



ECONOMIC and FINANCIAL ARGUMENTS for an INDEPENDENT SCOTLAND

INTRODUCTION

The following economic arguments are based substantially on factual evidence from a variety of sources and where appropriate informed analysis. We are especially indebted to Gordon McIntyre Kemp and his excellent publication 'Scotland The Brief'. We do however on occasion stray into the arena of opinion when the evidence leads us inexorably in that direction.

We also include certain reserved matters such as defence assets e.g. the Clyde submarine base at Faslane and the disposal of nuclear waste.

More often than not, the core argument against independence centres on the contention that Scotland is unable to survive economically on its own, and relies on the generous subsidies from the UK Treasury. In countering this we have led with the section on Scotland's Finances, demonstrating beyond doubt that this is patently untrue. This is explored in greater detail in the attached annex. Moreover, and in addition to Scotland's traditional economic strengths, such as tourism, we explore the new and emerging technologies which are underpinning our modern and progressive economy.

Fundamentally, we seek to dispel the preconception that Scotland's wealth depends substantially on oil and gas – a volatile commodity and controversial natural asset in the context of the climate crisis. Miriam Brett has stated that a comprehensive industrial response to climate change, based around the interests of Scotland's approximately 100,000 oil and gas workers should lie at the heart of the SNP's economic vision for independence. Scotland possesses an estimated 25% of Europe's offshore wind and tidal resources and 60% of the U.K.'s onshore wind capacity, and as such is well placed to absorb highly skilled oil workers into the renewable energy sector.

This document is intended to provide activists with the necessary detail and arguments in order to counter challenges from voters who remain sceptical of the economic case for independence, and in particular to present Scotland's unarguable wealth of natural assets and its innovative and creative people.

IN ALL OF THIS WE POSE THE FUNDAMENTAL QUESTION

**Is this why the rest of the UK is so determined
to keep Scotland in Union?**

1. SCOTLAND'S FINANCES

Some simple and fundamental facts:

- 1.1 **The Barnett Formula** – introduced in 1979 was intended to reduce Scottish public finances below that of England on a per capita basis and administered through the Block Grant. The Barnett Formula is NOT a subsidy borne at the expense of English taxpayers.
- 1.2 **The Block Grant** – This is the annual allocation of funding from the UK Treasury to the Scottish government in order that it can fund expenditure required for all devolved areas of responsibility. "This block grant is not in any way based on the needs of Scotland or on the levels of revenue generated in Scotland". In other words Scotland receives less from the UK Treasury than it provides in and tax revenues.
- 1.3 **GDP (Gross Domestic Product)** - GDP is a standard measure of national economic performance and specifically measures the value added created by the production of goods and services. For Scotland our GDP per head has been consistently higher than the rest of the UK for the last four decades, and has "had a lower illustrative deficit as a percentage of GDP". Only in recent times has that deficit been higher and that was due to the UK government's decision to lower taxes on oil extraction and thus reduce Scotland's revenues.
- 1.4 **GERS (Government Expenditure and Revenue Scotland)** – The expenditure figures used to calculate GERS by the UK Chancellor are in every case bar one based on estimates of multiple UK - wide costs applied nominally as a population percentage. Thus for example the cost of HS2 and the London Crossrail project, multibillion pound transport infrastructure, are factored into GERS but have no or little discernible economic benefit to Scotland.
- 1.5 **Debt loading** – There is an expenditure line in GERS called Public Sector Debt Interest (PSDI). It's the sixth largest expenditure item and has averaged £3.24 billion over the last five years. These interest payments on UK debt which have been allocated to GERS on a population basis relate to debt that Scotland did not generate.

NB. Remember that the Scottish government has had no borrowing powers until 2016, when it was allowed to borrow up to a paltry £600 million per year.

Let's look at an example of how this works in practice using the financial year 2017/2018.

