Economic Note: The Possible Evolution of the Maltese Economy in 2020 and 2021

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1. Executive Summary

This Economic Note attempts at forecasting the effect of COVID-19 on the economy of Malta. This is done through the economic modeling and simulations of four possible scenarios, ranging from Mild to Severe. The analysis is focused mainly on the tourism and retail sectors.

We anticipate a loss in Gross Value Added of between 6.1% and 16.1% for 2020, and a scissor varying from an unchanged position to a 19.0% loss in 2021.

The Maltese economy is expected to contract between 2.1% and 12.5% in 2020, but will go back in positive territory in 2021, from as little as 0.2% to a bumper 10%.

Tourism will be badly hit in all scenarios due to global travel bans, while retail, even though suffering, is likely to be the first sector to rebound.

2. Introduction

COVID-19 has caused a public health emergency throughout the world. In response to these events, governments have put in place a number of containment measures to stem the spread of the virus.

The modern world has never before experienced such a synchronized and all-encompassing shock from both a health and economic perspective. From an economic forecasting point of view, the level of global uncertainty is unprecedented, in that the models of economic impacts depend on the length of the event and its incidence, which at present are undefined.

At the same time, most existing macroeconomic models are ill-equipped to deal with this shock as they tend to be based on aggregate demand and supply, whereas the current emergency is basically closing down completely a significant number of sectors. As a result, one needs to modify standard models while using information from other approaches.

In the context of high uncertainty rather than focusing on one specific forecast, one is best served by looking at a number of scenarios.

[1] Restricted circulation. Not for re-distribution or reproduction without prior consent. This Economic Note was researched on the basis of information available as at 24 April 2020, and reflects the state of knowledge on the extent and duration of the COVID-19 pandemic prevalent up to that date. Given the fluidity of the situation, it is important to note that conclusions made here may differ significantly from those which would be made using the same methodology on the basis of more updated information.

3. Simulation Shocks

We have identified the following shocks that allow us to build a number of scenarios depending on different assumptions:

i. **Lockdown**: a full lockdown was imposed on specific sectors of the economy, beyond lost demand due to the travel ban.

ii. **Travel ban**: based on the various announcements and some judgement on the duration.

iii. **Supply chain restrictions**: reflecting possible disruptions to the global supply chain affecting especially the manufacturing industry.

iv. **External demand**: the lockdown measures in other countries are impacting the demand for Maltese products and services (we exclude tourism, which is considered separately). This impact is based on our reading of projections made for Malta's main trading partners, but excludes the impact of any European Union wide package which has yet to be agreed, and whose form, magnitude, reach and effectiveness is still unknown. Nevertheless, any package would have a positive effect both on external and internal demand.

v. **Economic stimulus package**: incorporating the projected impact of measures announced so far by the Maltese government.

4. Scenarios

We have set out four scenarios based on different assumptions about the development of the five factors described earlier. The scenarios range from a best-case scenario where there is a very rapid bounce back to previous conditions (the thinking at the start of the pandemic), to a worst-case scenario where the virulence of the pandemic takes much longer to be restrained, impinging heavily on 2021 prospects.

4.1 Scenario 1: Mild (V-shaped recovery)

Shock	**2020**	**2021**
Lockdown	Duration: 6 weeks	None
Travel ban	Duration: 6 weeks Loss: 90% of 2019 tourist arrivals	None
Supply chain restrictions	Duration: 10 weeks Effect: 15% of manufacturing industry	None
External demand	No change	No change

This best-case **Mild** scenario assumes that there will soon be the widespread availability of reliable anti-body testing that would reveal that a relatively large part of the population is immune to COVID-19. Moreover, tests confirm that the level of immunity is quite high and long-lasting, and a vaccine will start to be rolled-out to the public by end of this year.

This implies that already in 2020, a large part of the population will be able to return to work. The travel ban will most likely continue till the start of summer (twelve weeks), but as the pandemic eases, travel destinations will slowly start opening. Still, travel will remain restricted till the end of 2020, that is till the vaccine starts to be administered to the world population.

Domestically, preventive lockdowns will end a couple of weeks after the local transmission curve peaks. Under this optimistic scenario, the peak of the pandemic in Malta is projected to occur in the third week of April, with lockdowns starting to be partially lifted by the start of May. Domestic economic activity will start to slowly return to normal after around an economic lockdown of six weeks.

