



Beyond GDP

COMMISSION OF JUSTICE AND PEACE

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Foreword

As soon as the Archbishop appointed me to the role of president of the Justice and Peace Commission of our Archdiocese, I wanted the economy to be at the top of the agenda of the commission.

From its inception, the study of economics has been about the common good of a society. Along the years however we may have focused too much on the aspect of wealth production and consumption, which can be seen as taking away the focus from the common good and emphasizing individualistic needs.

As Pope Francis remarks in his latest encyclical *Fratelli Tutti*, “The mere sum of individual interests is not capable of generating a better world for the whole human family.” The economy as an instrument for the well-being of all, is a faulty instrument if its success depends on the abandonment of some, especially if these are the most vulnerable amongst us.

This in short is the message which the Church through Pope Francis is pushing for. This is not something new or recent, ever since the encyclical *Rerum Novarum* in 1891, the Church has been at the forefront of this movement for a just economy, which serves the interests of all, and which has a vision for an integral human development.

The event the Economy of Francesco happening in Assisi, and supported by the Holy See is another step in the search of how this can be achieved in the current scenario. Given this context, the commission doubled down on its efforts to seek answers to the question of the economy.

We joined forces with two church movements, whose expression of faith is intimately linked with being a testimony of the social

teachings of the Church in daily life, the Focolare movement and the Centesimus Annus Pro Pontifice Foundation (CAPPF).

Together we partnered with EY, and Seed Consultancy who provided their technical knowledge in a process which took over a year to complete and which we hope will serve as a catalyst for a renewal of our economy.

The starting point was the Pope’s claim outlined in his encyclical *Laudato Si*: “We need to correct models of growth incapable of guaranteeing respect for the environment, openness to life, concern for the family, social equality, the dignity of workers and the rights of future generations.” “Today more than ever, everything is deeply connected and that the safeguarding of the environment cannot be divorced from ensuring justice for the poor and finding answers to the structural problems of the global economy.”

The outcome, as the title of the report implies, is that a more just economy needs to look at a bigger picture, not just GDP, to get a true picture of the economy. When one does so, elements which have a great cost on society and our quality of life are factored in, which can severely change the picture one sees even in real wealth terms.

We present this report not as the solution, but as an invitation to widen our views of the economy and for a framework to be put in place, to help to continue to strengthen our economy and transform it into one, in which no one is left behind.

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List of Abbreviations

| | |
|-------|---|
| CAPPF | Centesimus Annus Pro Pontifice Foundation |
| EC | European Commission |
| ERA | Environment and Resources Authority |
| EWA | Energy Water Agency |
| ESPAD | European School Survey Project on Alcohol & Other Drugs |
| EU | European Union |
| FSWS | Foundation for Social Welfare Services |
| GDP | Gross Domestic Product |
| GHG | Green House Gas |
| HDI | Human Development Index |
| IMF | International Monetary Fund |
| MoH | Ministry of Health |
| MRA | Malta Resource Authority |
| NEET | Neither in education nor in training |
| NSO | National Statistics Office |
| PA | Planning Authority |
| PISA | Programme for International Student Assessment |
| SDG | Sustainable Development Goals |
| SILC | Statistics on Income & Living Conditions |
| TM | Transport Malta |
| UN | United Nations |
| UoM | University of Malta |
| WB | World Bank |
| WHO | World Health Organisation |

Acknowledgments

We would like to take the opportunity to express a word of thanks towards all those who in one way or another have contributed to this study.

Firstly, we would like to thank the Archdiocese of Malta, who have supported unconditionally the Justice and Peace Commission, the Focolare Movement and the Centesimus Annus Pro Pontifice Foundation in carrying out this study, in the belief that this outlines the core beliefs of the Church.

Secondly, we would like to thank all experts, academics and key contributors, who participated in our workshops and consultation processes and provided us with valuable feedback and critical thinking, which enabled the creation of a robust and evidence-based framework for this study.

We would also like to thank all the organisations who participated in our stakeholder consultation processes, for sharing their lived experiences, in terms of actual societal challenges witnessed. We also take the opportunity to put forward our gratitude for all the work they do in our society daily, in order to make sure that no one is left behind and that our society is as equitable as possible.

Finally, we also put forward our thanks to APS Bank, EY and Seed Consultancy, for having dedicated time, energy and resources towards this study pro-bono and for having believed in our same cause right from the start.

Executive Summary

Before the onset of COVID-19, Malta was experiencing a strong economic performance, spurred by key sectors such as tourism, real estate, finance and gaming, exhibiting high levels of local and foreign direct investment (FDI), increased job opportunities, record low unemployment figures and a growing influx of foreign workers. Public deficit has been reversed into consecutive years of surplus and public debt figures decreased. In numbers, Malta experienced incredibly high gross domestic product (GDP) real growth rates, averaging at around 7% between 2015 and 2018, with a high of 10.9% recorded in 2015. These results made Malta one of the strongest and most successful economies within the European Union (EU).

For decades GDP has been widely used as the major gauge of success amongst countries. Society, as represented by governments, has focused more on production, value added and GDP, in the belief that higher GDP automatically equates to higher levels of happiness and 'quality of life'.

This narrow GDP focus is however leading to a situation where other factors leading to well-being and a satisfactory quality of life can easily be disregarded. It is within this context that the Justice and Peace Commission, alongside the Focolare Movement and Centesimus Annus Pro Pontifice Foundation, supported by EY Malta and Seed Consultancy, are hereby proposing a new framework, which looks at the success of a country through a combination of socio-economic factors, and thereby going 'Beyond GDP'.

This study is based on the Catholic Social Teaching, whose focus has always been the integral development of humanity. Moreover, this initiative has been spurred on by the 'Economy of Francesco' event organised by Pope Francis, which has been organised to promote 'economic, environmental and social solidarity and sustainability within a more humane economy, which considers not only the satisfaction of immediate desires, but also the welfare of future generations'.

By no means does this report seek to underestimate the importance of money or GDP in the economy. Rather, it proposes that this figure should be viewed in conjunction with other socio-economic data. This study has four main objectives. Firstly, it seeks to be a catalyst for discussion by bringing to the public arena more awareness with regards to issues over and above GDP figures. Secondly, it represents an urgent call for action. Thirdly, it is an invitation for cooperation, since it highlights the need for various entities to work together for holistic well-being. Finally, this document serves as a motivation for further research, since it is a living document which can be improved through time, also as more data becomes available.

With the knowledge that a number of well-being indices and frameworks already exist at an international level, desktop research was undertaken to understand the international landscape and identify the Maltese research gap in this area. Without reinventing the wheel, the OECD's Better Living Index was chosen as a basis of the study and was adapted to reflect the specificities of the Maltese context. This led to the identification of six dimensions, namely: 1) Income and wealth, 2) Housing, 3) Education and skills, 4) Jobs, 5) Health and lifestyle and 6) Environmental quality. For each dimension a long list of indicators was first drawn up and then condensed into a shorter list of 28 indicators, based on data availability and relevance. Data was collected from publicly available portals, such as Eurostat and NSO, and corroborated through a stakeholder consultation process.

List of Chosen Dimensions and Indicators

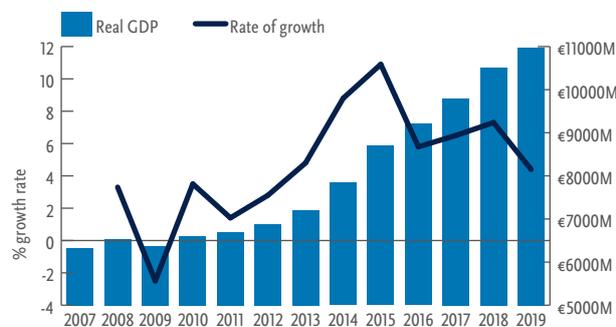
| Dimension | Indicators | Source of data |
|-----------------------|---|---|
| Income | Risk of poverty threshold | Eurostat – SILC Survey |
| | Gini Coefficient | Eurostat – SILC Survey |
| | At Risk of poverty | Eurostat – SILC Survey |
| | In work at risk of poverty | Eurostat – SILC Survey |
| | Material Deprivation | Eurostat – SILC Survey |
| | Risk of poverty and social exclusion | Eurostat – SILC Survey |
| | Children at risk of poverty according to parents' education | Eurostat – SILC Survey |
| Housing | Overcrowding | Eurostat – SILC Survey |
| | Severe Housing Deprivation | Eurostat – SILC Survey |
| | Cost overburden | Eurostat – SILC Survey |
| | Rent as a % of income | Eurostat – SILC Survey |
| | Homelessness | Eurostat – SILC Survey |
| Education and skills | Early School Leavers | Eurostat - Labour Force Survey |
| | Underachievement in Reading/Maths/Science | OECD - Programme for International Student Assessment (PISA) |
| | Tertiary Education Graduates | NSO - Graduate Student Data |
| Jobs | Young People neither in Education nor Training (NEET) | Eurostat - Labour Force Survey (LFS) |
| | Longer Working Hours | Eurostat - Labour Force Survey |
| Health and Lifestyle | Obesity | Eurostat - Quality of Life indicators / Health Behaviour in School Aged Children Study (HBSC 2016) |
| | Common Physical Health Ailments such as heart disease and asthma | State of Health in EU - Country Health Profile 2019 |
| | Mental Health Ailments: (longer working hours, loneliness and depression) | The Prevalence of Loneliness in Malta study (2019) World Health Organisation - Depression and Other Mental Health Disorders (Global Health Estimates) 2017 Ministry of Health Malta - World Health Day 2017 |
| | Drug use and addictions | EMCDDA - European Drug Report and Malta Country Drug Report 2019 |
| Environmental Quality | Assessing Air Quality through particulate matter | Environment and Resources Authority (ERA) - State of the Environment Report 2018 |
| | Levels of Greenhouse Gas Emissions | Malta Resources Authority (MRA) - Greenhouse gas emissions inventory for Malta 2018 |
| | Stock of Licensed motor vehicles by motor vehicle type | Transport Malta (TM) |
| | Stock of licensed motor vehicles by motor energy type | Transport Malta (TM) |
| | Assessing Land Use in Malta | Planning Authority (PA) |
| | Water Exploitation Index | Eurostat - European Statistical System |
| | Waste Management | NSO - Solid Waste Management 2018 NSO - Municipal Waste Management 2018 |

Just like any other study this report had a number of limitations, including lack of available data with reference to particular indicators, such as mental health or homelessness, as well as limitations in terms of metadata imported in our study. For instance, the fact that institutionalised individuals are often not part of the NSO statistics meant that such individuals were not captured in this study. Finally, the greatest limitation was that the study was conducted when the COVID-19 pandemic hit. This not only disrupted the possibilities of face-to-face interviews, but as one would expect, it also shifted local priorities. Undoubtedly, COVID-19 will impact greatly all socio-economic variables, the extend of which will only be fully understood once the pandemic passes. Given that data available is mostly pre-COVID, these effects are not captured in this study.

Results

Key findings on Malta's socio-economic indicators are presented in the next summary.

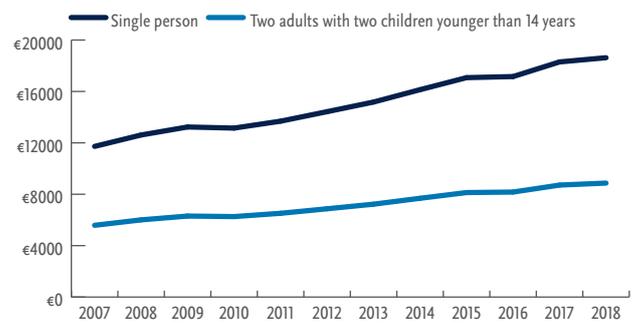
Malta has been experiencing high real GDP growth rates...



Source: National Statistics Office

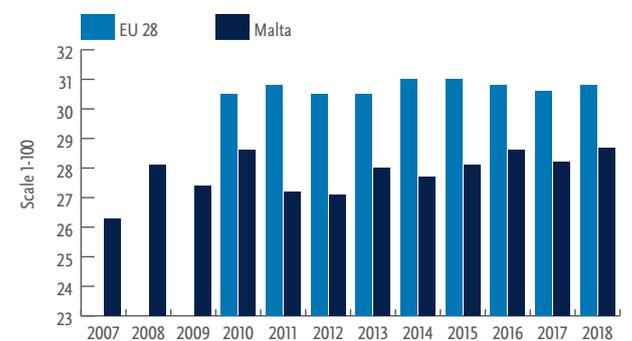
Income

The 'at risk of poverty threshold' has been rising since, on average, people have been earning more...



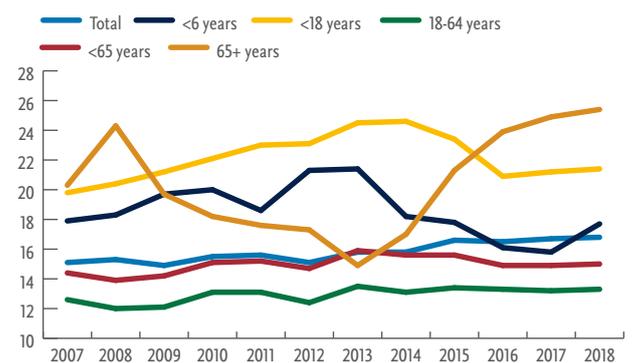
Source: Eurostat. EU_SILC survey ²

...but inequality, given by the Gini co-efficient³ did not decrease; there is actually a marginal increase, indicating a widening disparity.



Source: Eurostat. EU_SILC survey

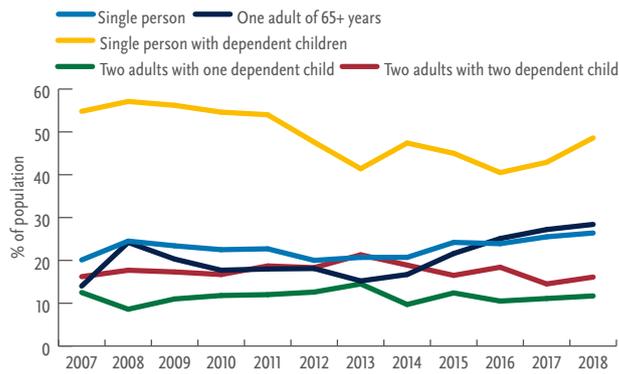
Circa 79,000 individuals (16.8% of the population) are considered to be at 'risk of poverty'. The elderly are more likely to fall in this category...



Source: Eurostat. EU_SILC survey

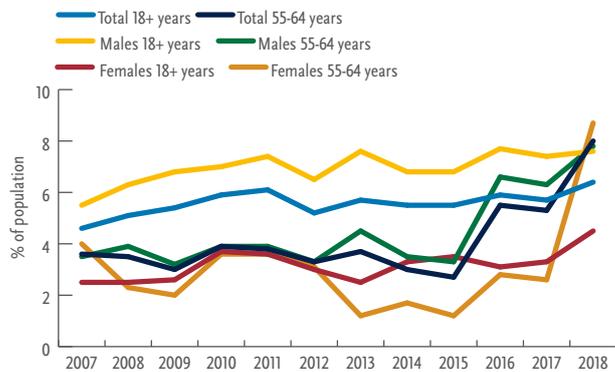
- 1 The threshold is calculated as 60% of the median income
- 2 EU 28 data was not available for the years between 2007 and 2009
- 3 On a scale between 0 and 100, the closer you get to zero, the more equal society becomes.

...while 'single person with a dependent child' is the household type mostly in danger of falling into poverty.



Source: Eurostat. EU_SILC survey

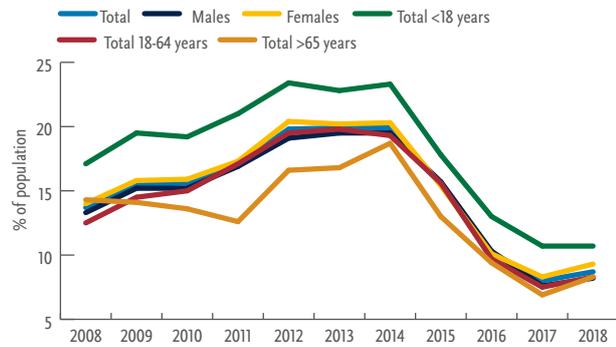
Being in the labour force is becoming less of a guarantee from falling into poverty, as the percentage of people 'in work at risk of poverty' is on the rise.



Source: Eurostat. EU_SILC survey

Material deprivation⁴ seems to be decreasing over time, with only a slight increase in 2019. Minors remain those most deprived.

- 4 Inability to pay for at least three of the following: to pay their rent, mortgage or utility bills; to keep their home adequately warm; to face unexpected expenses; to eat meat or proteins regularly; to go on holiday; a television set; a washing machine; a car; a telephone.
- 5 Inability to pay for at least four of the following: to pay their rent, mortgage or utility bills; to keep their home adequately warm; to face unexpected expenses; to eat meat or proteins regularly; to go on holiday; a television set; a washing machine; a car; a telephone.
- 6 The sum of persons who are either at risk of poverty, or severely materially deprived or living in a household with a very low work intensity.
- 7 Defined as a state whereby individuals do not have the number of rooms appropriate to the size of their household.
- 8 Defined as a combination of being overcrowded, and also featuring at least one of the housing deprived measures that would include: having a leaking roof, no bath/shower and no indoor toilet, or the dwelling considered too dark

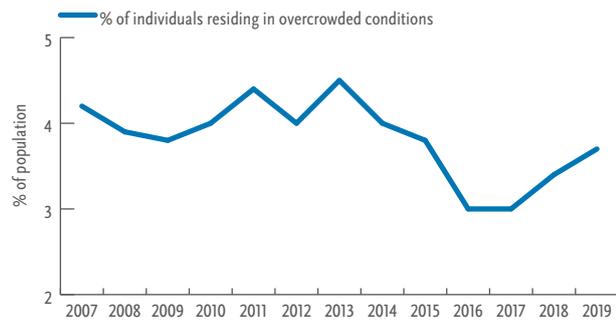


Source: Eurostat. EU_SILC survey

The same trend has been observed for severely materially deprived individuals⁵ and people 'at risk of poverty and social exclusion'⁶.

