

# Island Index Report 2023

**Sustaining prosperity  
and growth**



## Islands have always played important roles in international trade, communication and innovation, as well as being biodiversity hotspots, and attractive tourist destinations.

In modern times, Jersey, Guernsey, Malta and the Isle of Man have continued this trend by becoming established international financial centres (IFCs), punching above their weight in the global economy as hubs of expertise and conduits of capital. Financial services (FS) and other high value industries have helped the four islands to create quality jobs and living standards, while preserving their strong sense of community and place.

However, the islands are now feeling the effects of faltering productivity growth in financial services since the 2007 - 2008 financial crisis ([though this will likely disappear as deleveraging in the sector runs its course](#)). Looking ahead, their economies could be especially vulnerable to the disruptive impacts of climate change, geopolitical instability, technology disruption and ageing populations.

PwC's new Island Index gauges how prepared Jersey, Guernsey, Malta and the Isle of Man are for the disruptions ahead. We analyse the growth prospects for each of these economies between now and 2050. We conclude by looking at how businesses and governments can address the challenges and opportunities their islands face as they strive to sustain long-term prosperity and growth.

Building on our strong links with communities, businesses and governments, we at PwC are determined to play our part in supporting the islands' continued success. We hope that this report can provide a useful contribution to understanding and addressing the threats and opportunities ahead.

### Only have a minute? Consider the key findings.

- Small island economies boast some of the highest GDP per capita rates in the world. But without action, they could be especially vulnerable to decelerating global growth and disruptive trends ranging from ageing populations to deglobalisation and climate change.
- PwC's new Island Index gauges Guernsey, Jersey, Malta and the Isle of Man's respective readiness to face the disruptive challenges ahead.
- Economic projections suggest that Jersey, Guernsey and the Isle of Man are likely to underperform the OECD average GDP growth in the coming decades.
- Malta's GDP per capita is moving up to the OECD average and will begin to converge with Jersey, Guernsey and the Isle of Man in the coming decades.
- Ageing populations and shrinking workforces could put severe pressure on tax income and public finances. Attracting workers from overseas could offset any labour shortages and boost taxation. But attitudes to migration vary across the four islands, as does their capacity for population increases.
- Despite these challenges, there are opportunities for these islands to capitalise on their potential, lead in areas like climate action, and instil confidence in younger generations. Drawing from the Island Index and economic projections, we believe there are five key considerations for businesses and five for governments as they seek to strengthen and sustain relevance, resilience and growth.

## Steering through global upheaval

The islands' international finance and business sectors, combined with their tourism and hospitality industries and natural beauty, provide a magnet for investment, talent and high value work.

Many have grown into major centres for specialist services in areas such as investment management, private markets and captive insurance, while continuing to attract thousands of tourists every year. In recent years, the islands have diversified into new growth opportunities such as fintech, sustainable finance and online gaming.

As a result, the job prospects for young people coming into the workforce have been good and unemployment has been low.

## Country Statistics

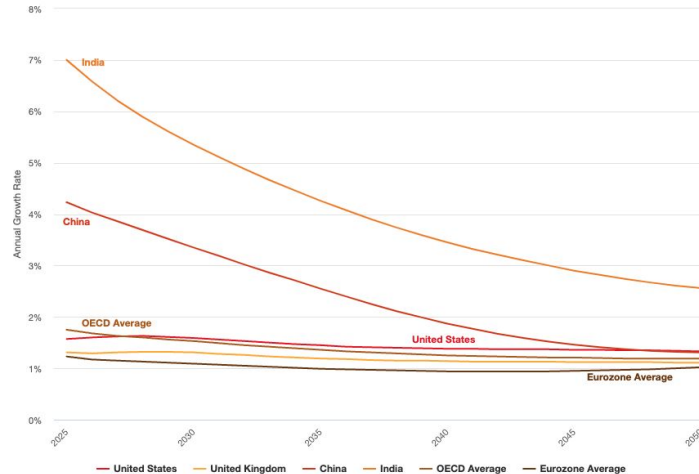
Country	Island Size (km <sup>2</sup> )	Population (latest Census, 2021)	Population Density (people per km <sup>2</sup> )	GDP 2021	GDP per capita 2021
Jersey	120km <sup>2</sup>	103,267	861	£5,087m	£49,260
Guernsey	62km <sup>2</sup>	63,463	1,024	£3,446m	£54,312
Isle of Man	572km <sup>2</sup>	84,069	147	£5,010m	£60,270
Malta	316km <sup>2</sup>	519,562	1,644	£14,010m	£24,489

## Slowing global growth

But the future is less certain. Growth in FS is harder won as businesses contend with post-financial crisis deleveraging and regulation<sup>1</sup>. The continued success of these islands depends on their ability to compete and to maintain relevance on the global stage. Further priorities include strengthening interoperability with the regulatory regimes in key markets, building up their presence in emerging markets and capitalising on opportunities in fast growth/high potential segments such as sustainable finance, while also developing the talent and technology needed to support this.

More broadly, island economies will be affected by what the OECD expects to be a halving of annual global GDP growth in the coming decades (around 3% now to 1.5% by 2060)<sup>2</sup>. Part of this stems from a deceleration in emerging market growth, but there are also more universal challenges in play, which are the focus for PwC's ADAPT framework.

## GDP Growth Projections



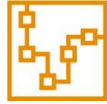
Source: OECD (2018), GDP long-term forecast

# Uncertain outlook - ADAPT



## Asymmetry

Inequality could be exacerbated by the squeeze on people on middle incomes as technology and automation polarise the workforce into high skill/high earners and low skill/low earners. The results will eliminate many traditional jobs, reduce consumer spending, corporate returns and tax take and could push many once reasonably well paid and self-supporting people to rely on already stretched welfare.



## Disruption

With the findings from PwC's latest [Net Zero Economy Index](#) revealing that the world needs to decarbonise seven times faster to limit global warming to 1.5 degrees above pre-industrial levels, the need to boost climate resilience and accelerate the green transition is pressing. Decarbonisation also opens up huge opportunities for innovation and growth. Investors have the opportunity to generate long-term returns by providing transition finance. Businesses who act quickly and decisively to [decarbonise their operations](#) will benefit from longer-term savings across their supply chains.

In turn, advances in technology in areas such as [generative AI](#) have the potential to transform productivity and returns. But before they can do this, they need to win public acceptance and trust.



## Age

Ageing populations in China, North America and Europe will lead to a decline in workforce numbers relative to older populations (old-age dependency ratio as defined as the ratio of 65 plus citizens to the working-age population aged 15-64). The results will reduce productive potential, increase care costs and put further strains on public finances.

Moreover, as more and more savings go into paying for retirement and care costs, savings rates will decline, and with them the amount of money available for investment in the economy.



## Polarisation

Connectivity, free movement of capital and the rules-based international order have been the hallmarks of globalisation and growth through much of the 21st century. But this favourable environment is now being eroded by geopolitical tensions, the protectionist retreat from globalisation and the move towards 'friendshoring' in an increasingly hostile and polarised world.



## Trust

Declining faith in businesses, markets and governmental institutions can heighten the tensions and polarisation within society, while making it harder to develop the consensus needed to tackle social and economic problems. As trust, order and social cohesion break down, those with internationally attractive skills will increasingly choose to leave, accelerating the downward economic spiral.

# Island vulnerabilities and opportunities

It is against this challenging global backdrop that governments and businesses in Guernsey, Jersey, Malta and the Isle of Man must develop their future strategies and plans. Their hyper-connected economies will be affected by the potential for slowing demand, investment and growth globally. As islands, their distinct demography and geography may also make them especially susceptible to disruptive shifts in areas such as ageing and climate change. At the same time, these islands have always shown a strong capacity for reinvention that could give them an edge in adapting to and taking advantage of disruption and change.

