this policy is based on the following data. The above information was used to calculate the number of additional hotel rooms and bed capacity if all, or some, of the eligible hotels participate in this initiative. Given the criteria set by MEPA and MTA, this policy is applicable to seven establishments within the five-star category, and to 37 and 48 hotels in the four-star and five-star categories, respectively. We assumed that approximately 50%, 25% and 10% of the eligible hotels, about 18 in all, within the three respective categories would take up the offer. This would translate in an increase of 5.8% in bed capacity (see Table 2).[5]

The simulation has been further adjusted to take into account that hotels are operating close to full capacity only during the third quarter of the year. As a result, when adjusted for

Table 1
HOTEL STATISTICS AS AT END 2014 Q2

	Number of hotels	Number of bedrooms	Number of bed places
5-Star	15	3,468	6,905
4-Star	45	7,983	17,496
3-Star	49	5,172	11,834
Source: NSO.			

Table 2
BASELINE CALCULATIONS AND ASSUMPTIONS

	5-star	4-star	3-star	Total	Currently available in all categories	Increase due to policy
Bedrooms	236	656	203	1,095	18,564	5.90%
Bed capacity	479	1,439	464	2,381	40,936	5.80%
Assumed increase in bed capacity						5.80%
Nights in 3 – 5-star hotels between July-September 2013						2,600,781
Increase in nights attributable to policy (=5.8%*2,600,781)						150,845
Total nights in all categories during 2013						8,501,147
Impact of policy in terms of % increase in total nights over a whole year (=150,845/8,501,147)						1.80%
Source: Own calculations.						

[5] To estimate the number of additional rooms that would result from a further two floors, information on the total number of rooms per hotel was supplemented by data on the existing number of floors. Eligible five-star hotels have an average of eight guest floors, while following discussions with MTA we assumed that the other two hotel categories have an average of five guest floors each.

the seasonality in occupancy rates, this policy will result in an average increase in nights stayed of around 1.8%. The expansion in capacity is assumed to rise gradually, starting from the second half of 2016 and reaching its full potential from 2019 onwards.

In terms of construction, we estimate that the capital investment by the hotel industry will amount to €100.0 million, spread over a period of four years.[6] Investment is assumed to start in 2015 and will continue until the first half of 2019.
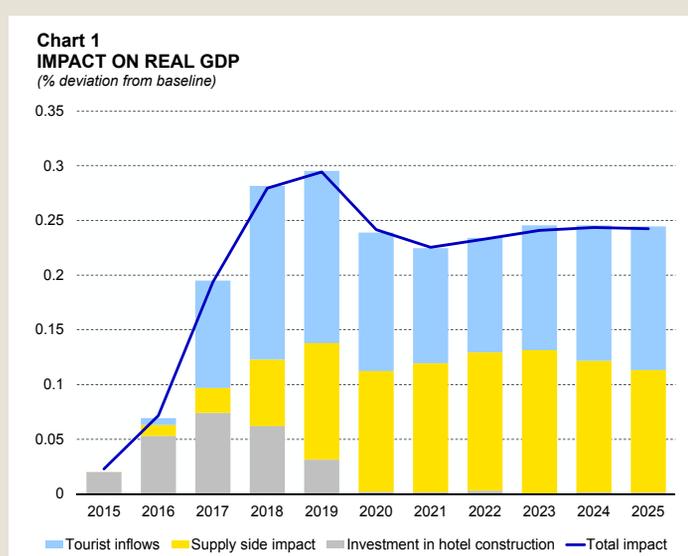
Results

Chart 1 plots the impact of the simulation on real GDP for the period 2015–2025. As expected, the simulation has a positive effect on real GDP, with the impact becoming gradually evident from 2015 onwards, reaching a peak in 2019 before stabilising at around 0.25% in the long run.

The chart decomposes the impact on real GDP into three different contributors. Initially, the main driver of growth is the higher construction investment in the hotel industry. The increase in investment boosts the country's supply potential, which explains why this category continues to contribute positively to economic activity even after the initial construction investment in hotel accommodation is assumed to finish by 2019.

Buoyant economic activity leads to an improvement in the labour market, with an increase in employment growth and disposable income and, subsequently, in private consumption expenditure. The latter is also affected by the positive impact of higher investment in construction on house prices through wealth effects. The rise in the supply capacity exerts downward pressure on prices, which leads to gains in price competitiveness and to a gradual increase in real exports.