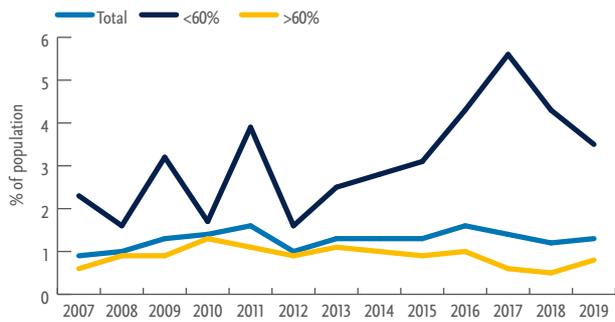
Housing

Overcrowding⁷ has been increasing over the past three years. The percentage is more marked for people at risk of poverty and social exclusion.



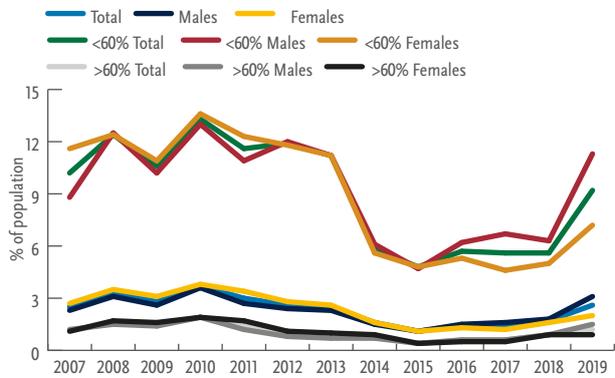
Source: Eurostat. EU_SILC survey

The percentage of those who are severely housing deprived⁸ has been increasing marginally to 1.3% in 2019. It peaks at 3.5% for people at risk of poverty.



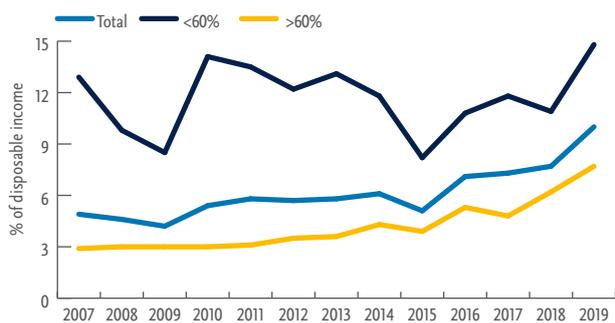
Source: Eurostat. EU_SILC survey

In terms of housing affordability, 'housing cost overburden'⁹ is on the rise for all categories, affecting mostly individuals under the poverty line. Moreover, foreigners experience a much higher cost over-burden, standing at 23.5%.



Source: Eurostat. EU_SILC survey

The cost of rent as a percentage of disposable income is increasing, doubling since 2007.

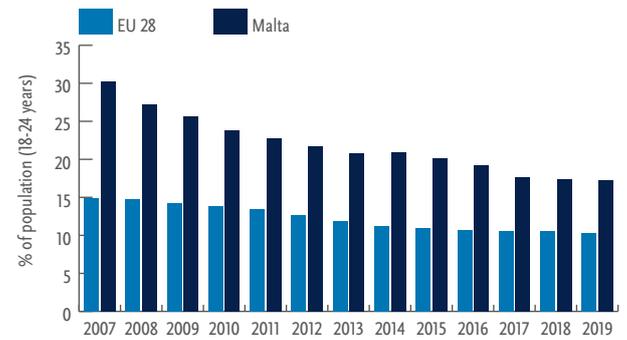


Source: Eurostat. EU_SILC survey

Homelessness remains understudied with lack of data in terms of how many people are roofless and/or homeless. In a national conference held on 8th February 2019, entitled 'Homelessness: The Hidden Scandal', it was estimated that circa 300 people were homeless.

Education

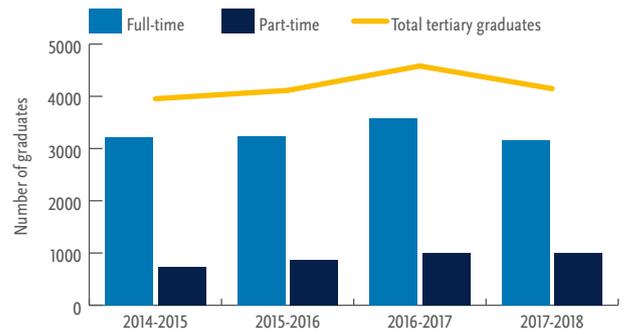
Early school leavers figures have been improving for Malta, but remain at higher levels than the EU.



Source: Eurostat. EU_Labour Force Survey

The OECD PISA indicates that Malta has a lower rate of achievers in reading, mathematics and science knowledge and skills to meet real-life challenges when compared to the OECD average.

Malta has managed to surpass the 33% target of people in tertiary education (34.7%), but remains below the EU average. Tertiary education graduates have remained constant.

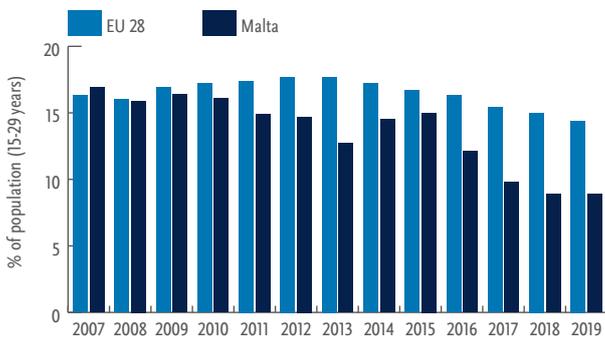


Source: NSO. Graduate Survey Data

9 The percentage of the population living in households where the total housing costs ('net' of housing allowances) represent more than 40% of disposable income ('net' of housing allowances).

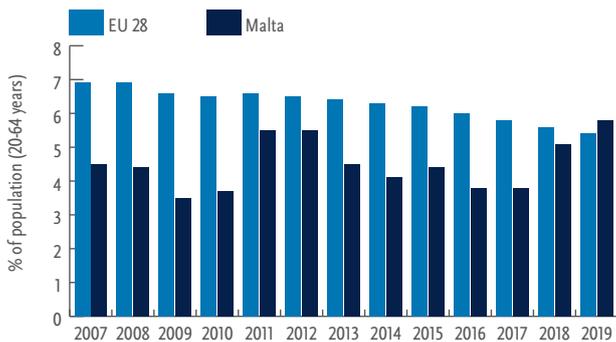
Work and decent jobs

NEET¹⁰ has been decreasing over the years. A 7.5% figure, however, still means an immediate waste of resources and a longer-term undermining of future prospects for younger people.



Source: Eurostat - Labour Force Survey

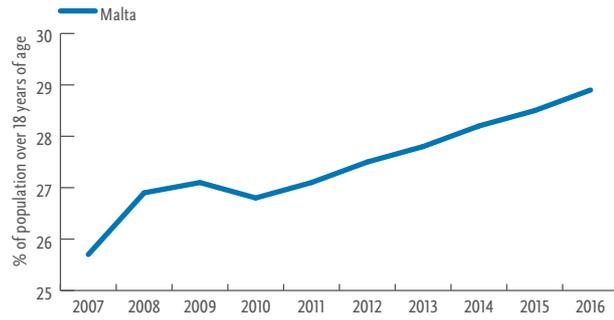
In terms of working conditions, it seems that the Maltese labour force is working longer hours¹¹. This could impact work-life balance.



Source: Eurostat - Labour Force Survey

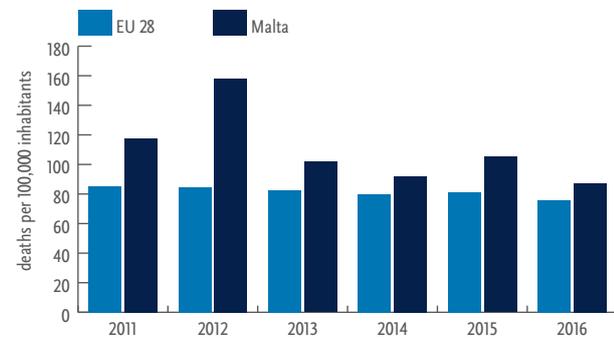
Health and lifestyle

Rate of obesity is increasing year on year, with childhood obesity standing at alarming levels.



Source: World Health Organisation Data Repository

Cardiovascular disease in Malta accounts for two out of every five deaths, making it the leading health ailment in Malta



Source: Eurostat

... also, figures by the Health Ministry indicate that there were over 26,000 chronic asthma sufferers in 2019, having increased by approximately 15% since 2017.

Mental health data remains limited. Proxies used in this study were working longer hours, depression and loneliness.

Studies have shown that mental health issues are common occurrences amongst individuals of all age groups engaged in working long hours.

In 2015, Malta had 5.1% of the population suffering from depressive disorders and 4.9% from anxiety disorders.

10 Not in employment nor in training (NEET) – People aged between 15-29 years

11 Working 49 hours or more per week

In 2019, a total of 43.3% of individuals residing in Malta experienced some degree of loneliness, with evidence showing that the numbers have been increasing along the years.

In terms of drug use, students aged 15-16 years indicated lower levels of usage of cannabis in Malta when compared to the ESPAD average, but higher than average use of other illicit drugs. Overall Malta is also experiencing an increased use of cocaine, often attributed to the greater purchasing power as well as more hectic lifestyles.

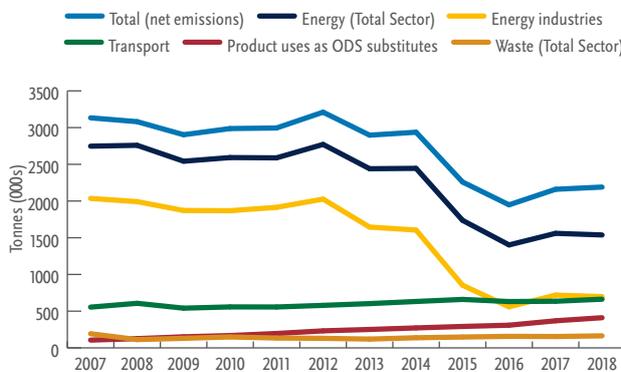
Environmental quality

In terms of air quality, between 2008 and 2017 PM10¹² and PM2.5¹³ concentrations decreased, mostly due to the increased efficiency of combustion engines in passenger vehicles as well as the slight increase in combines petrol/LPG, hybrid and electric vehicles on the island.

On the other hand, PM2.5-10 concentrations increased through non-exhaust sources such as road, brake, tyre and clutch wear and resuspended dust, linked to the increased number of vehicles on the roads and also to the significant boom in construction activity seen in recent years.

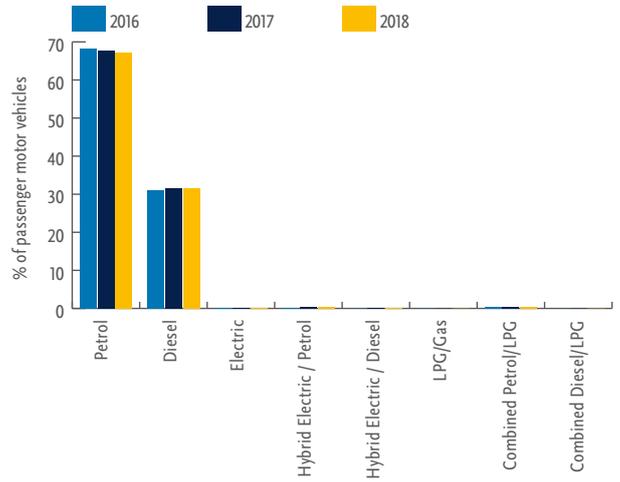
The stock of licensed motor vehicles by the end of 2019 stood at 397,508, which is 30% more than what was registered in 2010.

GreenHouse Gas (GHG) net emissions on the island have declined due to the move away from heavy-fuel oil in electricity production. However, these emissions are picking up again, with transport as the main contributor.



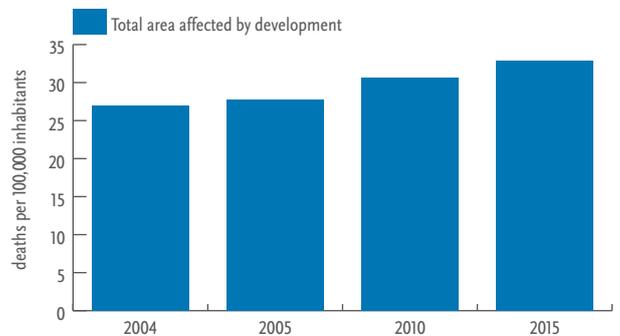
Source: Malta Resources Authority. Greenhouse gas emissions inventory for Malta 2018

Despite the increasing number of initiatives to promote non-combustion alternatives for both private and commercial vehicles, uptake remains too low.



Source: Transport Malta

Land, being an incredibly finite resource in Malta, is increasingly used for new developments.

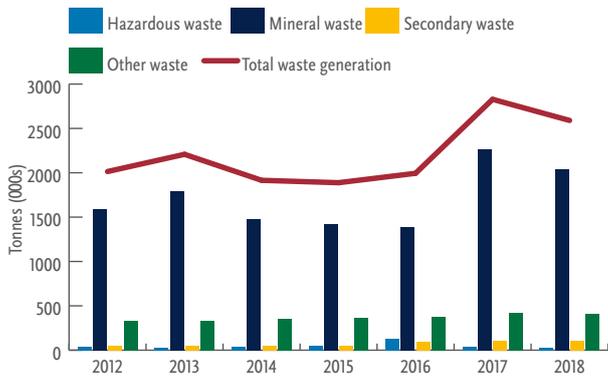


Source: Planning Authority

Increased economic activity and production led to increased waste production. Total solid waste production increased by 29% between 2012 and 2018. 60% of this waste was backfilled...

12 inhalable particles, with diameters that are generally 10 micrometres and smaller

13 fine inhalable particles, with diameters that are generally 2.5 micrometres and smaller



Source: NSO. Solid Waste Management 2018

Recommendations

Following these findings, we are presenting a call for action to immediately go beyond GDP and embrace a more holistic approach towards measuring our country's success and well-being. We are proposing a number of recommendations of how this can be done.

Development of an open data platform or dashboard

An open data platform should be launched which will also include a dashboard with the main areas of focus. Each area will then have a set of interactive graphs updated periodically, for public consumption.

Agree on a national well-being framework

Government should agree with social partners on a national well-being framework which includes a set of indicators, which the NSO could track and publish. This will help in critically assessing these socio-economic indicators over the years.

Integrate well-being in policy making

All government policies or strategies should include a chapter on the expected outcomes and effects of the policy on well-being. This will ensure that every policy proposal would have assessed its effects on well-being, in the spirit of good stewardship aimed at both current and future generations.

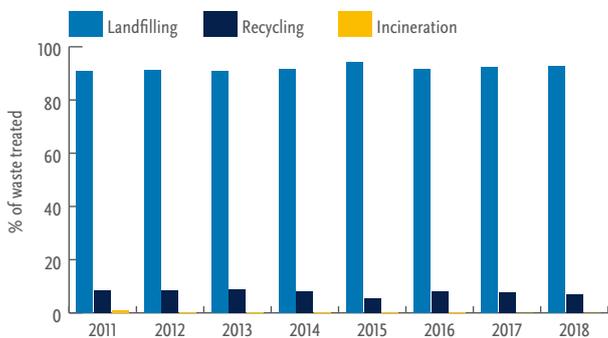
Revisit COLA mechanism

It is being recommended that social partners embark on discussions to revisit the COLA mechanism and to study concepts such as living wage which can support low-income cohorts much more than the COLA adjustment.

Commence discussions on a social pact

Government together with social partners should discuss and agree a social pact which will look into a number of issues, including policies to reward enterprise but disincentivise rent-seeking, ensure a fair tax burden and establish job and income protections to boost productivity, especially in the light of the changes brought about by the COVID pandemic.

...whilst landfilling is used predominantly to treat municipal waste.



Source: NSO. Solid Waste Management 2018

Water, another scarce resource, is suffering from high stress levels, as indicated by the Water Exploitation Index.



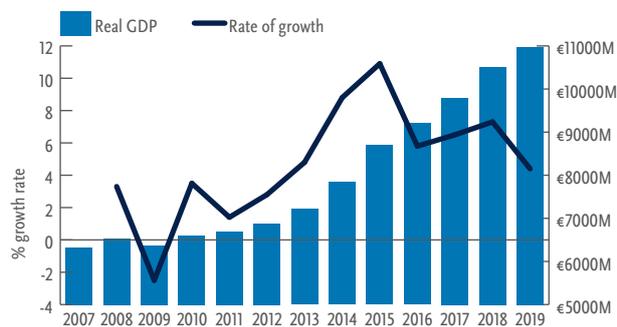
Source: Eurostat. European Statistical System

1. Introduction

1.1. Background to the research

In the past few years, the Maltese economy has been growing at a steady pace, registering an average gross domestic product (GDP) real growth rate of circa 7% between 2013 and 2018, peaking at 10.9% in 2015.

Graph 1: Malta's GDP growth



Source: National Statistics Office (NSO)

This growth has been characterised by the strong performance in certain key economic sectors such as remote gaming, professional & scientific activities, financial services and tourism, amongst others. Such results enabled Malta to enjoy economic stability that has incentivised further local and foreign direct investment. This has also led to increased job opportunities, record low unemployment figures as well as a growing influx of foreign workers. Public finances were also sanitised, through the reversal of the public deficit into consecutive years of surplus and a decrease in the public debt figures.