## Rising bar for transparency and trust

IFCs operate under heightened international scrutiny. Island governments, regulators and regulated businesses need to demonstrate that they're setting, enforcing and complying with exceptionally high standards of oversight and control to secure the credibility and trust upon which continued investment depends.

Since the great financial crisis of 2008, these expectations have grown. The FS sector has been subject to increasing regulations - whether related to capital requirements or compliance regulations. This has led to extensive changes in how organisations treat data, handle client onboarding, and anti-money laundering among much else.

Anecdotally, the increased time spent on regulatory compliance has largely counteracted the productivity

gains achieved from the better use of technology, thereby impacting the profitability and competitiveness of businesses operating in the sector.

Despite these challenges, the [OECD 'white listing'](#) on transparency, governance and information exchange attests to how Guernsey, Jersey, Malta and the Isle of Man have risen to the challenge and adapted their business environments to changing international expectations.

Looking ahead, the regulatory environment is likely to become more complex - in part due to Brexit. These islands are now operating in a more disjointed regulatory environment where they are seeking to accommodate both EU-wide and UK-specific regulatory expectations, whilst the UK has a diminished voice in shaping EU-wide regulations.



## Financial services competition, consolidation and adaptation

Accelerated by the financial crisis of 2008, there has been significant change in how IFCs compete, adapt and co-evolve. Prior to the financial crisis many FS businesses in Guernsey, Jersey, Malta and the Isle of Man were characteristically small and localised. In the intervening years, the previously fragmented industry (particularly in Trust and Company Services Providers - TCSP) has consolidated and internationalised., with some firms having scaled-up and sought corporate listing.

This consolidation has been driven by a number of factors, including the increased cost of business (regulatory entry points), client demands for pan-jurisdictional services, the growth of the funds industry, and new investment from private equity. Together these changes have led to significant M&A activity across the sector.

The private banking sector has followed a similar path, with fewer banks operating in some islands than before the financial crisis. This restructure and consolidation of the banking sector has impacted what level of autonomy and influence decision makers in the islands' industries have both locally, and at group level.

The consolidation of the finance industries in these islands both poses opportunities and threats. Their newly found scale means that many of these firms are better able to compete internationally, to meet industry best practices in regulatory compliance, and to invest in their people and technology.

However, it has also had an impact on where decision makers are based as executive management teams are consolidated into single location sites, and some decision-making power shifts across locations and between acquirer and target companies.

This concentration of decision makers is important, though hard to quantify. Whether an island is a net acquirer or net target of these acquisitions and consolidation decisions makes a difference. The heart and mind of a business is where the key decision-making functions are based. With fewer on-island decision makers, the industry could see their roles evolve from being at the heart of the network, to a node in the system. This will have spillover effects on other parts of the industry too, as key decisions on strategy, execution, value creation and talent are made.



## Tax shake-up internationally

In turn, the tax landscape is being transformed by international reforms. Key developments include the introduction of [‘Economic substance’](#) rules and, for the bigger businesses with a turnover of over €750 million, a 15% global minimum corporate tax rate ([OECD Pillar 2](#))<sup>3</sup>.

The governments of Guernsey, Jersey, Malta and the Isle of Man have endorsed the Pillar 2 reforms as signatories to the [Inclusive Framework](#), although implementation timeframes remain uncertain and the potential tax revenue impact and broader implications for competitiveness are yet to be fully understood.

## Move towards net zero

Island states are on the front line of the climate and biodiversity crises. Directly, this includes heightened pressure on critical natural resources like water and soil, and increased vulnerability to storms, floods and rising sea levels. Strengthening food security, supply chains, transport links and energy security are increasingly important for island resilience.

There are also broader implications for islands of the global transition to a net zero and [‘nature positive’](#) economy. All sectors of the islands’ economies will be affected directly or indirectly. As IFCs, it will be important for continued credibility and competitiveness that the islands lead by example - often framed as the ‘green finance on green islands’ concept.

Jersey, Guernsey, Isle of Man and Malta have all made clear net zero commitments under the [Paris Climate Agreement](#) and are grappling with the challenges of implementation. The feasible pace of change for these islands depends heavily on regulatory change in neighbouring larger economies (e.g. in the EU for low carbon goods), availability of capital investment and skills, and support for the poorest and most vulnerable islanders.

Key on-island traditional sectors such as agriculture, construction and tourism will all need to transform, as can be seen in plans for lower impact tourism in [Malta’s Low Carbon Development Strategy](#)<sup>4</sup>.

Islands are already staking a place as both [developers](#) and [testbeds](#) for [green technology](#). And there are significant economic opportunities arising from better quantifying and leveraging islands’ natural resources, for example in renewable energy generation, [blue carbon](#) and marine biodiversity net gain.

Meanwhile, in order to stay relevant as IFCs, the islands will need to keep pace with global regulatory and investor expectations on sustainable finance. They need to protect their industries from sustainability-related financial risks, and ensure equivalence and interoperability of corporate and FS sustainability disclosures. Most importantly, IFCs are ideally placed to take the lead in channelling capital into the transition and capitalising on the innovation and growth this opens up.



## The demographic time bomb keeps ticking

And all the time, small island populations are ageing faster than many of their European Union (EU) and Organisation for Economic Co-operation and Development (OECD) counterparts, while birth rates are declining. All four islands have a fertility rate significantly below the replacement rate, and even lower than their EU and OECD counterparts. With their constraints on land, housing and natural resources, island states are less able to bring in people to make up for their talent shortfalls.

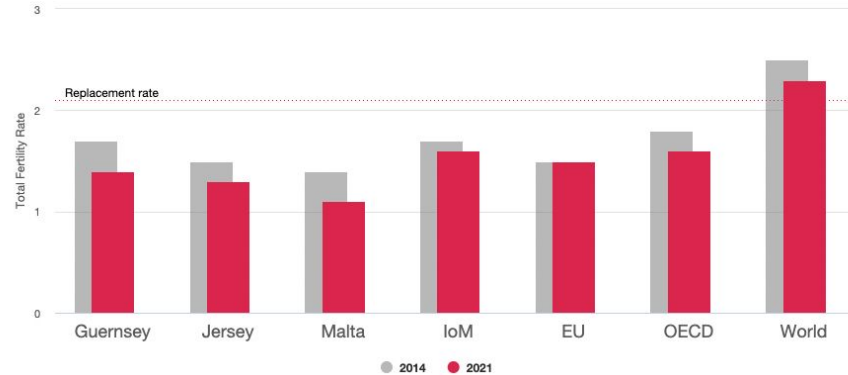
Practical and political curbs on migration heighten the need to make the most of digitisation, automation and

artificial intelligence (AI) to not only overcome labour shortages, but also increase the productivity and value potential of the people in work. Some jobs will be fundamentally transformed or disappear altogether, but new and better ones could emerge, with the green transition coming together with technology to shape many of the workforce developments ahead.

The big question is whether employers and workers are moving fast enough to prepare and adapt, especially as many island businesses may lack the scale to make the necessary investments in transformation. This puts the onus on businesses to pool resources, and on governments to step up support in areas such as the development of digital skills and infrastructure.

## Fiscal pressure internally

Public expenditure as a percentage of GDP in these small island economies ranges from the low to mid 20's as a percentage of GDP. In comparison, the OECD average is between 30-35%<sup>5</sup>. This in turn constrains the level of public investment these small islands can make into infrastructure, housing, technology, healthcare and education. An ageing population will put further strain on public finances, especially as there could be fewer workers paying tax. There may also be pressure to increase public expenditure to help fund the skills, connectivity and other investments needed to sustain island competitiveness.