The category labelled "Supply side impact" captures the impact of the initial investment in hotel construction on the country's capital stock, thereby exerting a positive effect on the economy's supply potential. Finally, once the investment in additional hotel floors is finalised, the increase in hotels' bed capacity will accommodate a higher inflow of tourists, especially during the peak

Chart 1
IMPACT ON REAL GDP
(% deviation from baseline)

Legend: Tourist inflows · Supply side impact · Investment in hotel construction · Total impact

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[6]   The investment of €100.0 million is in net present value terms. We applied a discount rate of 4.75%, which was the average bank lending rate to non-financial corporations for 2013. We assumed that a representative hotel within the five-star category will invest €150,000 per additional room, €75,000 for the four-star category and €60,000 for the three-star. These figures were designed in conjunction with the MTA and the MHRA based on recent investment trends in the respective hotel categories.

season. The addition in total nights and expenditure by tourists will, in turn, percolate to economic activity via its positive impact on employment and wages, leading to further gains in private consumption and investment.

Higher aggregate demand stimulates imports, especially given the high import content of investment, leading to a deterioration in the trade balance-to-GDP ratio, especially in the short to medium run. In the long run, however, the trade deficit is corrected by the increase in exports from higher tourist inflows, leading to a small surplus of around 0.1 percentage point of GDP.

The improvement in economic activity also exerts a positive impact on the fiscal balance-to-GDP ratio, owing to an increase in government revenue and a reduction in expenditure. The former is driven by higher tax revenues while automatic stabilisers are behind the decline in expenditure. Overall, the fiscal balance improves by around 0.1 percentage point of GDP. The combination of higher GDP and the improvement in the fiscal balance leads to a gradual decline in the government debt-to-GDP ratio.

Sensitivity analysis
A scenario analysis like the one presented in the previous section is naturally conditioned by the underlying assumptions and hence, is subject to a degree of uncertainty. One way to quantify this uncertainty is to compute different scenarios by changing the assumptions underlying the baseline results.

In this section we envisage three different scenarios.

In the first scenario, we assume a lower interest by hotels in pursuing this policy, such that the initial investment will amount to €50.0 million, compared with €100.0 million in the baseline scenario, with the increase in bed capacity being reduced to 0.9% as a result.[7]

The opposite is assumed in the second scenario, with the investment accelerating to €150.0 million owing to more eligible hotels taking advantage of this scheme.[8] In this scenario, the average annual increase in bed capacity is assumed to rise from 1.8% in the baseline to 2.7%.

In the third scenario, we assume that investment will remain unchanged compared with the baseline, at €100.0 million, but that additional efforts are undertaken to increase the occupancy rates. More specifically, in this scenario we assume that the number of quarters that hotels operate at close to full capacity rises to two (covering April to September) and, hence, the increase in total nights goes up from 1.8% in the baseline scenario to 3.3%.