With such large GDP growth rates, Malta has been hailed as one of the strongest economies within the European Union (EU). This is due to the fact that for decades such headline figure has been used, by politicians and policy makers, businesses, the media and the public in general, as the major gauge of success amongst countries. The GDP as a metric was first introduced by Simon Kuznets, an economist at the National Bureau of Economic Research in the United States in the 1930's, as a way to measure impacts of policies and budgets intended towards economic recovery following the great depression of 1933. This metric was further consolidated in the years following the second world war, as countries sought to rebuild their economies in the face of total destruction. With the increased

relations between countries, resulting from stronger ties of international trade, as well as the establishment of global institutions such as the International Monetary Fund (IMF) and World Bank (WB), GDP soon became a widely recognised international standard metric to measure and compare economic progress amongst different countries. GDP soon gained methodological consensus and supremacy over any other indicator in an economy, driving most governments to focus exclusively on increasing this figure.

This approach has led to the misuse of this measurement as it was originally intended. Economics is defined as the *study of how to best allocate limited resources to satisfy the unlimited wants of the people and maximise their utility and well-being*. Monetary results were never meant to be the sole indicator of a successful economy. Instead “money” was just one of the means with which well-being could be reached, in conjunction with many other elements. Yet, over decades, it seems society, as represented by governments, has focused more on production, value added and GDP, in the belief that higher GDP automatically equates to higher levels of happiness, putting aside measures on the quality of life dimension. However, there are studies which disprove this theory, showing that once a particular threshold of income is overcome, income and happiness are no longer correlated (Easterlin, 1973).

Moreover, it is widely known that GDP as a measurement cannot fully capture a number of aspects of the wellbeing of individuals and their quality of life, including health, happiness, equality, conditions of housing and creativity, amongst others. Therefore, despite being a fundamental pillar in any government's mandate, economic growth should not be the “be all and end all”, but rather a means to the wellbeing of society and its citizens.

This also applies to Malta. Despite the high GDP growth rates in Malta, major societal issues remain or are emerging, including inequality, short-term and long-term skills' mismatch, and lack of adequate infrastructure, amongst others. Moreover, high economic growth also leads to negative unintended consequences, including environmental degradation, irreversible use of rural space for development, the depletion of other natural resources, high property and rental prices leading to housing affordability issues, loss of cultural assets, high levels of waste due to increased consumption and low recycling levels, air and noise pollution, as well as growing carbon emissions, amongst others. Such collateral damage has led many to question the long-term sustainability of any economic growth model that has GDP as its primary objective, and whether the environmental and social costs of such economic progress has in fact kept unchanged (or even worsened) the quality of life for some individuals in Malta.

It is within this context that the Justice and Peace Commission (hereafter, 'the Commission') has been advocating for a discussion on the need to complement the GDP measure with a metric which would gauge the holistic well-being of society and factor in negative externalities. The Commission's point of departure is the church's magisterium mostly referred to as Catholic Social Teaching, whose focus has always been on the integral development of humanity. The question of the economy has also been one of the main focuses of Pope Francis' pontificate who often remarks about its importance and the need to cultivate 'a different kind of economy: one that brings life not death, one that is inclusive and not exclusive, humane and not dehumanizing, one that cares for the environment and does not despoil it.' (EoF Letter) The launching of the event the 'Economy of Francesco' which was to take place in March 2020 in Assisi, but which was later postponed online to November 2020, encouraged the Commission to embark on this local project, whilst linking to the greater global movement this event has become. This movement, backed by Pope Francis, aims at "promoting economic, environmental and social solidarity and sustainability within a more humane economy, which considers not only the satisfaction of immediate desires, but also the welfare of future generations". Economies and markets have been created to accommodate the people and improve their well-being, and not vice-versa. Hence, it is time to rethink the way we measure country performance and well-being - a way to go *Beyond GDP*.

1.2. Objectives of this research

This study by no means seeks to underestimate the importance of money or GDP in the economy. We are also aware that "there is no one solution, no single acceptable methodology, no economic recipe that can be applied indiscriminately to all". (Francis, Fratelli Tutti , 2020)

Yet, whilst acknowledging the fact that globally we have never been wealthier, healthier and that money has indeed improved the quality of life of so many, we still cannot turn a blind eye to the poverty, the inequality, the social injustices, the environmental degradation, the abuse of natural resources and the low concern for future generations which surrounds us.

For this reason, they study advocates that GDP should not be viewed in isolation but should be accompanied by indicators that draw from other social and economic dimensions which all have an impact on the quality of life.

This study provides a snapshot of how Malta has been fairing in several other dimensions, in addition to GDP already covered in the introduction. Through the analysis of a number of indicators, this study seeks to provide a holistic assessment of

Malta through these past few years, looking at quality of life of its people.

Firstly, this study report aims to be a **catalyst for discussion**, by bringing to the public arena greater awareness on a number of socio-economic issues. This will allow individuals, academics, businesses, policymakers, governmental authorities, politicians and other stakeholders to appreciate further issues which need to be addressed in the coming years to improve our people's quality of life.

This study is also an urgent call for **action**. The findings of this reports should not just fed into discussion and increased awareness. Over the years, some stakeholder groups have alluded to the idea of the need to look beyond GDP. Governmental documents have also acknowledged this, with the 2019 Pre-budget Document on 'Sustaining Inclusive growth' and the Environment and Resources Authority's (ERA) latest strategy, 'Wellbeing First – A vision for 2050'. The study would like to contribute and make a difference.

Thirdly, for action to take place, **cooperation** will be key. Most of the societal and environmental results outlined in this report will probably not take anyone by surprise, since many of them are well-known areas of concern in their specific arenas. Yet, this report brings all the issues under one umbrella of "well-being", highlighting the need for more cooperation amongst all the different players in the market and society. Relevant parties should be willing to move away from siloed approaches and towards a more integrated and cooperative approach, allowing for more synergies to be enjoyed.

Finally, this document is to be considered a **living document**, which stimulates **further research**. This is especially the case since this study highlights the fact that certain socio-environmental niches are still understudied or have no up-to-date data. This inevitably leads to such issues being considerably minimised or totally ignored, therefore leading to impacts on policy making. This study, therefore, aims at outlining areas in which data is scarce and hence encourages authorities to increase (directly or indirectly) research in these areas, to further strengthen the policy-making process. Moreover, we hope that this is not a one-off document, but a framework which will eventually be improved and adopted by local authorities when taking into account other factors impacting the quality of life of people, and therefore periodically assessing the real progress of the Maltese society.

2. Methodology

2.1. Background studies

“The gross national product does not allow for the health of our children, the quality of their education, or the joy of their play. It does not include the beauty of our poetry or the strength of our marriages, the intelligence of our public debate or the integrity of our public officials... it measures everything, in short, except that which makes life worthwhile.”

(Kennedy R, 1968)

The idea of going beyond GDP is neither new nor in any way original. The designer of the modern GDP metric himself, Simon Kuznets noted that “*the welfare of a nation can scarcely be inferred from a measurement of national income*” (Kuznets, 1934). The Nobel Prize winner stated that this was simply an economic tool to gauge the economic value of a country’s production and was not to be equated with welfare in the society.

The latest, and probably most spoken about country to have dethroned GDP is New Zealand. In 2019, Prime Minister Jacinda Ardern introduced the **Well-being Budget**, whereby the priority of the government was set to tackle long-term issues. Government spending is now based on five pillars, namely: i) improving mental health, ii) reducing child poverty, iii) addressing the inequalities faced by indigenous Maori and Pacific island people, iv) thriving in a digital age, and v) transitioning to a low-emission, sustainable economy.

This was not the first country to have a different metric of success. The Kingdom of Bhutan already tested the **Gross National Happiness Index** in 2008, whereby they measured living standards and community vitality, amongst others. Such measures informed the government of the standing of society and allowed policy makers to formulate specific policies to target such issues.

Apart from governments, a number of other organisations have been vociferous on the attainment of social well-being as opposed to solely economic results. The Sustainable Development Solutions Network (SDSN), a UN global initiative, has been publishing the **World Happiness Report** since 2012 (now in its 8th report), whereby Gallup’s World Poll data (survey based) is used to measure life satisfaction and happiness across countries.¹

Similarly, the OECD provides a **Better Living Index** for its countries (which does not include Malta). The OECD states that there is more to society than simply GDP; through 11 dimensions, it provides an index whereby well-being is compared across countries, based on areas of material living conditions as well as quality of life. In September (2020), the OECD also published a report along the same lines, ‘*Beyond Growth - Towards a New Economic Approach*’.²

In addition, the UN has also been pushing for a more inclusive and sustainable growth. Through its **Sustainable Development Goals (SDGs)**, it is aiming to tackle some of the most pressing issues in today’s societies, globally, by 2030. The 17 overarching goals (such as eradicate poverty, have zero hunger and have quality education for all, amongst others) have been set out as a “*blueprint to achieve a better and more sustainable future for all*”.³

Locally, some attempts to push for better quality of life have been made. Organisations working with people at the margins of society have made the point that an ever-growing GDP figure does not necessarily reflect that everyone is better off in society. Research has been undertaken in terms of ‘A Minimum budget for a decent living’ by Caritas. The Faculty for Social Well-being at the UoM carries out research on particular pressing issues, such as *loneliness* and *homelessness*, amongst others. The Foundation for Social Well-being has also been involved in a number of research studies and advocacy events on better quality of life. Similarly, numerous NGOs and entities working on the field with locals, third country nationals and migrants have also played their part in creating greater awareness of the societal and environmental issues impinging on our quality of life. This study seeks to bring all these issues under one report, in an aggregated manner, so that policy makers and stakeholders can have a holistic snapshot of where our quality of life stands.

1 In the latest report Malta ranked 22/153 countries (years 2017-2019)

2 OECD (2020), Beyond Growth – Towards a New Economic Approach. Available at: <https://www.oecd-ilibrary.org/sites/33a25ba3-en/index.html?itemId=/content/publication/33a25ba3-en>. Accessed on 1 October 2020

3 UN (n.d.) SDGs. Available at: <https://www.un.org/sustainabledevelopment/sustainable-development-goals/#:~:text=The%20Sustainable%20Development%20Goals%20are,environmental%20degradation%2C%20peace%20and%20justice>. Accessed on: 20 September 2020

Over the past years, government has increasingly been adopting a more sustainable approach in its policy making, with a number of documents pointing towards a more holistic growth strategy. These include the 2019 Pre-budget Document, ‘Sustaining Inclusive growth’ and ERA’s latest strategy, ‘Wellbeing First – A vision for 2050’. In September 2020 the Prime Minister Dr Robert Abela also mentioned ‘Sustainable economic growth’ as the first of five economic pillars being pushed forward by government in its post-COVID recovery. This governmental approach provides an auspicious context for our study and its recommendations.

2.2. Process

This study is being commissioned by the Justice and Peace Commission, together with the local branches of the Focolare Movement⁴ and Centesimus Annus Pro Pontifice Foundation⁵ (CAPPF). In December 2019 a technical team, with representatives from EY Malta and Seed, two local consultancy firms, was set up so as to start the process towards drafting this study.

Figure 1: Phased Approach to Study below outlines the processes and methodology adopted by the technical team in order to carry out the study and ultimately publish the report. This subsection provides clarity on the approach adopted in this study.

Figure 1: Phased Approach to Study



Phase 1: Desktop research

An online desktop research of similar studies and global frameworks was undertaken, to determine the research gap in Malta. *Table 6-1* in the Appendix illustrates the identified studies which have been analysed during the desktop research.

Phase 2: Chosen framework and adaptation to the Maltese context

Instead of re-inventing the wheel, the technical team opted to adapt one of the already verified international indices, namely the OECD’s *Better Living Index* (*Figure 2* in the Appendix), to the Maltese context. Given the specificities of Malta as a small island state, their relevance, as well as the publicly available

data, the following 6 dimensions of the original OECD index have been selected specifically for this study.⁶

1. Income and wealth
2. Housing
3. Jobs and earnings
4. Education and skills
5. Health and lifestyle
6. Environmental quality

This framework was then introduced to a wider group of technical people from the social, finance, economic and academic fields, so as to identify possible sources of data which could be used in terms of indicators for each dimension. The list of participants is found in the Appendix; *Table 6-2*.

4 A movement of spiritual and social renewal, founded by Chiara Lubich in Trent, Italy, in 1943. Officially known as the Work of Mary, today it is present in 182 nations and more than 2 million people share closely in its life and work. Inspired by Jesus’ prayer to the Father, “May they all be one” (Jn 17:21), its goal is to promote brotherhood and achieve a more united world where people respect and value diversity. To achieve this goal, people of the Movement engage in various forms of dialogue and are committed to building fraternal relationships among individuals, between cultural groups and in every area of society. Typical of the Focolare Movement is the “Economy of Communion”, a manifestation of a free economy based on solidarity, through which it inspires the economic management of businesses, promoting an economic practice and culture geared towards communion, gratuity and reciprocity.

5 Set up to help promote the study and diffusion of the social doctrine of the Catholic Church as set out in particular by St Pope John Paul II’s encyclical “Centesimus Annus”. For more information and resources please check the Foundation’s website at www.centesimusannus.org/en/

6 Other dimensions that were not considered in this first round of the study, but might be worthy of future research, include good governance, security as well as civil engagement.

Phase 3: Long list of indicators and data collection

For each of the dimensions identified, a long list of indicators was identified. Wherever data was publicly available, data was collected in a time series fashion, based on circa a ten-year period starting from the year 2007, up to the latest data point available. When available, data was also split by gender and age, and when relevant, by educational status. Data collection was predominantly done through the NSO and the Eurostat portals. Furthermore, specific sources for particular indicators (e.g. drug abuse) were considered as the analysis went along, as also suggested by stakeholders.

Phase 4: Selection of short list

Given that this study is not aimed at creating an index, but rather at bringing forward a narrative to the development of a multidimensional framework that goes beyond GDP, the technical team decided to focus on a smaller number of indicators, condensing the original long list to 28. The choice was based on the desktop research carried out, on the relevance of the data collected as well as the opinion of experts on the field. A list of the chosen dimensions and indicators, together with the data source used, can be found in *Table 2-1: List of Chosen Dimensions and Indicators* below.

Phase 5: Stakeholder and expert consultation

Stakeholder consultations were a very important step in this study, not only to make various entities aware of our study but also to gather the real lived experiences of people working in the field. Having their viewpoint, opinions as well as anecdotes helped in the formulation of the study, making it a living research project, rather than simply a collection of cold statistical numbers. Moreover, a number of experts, including the NSO and academics, helped with identifying data sources and outlining limitations with the statistics at hand. *Table 6-3* in the Appendix is a list of the stakeholder met as part of the consultation process.

Phase 6: Reporting

Once the statistics collected were further corroborated with the 'on the ground knowledge' provided by the stakeholders and experts, the report was drafted. As already stated, this study is not an index per se, but rather a proposal of a framework to be used in conjunction with the GDP statistic.

2.3. Limitations and Challenges

As with all research studies a number of limitations were encountered during the development of this study.

Firstly, some data sets are not publicly available, and thus could not be utilised. Secondly, the use of secondary publicly available data meant that certain data, both at national and EU level, was either incomplete, not up-to-date, or not disaggregated at the levels this study required. In other instances, the time series data set provided was simply not long-enough. For indicators such as homelessness, loneliness or mental health levels, data was extremely scarce or simply not available. For such indicators the input from experts in the field proved to be critical.

The use of secondary data sets also means that any methodological considerations that apply to this data are transferred to the study. For instance, for the housing, poverty and other indicators, the data collected by NSO and Eurostat are based on household surveys; hence anyone who does not have an address in Malta such as homeless, or the institutionalised individuals, simply are not included in the studies. This means that the results observed do not include the entire population, making a number of groups and categories seemingly invisible.

Finally, one of the greatest considerations to this study is that it was conducted when the COVID-19 pandemic hit. This not only disrupted the possibilities of face-to-face interviews, but as one would expect, also shifted local priorities. It is important to note that this report does not in any way focus on the COVID impacts, but rather it simply looks at indicators (including health) in the context of the GDP growth experienced till last year, that is 2019. Undoubtedly, COVID-19 will impact greatly all socio-economic variables, the extend of which will only be fully understood once the pandemic passes.

Table 2-1: List of Chosen Dimensions and Indicators

| Dimension | Indicators | Source of data |
|-----------------------|---|---|
| Income | Risk of poverty threshold | Eurostat – SILC Survey |
| | Gini Coefficient | Eurostat – SILC Survey |
| | At Risk of poverty | Eurostat – SILC Survey |
| | In work at risk of poverty | Eurostat – SILC Survey |
| | Material Deprivation | Eurostat – SILC Survey |
| | Risk of poverty and social exclusion | Eurostat – SILC Survey |
| | Children at risk of poverty according to parents' education | Eurostat – SILC Survey |
| Housing | Overcrowding | Eurostat – SILC Survey |
| | Severe Housing Deprivation | Eurostat – SILC Survey |
| | Cost overburden | Eurostat – SILC Survey |
| | Rent as a percentage of income | Eurostat – SILC Survey |
| | Homelessness | Eurostat – SILC Survey |
| Education and skills | Early School Leavers | Eurostat - Labour Force Survey |
| | Underachievement in Reading/Maths/Science | OECD - Programme for International Student Assessment (PISA) |
| | Tertiary Education Graduates | NSO - Graduate Student Data |
| Jobs | Young People neither in Education nor Training (NEET) | Eurostat - Labour Force Survey (LFS) |
| | Longer Working Hours | Eurostat - Labour Force Survey |
| Health and Lifestyle | Obesity | Eurostat - Quality of Life indicators / Health Behaviour in School Aged Children Study (HBSC 2016) |
| | Common Physical Health Ailments such as heart disease and asthma | State of Health in EU - Country Health Profile 2019 |
| | Mental Health Ailments: (longer working hours, loneliness and depression) | The Prevalence of Loneliness in Malta study (2019) World Health Organisation - Depression and Other Mental Health Disorders (Global Health Estimates) 2017 Ministry of Health Malta - World Health Day 2017 |
| | Drug use and addictions | EMCDDA - European Drug Report and Malta Country Drug Report 2019 |
| Environmental Quality | Assessing Air Quality through particulate matter | Environment and Resources Authority (ERA) - State of the Environment Report 2018 |
| | Levels of Greenhouse Gas Emissions | Malta Resources Authority (MRA) - Greenhouse gas emissions inventory for Malta 2018 |
| | Stock of Licensed motor vehicles by motor vehicle type Stock of licensed motor vehicles by motor energy type | Transport Malta (TM) |
| | Assessing Land Use in Malta | Planning Authority (PA) |
| | Water Exploitation Index | Eurostat - European Statistical System |
| | Waste Management | NSO - Solid Waste Management 2018 NSO - Municipal Waste Management 2018 |

3. Results and Key Inferences

This section outlines the analysis of the statistics as well as the data collected from available data sources, the various experts and stakeholders during the consultation, framed within our proposed methodology for a framework that looks beyond GDP for Malta. In this section we break down the framework into the six different dimensions identified in *Table 2-1: List of Chosen Dimensions and Indicators* above and look at the progress or deficiencies being recorded in these indicators.