Source: World Bank, Government of Jersey, States of Guernsey





## Case Study:

# Japan feels its age

Between 1945 and 1991, Japan rapidly grew to become the second largest global economy. In the 1980s, many thought that the Japanese economy would overtake the US to become the largest in the world. This economic success continued up until its peak in 1995, when Japan's living standards were the highest amongst OECD members, before growth began to stagnate.

Since its peak, Japan's economy has experienced stagnation. Today, according to the Office for National Statistics, the average worker in Japan is less productive than their equivalent in the UK<sup>6</sup>.

This economic stagnation has been exacerbated by an ageing population which has had a downward pressure on its economic productivity, by driving up public and private demand for health and social care spending and limiting the innovation capacity of the country. For instance, in the 2023 government budget, social security alone was the single largest area of expenditure at 32%<sup>7</sup>.

This ageing of the population has had other implications on labour productivity too. Evidence suggests that productivity and changes in the age structure of the workforce are connected. Data from the US shows a 10% increase in the fraction of the population aged 60+ leads to a fall of over 5% in GDP per capita<sup>8</sup>. Similar conclusions have been reached in the European economy, where studies find negative productivity impacts from an older workforce.

In response to this, the Government of Japan has taken a two-pronged approach in addressing these structural economic pressures.

Firstly, it has sought to boost demand by raising investment in the economy. OECD data finds that total investment as a share of GDP averages 25% in Japan (higher than many other advanced economies), with 10%<sup>9</sup> of all government spending on capital investment, accounting for 24%<sup>10</sup> of total investment in the economy - the highest of any G7 countries by some margin.

Secondly, the government has sought to create a change in wider societal views of the elderly by promoting the concept of an 'ageless society', thereby seeking to increase the workforce participation of older citizens.

Insights from Japan should be considered when developing policies to address the ageing population of Jersey, Guernsey, Malta and the Isle of Man.

# Gauging readiness for the future

Our Island Index gauges how prepared Guernsey, Jersey, Malta and the Isle of Man are for the opportunities and challenges ahead. It also looks at each island's readiness to be part of the new economy by embracing high value, low carbon footprint industries and fostering innovations to benefit from productivity growth.

Building on the ADAPT framework's analysis of the challenges facing the global economy and their implications, our Island Index hones in on the five dimensions most relevant to the future of island states between now and 2050:



## Environmental Sustainability

Key indicators include levels of low-lying land and population at risk as a result of climate change. From a policy and strategy perspective, we've also analysed carbon emissions, energy dependency and whether or not the island is committed to the [Paris Climate Agreement](#). Measures of progress towards decoupling economic activity from energy-related CO2 emissions are also included.



## Connectivity & Business Dynamism

Key indicators include levels of investment, the development of professional networks and measures of regulatory quality (as determined by international rankings). We've also looked at infrastructure development in areas such as wireless connectivity and transport links locally and internationally.



## Confidence & Stability

In the face of heightened international scrutiny, the confidence and stability dimension assesses trust, credibility and other external perceptions of the islands. This includes credit ratings, the Financial Action Task Force greylist and international reputation metrics.



## Human Capital

In assessing the available talent, skills and motivation needed to drive productivity and economic growth, we've drawn on the metrics used in the UN Human Capital Development Index. This includes birth rates (a key determinant of the future workforce size), health, life expectancy, educational attainment, workforce participation and the old-age dependency ratio. We also looked at progress on diversity and inclusion, including developments in the gender pay gap.



## Institutions

This dimension looks at how ready and able governments are to tackle the issues coming up between now and 2050. This includes the effectiveness of government (based on global rankings) and their ability to fund investment as a result of economic growth and taxation. As governments look to build public consensus and bring electorates with them when making difficult decisions, we also look at faith in public bodies (as measured by such indicators as voter turnout), relative inequality and potential marginalisation (as measured by such indicators as housing affordability and the Gini coefficient - a measure of the degree of inequality in the distribution of income/wealth).

## Explore the data

The Island Index aims to assess how well small island nations are equipped to deal with global megatrends and ultimately absorb productivity growth. The Island Index score is an unweighted mean of the five themes: Environmental Sustainability, Connectivity & Business Dynamism, Confidence & Stability, Human Capital, and Institutions. Within each of these themes, indicators were converted to a scale of 0 to 100%. The centre of the chart should be read as a score of zero, with the furthest edge of the spoke a score of 100. Therefore, the closer towards the edge of the spoke, the higher the island scores on that theme.

Each of the island charts has a 'best in theme' score, highlighting the gap between the island and the leader within that theme. This shows where each island is falling short, relative to their peers. Scores for each of the islands will likely change overtime, as each island adapts to a changing environment and economy.

Improvements across all themes will be important if the islands are to remain competitive and to effectively accelerate technology adoption, build climate resilience, and to adjust to an aged population, amongst other factors.



# Island Index

## Guernsey

Guernsey rates highly on the effectiveness of its institutions in areas such as regulation, integrity and state capacity. But the island could improve its attractiveness to overseas workers by better supporting mobile talent to settle on the island.

Looking at the Human Capital theme more broadly, Guernsey is facing a worsening demographic outlook and the resulting impact on talent availability. The island's age dependency ratio is expected to rise from 55% in 2022 to 72% by 2050, not only heralding potential labour shortages, but also pressure on public finances and services ahead. The States of Guernsey has recently committed to a population growth of 300 people a year for the next decade. While this could help to boost workforce numbers and bridge some of the talent gaps, it may not be enough to offset the continuing increases in the dependency ratio. This highlights the need to encourage older workers to delay what is often quite a young age of retirement and bring in more family-friendly policies for parents who want to return to work.

Guernsey enjoys high levels of confidence and stability, partly driven by high levels of home ownership and low crime rates. But the uncertain outlook in areas such as talent availability could cause some businesses to switch their presence and investment in the island.

Priorities for boosting investment and economic prospects would include a step up in investment in infrastructure and connectivity, both physical and digital.

From a sustainability perspective, whilst Guernsey may have greater exposure to extreme weather events, it does benefit from imported low carbon electricity, and greatly succeeds in one area - household recycling. Guernsey's recycling rate is said to be one of the highest in the world at 73%<sup>11</sup>. The island hopes to increase local renewable energy generation and to find affordable ways to implement and finance its net zero transition.

### Boosting growth

Guernsey sits at an inflection point. After a period of low population growth coupled with low levels of public investment, policy makers are looking to loosen labour markets and raise investment. Therefore, decisions made in the coming years could greatly change the long-run trajectory of the economy.

Specifically, the proposed capital outlay programme by the States of Guernsey could see a significant uplift in investment locally, creating opportunities to crowd in private investment through the regeneration of key assets - including St Peter Port waterfront (Eastern Seaboard) and the upgrade to the islands energy infrastructure. Further, recent changes in migration policy could see stabilisation and possible moderate growth in the workforce size, further helping to uplift economic growth from its current trajectory.

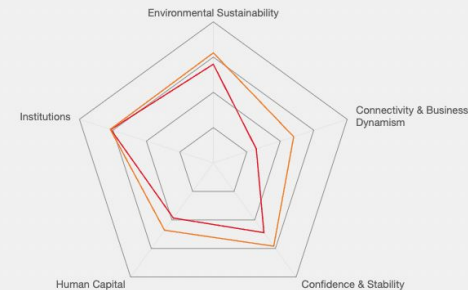
However, much of the island's future success rests on its appetite to increase investment, accelerate technology adoption, boost human capital and make improvements to connectivity - all of which remains uncertain.

If policy makers are successful at turning the dial from recent trends, the island could see its economic growth levels some way beyond those based on the current policy environment.