Supply-side disruptions stemming from imports will last till the worse affected economies start opening their manufacturing plants, which we anticipate being around ten weeks and affecting 15% of manufacturing industries. Following the worldwide roll-out of vaccines, economic activity and crucially the tourism industry is assumed to return to normal in 2021.

4.2 Scenario 2: Moderate (U-shaped recovery)

Shock	**2020**	**2021**
Lockdown	Duration: 8 weeks (full)	Duration: 6 weeks (partial)
Travel ban	Duration: 12 weeks Only partial arrivals in November / December Loss: No senior tourist arrivals	Duration: January – March No senior tourist arrivals until summer Vaccine re-opens borders Loss: 40% of 2019 tourist arrivals
Supply chain restrictions	Duration: 12 weeks Effect: 15% of manufacturing industry	None
External demand	No change	Loss: 2% of external demand

Under the **Moderate** scenario, we assume that only a small proportion of the population will be immune to the infection and that the vaccine will only become available in mid-2021. Furthermore, the local peak in the transmission will occur in early May.

This means that the current full lockdown will be partially lifted only in mid-May after eight weeks in place. The travel ban is therefore assumed to persist till mid-summer, but with partial lockdowns still in place for restaurants and accommodation establishments (in the form of mandatory reduced capacity). This implies that the tourism industry will suffer throughout summer.

With a fraction of the population immune to the COVID-19 virus, the infection rate will increase again in autumn and winter (second wave of transmission). However, with the health system and the population already prepared after the first outbreak, the outbreak will be manageable with less stringent lockdowns (with retail outlets remaining open for instance).

2021 will economically see a weak first half with limited travel and partial lockdowns in the economy. Since the authorities are well-prepared there will be no supply-chain restrictions on manufacturing. The economy at large, but mainly tourism and manufacturing, will be affected by lower external demand as the world-wide recession extends in 2021.

4.3 Scenario 3: Relapse (W-shaped recovery)

Shock	**2020**	**2021**
Lockdown	Duration: 10 weeks (full, including 2 weeks in Q4)	6 weeks (full)
Travel ban	Duration: 12 weeks (including Q4) Loss: 70% of 2019 tourist arrivals	Duration: 12 weeks at the beginning of the year Gradual recovery Loss: 40% of 2019 tourist arrivals
Supply chain restrictions	Duration: 12 weeks Effect: 15% of manufacturing industry	Duration: 12 weeks Loss: 15% of manufacturing
External demand	External demand falls but supply conditions are binding	Loss: 7% of external demand

This **Relapse** scenario is based on the Moderate outlook but assumes that a further outbreak during next autumn and winter is not manageable and that lockdowns and travel bans enacted up to spring of 2021 will be similar to the ones in place at the moment.

Therefore, the end of 2020 and more importantly the first half of 2021 will be characterized by stringent lockdowns and travel bans, similar to the ones currently in place. Moreover, import restrictions will re-emerge.

The roll-out of the vaccine in the second part of 2021 will result in a removal of lockdowns and travel bans, but foreign and domestic demand will remain subdued after more than a year of repeated lockdowns.

4.4 Scenario 4: Severe (L-shaped recovery)

Shock	**2020**	**2021**
Lockdown	Duration: 10 weeks (full), partial until end of the year	8 weeks (full), partial until Q3
Travel ban	Duration: 36 weeks Loss: 70% of 2019 tourist arrivals	Very restricted travel between Q1 and Q3 Vaccine re-opens borders in Q4 Loss: 70% of 2019 tourist arrivals
Supply chain restrictions	Duration: 40 weeks Effect: 90% of manufacturing industry	Duration: 25 weeks Loss: 90% of manufacturing
External demand	External demand falls but supply conditions are binding	Loss: 13% of external demand

The main assumption of this worst-case **Severe** simulation is that immunity guaranteed by anti-bodies gained through infection is short-lived and unstable, implying that lockdowns will only be completely lifted after the vaccine is rolled-out to the public. Moreover, this scenario assumes that the public will only be immunized in the fourth quarter in 2021.

In the meantime, after eight weeks, the current lockdown will be partially lifted. Mandatory quarantine will still be imposed on foreign travellers till Q3 2020. From Q4 2020 onwards, travel will be possible but severely restricted.

Lockdowns in restaurants and accommodation outlets will be partial but will last until the third quarter of 2021. Import restrictions will become less severe but will affect manufacturing throughout the rest of 2020 and the first three quarters of 2021.

External demand will severely hit foreign oriented industries with severe second-round effects on local demand.