Revenues Generated by Scotland (£bn)	Scottish Government Expenditures (£bn)	UK Government Expenditure in Scotland (£bn)	Total Expenditure in Scotland (£bn)	'Deficit' (£bn)
59.96	42.85	30.55	73.40	13.44

source: Scottish Government (2018) GERS 2017 – 2018
with acknowledgement to Gordon MacIntyre-Kemp

- 1.6 This in reality creates a totally false position and is redolent of creative accounting and of political chicanery. Without UK debt loading, Scotland since 1980/81 would have generated a massive surplus of circa £72.6 billion.

2. DEFENCE

There are a number of fundamentals which need to be taken into account when viewing Scotland's role and contribution to the defence of the UK.

- 2.1 Before we even begin to catalogue the number of defence establishments based in Scotland, it is important to recognise and not overlook the strategic position of Scotland, particularly in terms of its proximity to the North Atlantic, and ready access to the Norwegian Sea.
- 2.2 This was a crucial factor in World War II and it remained so throughout the Cold War. However, despite the UK's defence capability being reduced in recent years, Russia continues to probe our defences both by air and sea, and it is salutary that NATO regularly stages war games in Scottish waters.
- 2.3 Accordingly, we should not underestimate those powerful forces at home and abroad who would view Scotland's secession as a major threat to the defence of the UK and NATO.
- 2.4 In terms of strategic defence assets the greatest by far is the UK's sole nuclear weapons system Trident, which is deployed on a fleet of purpose-built nuclear submarines based at Faslane on the Gare Loch (HMNB Clyde). Associated with the port facilities at Faslane is the nearby ordnance depot at Coulport on Loch Long, which stores the missiles in vast underground bunkers.
- 2.5 To provide an indication of scale and costs involved in the upgrade of Polaris to Trident missiles in the 1990s, costs were estimated at £1.9 billion at 1994 prices while the construction took 13 years to complete.
- 2.6 Trident renewal has been approved by the UK Parliament (cross party support with the exception of the SNP) with considerable controversy regarding the costs – estimates vary between £167 billion and £205 billion over the 30 year life expectancy of the weapons system, its efficacy as a deterrent (its primary value as a stealth missile system is now being compromised by technological advances in detection) and not least the ethical standpoint of possessing weapons of mass destruction.
- 2.7 There are of course other defence establishments related to conventional forces in Scotland. These include, RAF Kinloss, Leuchars Army base, Redford Barracks, Edinburgh and HM Dockyard Rosyth. However, their strategic deterrence value is dwarfed by the Trident nuclear weapons programme.

3. NUCLEAR WASTE

- 3.1 Scotland's location i.e. distance from London and the SE of England, its low density population and remoteness, and its deep waters off the west coast, has long represented a convenient dumping ground for nuclear and other hazardous waste. There are recent reports that the Ministry of Defence wants to increase the amount of nuclear waste it dumps into the Firth of Clyde. The key word there is increase, as the MoD has been using Scotland as a dumping ground for its obsolete ordnance waste for a very long time, and continues to do so. Right now, we only know the amount of waste and damage that the notoriously secretive British state is prepared to admit to.
- 3.2 Dec 30, 2018 – The UK government secretly planned to dump the radioactive hulks of 22 nuclear submarines (many docked at the Rosyth Naval Dockyard) in the sea off north west Scotland, documents released by the National Archives reveal. A survey for the Ministry of Defence (MoD) in 1989 identified six sites for 'seabed storage' of defunct naval submarines near the islands of Skye, Mull and Barra for up to 60 years – and probably longer.
- 3.3 Nirex (the somewhat infamous industry body) the Nuclear Industry Radioactive Waste Executive, in its report on the 'Options for Radioactive Waste Management.....' published in May 2002 considered a range of options for the disposal of radioactive waste. These included sea disposal, near surface disposal, deep geological disposal, long-term surface storage and partitioning and transmutation.
- 3.4 In 2006 Nirex was subsumed into the Nuclear Decommissioning Authority as the Radioactive Waste Management Directorate. However, prior to that development it had long been suspected that deep geological disposal had become the preferred option and that Nirex had identified a number of sites which would meet the requirements for suitable deep storage facilities, but these had not been made public.
- 3.5 In June 2005, BBC News reported that 5 out of 12 deep geological disposal sites shortlisted by Nirex were located in Scotland. These were;
 - Dounreay close to the reactor research facility in Caithness
 - Altnabreac in Caithness
 - Hunterston, an undersea site close to the power stations in Ayrshire
 - Fuday and Sandray two uninhabited islands near Barra in the Western Isles.