3.1. Income

“The economic well-being of a country... takes into account the manner in which [goods] are produced and the level of equity in the distribution of income, which should allow everyone access to what is necessary for their personal development and perfection”.

Compendium of the Social Doctrine of the Church, 303

The first dimension hereby being presented is that of *income*. Whilst money alone cannot buy happiness and does not necessarily lead to a good quality of life, one cannot deny the importance of such an indicator.

Having low income levels might result in the inability to cover the costs of the most basic needs, or the inability to save for a rainy day. The financial means of an individual or of a family also influences their access (as well as quality) to education, health and housing, amongst others. Hence, whilst not being the only component of well-being, the income dimension is an important puzzle piece of this greater whole.

Hence, we pose the question as to whether the increased GDP experienced by the Maltese economy in these past few years has trickled down amongst all the strata of society, making everyone better off, or whether wealth was shared unequally.

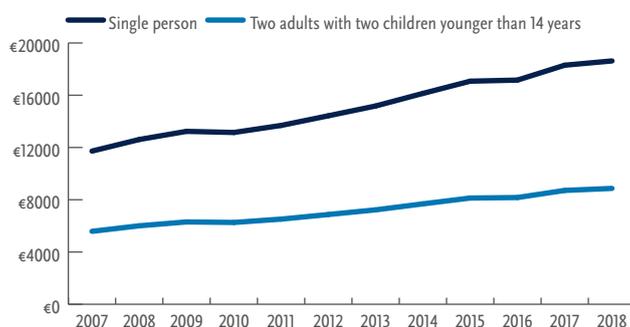
In order to gauge such an effect, we chose to examine a number of indicators under this dimension so as to ascertain

the impact on the well-being of everyone in the society. These indicators included:

1. Risk of poverty threshold
2. Gini Coefficient
3. At risk of poverty
4. In work at risk of poverty
5. Material Deprivation
6. Risk of poverty and social exclusion
7. Children at risk of poverty according to parents' education

Given that average incomes have been rising, this has automatically meant that over the years the *'at risk of poverty threshold'* (i.e. the level of income under which one is considered to be at risk of poverty, defined as the 60% of median income) has been increasing. For a single person it stands at €8,868 and for a household of two adults with two children younger than 14 years at €18,624. Increasing GDP and GDP per capita indicates that people on average are making more money, since the median income level is automatically pushed up. The purpose of this study is to go beyond these averages and investigate whether all pockets of society are earning more money, or whether it is a reflection of higher jobs in the upper quartiles and stagnant low-income earners at the bottom quartiles.

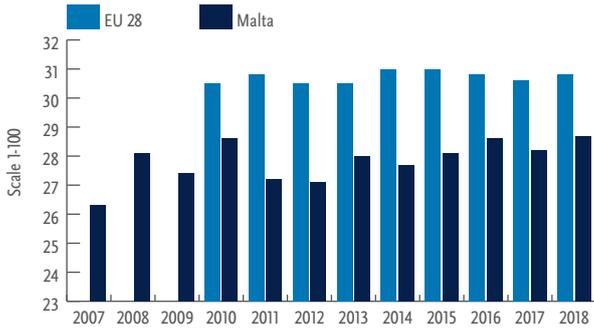
Graph 2: At risk of poverty threshold



Source: Eurostat. EU_SILC survey

To answer questions on inequality in a society, economists use the *Gini co-efficient*, where the closer you get to zero, on a scale between 0 and 100 the more equal society becomes. The Gini Co-efficient for Malta in 2018 stood at 28.7. This data compares well to the 30.8 figure for the EU, yet locally it has been the highest in the past 12 years, with 26.3 being recorded in 2007. This increase might be considered to be minimal, with the Gini co-efficient remaining stable on average over the past few years. Yet, when considering this in the light of ever-increasing GDP, one would have expected an improvement (decrease) in this number. Especially if we are working towards an economy which leaves no one behind.

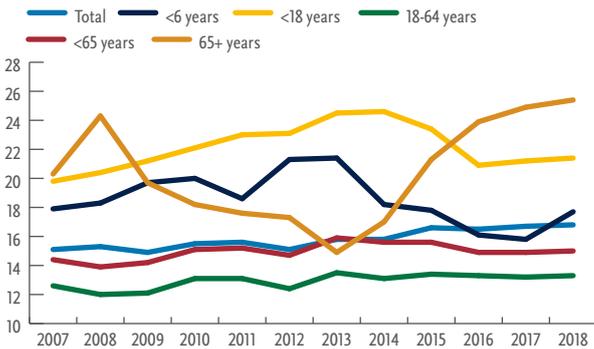
Graph 3: Gini Co-efficient - A measurement of equality



Source: Eurostat. EU_SILC survey⁷

When looking at the percentage of the population falling under the 60% threshold, that is those at 'risk of poverty', it seems that in Malta this is rising slowly overall (15.1% in 2007 Vs 16.8% in 2018), with around 79,000 individuals falling below this threshold.

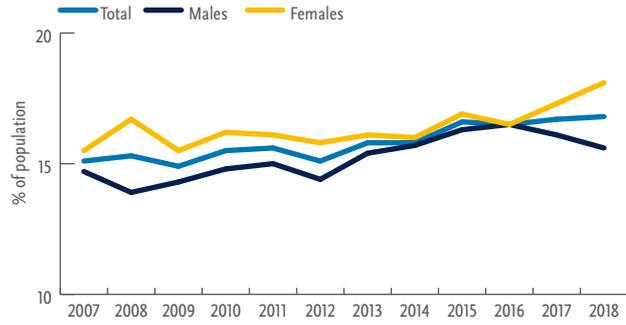
Graph 4: At risk of poverty by age



Source: Eurostat. EU_SILC survey

This increase seems to be even more marked for 65+ individuals, whereby in just 5 years the percentage of 65+ individuals at risk of poverty increased by 10 percentage points. This is to be expected given that many 65+ individuals are often dependent on their state pension. And this could also be an indication that over the years, pensions are becoming increasingly insufficient when compared to the rising cost of living. Moreover, females tend to be at a higher risk of poverty than males.

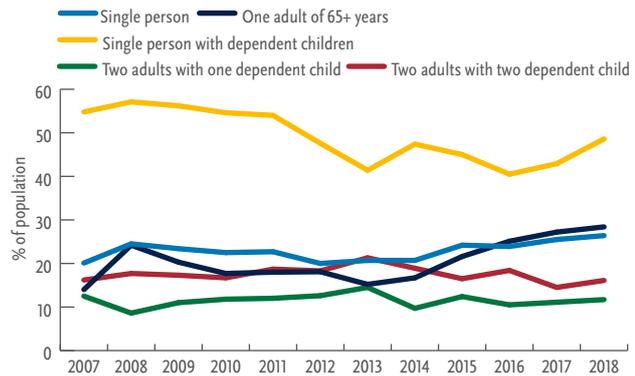
Graph 5: At risk of poverty by gender



Source: Eurostat. EU_SILC survey

In terms of household types, the 'one adult of 65+' and a 'single person with a dependent child' seem to be the two categories at the most risk of poverty (28.4% and 48.6%) respectively, with the latter seeing a marked increase and reversing any improvements made over the years between 2014 and 2016.

Graph 6: At risk of poverty by household type



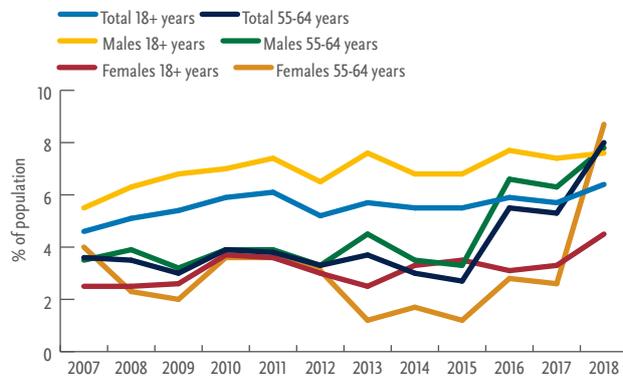
Source: Eurostat. EU_SILC survey

Based on the two indicators referred to above, it seems that the stable and economic performance, as measured in financial terms, is not reaching everyone in society, especially those people out of work, mostly pensioners and single mothers who are at a much higher risk of ending up in monetary poverty. In this regard, over the years local authorities have provided a variety of benefits both for active ageing and to assist mothers to return back to work, through free childcare centres and homework clubs after school. We also understand that these in-kind benefits do not feature in this monetary indicator, nor in the AROPE, which will be introduced shortly.

⁷ EU 28 data was not available for the years between 2007 and 2009.

However, the proportion for people at risk of poverty is not only rising for those outside the labour market. Indeed, the ‘in work at risk of poverty’ indicator increased from 4.6% in 2007 to 6.4% in 2018. The rise has been particularly high for females between 55-64 (3% in 2007 Vs 9% in 2018).

Graph 7: In work at risk of poverty by gender and age

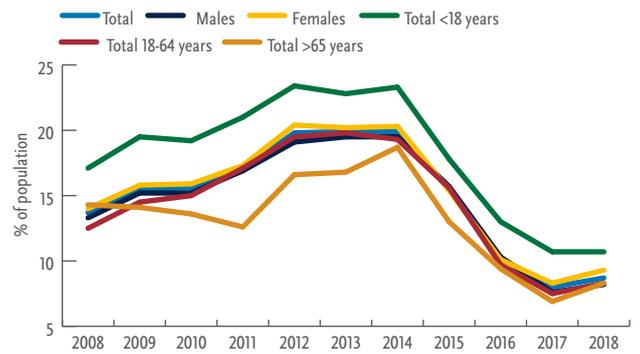


Source: Eurostat. EU_SILC survey

This indicates that even when holding a job, the risk of falling below the poverty line is increasing. This clearly indicates that the higher threshold mentioned earlier (the 60% benchmark) could be inflated by the upper quartiles of higher paying jobs, while people working at lower-end jobs are becoming more deprived. This is especially worrying if the improved purchasing power of the few well-paid employees leads to higher commodity prices. This will inevitably lead to higher risks for the people below the threshold and a greater disparity amongst members of society.

Poverty is however not only calculated through monetary income, but also through other opportunities and material dimensions. For this reason, we have looked into the indicator of *material deprivation*.⁸

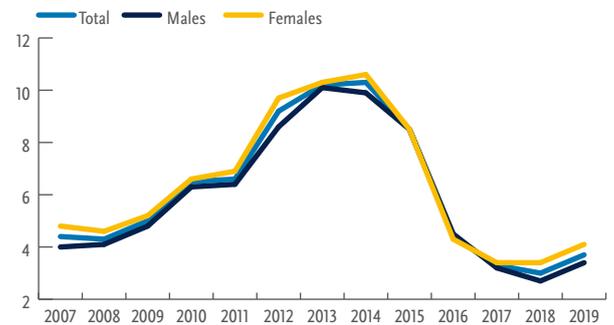
Graph 8: Materially deprived by gender and age



Source: Eurostat. EU_SILC survey

The percentage of materially deprived individuals has fallen substantially from 15.6% in 2010 to 8.7% in 2018, while figures in the last year seemed to have edged up once again. Moreover, minors seem to have always been more materially deprived (10.7% in 2018). It is important to keep this in mind since material deprivation from such a young age could impact the development of the child and stunt their healthy growth. The percentage of **severe materially deprived** has also been falling, especially from an all-time high of 10.3% in 2014, now (2019) standing at 3.7%.

Graph 9: Severe materially deprived by gender



Source: Eurostat. EU_SILC survey

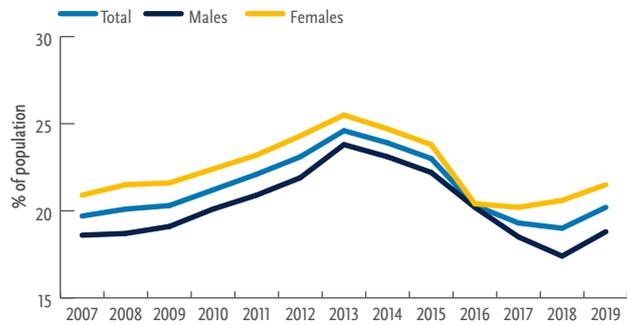
This represents a slight increase from 3.0% in 2018. This might be seen as a very small number, yet when translated into the number of individuals this difference accounts for circa 4,000 people. Further research into each of the material deprivation measures is encouraged.

A composite indicator which is often used and cited in literature is that of the ‘**risk of poverty and social exclusion**’ (AROPE).

8 Inability to pay for at least three of the following: to pay their rent, mortgage or utility bills; to keep their home adequately warm; to face unexpected expenses; to eat meat or proteins regularly; to go on holiday; a television set; a washing machine; a car; a telephone.

It corresponds to the sum of persons who are either at risk of poverty, or severely materially deprived or living in a household with a very low work intensity.

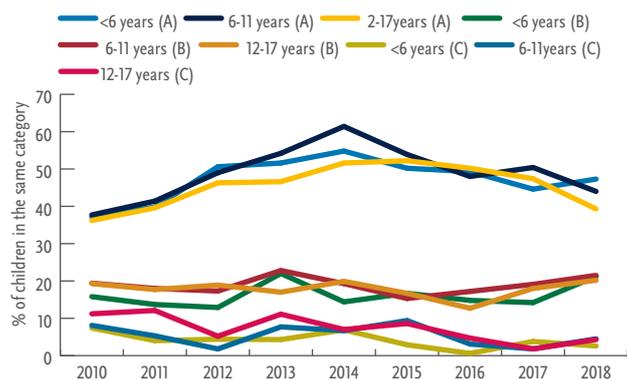
Graph 10: At risk of poverty and social exclusion by gender



Source: Eurostat. EU_SILC survey

This has witnessed a fall since 2013, indicating an improvement over the past 5 years, yet picked up slightly from 2017 to 2018. This overall trend could indicate that the high economic activity is leading to less people at risk of poverty and social exclusion. Honing down on the statistics for **children at risk of poverty or social exclusion**, depending on the level of education of their guardians, there is an indication that the higher the education of the parents/ guardians, the lower the percentage of children at risk of poverty and exclusion. This is an indication of the cross-linkage between various indicators.

Graph 11: Children at risk of poverty and social exclusion depending on parents' level of education



Source: Eurostat. EU_SILC survey

- a. Less than primary, primary and lower secondary education (levels 0-2)
- b. Upper secondary and post-secondary non-tertiary education (levels 3 and 4)
- c. Tertiary education (levels 5-8)

At tertiary levels of education, children of ages 6-11 and 12-17 are still showing a marked increase in AROPE. This is a worrying trend (2018 - 4.5% and 4.3% respectively from 1.8% in 2017), since the data seems to indicate that higher education seems to be no longer a guarantee that you're a family will be out of the risk of poverty.

3.2. Housing

“Having a home has much to do with a sense of personal dignity and the growth of families. This is a major issue for human ecology”.

Laudato Si 152

The second dimension hereby being presented is that of *housing*. Housing represents one of the basic needs as also outlined by Maslow’s hierarchy. It is a place of shelter but should also represent a place where one can rest, feel secure, and bring up a family. Adequate and affordable housing is therefore a prerequisite for a good quality of life.

The local housing market has been under great strain with marked increases in prices and rents as a direct result of increased demand for such accommodation. This was brought about by various social trends such as separations, divorces, single persons seeking households, as well as the sudden influx of foreign workers.

We acknowledge that in the past few years a number of initiatives have been taken on board by the authorities to improve the housing situations for citizens. Malta has a social housing investment programme in place, managed by the Housing Authority. In the past years, this system was under enormous pressure with large waiting numbers of families asking for assistance in finding a residence. Initiatives to regularise the rental market and assist those in need to purchase a property have also been introduced (e.g. equity sharing). Yet, the situation might still be unresolved for some, as the sector is characterised by various developments taking place in parallel.

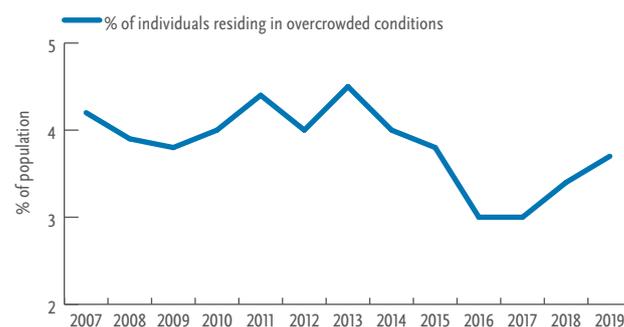
In order to gauge the situation in terms of housing in Malta, the following indicators have been looked into:

- Overcrowding
- Severe Housing Deprivation
- Cost overburden
- Rent as a percentage of income
- Homelessness

The first indicator selected was that of **overcrowding**, being defined as a state whereby individuals do not have the number of rooms appropriate to the size of their household. In 2019, this stood at 3.7% of the population, amounting to circa 17,600 individuals. In 2016 this stood at 3%. People renting were found to be much more prone to overcrowding (12.5%) rather than homeowners (2%). Moreover, 8.8% of people at risk of poverty and social exclusion were likely to live in an overcrowded dwelling. This is most likely due to the fact that such individuals do not afford to have decent housing arrangements. This stands to show how various indicators

play to each other. As demographics indicate that our fertility rates are falling, it is made clear that overcrowding is not due to larger families, but rather to individuals choosing to share residences (especially rented out property). This is especially the case for third country nationals, who come to Malta for work and often accept whatever living conditions are available, as long as they are able to save and send money back to their home country. This can be seen as particularly problematic when considering that green and/or open spaces outside one’s home are also becoming limited. This might point towards a lack of space where one can rest.