**“Guernsey is at a crossroads. We can no longer take our economic success, standard of living and quality of life for granted as we come up against the disruptive impact of ageing, climate change and slowing global growth. Our ability to compete depends on investment in skills, connectivity and tech-enabled productivity. We also face some tough decisions on migration, public finances and tax policies as declining workforce numbers not only put growth at risk, but also reduce tax income.”**



**Evelyn Brady**  
Partner and Guernsey Office Leader,  
PwC Channel Islands



# Island Index

## Jersey

Strong ratings across the board, though weakest on connectivity and business dynamism (despite strengths in broadband connectivity<sup>12</sup>). In particular, the island would benefit from improvements to its ecosystem for innovation.

From an institutional perspective, Jersey is in a strong fiscal position, which is bolstered by the government's strategic reserves. In turn, confidence and stability are bolstered by high levels of public investment in areas such as energy, infrastructure and social housing. But the old-age dependency ratio continues to rise, putting economic growth at risk and imposing increased strains on social and health care.

The island scores well on workforce health and participation, along with a gender pay gap that comes out under the OECD average. But the island's ability to replenish its workforce and attract top talent to overcome its rising old-age dependency ratio is hindered by its immigration rules and high cost of living. Moreover, there may also be a case for lifting the effective age of retirement to help retain key talent and ease the calls on public finances.

Jersey scores well on environmental sustainability due to low carbon electricity imports and relative resilience to extreme weather events. However, recycling rates are low and more could be done to capitalise on the opportunities opened up by the net zero transition.

### Boosting growth

The ageing Jersey population could lead to declining workforce numbers, which will affect both growth and the ability of the island to care for its older residents.

Our baseline analysis indicates that Jersey's old age dependency ratio is expected to increase from just short of 30% in 2022 to more than 40% by 2050.

The ageing population presents several economic challenges. As the working-age population decreases as a share of the total population, concerns about labour shortages arise, especially in key industries like healthcare. This is due to the higher health and social care needs of older residents, driving up overall public and private spending on health and therefore raising the financial burden on those of working age.

This additional spending, combined with a relatively tighter labour market, can lead to wage inflation, in turn driving up overall inflationary pressures. Yet, an ageing population also has the opposite effect on general consumption, as older individuals tend to spend less overall than their younger counterparts.

Further, as the island's population ages, and the relative share of older islanders increases, the propensity for economic growth and innovation is likely to slow. These downward pressures are particularly evident by the impact of an ageing population in slowing progress in skills accumulation and in dampening the diffusion of new technology across business and people.

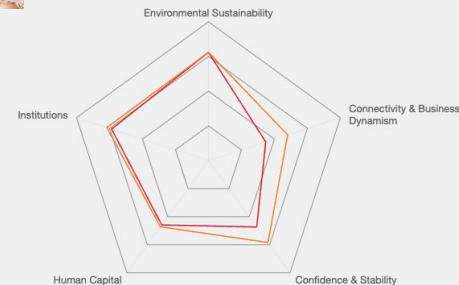
The Jersey government is actively seeking to boost workforce numbers, not just from inward migration but also encouraging greater workforce participation across all ages and by developing the affordable housing and modern infrastructure needed to motivate more young people to stay on the island.

But both more investment and faster workforce expansion may be needed as the ageing of the population accelerates in the coming years. The decisions made now will be critical.

**“People in Jersey continue to benefit from good employment prospects, a high standard of living and strong levels of government investment. But sustaining these advantages in the face of an ageing population, a tightening labour market and faltering productivity growth in mainstream financial services will be challenging. Key priorities ahead include diversification of the economy, further investment in skills and infrastructure and the ability to build on the island's strengths in fast growth areas such as private markets and the green economy.”**



**Lisa McClure**  
Partner and Jersey Office Leader,  
PwC Channel Islands



— Best in theme

The 'best in theme' composite score is comprised of the highest score achieved in each indicator theme by any of the islands.

# Island Index

## Malta

Malta's place within the EU Single Market has helped to drive impressive levels of investment and growth. Confidence and stability has been bolstered by the strong growth outlook. But while civic engagement is healthy and Malta's institutional rating is high overall, there is still room to strengthen government effectiveness.

Malta scores highly on international connectivity, including its dual runway airport. The island also benefits from visa-free movement of tourists and workers within the European Single Market, but digital connectivity needs improvement.

Malta is building on its central location in the Mediterranean to position itself as a competitive transshipment hub, helping to attract inward investment into key strategic industries. The recent agreement between the government and Malta Freeport Terminals to expand the port for the first time in almost a decade could generate further investment opportunities and enhance the island's strategic potential.

From a human capital perspective, the island has benefitted from an improving female labour participation rate. However, extra investment is needed in education and skills, especially as the island builds its presence in high value economic areas. There may be a temptation to rely on migration flows, but this requires sufficient housing, infrastructure and capacity within health, education and other public services.

Environmentally, Malta benefits from relatively low levels of emissions per-capita and relatively little land at risk to flooding. However, the recycling rate is just 11%, well behind the EU average of 46%, highlighting

the need to accelerate moves towards a 'circular economy'. While the circular economy is beneficial for all countries, it is especially important in resource-constrained island states.

### Boosting growth

The female participation rate in Malta has increased significantly in the past decade, reaching 59.9% in 2021, exceeding the Euro area average of 59.4%<sup>13</sup>. This is mainly thanks to a series of government measures aimed at encouraging women to remain or return to the labour force. Some of these measures directly impacted disposable income such as a reduction in national insurance contributions, the introduction of tax credits, a new parent tax computation, in-work benefits and higher maternity benefits. Other measures indirectly impacted disposable income such as the increase of maternity and paternity leave, the introduction of partial payment for parental leave, the free childcare scheme, afternoon school programmes and other schemes.

Other drivers behind the increase in the number of women in the labour force may be stemming from cultural changes and shifts in the dynamics of the economy, such as the shift towards a service-oriented economy and the enhanced levels of higher educational attainment of women.

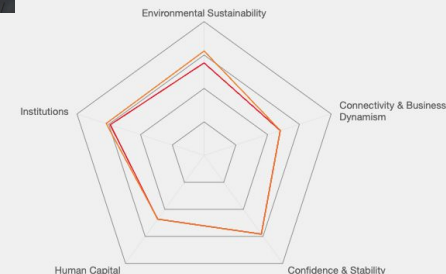
The increase in the female employment rates has contributed significantly to Malta's economic growth. The decrease in the number of inactive people of working age has reduced the number of families at risk of poverty especially in the case of single parent

households. Enabling both parents to continue working has prevented a potential drop in disposable household income. Additionally, supporting both parents to continue with their studies and career bolsters skills development and the share in the workforce of skilled workers, ultimately leading to productivity gains.

**“Malta's economy continues to grow in both size and sophistication, bringing increasing opportunity to the people of our island. But with growth comes challenges. Our ability to sustain the momentum of economic expansion while protecting the environment and livelihoods of future generations depends on investment in skills, digital connectivity and public infrastructure, while stepping up the pace of decarbonisation and the creation of a sustainable, circular economy.”**



**David Valenzia**  
Territory Senior Partner,  
PwC Malta



# Island Index

## Isle of Man

The Isle of Man has grown strongly in recent years and the government has ambitious plans for the future.

The island's ability to deliver these objectives and realise its long-term potential are bolstered by strong institutional foundations. But civic engagement is an area in need of improvement, especially now that the Isle of Man is entering into a period of major transformation and potentially population growth.

The government wants to bring in new talent to help boost economic growth and offset the impact of an ageing population. But as the high gender pay gap highlights, it's also important to improve participation and inequality within the island workforce.

Connectivity will be critical in attracting the necessary talent and investment. Improvements in links to the UK are underway, but this needs to be matched by further investment in digital connectivity.