With the exception of the Hunterston site all other proposed sites are located in geological strata which is among the oldest and critically the most stable rock formations in the world e.g. gneiss and granite.

- 3.6 While there is international consensus that geological disposal is the safest permanent solution to dealing with radioactive waste, the Scottish Government is not a sponsor of the geological disposal programme in the UK, but does remain committed to dealing responsibly with radioactive waste arising in Scotland. Scottish government policy, as set out in the 2011 report 'Higher Activity Waste Policy', is that the long-term management of higher activity radioactive waste should be in near surface facilities located near the sites where the waste is produced. This is currently the position across the UK.
- 3.7 The sites for deep geological disposal identified initially by Nirex in England, are in contrast mainly in softer sedimentary rocks as the geology of England is very different to that of Scotland. As such these formations are more permeable and thus susceptible to leakage and potential ground water contamination.

4. SECOND HOMES (HOLIDAY HOMES)

- 4.1 Second homes, also known as holiday homes, remain a blight in many rural communities and contribute to the inflation of house prices beyond the reach of local people. Accurate figures for holiday homes in Scotland, are difficult to ascertain. However, these tend to be concentrated in many tourism hotspots such as Skye, Mull, Arran and the East Neuk of Fife. In some of these areas there are reports showing that from their current housing stock 60% to 80% are holiday homes – mainly owned by people south of the Scottish border. This in turn gives the incomers the opportunity to vote in elections in Scotland. This may be advantageous to Westminster in terms of anti-Independence votes.
- 4.2 In a recent article in 'The National' (10/09/20) Lesley Riddoch reports on a letter written by young people from the Uists, Mull, Skye and Benbecula, in which they set out their concerns over the lack of affordable housing which in their words is driving an economic clearance.
- 4.3 Traditionally young people have migrated away from these remote rural communities to seek economic opportunities elsewhere, thus exacerbating the decline and economic fragility of these communities. This housing crisis therefore threatens to undo all the efforts by government and other agencies to sustain and stabilise these communities for the future.
- 4.4 From data published by the National records of Scotland there was a peak of 38,249 second homes in 2012 which has since fallen to 25,713 in 2017.
- 4.5 However, according to Andy Wightman and Ciaran McDonald in their publication 'A review of Empty and Second Homes in Scotland' – June 2018, this apparent reduction in the number of second homes is almost certainly a consequence of changes in local taxation and offset by the growth in short-term lets (Airbnb). This growth has been fuelled by owners of second homes circumventing the abolition of the council tax discount on second homes by local authorities in 2013. This is achieved by registering their properties as a business in terms of commercial short-term letting. As such they are billed for non-domestic rates rather than council tax. This then accords them eligibility under the Scottish Government Small Business Bonus scheme, and as the valuations of such properties frequently fall within the threshold for 100% relief, they pay no local tax at all.
- 4.6 As John Finnie MSP has stated in an article in The National on 28 September 2020, *"Fundamentally, we need homes to make communities, and if we can't house our young people we will simply become a barren theme park, driven by another Highland clearance"*.

5. NATURAL RESOURCES – THE NATURAL WEALTH OF SCOTLAND

- 5.1 **Natural Heritage** – Scotland has a unique and outstanding natural environment from varied landscapes including ancient woodlands, extensive peatlands and the Hebridean islands. In addition there is a rich heritage of ancient monuments and archaeological sites.
- 5.2 This abundant and rich historical and natural heritage has attracted visitors from around the world and is the mainstay of the tourism economy.
- 5.3 The natural environment also attracts and supports many outdoor activities including water sports, cycling, mountaineering and wildlife watching, again contributing to the tourism economy.
- 5.4 The rich coastal waters and sea lochs also attract visitors seeking game fishing while the many sporting estates provide wild game shooting and deer stalking.
- 5.5 Indeed Scotland's natural wealth represents 34% of the UK's as a whole and has been valued at £273 billion. However, we should not underestimate the huge benefits these natural assets have on health and well-being. By way of an independent validation of this, the following is an extract from an interview with Professor Dieter Helm, Professor of Economic Policy at Oxford University on 'Good Morning Scotland' reported by 'The National' on 8 September 2020.