5. Modelling Strategy

The type of shock the economy is facing cannot be adequately studied by using a traditional demand-side model, as this fails to capture shut-downs of particular industries. Moreover, government measures aimed at maintaining employment levels unchanged in spite of declining demand mean that the typical relationship between output and employment no longer holds in this situation.

Similarly, standard supply-side models could also misconstrue the situation, as they would not be able to adjust for a large decline in productivity and would try to adjust it back to normal levels.

As a result, this Economic Note is based on:

i. **An input-output framework**: which allows to quantify the effects of sector specific shocks on other sectors and the overall economy. This is done by internalising sectoral interlinkages through demand-side and supply-side models.

ii. **A traditional aggregate demand macro-model**: which allows us to convert results obtained by the input-output and fiscal frameworks on the expenditure side of the economy.

6. Sectoral Losses in Gross Value Added Compared to Baseline Results

As a baseline, in the absence of the pandemic, we would have conservatively projected the Maltese economy to have grown by 3.8% in 2020 and by 3.6% in 2021. This is in line with national and international projections, which must be said, tended to underestimate the resilience and growth of the Maltese economy over the past few years.

The table below presents the percentage loss in sectoral **Gross Value Added** under the four scenarios, excluding the impact of the economic stimulus measures. This is in turn included in our revised forecast of the growth in **Gross Domestic Product** for 2020 and 2021, which again we choose to keep on the conservative side out of caution.

As one would expect, the worst affected sectors are related to tourism, but even in the Mild scenario there are double digit losses in retail, aquaculture, manufacture of food and beverages, and sports.

Sector	**Mild**		**Moderate**		**Winter**		**Severe**	
	2020	2021	2020	2021	2020	2021	2020	2021
Agriculture	(7.3)	0	(8.9)	(4.1)	(13.1)	(11.9)	(19.6)	(19.7)
Fishing and aquaculture	(10.7)	0	(13.0)	(6.6)	(19.2)	(18.1)	(28.9)	(31.1)
Manufacture of food, beverages and tobacco products	(11.3)	0	(13.7)	(6.0)	(20.1)	(17.6)	(30.3)	(30.2)
Manufacture of textiles, wearing apparel and leather	(1.9)	0	(2.3)	(3.1)	(3.0)	(7.8)	(5.0)	(10.7)
Manufacture of wood	(5.0)	0	(6.1)	(3.1)	(8.6)	(9.8)	(13.6)	(14.6)
Printing, pharmaceutical products, rubber and plastic	(2.0)	0	(2.4)	(3.0)	(3.2)	(7.6)	(5.2)	(10.6)
Manufacture of other non-metallic mineral products	(3.3)	0	(4.0)	(1.7)	(5.4)	(5.9)	(8.7)	(8.7)

Manufacture of fabricated metal products	(3.7)	0	(4.4)	(2.4)	(5.7)	(7.7)	(9.7)	(11.2)
Manufacture of electronic products, other manufacturing	(1.9)	0	(2.2)	(3.0)	(2.4)	(8.0)	(4.9)	(10.8)
Quarrying and construction	(2.7)	0	(3.3)	(1.4)	(4.5)	(4.7)	(7.2)	(7.1)
Wholesale trade	(9.5)	0	(12.0)	(5.5)	(16.7)	(14.5)	(21.5)	(29.6)
Retail trade	(15.1)	0	(19.5)	(4.9)	(26.1)	(18.9)	(31.2)	(35.2)
Land transport, air transport, warehousing and support	(12.1)	0	(14.8)	(5.6)	(24.5)	(21.1)	(38.6)	(33.6)
Accommodation and food service activities	(31.9)	0	(38.7)	(16.2)	(58.3)	(44.4)	(86.6)	(84.0)
Telecommunications and computer programming	(5.4)	0	(6.8)	(2.6)	(9.4)	(9.3)	(12.0)	(13.4)
Financial services, except insurance and pension funding	(1.0)	0	(1.2)	(3.2)	(1.8)	(7.0)	(2.6)	(9.6)
Insurance, reinsurance and pension funding	(4.3)	0	(5.2)	(3.3)	(7.7)	(9.1)	(11.2)	(13.6)
Real estate activities	(7.0)	0	(8.6)	(3.6)	(12.6)	(10.9)	(18.2)	(17.8)
Legal and accounting activities, management consultancy	(2.0)	0	(2.5)	(3.4)	(3.7)	(8.0)	(5.3)	(11.4)
Professional, scientific and technical activities, advertising	(6.9)	0	(8.5)	(4.5)	(12.4)	(12.7)	(17.4)	(20.5)
Employment activities	(4.8)	0	(6.0)	(3.9)	(8.7)	(9.9)	(12.3)	(16.8)
Travel agency, tour operator services and related	(28.2)	0	(34.5)	(16.5)	(51.4)	(40.6)	(74.8)	(83.9)
Security and related activities	(3.1)	0	(3.8)	(3.1)	(5.7)	(8.2)	(8.4)	(12.0)
Education	(2.9)	0	(3.6)	(2.1)	(6.0)	(6.8)	(9.4)	(10.4)
Creative, arts and entertainment, gaming	(0.5)	0	(0.6)	(3.1)	(0.9)	(6.5)	(1.4)	(8.8)
Sports, amusement and recreation activities	(14.7)	0	(18.0)	(4.9)	(29.7)	(21.8)	(47.0)	(35.7)
Other personal service activities	(8.4)	0	(10.3)	(4.3)	(15.3)	(12.8)	(22.4)	(21.5)
Total GVA loss	**(6.1)**	**0**	**(7.6)**	**(4.0)**	**(11.1)**	**(11.4)**	**(16.1)**	**(19.0)**
Growth in GDP	**(2.1)**	**10.0**	**(3.6)**	**7.5**	**(7.3)**	**3.3**	**(12.5)**	**0.2**