From a sustainability perspective, the Isle of Man is continuing to refine its projected Energy Transition Programme and Climate Change Plan to meet its Net-Zero targets; while maintaining its biosphere status and increasing recycling rates which are currently behind the UK average. The island's emissions are steady with still strong dependence on fossil fuels. In order for the island to meet its population, economic and sustainability goals there will need to be a continued drive to implement policies and encouragement of investment from both the public and private sectors in areas such as housing, health, education, infrastructure and sustainability to provide an exceptional quality of life.

### Boosting growth

In 2022 the Isle of Man Government approved its 'Our Island, Our Future' Strategy, setting out the Island's vision for the next 10-15 years. The Strategy highlighted key areas covering the shape of the economy, infrastructure and services, public finances and sustainability.

An important element of the Strategy is the aspiration to create 5,000 new jobs and increase the population to 100,000, which will be necessary in part to serve an ageing population.

The Island has had great success in growing its GDP over the past 20 years, most recently from FS and e-gaming. However, there is a clear need to take action following the impact of the pandemic on GDP, supported by policy, to adapt the economy for a changing and more digitised world.

There have been recent investments in sea links which will need to be mirrored in the air links too. There is also the need to invest in the energy transition for which Manx Utilities presented a high level overview of the future energy plans at the Isle of Man Government Conference in September 2023. The plan is to achieve a 35% reduction in Net Emissions by 2030, from the baseline Net Emissions set in 2018.

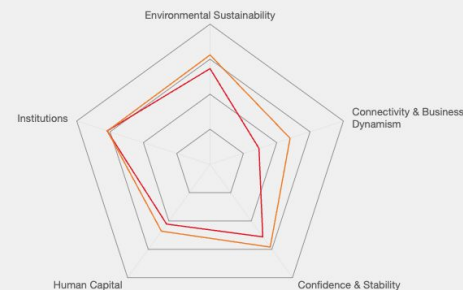
The main challenges and opportunities come in relation to funding the required investment and infrastructure needed to accommodate the demands of a larger population especially with the limited financial resources available.

Finding the right balance between public and private funding will be critical for the Island in this regard.

**“The Isle of Man is developing and diversifying its economy as it looks to sustain the impressive levels of growth seen in recent years. But it's important to build and sustain public support for the transformational changes ahead and make sure all islanders can benefit from the step-up in investment and growth. For our economic success to be sustainable and beneficial, we should also accelerate investment in areas such as the green transition. Get this right and the future for our island looks extremely promising.”**



**Nick Halsall**  
Territory Senior Partner  
PwC Isle of Man



— Best in theme

The 'best in theme' composite score is comprised of the highest score achieved in each indicator theme by any of the islands.

# Islands economic outlook

In addition to gauging the islands' readiness for disruptive change, we've analysed their growth potential in a fast-evolving global economy.

There are many uncertainties about the impact that technological developments will have on the future of productivity. Evidence would suggest that improvements could range from 1-2% per year under a good scenario; however, this depends how well the technologies are diffused. As service based economies, the islands could be well positioned to take advantage of developments, particularly in AI. However, due to the administrative nature of some roles, emerging technologies could, in some cases, replace rather than compliment human activity thus having a downward pressure on productivity. Given the above, we take a conservative view on the long-run impact that these technologies will have on the long-run productivity in the islands.

The **central scenario** equates to moderate improvements in 'human capital'<sup>14</sup> and tech- and skills-enabled productivity (Total Factor Productivity<sup>15</sup>). This would be driven by a continuation of existing policies, which have or are being implemented. However, this is subject to changes, for instance any potential shifts in migration policy, government spending or regulations affecting international businesses.

A second scenario looks at growth in line with the OECD average. It's important to note that each island has a different starting point and policy context.

Therefore, growth in line with the **OECD average** would be an aspirational trajectory for Jersey, Guernsey and the Isle of Man given their high starting point. These islands already enjoy some of the highest levels of GDP per capita in the world. While growing strongly, Malta still has some way to go before it catches up with the GDP per head and affluence of the other three islands.

A third scenario is based on **no improvement** to productivity, which has been the case for some in recent years. This underlines the imperative need to improve the skills of islanders and productivity of businesses to avoid over dependency on workforce growth.

The **shaded projection area** represents the projected long-term growth potential under a pro-growth or no-growth environment. Having analysed the policy options and direction within the four islands, there is significant room to influence the growth trajectory in areas such as workforce expansion and the housing and infrastructure to support this.

As economies that are dominated by a small number of sectors (e.g. banking etc.), island GVA can be especially susceptible to short-term movements in areas such as interest rates. The purpose of this report and the evaluations within it is to look beyond short-term economic and political cycles to identify broad long-term trends. We're not claiming to be able to make precise forecasts of GDP in 2050 – this isn't possible. But we do believe it is possible to draw out the broad shape of economic developments over this period.





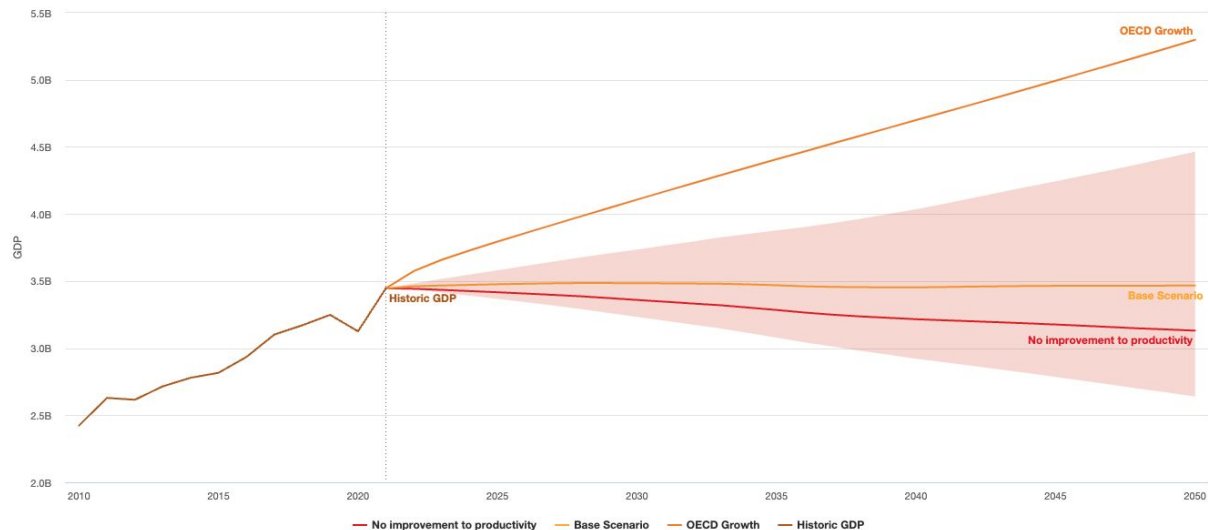
# GDP Scenarios

## Guernsey

Guernsey's growth rate and GDP per head are strong by international standards. But sustaining this edge could be difficult in the face of potential labour shortages. Moreover, the island's favourable economic ratings are heavily dependent on FS. Output per head in other sectors is much lower.

Looking ahead, economic growth looks set to slow over the long-term as a result of low levels of investment and a tight labour market, in turn impacting skills development and productivity improvements.

Boosting workforce capacity and skills is therefore going to be a key priority for the island between now and 2050, especially as any improvements in productivity could be offset by the impact of downward pressures on the workforce. Further investment in technology and skills, and improvements in tech adoption rate, are also going to be important if Guernsey is to maintain living standards and economic potential.