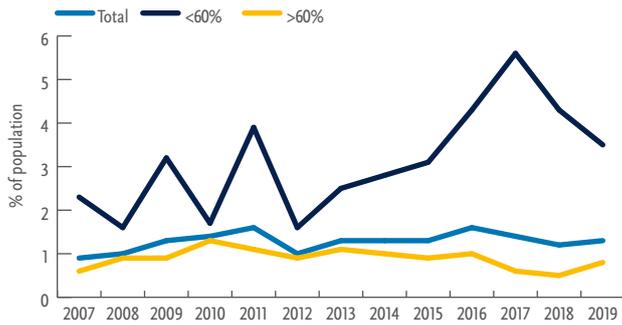
Graph 12: Percentage of individuals residing in overcrowded conditions



Source: Eurostat. EU_SILC survey

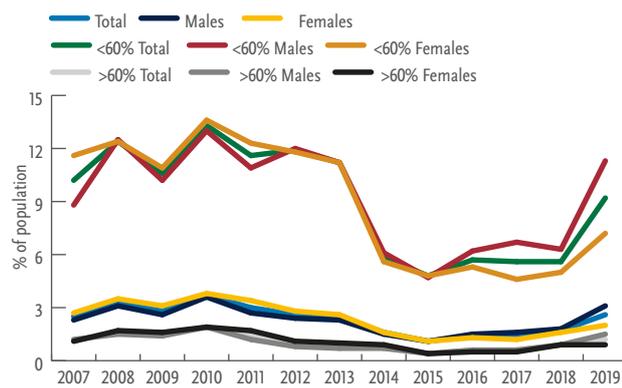
Overcrowding data could also be used to inform another indicator, namely those who are **severely housing deprived**. This indicator shows the percentage of the population who lives in some form of inadequate housing, defined as a combination of being overcrowded, and also featuring at least one of the housing deprived measures that would include: having a leaking roof, no bath/shower and no indoor toilet, or the dwelling considered too dark. Over the years this statistic has increased to 1.3% in 2019 from a 0.9% in 2007. This figure goes up to 3.5% for people at risk of poverty who survive with income under the 60% threshold. Nevertheless, the percentage of people residing in such dwellings, who have an income over the 60% mark, is also on a slight increase, moving from 0.5% in 2018 and to 0.8% in 2019. The percentage of children under six-years of age, residing in severely deprived households and whose family are considered out of the risk of poverty (>60% income mark), increased to 2.9% in 2019, from 1% in 2018. Moreover, women under the poverty line seem to carry the highest risk in this indicator, with 3.9% of this category being classified as severely housing deprived.

Graph 13: Severe housing deprivation above/under poverty line



Source: Eurostat. EU_SILC survey

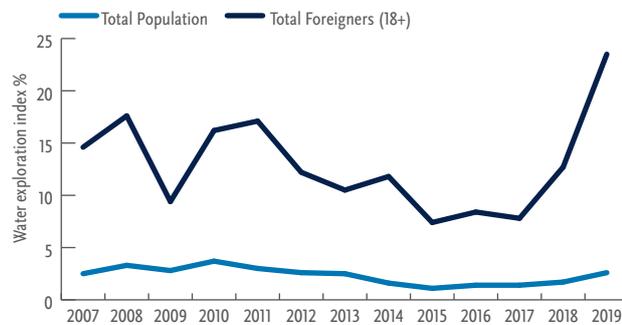
Graph 14: Housing cost overburden by gender and poverty tenure



Source: Eurostat. EU_SILC survey

Apart from the conditions in which one lives, it is also important to identify the affordability of housing. Not being able to afford a place where to live leads to a lack of basic needs and consequently the deterioration of quality of life. To gauge this aspect of housing, the **housing cost overburden** is used. This indicator shows the percentage of the population living in households where the total **housing costs** ('net' of **housing allowances**) represent more than 40% of disposable income ('net' of **housing allowances**). These costs include mortgage repayments, or rent, plus the cost of utilities, expenses related to regular maintenance and expenditure on structural insurance. Despite being much lower than the EU average (2018: EU = 10.3% and Malta = 1.7%), the local figure is also on the rise reaching 2.6% in 2019. Once again, housing costs take up a much higher portion of income of people who earn less than the 60% poverty line benchmark. Hence, it goes without saying that people being cost overburdened in this category is much higher than the total average, standing at 9.2% for the year 2019. Yet, all categories have seen a rise since 2016. This clearly mirrors market dynamics, whereby property prices have shown a marked increase. Also, it is worth noting that the rate of costs overburdened foreigners is much higher, standing at 23.5% (**Graph 15 - Housing cost overburden - Foreigners Vs Locals**). This rate particularly shot up after 2015, a time whereby Malta started experiencing a high influx of foreigners manning our labour force, which also led to a push in the price of houses due to a higher demand for buy-to-let accommodation.

Graph 15 - Housing cost overburden - Foreigners Vs Locals

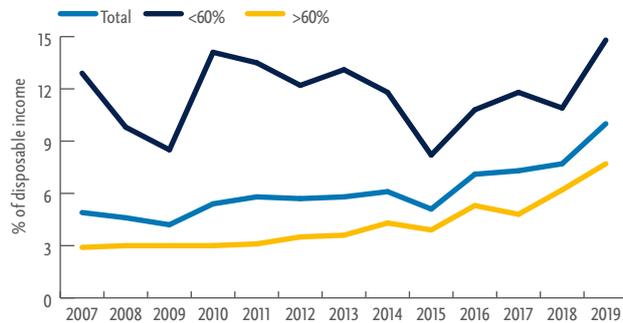


Source: Eurostat. EU_SILC survey

The Maltese property market has traditionally been characterised by 'ownership'. Yet, the high property prices have forced some individuals or families to only be able to afford renting. At the same time, the influx of foreign workers, illustrated in **Appendix 2 Graph 37**, has also meant that renting increased. This increase in demand for rent has meant that the rental rates increased. For this reason, **rent as a percentage of disposable income** is here being analysed. Overall the percentage is on the rise for all household types. Since 2007, this figure nearly doubled, rising from 4.9% of disposable income to 10% in 2019. Again, it stands to reason that individuals under the poverty line do not have the means to purchase their own property (e.g. deposit and current pay employment needed to tap bank financing) and hence are more inclined to rent. Thus, rental rates take a higher percentage of their income, standing at 14.8% in 2019. Yet, even people above the poverty threshold are increasingly spending more on rent. When looking at household types, 'one adult younger than 65 years old' seems to be the category which spends most on rent, reaching a level of circa a quarter of their pay at 25.7%. The person with the lowest

spend on rent is that of over 65 years old individuals, who as explained before, tend to have ownership of their home rather than renting it.

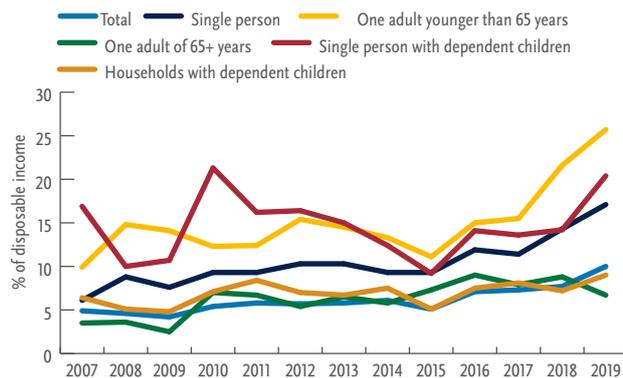
Graph 16: Rent as a percentage of disposable income by poverty level



Source: Eurostat. EU_SILC survey

one shelter to another (which could lead to double counting), whereas others often do not step forward to ask for help, given that such a living condition is still very much a taboo locally. Unfortunately, homelessness is a vicious cycle, which often leads to other issues such as mental health problems and the inability to hold a job. It is imperative that greater awareness and information is obtained with regards to this phenomenon. This is because, even if GDP increases and trickles down to all levels of society, such people are rarely considered, given they are not part of the labour market in any way. Finding these individuals and providing the necessary assistance should be a must for the authorities to ensure that all its citizens are living a decent life.

Graph 17 - Rent as a percentage of disposable income by household type



Source: Eurostat. EU_SILC survey

Another indicator which has become more visible in recent years is that of **homelessness**. This area lacks accurate data in terms of how many people are actually roofless and/or homeless (e.g. sleeping in cars and in abandoned or inadequate housing). This is due to a number of reasons. For one, Malta does not have a formal definition for homelessness and housing exclusion (Vassallo, 2019). Clearly, having no address often excludes people from being chosen to be part of a survey's sample which is typically based on households. In a national conference held on 8th February 2019, entitled 'Homelessness: The Hidden Scandal', it was estimated that circa 300 people were homeless at the time. This number needs to be seen in the light of a number of considerations. Administrators of shelters are often reluctant to draw conclusion on the number of such vulnerable groups; this is because service users often move from

3.3. Education and Skills

“The education of youth from every social background has to be undertaken, so that there can be produced not only men and women of refined talents, but those great-souled persons who are so desperately required by our times”.

Gaudium et spes, 31

The third dimension is that of *education and skills*. Seen as the foundation of economic growth and human development (UNESCO), the importance of having a strong level of education plays a key role in the country’s overall resilience and economic development as well as in each individual’s quality of life. This is because the level of education one attains will directly and indirectly influence other quality of life indicators, such as opportunities of getting a good job, the level of wealth one accumulates as well as the risk or poverty of both oneself and that of one’s children (as already indicated in Section 3.1 above).

Since Malta lacks a number of natural resources, labour remains the only natural factor of production our economy can deliver and nurture locally. For this reason, local governments have invested heavily in the country’s educational system and allocated resources towards increasing the knowledge and skills of its labour force. In this regard, government expenditure on education as a percentage of GDP in Malta exceeding the EU average throughout the years (*Appendix 2 – Graph 38*). One key component of this public expenditure is that education is free for all, from primary school up to tertiary education.

With unemployment levels decreasing steadily over the past years, reaching an all-time low of 3.4% in 2019 (National Statistics Office, 2019), and the emergence of new specialised knowledge sectors, one can attest that this increased investment in education has definitely bore fruit by contributing to a more employable workforce, across all sectors and levels of employment.

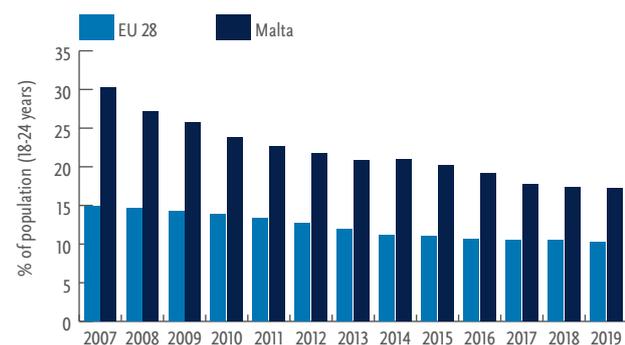
However, at the same time, the European Commission (EC) has repeatedly brought to the attention of the local authorities that persistent figures of high early school leaving and underachievement of the Maltese students will have long-term economic and social implications. Skills shortages, which are already being observed in the local labour market, will be exacerbated as individuals fail to fulfil the skills required by employers. Moreover, social-inclusion issues might arise, as disadvantaged families are unable to send their children to good quality schools, further falling behind their counterparts in terms of future opportunities (Commission, Country Report Malta 2020).

For this dimension the report therefore focuses on the following indicators:

- Early School Leavers
- Underachievement in Reading/Maths/Science
- Tertiary Education Graduates

The first indicator which is frequently brought to the forefront of the educational debate in Malta is that of the level of **early school leavers**. The trend has been on a consistent decline over the years, with the percentage in 2019 falling by almost half to what it was in 2007. Nevertheless, the EC’s comments relate to the higher local percentage in comparison to the EU average, even though the gap between Malta and the EU has been decreasing (11.7 percentage point difference in 2009 vs. 6.5 percentage points in 2019). The concern with early school leavers is based on the fact that children who fail to finish school might not be fully equipped with the skills required to enter the labour market, nor will they have any certification to signal to possible employers about their employability. This therefore decreases their life-time opportunities and chances drastically, very often limiting them to lower-paid jobs, which could more easily lead them to be at risk of poverty once they become adults.

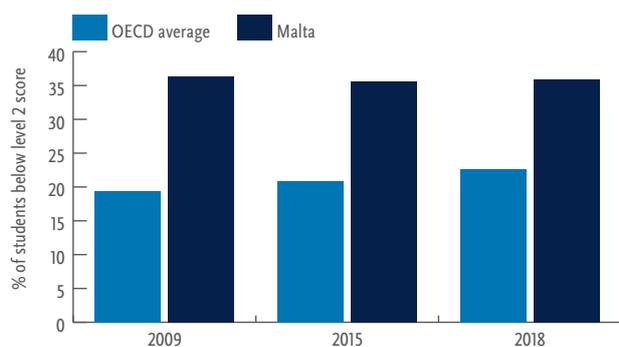
Graph 18: Percentage of early school leavers



Source: Eurostat. EU_Labour Force Survey

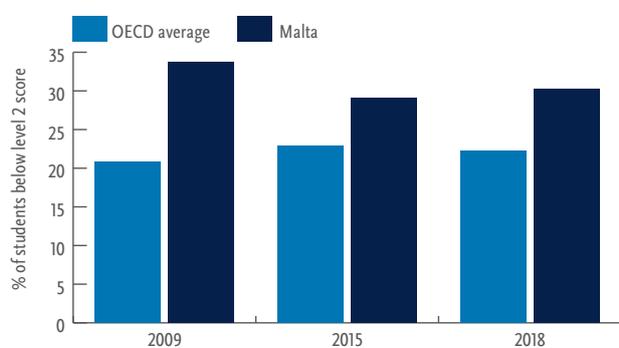
The second issue tackled in this dimension captures **underachievement in reading, maths and science**. With the necessary increased attention given towards the attainment of students in the education system, the quality of education being provided is also of key importance to enable individuals to seek employment further on. According to the OECD Programme for International Student Assessment (PISA), which measures 15-year-olds’ ability to use their **reading, mathematics and science** knowledge and skills to meet real-life challenges, Malta has a lower rate of achievers when compared to the OECD average. This again limits opportunities for Maltese to compete in labour markets. Moreover, achieving lower results in basic skills such as reading is of great concern for the future life possibilities of such students. The below graphs depict the overall trend in these subjects, for Malta vs the OECD average.

Graph 19: Percentage of low achievers in reading



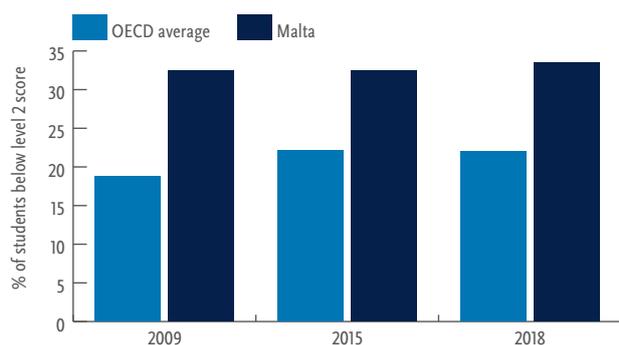
Source: OECD. Programme for International Student Assessment (PISA)

Graph 20: Percentage of low achievers in mathematics



Source: OECD. Programme for International Student Assessment (PISA)

Graph 21: Percentage of low achievers in science



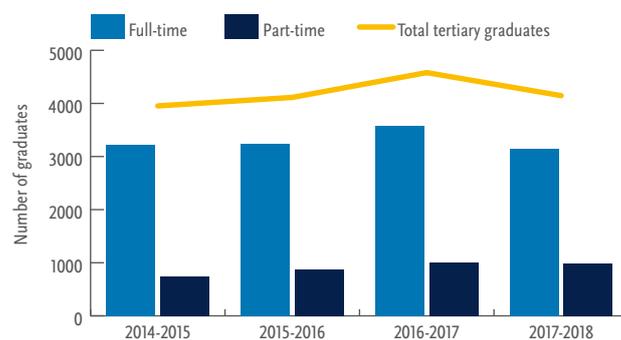
Source: OECD. Programme for International Student Assessment (PISA)

When comparing 2009 to 2018 figures for Malta, the percentage of low achievers in both reading and mathematics decreased marginally by 0.4 and 3.5 percentage points, respectively. This contrasts however to the 1 percentage point increase in the percentage of low achievers in science. Whilst OECD average figures are also indicating a slight increase across the years, this does not compensate for the gap found between Malta and the OECD average, and merits further attention from stakeholders in the sector.

Shifting away from primary and secondary statistics, the trends in **tertiary education** are also an important indicator to look at. This is especially the case given Malta's shift towards knowledge industries and the need to constantly maintain the jurisdiction's attractiveness. Malta managed to attain and surpass the 33% target of people in tertiary education (34.7%), but remains below the EU average of 40.7% (Commission, Education and Training Monitor 2019).

On the other hand, when looking at the number of graduates rather than admissions, the trend in **tertiary education graduates** has been relatively flat over the past 6 years, with numbers decreasing by 9.5% in 2018 over 2017 levels. The data also indicates that throughout the past few years, there seems to have been a shift towards more part-time graduates rather than full-time.

Graph 22: Tertiary education participation



Source: NSO. Graduate Survey Data

A number of industry operators often argue that some of the skills of graduates in Malta are not in line with industry demands, resulting at times in a skills mismatch in the labour market which could ultimately undermine Malta's attractiveness as a jurisdiction (EY, 2019). At the same time, higher levels of education have also been commonly cited to increase the overall welfare of individuals, leading to more prosperous lives and a decreased chance of poverty.