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[7]   In the first scenario, we assume that 25.0%, 12.5% and 5.0% of the eligible five, four and three-star hotels, respectively, expand their bed capacity. The investment amount of €50.0 million was derived by assuming the same ratio of investment to the percentage increase in total nights in the baseline scenario. In this case, this ratio is multiplied by 0.9%, which is the calculated percentage increase in bed capacity, given the assumptions on the number of hotels that are interested in taking up this initiative.
[8]   In the second scenario, we assume that 75.0%, 37.5% and 15.0% of the eligible five, four and three-star hotels, respectively, expand their bed capacity. The same calculations apply as in the other scenario.
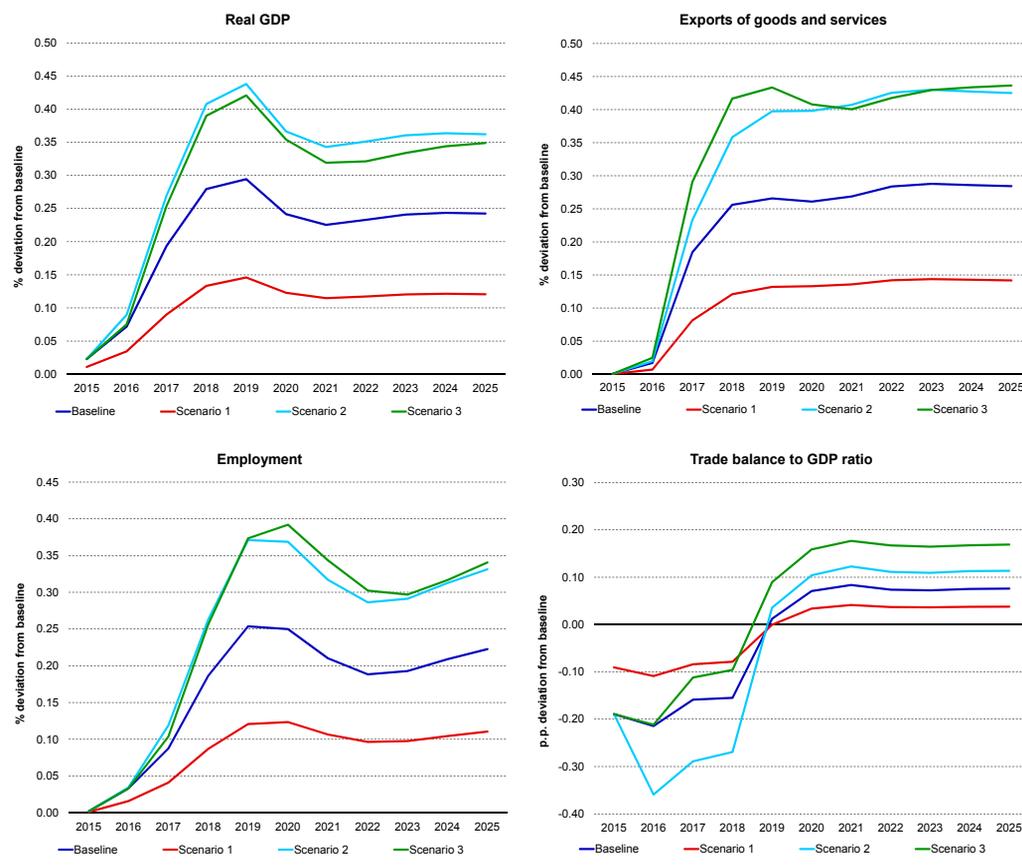
Chart 2
SENSITIVITY ANALYSIS

Chart 2 illustrates the impact of the various scenario analyses on the main variables. In terms of real GDP, the long-run impact ranges from around 0.12% to 0.36%. In the third scenario, namely the one associated with a higher occupancy rate, the long-run impact on GDP increases from around 0.25% in the baseline scenario to around 0.35%.

As expected, the impacts of the second and third scenarios on all variables are more pronounced compared with the baseline, while the first scenario is always lower.

Conclusion

The study finds that the policy has a positive effect on economic activity, with its impact on GDP being felt from 2015 onwards and stabilising at around 0.25% in the long term. Model decomposition suggests that this effect is driven by a number of factors, including the initial investment in construction, the impact on the supply potential and higher tourism receipts. In general, the simulation underlines the special role of productive investment in directly stimulating both the demand and supply side of the economy.

With regard to the other macroeconomic variables, the increase in economic activity leads to higher employment, income and to an improvement in the fiscal balance. The trade

balance tends to deteriorate in the short to medium term, though this effect will be corrected over the longer term from the rise in exports owing to higher inflow of tourists, leading to a small surplus in the long run.

This policy should not be assessed in isolation, but rather from a holistic perspective as part of ongoing efforts by policy makers and the business community to upgrade the tourism product. For instance, one possible limitation to this study is that the baseline scenario does not take into consideration the possibility of additional investment by entrepreneurs to upgrade existing facilities, which are not currently classified as three-star hotels.

Anecdotal evidence indicates that there is substantial interest in the lower categories, mainly two-star hotels and guesthouses, to upgrade their services to three-star status so that they become eligible to benefit from this policy. Additionally, notable interest is also expressed from owners of hotels, which are currently non-operative, thereby contributing further to the upgrade of the local tourism product. Furthermore, this study excludes the potential ancillary investment related to the possible refurbishment of the remaining floors in hotels expanding their bed stock. Hence, benefits and economic spillovers resulting from such additional investment will yield an even more pronounced impact than that reported in the baseline scenario.

Finally, model simulations suggest that the macroeconomic impact of this policy would be higher if the investment in tourism supply infrastructure, in the form of additional bed capacity by hotels, is complemented with additional marketing efforts to increase demand during non-peak seasons to generate more revenue to cover higher running costs. This is especially important given the strong seasonality of tourism in Malta, with a number of hotels operating significantly below capacity for several months. Given the anticipated rise in capacity, demand-side oriented policies should be pursued in tandem to attract more tourists during the winter and shoulder seasons. These would focus on already identified sectors, which have shown growth potential, such as culture and heritage, business and sport tourism.