# GDP Scenarios

## Jersey

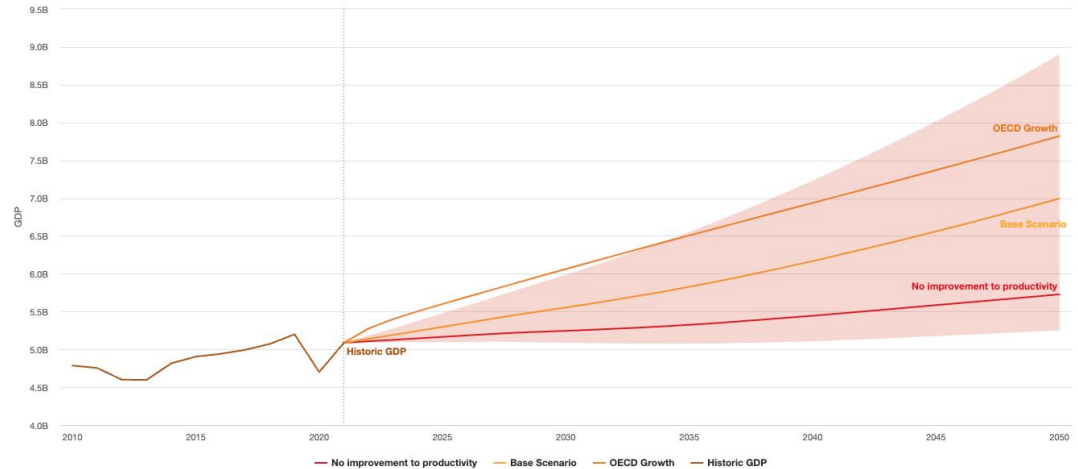
Economic growth has stalled since 2000, with earnings flatlining and productivity (output per-person) dropping by over a fifth.

During this time, the economic contribution of FS has declined as a share of total output from 55% to 40%. The main reason has been a steeper fall in productivity in FS than other sectors. This reflects the falling profitability in Jersey's banking sector (driven by lower interest rates), which accounts for the majority of the FS sector's gross value-add (GVA).

Despite this, over the same time frame, the island has benefited from increasing sophistication and inward investment in its trust and funds administration industry - helping to offset a consolidation of the banking sector locally. The finance sector has also attracted a growing number of investment managers, who tend to be well remunerated and highly skilled.

The government's investment in a Future Economy Programme does provide a clear sense of direction and aspiration through its five missions around becoming a skilled, innovative, resilient, fair, and international economy<sup>16</sup>.

Even so, the growth ahead could be moderate at best and some way below the OECD average. Without any improvements to skills and productivity, the island's GDP per capita could continue to fall. This underlines the importance of boosting productivity through increased and effective investment in skills and technology.



# GDP Scenarios

## Malta

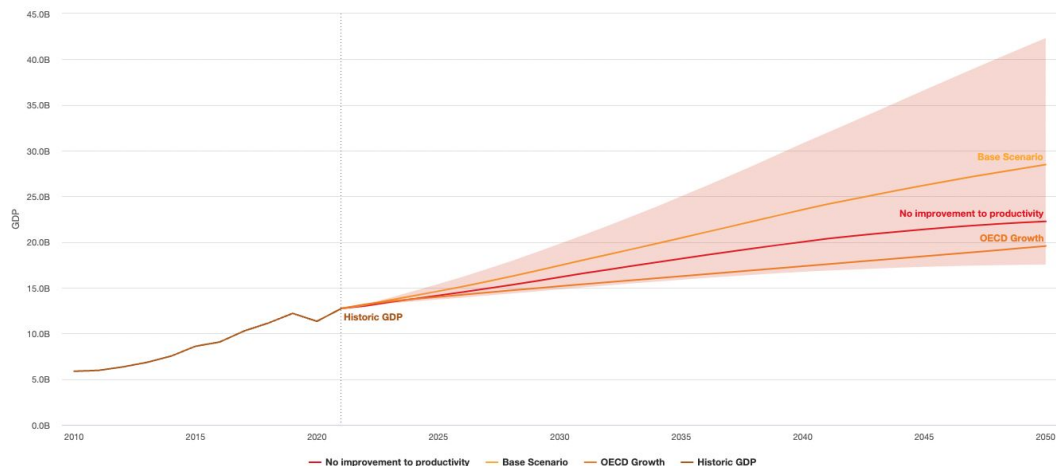
Since joining the European Union in 2004, Malta has undergone rapid development as its income levels start to converge with other advanced economies. Between 2000 and 2021 the island's GDP growth exceeded the OECD average<sup>17</sup>.

Looking ahead, economic growth will exceed OECD levels under each scenario, driven by healthy levels of investment, increasing workforce numbers and convergence towards the productivity levels of its northern European island counterparts. GDP per capita is therefore likely to continue to converge towards those in the Channel Islands and the Isle of Man by 2050.

FS is one of the fastest growing sectors of the economy<sup>18</sup>, with further expansion expected in the corporate banking, alternative investments, fiduciary and asset services segments.

However, the island's continued success in FS will demand that Government and industry respond to increasing regulatory scrutiny and pressure to make improvements to productivity. This will further demand additional investment in R&D, which currently lags many of Malta's European peers.

Looking ahead, the economy is projected to continue to grow at a robust rate. Some of this reflects the catch-up from a historically low base, but growth is anticipated to be buoyed by continued population growth. In fact, Eurostat anticipates that Malta will see one of the biggest increases in population of any European country<sup>19</sup>. Even without any improvements to productivity, the economy is still expected to outperform the OECD average growth rate, driven by a growing workforce. However, with strong population growth comes its own challenges, including a greater need for investment in the Island's infrastructure, affordable housing and public services. The assumed forecasted growth in population, as published by Eurostat, must also be seen within a context of a densely populated island, and the social and environmental challenges that overpopulation can bring with it.



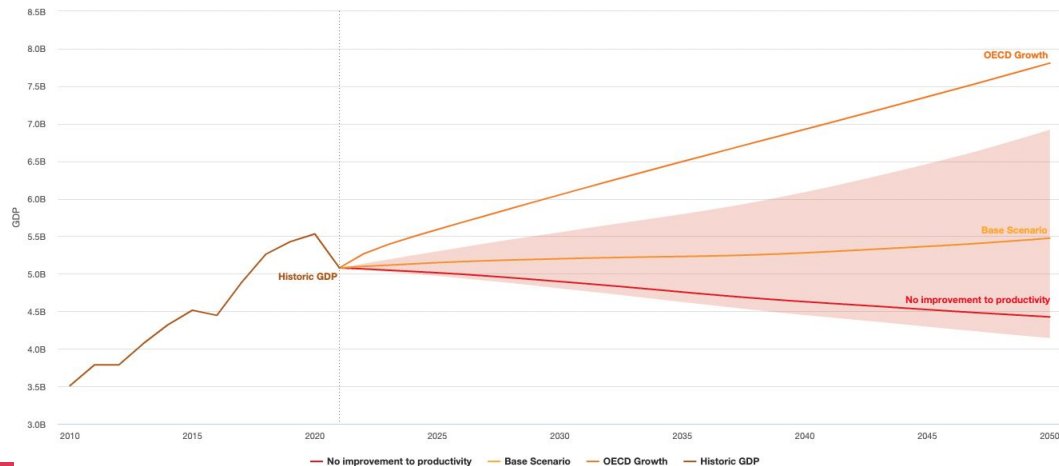
# GDP Scenarios

## Isle of Man

Between 2000 and 2021 the island's GDP growth exceeded the OECD average. But more recent years have seen a dip<sup>20</sup>. On top of COVID-19, the fall mainly stems from a sharp decline in e-gaming revenue following relocations. Banking and ICT services also contracted, underlining the need to diversify the economy and increase GDP across multiple sectors.