The Maltese government has been striving to tackle the above issues through its 2014 National Education Strategy (Ministry for Education and Employment, 2014) and increases in the percentage of GDP spend for this area. It is difficult to gauge the

quality of such spend. Both quantity and quality of spend are needed to ensure results that spill over in the labour market, which is currently characterised by a shortage of skills as will be outlined in the next dimension.

3.4. Work and decent jobs

Closely interlinked to the dimension of education is the dimension that covers **work and decent jobs**. “*Work gives dignity to man, not money*” (Francis, Il Papa: la dignità del lavoro viene prima del reddito, 2018). Indeed, the possibility of having a decent job, with good working conditions is intrinsically dignifying in itself. People feel useful when they use their creativity and intelligence, whilst also earning the required income in the process to live decently.

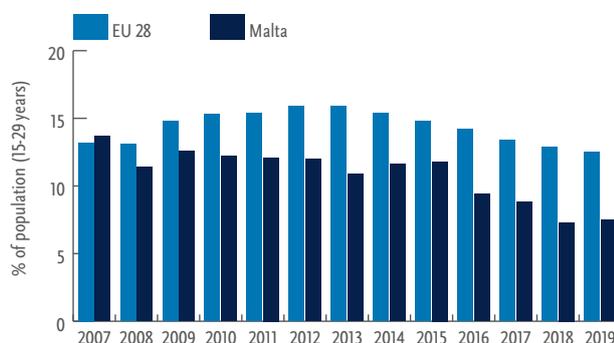
On the back of strong economic activity, Malta has been hailed as a success story when it comes to work opportunities and more importantly low unemployment rates. In this context, the number of people employed in Malta has broken all previous records, reaching practically full employment and an unemployment rate which hovers around the natural rate. Simplistically, this means that anyone who was out of employment in Malta was either i) in between jobs, or ii) he/she can't work (e.g. illness or disability). People who do not want to work (e.g. decision to stay at home caring for relatives etc.) for personal reasons are not included in the labour force count.

Looking more closely at the following indicators reveals further nuances to this narrative:

1. Young People neither in Employment nor in Training (NEET)
2. Working Long hours

The NEET statistics show the percentage of young people (between 15 and 29 years of age) who are not employed (i.e. unemployed or inactive according to the International Labour Organisation definition) and have not received any education or training (i.e. neither formal nor non-formal) in the four weeks preceding the Labour Force Survey (LFS).

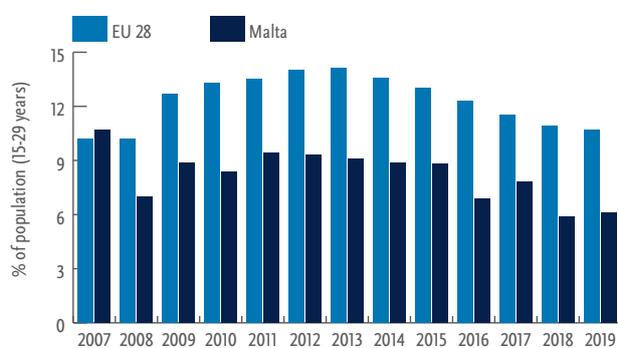
Graph 23: Total NEET as a percentage of population aged 15-29 years old



Source: Eurostat. EU_Labour Force Survey

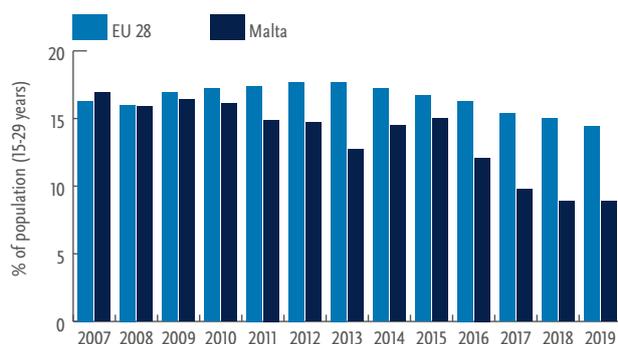
Malta has a lower rate of young people NEET than the EU average; over the years, this has also been decreasing, reaching its lowest point at 7.3% in 2018, which is equivalent to 7,145 individuals according to demographic statistics of that year. Whilst this statistic is somewhat taken for granted, nonetheless the indicator remains an important one within the context of this study as it sheds light on the structural flaws of the labour market, which generally become evident in times of economic downturn. In fact, at a time of significant economic prosperity, a 7.5% NEET should still be subject to a focus by local authorities, since it translates into both an immediate waste of much needed resources (labour force) for our economy, as well as an undermining of long-term prospects for these young people. The situation becomes more pressing when looking at genderised graphs, with female NEET figures coming higher than males.

Graph 24: Male NEET as a percentage of population aged 15-29 years old



Source: Eurostat. EU_Labour Force Survey

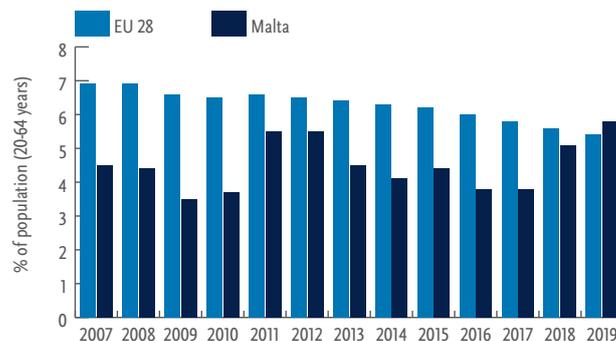
Graph 25: Female NEET as a percentage of population aged 15-29 years old



Source: Eurostat. EU_Labour Force Survey

As already stated, work is a basic prerequisite to ensuring some standard level of quality of life. At the same time, working conditions are also a vital determinant to the well-being of workers. In order to gauge this, an indicator related to the conditions of work is hereby presented, namely the amount of people stating that they **work long hours**. Statistics reveal that the amount of people **working longer hours**⁹ in Malta spiked in 2019, and for the first time exceeding the EU average since 2007, as depicted in the graph below.

Graph 26: Long working hours – Total employees



Source: Eurostat - Labour Force Survey

Whilst this may not yet be indicative of a trend in itself, the past 3 years, between 2017 and 2019, have revealed a growing percentage of the population working longer hours, increasing from 3.8% to its all-time high in a 12 year span at 5.8%. While potentially leading to higher (overtime) incomes, this could also potentially undermine wellbeing. As will be discussed in the health dimension below, longer working hours might have an impact on one's mental health. Moreover, it might also increase pressure on the workers to juggle between their personal and working lives. In a target oriented and ever-more demanding labour market, workers are often faced with great pressures to work long hours and shifts, especially in light of the skills shortages which have already been highlighted elsewhere in this report.

Moreover, stakeholder consultation processes highlighted the fact that the increase in non-EU nationals has also increased such pressure. This is because many of the foreign counterparts come to Malta solely for work, many a times with families staying behind in their countries of origin. For this reason, some foreigners are willing to work longer hours, independently of working conditions, simply because that is their sole aim for being in Malta. On the other hand, Maltese individuals who have a family to tend to are often unable to meet such requests from their employers, and potentially face the risk of being pushed out of the labour market. Of course, extremely long working shifts and other inadequate work

9 working 49 hours or more per week

conditions should not be imposed on anyone, be it local or foreigner. For this reason, it is of utmost importance to make sure that the employment market is well regulated and that abuses are not tolerated.

The Commission has many a times outlined the need to shift away from the mentality that workers (especially foreigners) are simply yet another factor of production to enable us to reach GDP targets, at the expense of their well-being. To this end, it is also important to include this indicator within the framework of this study as another proxy to measure economic well-being.

3.5. Health and Lifestyle

“Inner peace is reflected in a balanced lifestyle together with a capacity for wonder which takes us to a deeper understanding of life...Many people today sense a profound imbalance which drives them to frenetic activity and makes them feel busy, in a constant hurry which in turn leads them to ride roughshod over everything around them”.

Laudato SI 225

As already hinted at in the previous dimension, the quality of life of an individual is also very much based on the health and lifestyle of that same individual. In this regard, COVID-19 was probably a good eye opener to the mantra that no matter how much money one has, or the rate of GDP a country records, health has the ultimate bearing on one's well-being. Needless to say, the type of lifestyle that one leads also plays a significant role in determining his/her physical and mental health.

As a fundamental human right, most governments around the world have recognised the importance of investing in an adequate healthcare infrastructure. Malta is no exception in this regard, whereby the total amount of expenditure by the government, as a percentage of GDP, on healthcare has also been increasing throughout the years. In fact, according to the 2019 World Health Organisation (WHO) report on Malta, the country has recorded “one of the largest increases in per capita health expenditure in the EU over the last decade”, increasing by over 60% in 2017 when compared to 10 years earlier, which in nominal terms equates to an additional €2,732, spent per individual (European Commission, 2019).

Through the provision of free healthcare, governments in Malta have as a result also served as catalysts to ensure the availability of healthcare to all individuals, irrespective of which level of society they come from. In fact, recent statistics from 2018 indicate that Malta ranks amongst the lowest countries with unmet medical needs, standing at just 0.4% of the total population (Eurostat, 2020). This trend has been consistently decreasing throughout the past 9 years (*Appendix 2 – Graph 39*).

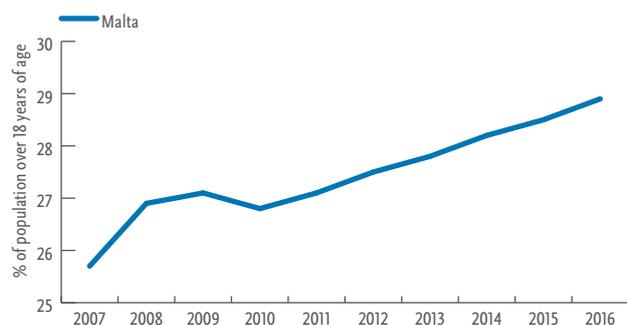
However, due to the rapid socio-economic shifts we've been witnessing, as a country, over the past years, the health dimension requires a broader, more holistic appraisal that covers not only the quality of healthcare being provided, but also changes to our lifestyles and way of living, as these undoubtedly are major contributing factors to both physical and mental wellbeing.

To this end, we have selected a number of health and lifestyle indicators, related to physical and mental health, which aim to shed light on different facets of health and the relationship that these have with the quality of life of our people. These include:

1. Obesity
2. Common physical health ailments such as heart disease, asthma
3. Mental health (using the proxies of longer working hours, loneliness and depression)
4. Drug use and addictions

Obesity has often featured in the media since latest statistics (2018) rank Malta highest in terms of the proportion of individuals above the age of 15 (59.6%), who were classified as overweight (BMI \geq 25) or obese (BMI \geq 30) (Eurostat, 2020). On the opposite end, lean and underweight individuals made up 38% and 2% of the population respectively. The situation is made worse by the fact that the rate of individuals with a BMI equal or over 30 has been on a constant upward trajectory for several years now, as indicated in the graph below.

Graph 27: Adult obesity rate (BMI \geq 30)



Source: World Health Organisation Data Repository

Within this indicator, **childhood obesity** is also at alarming levels in Malta. The Health Behaviour in School-Aged Children study of 2016 (World Health Organisation, 2013/14) indicates that 32% of Maltese children under the age of 11 are obese or overweight, with the rate increasing to 33% for children aged 13 or under and 26% for those aged 15 or under.

Obesity levels in Malta have been problematic for a considerable number of years. The prevalence of a more hectic lifestyle, increased access to cheap and highly processed foods along with a decreased appetite for physical activity, have all amplified the issue amongst all age groups and genders. Moreover, other socio-economic factors, cultural norms as well as environmental factors, such as the lack of recreational spaces available, have also had a direct impact on the obesity levels within the population (Swinburn, et al., 2011). Amongst these cultural norms, one could also identify the habits which come with greater economic affluence, such as eating out more

frequently and increasing the intake of alcohol, both of which might lead to increased weight gain over time.

Whilst it is common knowledge that obesity is not just an issue in itself but can be linked to other non-communicable diseases, such as Type 2 diabetes, cardiovascular diseases and several types of cancer, it is also important to highlight the financial burdens to society as a whole but also to government, businesses and individuals alike (Lobstein, 2014) (World Health Organisation, 2000). A study conducted by PWC in 2017 on the direct and indirect costs brought about by obesity in Malta estimated total costs to reach €36.3 million in 2016, with the highest direct cost coming from palliative care and the brunt of the indirect costs coming about in the form of increased absenteeism of workers due to health ailments caused directly or indirectly by obesity (PriceWaterHouseCoopers). It is important to note that the Maltese government has taken action such as the Healthy Weight for Life Strategy 2012-20, the Food and Nutrition Action Plan 2015-20, and the Non-Communicable Diseases Act 2016 as well increased regulations in schools (European Commission, 2019).

This study also focuses on two local prevalent **physical health ailments** which are asthma and cardiovascular disease. From data presented in 2016, cardiovascular disease in Malta accounts for two out of every five deaths, making it the leading health ailment in Malta (European Commission, 2019). There are undoubtedly multiple causes that can be attributed to these high rates such as lack of physical exercise, poor dietary choices, smoking as well as environmental problems (Fleri-Soler & Cassar-Maemple, 2018).

Graph 28: Deaths due to heart diseases



Source: Eurostat

In terms of asthma, figures tabled by the Ministry of Health (MoH) indicate that there were over 26,000 chronic asthma sufferers in 2019, having increased by approximately 15% since 2017. With deteriorating air quality (as shall be explained in the environment dimension), the prevalence and severity of asthma in Malta continued to increase, further emphasising the need for measures to improve air quality taken on a national level (Cacciattolo, 2013). The lack of publicly available data on

respiratory problems is also a cause for concern highlighted in this study. This in turn limits the opportunity for stakeholders to take mitigating action to the cause due to their inability to make the necessary informed decisions. It is to be noted that the shift away from heavy-fuel oil in electricity generation has had a positive effect on air quality, especially in the Harbour area.

Although not as visible as physical ailments, **mental health** is also a very important determinant of one's health and well-being. According to the World Health Organisation (2018): *"Mental health is a state of well-being in which an individual realises his or her own abilities, can cope with the normal stresses of life, can work productively and is able to make a contribution to his or her community."*

Evident from this statement, the definition of mental health should not stop at the diagnosis of commonly known neuro-degenerative diseases such as dementia or Alzheimer's, but should also be tied to the ways and tools we have as a society to deal with situations on a daily basis. As a result, aspects such as rapid social change, stressful work conditions, gender discrimination, social exclusion, domestic violence, unhealthy lifestyle, physical ill-health and human rights violations all play a significant role in the situations individuals may face, making solutions to these problems even more essential. Similarly to what was discussed above in terms of obesity, the issues of mental health do not only have a direct and indirect consequence on the individual but also on the entire social fabric brought about from an increased need in healthcare resources, lower educational outcomes, decreased productivity or inability to work, earlier retirement and overall increased dependence on the state through welfare benefits (Doran & Kinchin, 2019).

According to data published in 2010, mental disorders on a global level were estimated to incur between \$2.5 and \$8.5 trillion in overall expenses, which is equivalent to a percentage between 3% and 10% of total world GDP (World Bank, 2020). Whilst data on the actual cost burden of mental illness in Malta is lacking, when extrapolating data of the cost burden from similarly sized OECD countries, the toll amounts to 4% of the economy's GDP, which according to 2019 GDP levels, may equate to more than €450 million annually.

Data on mental health issues continue to be limited in that many cases remain unreported or hidden from society. Even though awareness and social acceptance is on the increase, actual data on the number of cases and different ailments are not so readily available. For this reason, three proxies are hereby being analysed to assess the mental well-being of the Maltese citizens, namely: **working longer hours**, **depression** and **loneliness**. The lack of accurate data in terms of mental health might hinder or underestimate the true depiction of the local situation. Hence, it is of national interest for policy makers and other relevant stakeholders to push for the availability of a more rigorous statistical collection and analysis process in this

regard, to enable more evidence-based policies and solutions to be implemented.

As already indicated in the Work dimension, the number of people **working longer hours** has been increasing. Studies have shown that mental health issues are common occurrences amongst individuals of all age groups engaged in working long hours, which could end up suffering stress, sleep deprivation, depression and suicidal ideation. Evidence also points towards an increased risk in blue-collar workers suffering from these health implications, when compared to white or pink-collar workers (Sato, Kuroda, & Owan, 2020), (Wong, Chan, & Ngan, 2019), (Park, et al., 2020). This inevitably stresses the need for government to take action to mitigate such occurrences before the problem becomes too large to handle.

Another prevalent issue of mental health which ought to be given more importance is that of **depression**. Depression is estimated to affect 4% of the world's population and is linked to close to 800,000 suicides per year globally according to the WHO estimates published in 2017 (World Health Organisation, 2017). The same report indicates that in 2015, Malta had 5.1% of the population suffering from depressive disorders and 4.9% from anxiety disorders (Ministry for Health, 2017).

Loneliness is another key determinant of mental health as well as quality of life. In fact, a study conducted by the Faculty of Social Well-being in Malta indicate that in 2019, a total of 43.3% of individuals residing in Malta experienced some degree of loneliness, with evidence showing that the numbers have been increasing along the years. The report also links a number of socio-economic factors with the prevalence of loneliness. Amongst the factors mentioned, being unemployed, having poor educational backgrounds, living with a low income, having poor physical health or having some form of disability all contribute to the likelihood of a person falling lonely and thus increasing the risk of suffering mental health.

Although not captured in any statistical data, actual lived experiences by professionals working in local mental health organisations such as the Richmond Foundation, also confirmed an increased level of loneliness amongst the elderly, as well as foreigners living in Malta, which has at times triggered mental health issues and potentially even substance abuse. Moreover, increased work pressures and the desires of individuals to keep up with the affluent society that has been shaped by economic prosperity and fuelled further by social media, is also putting more people under pressure, possibly impacting the mental well-being of individuals who are constantly trying to catch up in fear of missing out.