7. Forecast of Growth in Gross Domestic Product

These simulations anticipate a loss in Gross Value Added of between 6.1% and 16.1% for 2020, and a scissor varying from an unchanged position to a 19.0% loss in 2021.

The Maltese economy, as almost all economies globally, is expected to contract in 2020. Our estimates are between 2.1% and 12.5% depending on the scenarios. Nevertheless, this is generally a better performance than its economic peers.

We anticipate the Maltese economy to go back in positive territory in 2021, from as little as 0.2% to a bumper 10%. According to our models, in all four simulations, there would be positive GDP growth in 2021. In fact, even in the Relapse scenario, there would be a very respectable growth of 3.3% in 2021, obviously from a lower baseline. However, this would still leave the Maltese economy relatively divergent from the trend path that it was on pre-COVID-19.

This forecast includes the initial estimate of the economic impact of the economic stimulus package offered by the Maltese government, which we estimate should help recoup between 0.5% and 0.75% of GDP lost in 2020.

In the Mild scenario, in 2021 the economy would recover the loss in 2020 and also achieve the projected growth (pre-COVID-19) anticipated for 2021.

In the Moderate scenario, in 2021 the economy would recover the losses of 2020, but would remain well below the GDP level predicted for 2021 pre-COVID-19.

In both the Relapse and Severe simulations, during 2021 there would be no recovery from the loss made in 2020. In fact, further losses would be made.

Input-output analysis suggests that the sector that is most likely to bounce back rapidly is **retail trade**, with a notable caveat to be made for the Severe scenario. We anticipate that this sector will be able to recoup a large part of its losses in 2021, as it will quickly adapt to new health protocols that will be rolled out, and as international brands will seek not to outprice themselves from their global market share. **Telecommunications and information technology** are also projected to be very quick to recover and return to their pre-COVID-19 expected trajectory.

On the other hand, there are sectors which are unlikely to recover that rapidly, and may even incur a larger loss in 2021. These include **professional services**, such as legal, accounting, rental, leasing and consultancy activities, reflecting the fact that typically after a downturn, firms try to cut down on this sort of expenditure. **Financial services** are also likely to be hit by second-round effects on account of non-performing loans, higher default rates and insurance claims, and lack of investment, even though European Union wide initiatives will help contain these effects. **Manufacturing of non-essentials**, such as clothing and electronics, could also feel such a second wave, though here the lost activity should be quite limited in absolute terms.

Focusing on **tourism**, the likelihood is that even under the most optimistic scenarios in 2021, this sector will globally and nationally be far below its previous path of growth. Even with

the pandemic defeated, the substantial hit in disposable income in source markets will lower demand for travel significantly.

In this respect, one expects resources to be further focused on niche tourism, such as culture, entertainment and event driven tourism), where demand is less elastic and where value added is higher. At the same time, one can anticipate that the global trend towards accommodation sharing, which had become a dominant part of the Maltese market, will slow down, diverting business to collective accommodation (hotels) with more openly verifiable health protocols. This will also likely make more property available in certain segments of the long let rental market, thus dampening rent prices which were considered to have an inflationary effect over the past years.