The Isle of Man government's ambitious 'Our Island, Our Future' economic strategy aims to increase GDP to £10 billion<sup>21</sup>. Key objectives include creating 5,000 new jobs, a 35% cut in carbon emissions and the setting up of a £100 million infrastructure investment fund. Recognising the impact of an ageing population and the need for more skilled workers, the proposals also include increasing the island's population from 84,000 to around 100,000 by 2037.

However, based on the current trends and data (e.g. population growth staying at its trend rate rather than rising in line with government objectives), economic growth could slow in the years ahead. The government's ambitious plans in areas such as job creation and population have the potential to raise growth above our assumptions, but it would need to secure public support, policy changes and investment to be successful.



## Agenda for action

The small, open and agile economies of Guernsey, Jersey, Malta and the Isle of Man have proved exceptionally adept at adapting to economic developments and attracting capital and talent.

But the challenges of sustaining relevance are mounting. How are investor demands changing? How can the islands keep pace? What can they offer that competitors can't?

This is also a time of disruption and change. Without concerted action now, factors such as climate change, an ageing society and skills gaps could drag back economic growth and constrain public finances and services.

But with these challenges come opportunities to make the most of each island's potential, take the lead in areas such as climate action and help younger generations look to the future with renewed confidence.

Drawing on the Island Index and economic projections, we believe there are five key considerations for businesses and governments as they seek to strengthen and sustain relevance, resilience and growth.



# Priorities for government



## **Institutions** Protect and evolve the finance industry

Island IFCs face ever increasing competition from other jurisdictions, tighter scrutiny from global authorities and higher expectations from customers and stakeholders on transparency, accountability and social responsibility. To ensure their finance industries stay relevant and competitive for the long term, governments and regulators need to ensure continued interoperability with major markets, notably the UK, US and EU, maintain regulatory efficiency and agility, and protect their industries from sustainability-related financial risks. They need to facilitate industry upskilling and investment in technology adoption, innovation and sustainable finance. Governments may need to offer incentives to attract new finance businesses to the islands, or support new products, services or emerging markets. Perhaps most importantly, IFCs are ideally placed to take the lead in channelling capital into financing the global sustainability transition and capitalising on the innovation and growth this opens up.



## **Environmental Sustainability** Accelerate the green transition

Progress to net zero in these island economies requires significant investment in renewable energy, improved energy efficiency and transport infrastructure, together with support for green skills, innovation and circular economy businesses. Meanwhile, islands must continue to prepare to adapt their infrastructure, food and supply systems to the realities of the changing climate. This must be balanced with maintaining a reliable, affordable power supply, support for the poorest and most vulnerable, and reskilling of workers to participate in the green economy.

All this requires finance. As elsewhere, the islands will need to create the conditions for private capital, whether through polluter-pays charging, sustainability-linked loans, bonds and incentives, or innovative public-private net zero delivery mechanisms. Opportunities to develop commercial scale wind or other renewable energy sources, including for export where appropriate, can play a valuable broader role in economic growth, industry diversification, and net zero financing.

Islands can't deliver on their own. Priorities include collaborating with each other and larger countries, governments, developers and suppliers in areas such as energy policy.



## **Connectivity & Business Dynamism** Invest in productivity and innovation

The islands often lack capacity and capital to be at the forefront of technological developments, partly due to a lack of incentives to invest in research, development and innovation, and partly given their limited scale to accommodate research intensive institutions and businesses. It follows that island businesses are usually sub-scale, and therefore lack the capital to invest in AI, further limiting adoption, which in turn diminishes their relative competitiveness.

This ultimately limits their ability to achieve productivity-led growth. The technology revolution ahead poses both opportunities and threats for the islands. As service led economies they are well placed to take advantage of automation technologies. However, the nature of some work undertaken in the islands means that AI could in some cases be in replacement of humans rather than complementary to them, having a downward pressure on productivity.

To address these challenges, governments should proactively encourage investment in technology adoption and research and development with a targeted focus on areas which will have the greatest impact on productivity.

Islands are uniquely positioned to do so, they can act as microcosms of much larger economies, where new innovations can be tested and deployed before being scaled internationally. Further, these islands have the ability to create nimble and responsive frameworks and regulations to attract new industries that support wider economic diversification. Together with improvements to the business environment, this investment in technology and innovation will position the islands for stronger growth in the coming years.

# Priorities for government (cont.)



## **Human Capital** Become a magnet for talent in a mobile world

All islands explored in this report have birth rates significantly below the replacement rate, and in cases, some of the lowest of any advanced economies. This is coupled with an increasingly aged population. There is an opportunity to play on the reputation of these islands as desirable places to live to help attract highly mobile, highly skilled talent to help make up for the shortfall in births and to accommodate for the increased needs of a larger retired population.

Emphasis on talent attraction and retention should apply to islanders and highly mobile and skilled talent. Therefore governments should both ensure that the islands are attractive to locals and the global talent needed to both drive innovation and meet the needs of ageing populations.

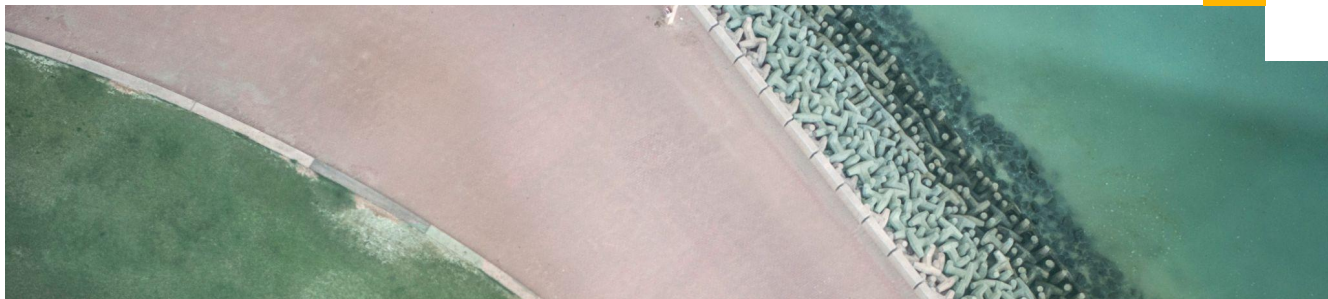
As part of this, governments should consider what further actions can be taken to improve and optimise their existing human capital, particularly through upskilling and by increasing the workforce participation rate of older workers and parents ([Women in Work 2023](#)). To do this will require significant changes in policy, both in the working environment for parents as well as for older workers.



## **Confidence & Stability** Lay the foundations for future success through strong government finances

Healthy public finances provides the foundations for industry and individuals to have confidence to invest, and creates the conditions for public services to respond to the current and future needs of islanders. The ageing population poses a significant challenge to public finances as Government's prepare for a significant uplift in payments for health and social care, public pensions, and wider investment in health and social care infrastructure.

Governments in all islands should give due consideration to both the appropriate level and distribution of taxation, as well as opportunities to maximise existing tax revenue generation. This fiscal stability will in turn foster an environment that encourages long-term business investment.



# Priorities for businesses



## **Institutions** Collaborate to compete

Island businesses can often lack the economies of scale within their local operations and markets to drive major investment in technology, upskilling, infrastructure and sustainability. That makes partnership with the government crucial. It also makes the pooling of resources and operational collaboration between sector peers so important. This might be collaborative initiatives in areas such as renewable energy and low-carbon logistics or centralised tech capabilities as part of managed service models. Strong cross sector collaborations and partnerships will be particularly important for the adoption of new technologies that require significant investment and scale, something that island businesses and economies often lack.