However, one cannot fail to mention that over the past years, Malta's awareness of the implications of the issues mentioned above and actions to solve these issues have been on the rise, with both government as well as organisations such as the Richmond Foundation, Sedqa, Caritas and others all contributing to the national cause through various actions,

campaigns and initiatives, such as the “World Mental Health Day” and the #StopStigma campaign amongst others (Office of the Commissioner for Mental Health, 2018).

The vision for mental health presented in the National Mental Health Strategy highlights a number of key issues and targets that the government has towards improving mental health. At the same time, the general consensus amongst these organisations and professionals alike point towards the immediate need for the economy and its constituents to further its efforts on understanding the severity of the problem of mental health and devising ways of firstly assessing the problem systematically and finding adequate and timely solutions.

The final indicator of health and lifestyle we delved into is the notion of substance abuse, with particular emphasis on how shifting socio-economic landscapes have impacted substance abuse, focusing primarily on **drug use**.

Drug use in Europe encompasses a wide range of substances. Among people who use drugs, polydrug consumption is common but challenging to measure, and individual patterns of use range from experimental to habitual and dependent consumption. Cannabis is the most commonly used drug — the prevalence of use is about five times that of other substances (European Monitoring Centre for Drugs and Drug Addiction, 2020). The Malta National Focal Point for 2019 also presents a high prevalence level of cannabis usage. Moreover, according to a 2013 general population survey, 4.3 % of those aged 18-65 years reported having used cannabis during their lifetime, with 1.4% of the same population having used other illicit drugs such as MDMA/ecstasy, amphetamines, cocaine, heroin, mephedrone, any of the new psychoactive substances (NPS) or lysergic acid diethylamide (LSD) (European Monitoring Centre for Drugs and Drug Addictions, 2019).

The 2015 European School Survey Project on Alcohol and Other Drugs (ESPAD) carried out with students aged 15-16 years indicated lower levels of usage of cannabis in Malta when compared to the ESPAD average, but higher than average use of other illicit drugs (European Monitoring Centre for Drugs and Drug Addictions, 2015). Local agencies such as Sedqa and Caritas have indicated that heroin has been the most pressing drug issue on the island for many years. However, whilst numbers have remained relatively constant, levels of cocaine have been increasing across all sectors of society and are a growing problem.

Professionals in the field explained that the increased use of cocaine, amongst others, could be attributed to the greater purchasing power which people currently have. Having more money and living a more hectic and stressful life, might be a combined push factor to abuse of such substances. Indeed, these new trends could be an indication of our society ‘suffering from affluence’ and is likewise important to thrust a spotlight on these issues to monitor developments as they happen and devise strategic action.

3.6. Environmental Quality

“The earth’s resources are also being plundered because of short-sighted approaches to the economy, commerce and production... Different species contain genes which could be key resources in years ahead for meeting human needs and regulating environmental problems”.

Laudato SI 32

The final dimension being presented in this report is the *environmental quality* of our islands. Research has often cited a trade-off between economic development and the environment. The industrial revolution in the 18th century kick started a period of history characterised by immense economic advances amongst many countries around the world but was also the start of a significant downfall in the upkeep and state of the global environment. Issues such as pollution, reduced air quality, soil erosion, loss of biodiversity, global warming, loss of natural habitats, have taken over the narrative of most economies, due to the dire consequences that will ensue if remedial action is not taken now.

Malta’s economic development throughout these past years has been the subject of intense criticism by different sections of society for consistently turning a blind eye to the effect that this is having on the environment. This becomes a much more pressing matter when we factor in Malta’s very limited natural resources of land and water. It compounds the need for efficient systems of resource allocation to be put in place to ensure an equilibrium between economic development and environmental sustainability. Whilst economic growth has played a role in improving people’s livelihood, this becomes irrelevant if it comes at a greater cost in the longer term.

Government, through the Environment and Resources Authority (ERA), has embarked on an in-depth review of its current environmental challenges and sought to devise a national strategy, spanning the next 30 years until 2050. The underlying objective is to focus on improving citizens’ wellbeing through the formulation of targets that address key environmental issues and build on synergistic efforts made by multiple stakeholders to set a long-term direction for Malta’s state of the environment (Environment and Resources Authority, 2020). Aspects such as air quality, climate change, adequate resource management such as land, waste and marine resources, noise pollution, natural open landscapes and many more were all identified as areas requiring specific attention. Whilst such long-term strategies still need to be implemented,

the next sub-section presents a number of indicators on the environment. These indicators are:

1. Air quality (assessed through particulate matter)
2. Levels of Greenhouse Gas emissions
3. Number of vehicles in Malta
4. Land use in Malta
5. Water Management – Water Exploitation Index
6. Waste Management – Most common types of waste and treatments

Looking at **air quality** from a technical point of view indicates that there are various pollutants which are used to measure air quality. These include: 1) Particulate Matter (PM), 2) Ozone (O₃), 3) Nitrogen Oxides (NO and NO₂), 4) Sulphur Dioxide (SO₂), 5) Benzo(a-)pyrene (BaP), 6) Carbon monoxide (CO), 7) Benzene, 8) Arsenic, 9) Cadmium, 10) Nickel, 11) Lead and 12) Mercury. Malta's most pressing air pollutants include ground level ozone (O₃), nitrogen oxides and PM (Environment and Resources Authority, 2018).

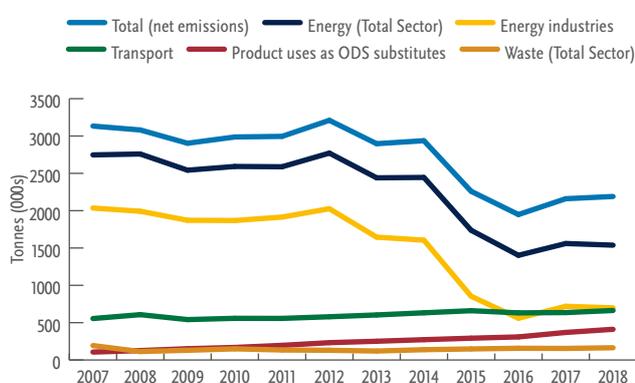
According to a recent study which aimed to assess trends in air quality in Malta between 2008 and 2017, there were indications of decreased trends for both PM₁₀¹⁰ and PM_{2.5}¹¹ concentrations respectively, across the island, whilst showing an increasing trend in the more coarse fraction¹² of particulate matter which is PM_{2.5-10} (Fenech & Aquilina, 2019). The main reasons behind the decreased levels of PM₁₀ and PM_{2.5} stem from the increased efficiency of combustion engines in passenger vehicles as well as the slight increase in combines petrol/LPG, hybrid and electric vehicles on the island. On the other hand, PM_{2.5-10} is said to originate mostly from non-exhaust sources such as road, brake, tyre and clutch wear and resuspended dust (Pallavi & Harrison, 2016), which can be linked back to the increased number of vehicles on the roads and also to the significant boom in construction activity seen in recent years. The study also indicates an increasing trend for Ozone (O₃) in the air between 2008 and 2017 in Malta.

Poor air quality is intrinsically linked with many respiratory problems such as asthma, cardiovascular diseases, impacts on the central nervous system and irritation of nose, eyes, throat and skin amongst many other conditions. This issue is not just present in Malta, but all across Europe, where there is an increased sense of urgency to improve the air quality, especially in the most urbanised areas, where air quality is worsened due to more vehicles present. Needless to say, some of the air quality pollutants also play a role in the issue of climate change, whereby failure to mitigate this issue now will have everlasting implications on our ability to withstand climate change over the

next decades. In this regard, the level of **Greenhouse Gas (GHG) emissions** on the island. While Malta's net emissions have been on a steady decline since 2012 due to the move away from heavy-fuel oil in electricity production (e.g. Marsa power station closure; shift to LNG; increased use of the interconnector), reaching its lowest point in 2016, there was an uptake again in 2017 and 2018. Transport remains the main contributor to GHG emissions in Malta. Transport has been increasing in emissions throughout the years, increasing its contribution from 18% of total emissions in 2007 to 30% in 2018. The increased numbers of motor vehicles is of key concern in Malta, leading not only to environmental issues but also to logistical and infrastructural challenges such as increased traffic and increased occurrences of traffic accidents.

Another contributor to GHG emissions is what are known as ozone depleting substances (ODS; also referred to as F-gases)¹³, coming from uses such as refrigeration, air conditioning or fire suppression amongst others (National Statistics Office, 2019). Since the early 1990s, efforts have been made at finding alternatives to these ODS. Alternatives such as hydrofluorocarbons (HFCs), perfluorocarbons (PFCs) and sulphur hexafluoride (SF₆) were introduced in the use-cases mentioned above to mitigate this issue. Whilst these substances are not ozone depleting, they still emit GHGs and there has been an increasing trend of products used as ODS substitutes in Malta. In fact, these have increased by 16% in terms of contribution to the overall net emissions over an 11-year timespan, between 2007 and 2018.

Graph 29: GHG emissions by sector



Source: Malta Resources Authority. Greenhouse gas emissions inventory for Malta 2018

10 inhalable particles, with diameters that are generally 10 micrometres and smaller

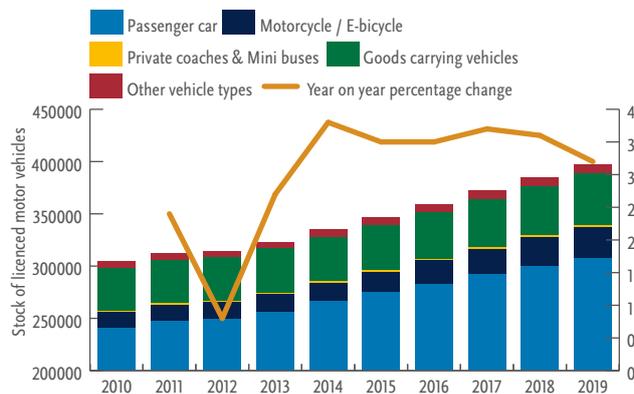
11 fine inhalable particles, with diameters that are generally 2.5 micrometres and smaller

12 Coarse particles have an aerodynamic diameter ranging from 2.5 to 10µm (PM10-2.5)

13 Ozone depleting substances are chemicals that destroy the earth's protective ozone layer such as chlorofluorocarbons (CFCs), hydrochlorofluorocarbons (HCFCs), hydrobromofluorocarbon (HBFCs), halons, methyl bromide, carbon tetrachloride and methyl chloroform (Ministry for the Environment - New Zealand, 2019)

Linked to the above indicator is the presence of **motor vehicles** currently on the roads. Given that most of the current fleet uses an internal combustion engine (ICE), there is a direct relationship with the levels seen in both diminished air quality as well as high GHG emissions on the island. Between 2010 and 2019 the number of licensed motor vehicles increased by an average of 3% annually. At the height of economic performance and population growth, that is the past 5-years, the average annual rate of growth went up to 3.5%. The stock of licensed motor vehicles by the end of 2019 stood at 397,508, which is 30% more than what was registered in 2010. 77% of total motor vehicle stock are private passenger cars, which have increased by more than a quarter over the past 9 years. 8% are motorcycles and have more than doubled during this same period. Growth in motor vehicle stock was also registered in the number of licensed private coaches (+85%) and minibuses (+36%) mirroring the increasing demand from the tourism industry, as well as goods carrying vehicles (+20%) which is reflective of the growth registered in the productive sectors of the economy.

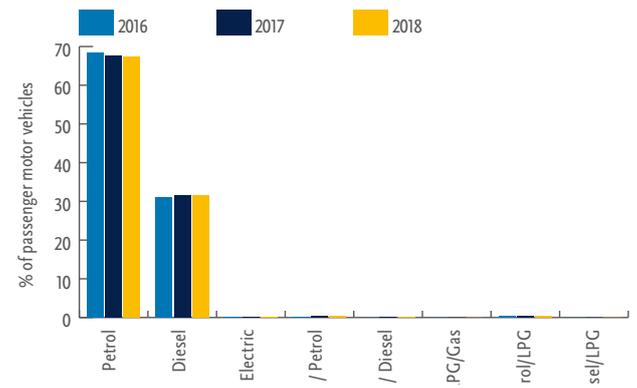
Graph 30: Stock of licensed motor vehicles & year-on-year percentage change



Source: NSO

In spite of the increasing number of initiatives and incentives aimed towards promoting the use of non-combustion alternatives for both private and commercial vehicles, only a small uptake has been registered so far, with few numbers of electric, hybrid or vehicles using a combination of either LPG and petrol or LPG and diesel. To this end, there continues to be an urgent need to make public transport alternatives a reliable and attractive alternative to private car use to mitigate and lower the environmental impacts from private vehicle use. Government has also committed to announce an official ICE cut-off date for new vehicles, which would be the first step in shifting away from highly emitting cars from our roads.

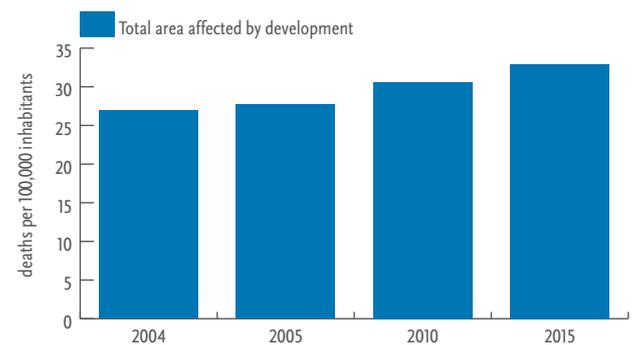
Graph 31: Passenger motor vehicles by fuel type



Source: Transport Malta

The next indicator is that of **land use** and how this incredibly finite resource in Malta is being used. The total area of developed land in Malta has been steadily increasing throughout the years, by roughly 3% every 5 years both within and outside development zones. In 2015, Malta had 32.9% of its land affected by development, making up 103.8km² out of a total surface area of 315.7km² for the entire island.

Graph 32: Total area affected by development



Source: Planning Authority

This increase should also be analysed in the light that the construction industry in these past few years has been booming, indicating a potential tangible cost of achieving GDP targets. In all countries, as governments aim to achieve a more sustainable growth, authorities must seek to control developments (especially greenfield type), safeguarding this finite resource and ensuring that enough open spaces are allowed, not only for better air quality and aesthetics, but also for better physical and mental well-being of the citizens. Once again, this stands to show how each element and indicator is intrinsically tied to others.

Another collateral cost of increased economic activity and production relates to increased waste production. Total solid waste production in Malta increased by 29% between 2012 and

2018, with roughly 2.6 million tonnes of waste generated in 2018. A key issue in waste management comes from dealing with non-hazardous mineral waste generated from construction and demolition (C&D), producing approximately 73% of total waste in 2018. This figure saw a significant spike between 2016 and 2018, which coincides with the boom in property market seen in the island, brought about by a significant increase in construction levels. Local media very often presented situations where space for such C&D waste seemed to have all been taken up.

Graph 33: Total waste by category

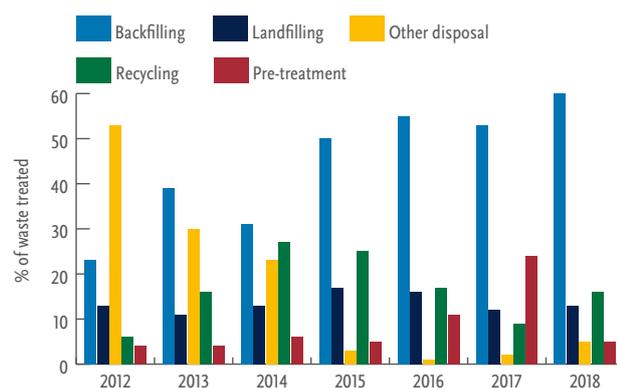


Source: NSO. Solid Waste Management 2018

Indeed, the booming construction industry resulted in great waste generation, which becomes even more problematic when considering the very little space we have as a small island state to manage that waste. Indeed, waste management is of utmost importance, especially in terms of how we decide to treat the waste we are increasingly generating, and whether there are cost-effective options for re-use.

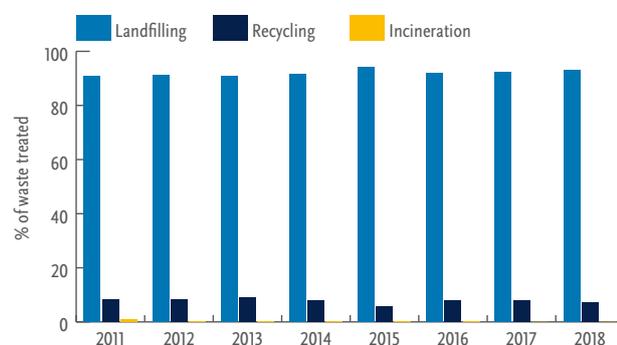
In terms of general waste streams, the most commonly used method of waste management is that of backfilling, showing a steady increasing trend from 23% in 2012 to 60% in 2018. The second most common treatment is recycling but Malta has so far failed to register any marked increases, despite various measures taken by government to increase the amount of recycling done by all sectors of society.

Graph 34: Type of solid waste treatment



Source: NSO. Solid Waste Management 2018

Graph 35: Type of municipal waste treatment



Source: NSO. Municipal Waste Management 2018

Landfilling, on the other hand, is used predominantly to treat municipal waste, treating approximately an average of 90% of total municipal waste on a yearly basis between 2011 and 2018. The prevalence of material recycling of municipal waste has been decreasing during the same timeframe, with 7.1% of municipal waste recycled in 2018 when compared to 8.4% in 2011. This undoubtedly merits further attention in order to find more effective means to reverse this decreasing trend and in turn improve recycling levels in Malta for both municipal and solid waste. To avert a potential crisis as landfilling is less likely to represent an option in the future, Government has recently announced a waste-to-energy infrastructure project.

The final indicator considered under this dimension relates to the use of water as captured by the *water exploitation index*, which provides insights into the level of water abstraction in Malta. Malta's environmental resources are extremely scarce, both in terms of land and water. Water use is estimated at 110 L/capita/day, one of the lowest in the EU. The four main water sources are groundwater (61%), desalinated water (29%), rainwater (7%), and treated wastewater (3%). Agriculture and

domestic sectors have the highest demands for groundwater in Malta (Environment and Resources Agency, 2018).

Despite the low water use when compared to the EU, water has always been a pain point for the island, being surrounded by sea but having limited fresh water sources - Malta has the lowest access to natural freshwater resources in the EU. To this end, governments have over the years invested in several reverse osmosis plants to ensure water availability. The higher levels of economic and social development experienced in these past few years (including greater level of manufacturing, record tourist arrivals and increasing population figures, amongst others) have also put additional pressures on the local water resources.

Graph 36: Water exploitation index



Source: Eurostat. European Statistical System

Within the above context, Malta's water exploitation index has seen an increase throughout the years between 2008 and 2017, with the peak reached in 2013 and 2014, at 54.9% and 53.6% respectively. With levels constantly above the EU threshold of 40%, this indicates that Malta suffers from high water stress levels. Moreover, Malta suffers from the fact that more than half of its 8,000 registered boreholes, used for water abstraction are not metered, leading to users not being charged for its use and in turn increasing the prevalence for abuse (MaltaToday, 2020). All this highlights the urgency for better water governance on the island.

The above indicators stand to show that the increased economic activity in the past few years came at the cost of greater pressures on the environmental resources of the island. Finite resources like land and water are indispensable for the well-being of society and individuals and thus call for immediate action to preserve and secure them, for both current and future generations.

4. Concluding remarks

4.1. General Takeaways

All dimensions discussed in this study are all closely inter-linked, further emphasising the need for a more holistic approach at progress and development, bringing together various economic, social and environmental factors in our quest to fully capture the country's progress and well-being. This section highlights a number of key takeaways for each dimension covered in this study.

Income

The 60% threshold of income under which one is to be considered at risk of poverty has increased, indicating a rise in average wages. This means that people who are on fixed pay at the low end have fallen behind. This is confirmed by the Gini coefficient which has shown inequality levels being the highest in 12 years. The percentage of people at risk of poverty is increasing (16.8% in 2018), especially in the elderly category as well as single parents' households. Authorities should therefore hone down on subcategories, such as age and gender, when looking at poverty data. It is our duty as a community to make sure that those who have serviced our society for so long, the elderly, are well taken care of, even once they are no longer productive as they used to be. Moreover, minors also seem to be at higher risks of poverty. This requires urgent addressing, given the fact that children are the adults of the future and if they do not grow and develop as they should, the Malta of tomorrow will suffer. Encouraging statistics in the materially deprived and severely materially deprived groups could be an indication that, through targeted policy, results can be truly achieved.

Housing

Amidst growing construction activity, increased demand for housing due to the foreign workers influx and property price increases, housing has been high on the national agenda for the past few years. The booming construction industry as well as the increased level of foreigners have both been important elements which spurred on our economy and GDP. At the same time, they also led to housing issues, including increased level of overcrowding in housing, whereby more people are sharing spaces due to cost considerations. Severe housing deprivation has been stable overall but increasing for people with income under the 60% poverty threshold. Moreover, cost overburden on housing and the percentage of rent from disposable income have both been increasing, indicating that housing is becoming increasingly more expensive, posing problems, especially for those already at the risk of poverty. Moreover, homelessness remains an increasingly difficult topic to discuss given the lack of accurate data of such phenomenon. Yet, lack of data does not mean the problem does not exist; hence, authorities

should look into it to ensure that all individuals have adequate housing conditions.

Education

Education plays an instrumental role for each level of society. On an individual level, it indicates to employers one's skills and ability to work, increasing future opportunities. The indicators analysed in this dimension highlight the need for further educational improvement in Malta, since despite the increased spending and investments by governments, issues related to early school levels and underachievement remain.

High numbers of early-school leavers, coupled with a high rate of underachievement in reading, mathematics and science, point towards a wider discussion needed, including the curriculum, teaching methods and the methods of assessment. This not only applies to primary and secondary education but also to tertiary education, whereby the number of enrolled students has reached the EU2020 targets while the number of graduates throughout the past several years has been relatively stagnant.

Strategies aimed towards improving education should be flexible, inclusive and embrace a long term-vision whilst targeting not only the improvement of formal education but ensuring that informal and non-formal means of education are also given due importance. This will in turn enable society, from children of school age, to elderly pensioners, to access different forms of improving their knowledge and skills.

Work and Jobs

Youths (aged 15 to 29) neither in employment nor in training for Malta has been lower than EU levels and decreasing over the years, which is positive. Authorities must still keep an eye out for this statistic, especially in terms of female youths, as any such youth not working nor training represents underutilisation of our key natural resource: human capital. It also means that these youths will have lower opportunities in the future and will probably be at greater risk of poverty. In addition, in this dimension, there was an overall increase of people working longer hours. Having a job is extremely important, yet at the same time decent working conditions are a must if the individual is to safeguard one's well-being. Such an indicator shows the mounting pressures that many workplaces are nowadays being faced with, for the sake of reaching targets and being more productive, whilst sacrificing time which could otherwise be spent with one's families and loved ones.

Health and Lifestyle

The accelerated growth experienced in the economy over the past few years does not automatically correlate to higher physical and mental well-being amongst society. It is true that there cannot be better health without improving economic

conditions, but the former is not mutually dependent on the other.

With increased physical and mental problems, as well as ill health, the quality and length of life of people will deteriorate, inhibiting economic and social development at a national level, by reducing human capital. Poor health conditions mean that a significant part of a given population is unable to benefit from the general progress of society, or actively engage in civic activities.

Economic progress has also been found to trigger new health challenges. For example, this dimension touched upon the issue of obesity, especially the high incidence of this condition amongst children. Also, the incidence of physical ailments such as cardiovascular diseases as well as asthma, might be an indication of the ever more stressful life and polluted air which are impinging on our health. Moreover, the increased levels of depression and loneliness, stemming from various socio-economic shifts such as, for instance, increased working hours, has increased throughout the years. The change in lifestyle and affluence might also have contributed to the increased use of cocaine for recreational purpose, becoming much more diffused than heroin.

Environmental Quality

Finally, the last dimension looked into how Malta has been fairing in a number of environmental indicators. The analysis in this dimension highlighted a significant burden being placed on our environment, encompassing elements such as the air, land and water resources in our country. Amidst increased motor vehicles running on fossil fuels, increased waste coming from households and businesses coupled with low recycling levels has had a significant impact on our air quality as well as land use. This has in turn played a role in accelerating a number of health ailments such as asthma and heart disease, with several studies also revealing an intricate relationship between these diseases and air quality.

Another key takeaway is the increased focus needed on improving the efficiency and effectiveness of adequate land, waste and water management. Amidst increased land development due to higher population figures in Malta over the past years, this has led to a decrease in the availability of open air spaces for individuals and families to enjoy as well as an increased strain on the water table as can be seen through the very high levels of the water exploitation index, beyond the EU's recommended levels.

General

This study has attempted to throw light on the possibility that GDP figures remain important but do not portray the full socio-economic picture. Locally, while some indicators such as educational improvements and attainments remains constant, other indicators registered declines, such as the environment. This study presented this information to act as an invitation to all stakeholders, including the authorities, enterprises

as well as individuals themselves, to expand on this initial research and focus on all areas which impact the quality of life of people. Such findings should inform economic decisions taken at any level of society, to give all economic, social and environmental considerations equal footing. The following are recommendations we are putting forward at all levels of society to enable a composite measurement framework of all that makes the quality of life of the Maltese better.

4.2. Well-being Recommendations

As already alluded in the first part of this report, the findings of this study serve as a call for action for Malta to embrace a more holistic approach to measuring the country's well-being that looks beyond GDP. For this reason, we are proposing a number of recommendations which can be undertaken at stakeholder and policy making levels, so as to ensure that a concerted effort is made at all levels of society.

Development of an open data platform or dashboard

The report has highlighted the need for a more comprehensive list of indicators to measure the well-being of society. It is being proposed that an open data platform is launched which will include a dashboard with the main areas of focus. Each area will then have a set of interactive graphs which will be updated regularly and users can also filter and disaggregate to analyse the results by age, gender, region and other markers where necessary. This project can be phased with a static dashboard being developed first before being enhanced into an interactive one.

Agree on a national well-being framework

Government should agree with social partners on a national well-being framework which includes a set of indicators, which the NSO will track and publish. The country needs an annual publication which critically assesses impacts on well-being so that the national debate will not solely focus on GDP but a broader assessment of well-being is taken. This will then be part of the dashboard referred to above.

Integrate well-being in policy making

Once such a framework is defined and agreed upon, it is being suggested that government policies or strategies include a chapter on the expected outcomes and effects of the policy on well-being. This will ensure that every policy proposal would have assessed its effects on well-being, in the spirit of good stewardship aimed at both current and future generations.

Revisit COLA mechanism

The cost-of-living-adjustment mechanism has been an important contributor to Malta's social and welfare economy whereby families were compensated for the increase in prices of a typical basket of goods. However, this mechanism now needs to be updated to ensure affordability, especially for low-income earners. It is being recommended that a discussion is started amongst social partners with a view of revisiting the COLA mechanism and to study concepts such as living wage which can support low-income cohorts much more than the COLA adjustment. This could build on the study carried out by Caritas in 2012 and 2016 to identify a minimum essential budget or a decent living (MEBDL), which outlined the minimum essential budget or three different Maltese households.

Commence discussions on a social pact

COVID will usher a number of structural changes into the economy which will need to be addressed given their potential impact on well-being. It is being recommended that Government together with social partners discuss and agree a social pact which will look into a number of issues including policies to reward enterprise but punish rent-seeking, ensure a fair tax burden and establish job and income protections to boost productivity. In case of a need for fiscal consolidation, measures to cut fiscal deficits cannot be at the expense of education and training strategies to fit changing demands for skills.

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6. Appendices

6.1. Appendix 1

Table 6-1: List of existing studies and indices identified during the desktop research

| Name of the study | Producer of the study |
|--|--|
| The Good Life | Centre for Progressive policies. Based on Jones and Knlenow. |
| Welfare vs. Income Convergence and Environmental Externalities | IMF Working Papers; Geoffrey J. Bannister and Alexandros Mourmouras. Based on Jones and Knlenow. |
| Feasible future global scenarios for human life evaluations | Nature communications, Barrington-Leigh & Galbraith. Based on Jones and Knlenow & The good life |
| New Zealand's Well-being Budget | NZ's treasury |
| UN Human Development Index (HDI) | United Nations Development Programme, Human Development Reports (HDR) |
| Mercer's QoL survey | Mercer |
| Human Capital Index | Human Capital Project, World Bank |
| Gallup's Emotions report | Gallup |
| World Happiness Report | United Nations Sustainable Development Solutions Network. Based on data from Gallup. |
| Five headline indicators of national success | National Economics Foundation (UK) |
| Bhutan Gross National Happiness | Centre for Bhutan studies and GNH |
| Inclusive Development Index | World Economic Forum |
| Better Life Index | OECD |

Figure 2: OECD Better Living Index framework

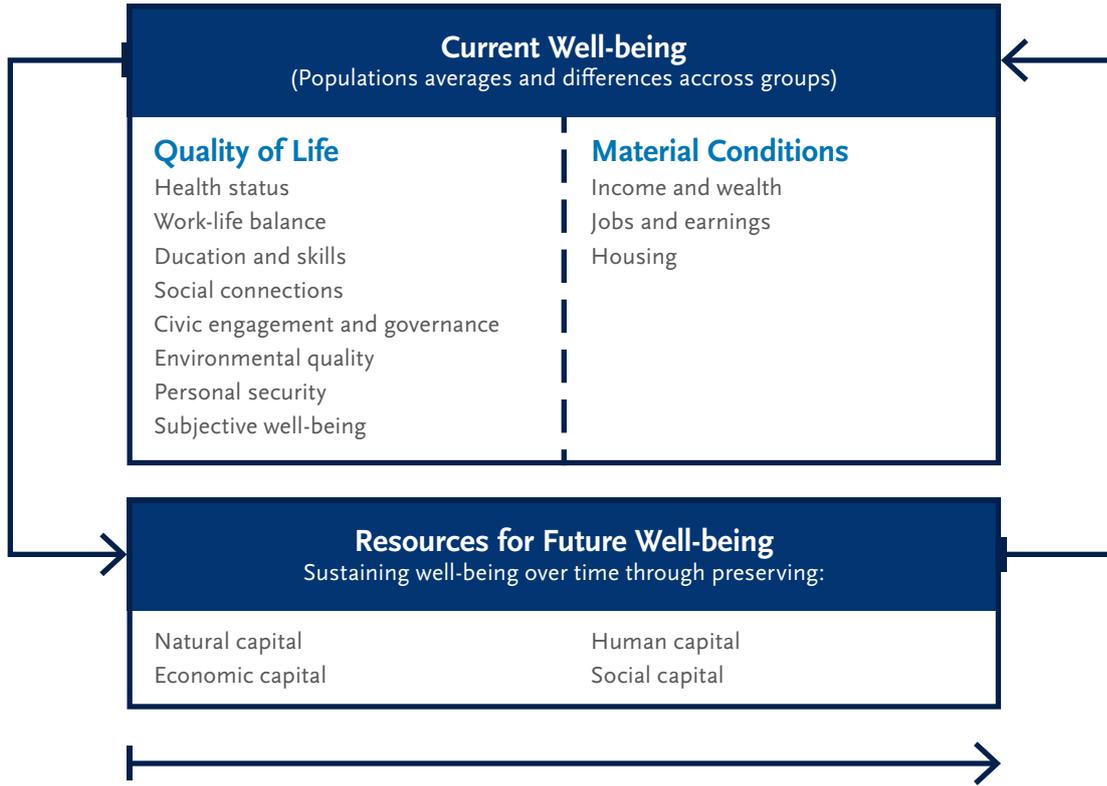


Table 6-2: List of participants to the technical workshop

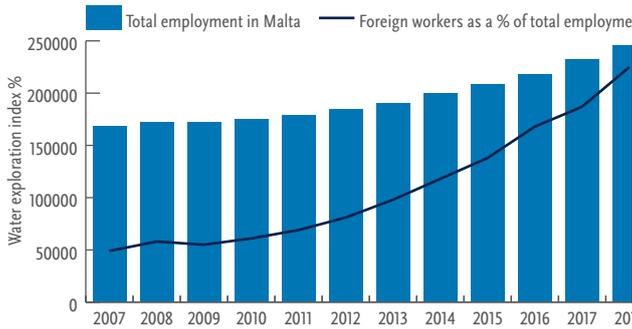
| Name of participant |
|---|
| Vivienne Attard - Focolare movement |
| Malcolm Bray - MFAC |
| Marie Briguglio - Academic and Senior lecturer at UoM |
| Andre Camilleri - Member, ECB Administrative Board of Review |
| Vincent Cassar – Associate Professor at the UoM |
| Stephanie Fabri - Economist and lecturer at UoM |
| Michael Pace Ross – Administrative Secretary for the Archdiocese of Malta |
| Sue Vella – Senior Lecturer and Head of Discern Institute Board |
| Fr Frankie Cini MSSP - Provincial of the Maltese Province |

Table 6-3: List of Stakeholders and experts consulted

| Stakeholder | Role / Organisation | Date of Meeting |
|---|--|-----------------|
| Sue Vella | Researcher, Senior Lecturer. Social Policy & Social Work. and Head of Discern Institute Board - Expert | 13/05/2020 |
| Etienne Caruana & Matthew Zerafa | Director General & Director Social Statistics Directorate respectively NSO | 17/08/2020 |
| Marie Briguglio and Jonathan Spiteri | UoM lecturer and researcher – Environmental point of view - Expert | 02/09/2020 |
| Mr. Alfred Grixti (CEO), Sharon Arpa (Research), Charles Scerri (Sedqa) | Foundation for Social Welfare Services, FSWS | 17/09/2020 |
| Dr. John Cachia | Commissioner for Mental Health | 29/09/2020 |
| Dr. Anthony Gatt | CEO of Caritas | 30/09/2020 |
| Ms. Stephania Dimech Sant | CEO of Richmond Foundation | 07/10/2020 |

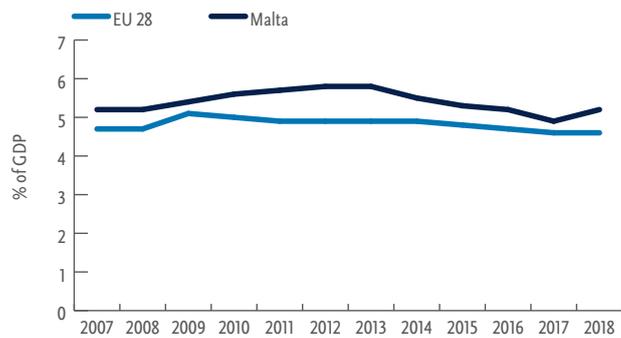
6.2. Appendix 2

Graph 37: Employment levels in Malta



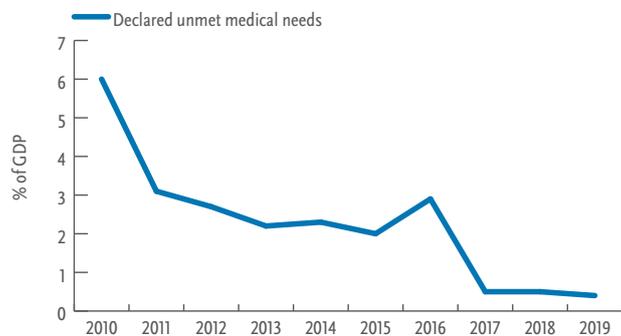
Source: Jobsplus

Graph 38: Government expenditure on education as a percentage of GDP



Source: Eurostat

Graph 39: Percentage of declared unmet medical needs



Source: Eurostat. EU_SILC survey