Further, island businesses would benefit from looking outwards for growth opportunities, seeking out export opportunities and working with their respective Government to create business environments that support export focused industries.



## **Environmental Sustainability** Seize the green opportunity

The long-term success of island businesses is intrinsically connected to the long-term environmental sustainability of the islands upon which they depend, whether directly for resources and people, or indirectly as part of their global brand, reputation and competitiveness. Many island businesses already have a track-record of strong community engagement. And, in response to client, employee, customer, and in some cases regulatory pressures, many island businesses are already measuring, managing and reporting on their environmental risks and performance.

As the global net zero and nature positive transition continues to accelerate, island businesses will need to integrate sustainability into their core business strategies. There are significant opportunities in all sectors to create value from the transition. Or, put another way, businesses that don't are likely to miss out on growth and may be at risk of disruption from on or off-island competition.

Protection and enhancement of island ecosystems can support increased eco-tourism and nature-led experiential travel. Entrepreneurial approaches to electric or alternative on-island or inter-island travel could transform connectivity. Regenerative agriculture, vertical farming, circular economy models, and locally-led alternative foods could revolutionise island food systems. The sustainable finance market will continue to expand. Island IFCs are also potentially well placed to collaborate cross-sectorally to open up opportunities for investing in transition finance and innovating new market mechanisms, for example for nature credit markets. Islands could even combine their blue or green economies with finance and technology to create new income streams.





# Priorities for businesses (cont.)



## Connectivity & Business Dynamism **Embrace the silver economy**

Despite the challenges posed by an ageing population, the demographic shift also represents a huge opportunity for businesses that are well positioned to take advantage of the growing silver economy.

However, to do so, industry will need to address barriers to spending by older islands. This could include inaccessible shops and poorly designed products. Research by the [International Longevity Centre](#) in the UK shows that tackling barriers to spending by people aged 75 and over could add 2% to UK's GDP a year by 2040 alone.

In some cases, the nature of Island economies means they are already well placed to take advantage of a growing silver economy. For instance, in wealth management, there will be growing demand for services which support financial planning as customers seek to both grow their pension pots and to divest their wealth as they move into retirement.

Further, the ageing of populations across Europe could also provide a strong boost to the tourism and hospitality sectors of the islands, as a growing number of retirees seek to holiday close to home.

However, key to success in the silver economy will be greater engagement, inclusivity and the ability to bridge digital divides within what will be a growing market of consumers.



## Human Capital **Boost the talent pool**

Employers play a leading role in the skills development of the workforce not only through investment in training and professional development, but also in the roles created on island versus those offshored. It's important for employers to recognise the responsibility they have, not only in supporting their own employees but also in playing an active role in the development of the islands' skills base. Therefore, industry should lead by example and invest in people centric professional development plans, bringing flexibility to their recruitment practices to accommodate for a diversity of skills.

To do this, companies should not only invest in skills development, but should also adopt best practices in employment. This extends to the whole employee [value proposition](#), including adequate [parental leave](#), efforts to close the gender pay gap, incentives for older workers to stay in the workforce, and setting and reporting on diversity and inclusion targets.



## Confidence & Stability **Invest for the future**

Businesses in island economies face some unique challenges which are often in sharper focus than in larger countries. Challenges of scale, connectivity and access to markets feed into all elements of commercial life, from health and education, to logistics. For instance, geographic isolation and dependency on imports can raise prices, increase lead times and reduce the availability of certain goods and services. Businesses should consider these challenges when making long term strategic decisions about their investments. In particular, greater emphasis is needed on supply chain resilience for companies importing or exporting goods to the island. Equally as important will be investing in technology adoption to minimise their dependencies on external factors, as is investing in local social mobility and job opportunities for all islanders.

# Methodology

## GDP Growth Pathway

This analysis uses a robust long-term economic growth model that accounts for projected trends in demographics, capital investment, education levels and technological progress to estimate potential long-term growth rates:

- Demographics – specifically growth in the working age population and the weight of an ageing workforce
- Growth in the quality of labour ('human capital') – which is assumed to be related to current and projected average education levels in the workforce
- Growth in the physical capital stock – which is determined by new capital investment less depreciation of the existing capital stock; and
- Technological progress – which drives improvements in total factor productivity (TFP)

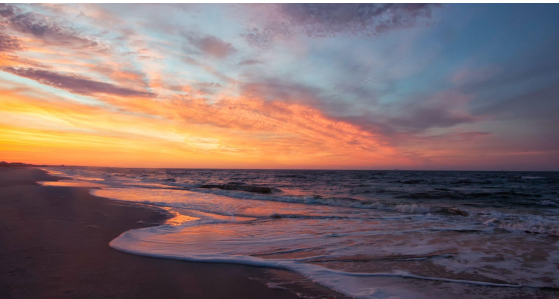
## Market Exchange Rates

All GDP figures are reported as nominal, at the Market Exchange Rate (MER) and are not Purchasing Power Parity (PPP) adjusted. When exchange rates are expected to remain relatively stable, or when reliable data for PPP-adjusted rates is limited, MER can simplify modelling. It finds utility in scenarios where exchange rate fluctuations have a minimal impact on long-term economic variables or in cross-country comparisons over extended periods.

Historical figures for Malta (Euros) have been taken from national accounts and converted at a rate of 0.85987 EUR/GBP which is calculated as the average of average monthly FX rates, sourced from Bloomberg.

## The Island Index scores

Scores against the five themes of the Island Index are based on more than 40 indicators and metrics. This analysis has been supported by a broad literature review, encompassing works from key academics as well as working papers from institutions such as the World Bank, OECD, and the European Commission. Primary research from the PwC network has been utilised to gain a unique perspective and offer untapped insights into the economies covered. We discussed the findings with PwC partners from the four islands to harness their local expertise, better understand the wider macroeconomic conditions of their jurisdictions and sense-check the trends and findings emerging from the analysis.



# Appendix

1. In part driven by new requirements for banks to retain more capital and to invest in labour-intensive tasks such as compliance and reporting. At the same time, the banking industry has experienced a fall in deposit margins, which in part has driven a rebalancing of employment from high-productivity banking into the relatively less productive trust and funds administration.
2. The long game: Fiscal outlooks to 2060 underline need for structural reform', [OECD](#)
3. [Pillar Two Readiness \(pwc.com\)](#)
4. [Malta Low Carbon Development Strategy](#)
5. [General government spending](#)
6. [International comparisons of UK productivity \(ICP\), final estimates: 2020](#)
7. [Japanese Public Finance Fact Sheet](#)
8. [The Effect of Population Aging on Economic Growth, 2014](#)
9. [Government investment spending](#)
10. [An international comparison of gross fixed capital formation](#)
11. [Household recycling of 73% may put island on top of the world](#)
12. [Jersey – first for broadband speed – cements digital reputation](#)
13. [Women in the Labour Market \(Central Bank of Malta\), 2023](#)
14. The [World Bank](#) defines human capital as the knowledge, skills, and health that people invest in and accumulate throughout their lives, enabling them to realise their potential as productive members of society.
15. Total Factor Productivity (TFP) is used to gauge the efficiency of a business or economy. It is defined as the ratio between the output volume and the volume of inputs such as labour and capital.
16. [Outline Economic Strategy for Jersey](#)
17. [World Development Indicators | DataBank](#)
18. [Malta - Financial Services \(trade.gov\)](#)
19. [Population projections in the EU](#)
20. [Isle of Man Government - National Income](#)
21. [Isle of Man Economic Strategy](#)



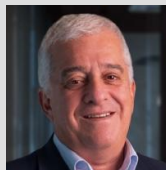
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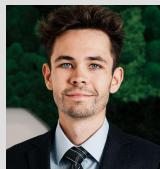
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