"Scotland is probably one of the leading countries in the world where its natural environment, its natural capital, sets it in a class apart from the rest, bringing opportunities for a more sustainable economy.

A Green Recovery is essentially taking a look at the balance sheet of Scotland, looking at its assets of which natural capital is an absolutely crucial part, and looking at how to build a sustainable economy making the most of those natural assets. That includes action on Climate Change, but of course climate isn't just about emissions and power stations – it's about soil, it's about the land, the huge peat deposits in Scotland.

And of course Scotland's great, amongst its many assets, its great asset is its sheer natural beauty, the opportunities that offers to build a better and more sustainable economy in the future."

- 5.6 **Water** – Scottish drinking water has always had a solid reputation for quality being primarily soft water. However, we take the apparent abundance of water and its quality for granted. Much of the existing water infrastructure and water treatment plant is ageing and requires ongoing maintenance and renewal.
- 5.7 When the impact of climate change is taken into consideration, in particular global warming, water assumes a greater if not vital importance. There is considerable debate among climate scientist as to the precise effects of climate change on the current maritime climate of Scotland. Most probable is that we will experience warmer and wetter winters with not much change in our summer temperatures. As for the south of England this is likely to get hotter and drier.

- 5.8 Accordingly, Scotland is unlikely to experience major water shortages while England is more likely to suffer periods of drought. Water therefore becomes a major natural asset and one that potentially becomes a political bargaining point.
- 5.9 NB. As a stark reminder of the widespread impact of climate change and instability, and lest we forget, the Scottish Whisky industry experienced major water shortages during the heatwave of the summer of 2018 when many distilleries lost as much as a month's production.
Source: Observer in Scotland, 02/06/2019.
- 5.10 However, the continued public ownership of Scottish Water is under threat in the guise of the UK Internal Market Bill. In the explanatory notes to the Bill, Part 7. Final provisions, there is to be inserted in the Scotland Act 1998 text which refers to distortive or harmful subsidies being provided by a public authority.
- 5.11 A subsidy is distortive or harmful if it distorts competition between persons supplying goods or services in the course of a business. Thus private water companies in England and Wales could legitimately complain to the new Competition and Markets Authority which will oversee the operation of the UK Internal Market, arguing that the Scottish government and local authority financial assistance to Scottish Water are in effect harmful and distortive subsidies. This would then open up the possibility of the privatisation of Scottish Water.
- 5.12 **Renewable Energy** – Scotland possesses all the elements to have a world leading economy founded on the principles of the New Green Deal.
- 5.13 In the Scottish government 'Programme for Government 2019/2020', which is predicated on sustainable and inclusive growth, it states that a Green New Deal harnessing the power of the Scottish National Investment Bank (providing 'patient' risk capital – that is unlike traditional venture capital funds there is no standard requirement to generate significant returns on investment within a fixed term – usually capped at 5 years) and creating a £3billion package of investments to attract green finance to Scotland, will become a key component.
- 5.14 Moreover, the Scottish government is committed to achieving zero greenhouse gas emissions by 2045 at the latest (earlier than any other UK nation).
- 5.15 Scotland already generates 74.6% of its electricity consumption from renewable sources (hydro electric, wind and solar. Tidal and wave power are still early stage technologies and have been frustrated by a lack of longer term investment). Exports of energy in total to the rest of the UK are worth around £5.1 billion, of which £2.8 billion is nominally low carbon/renewable energy.
- 5.16 Also, Scotland has 25% of Europe's tidal energy. With ample natural resources, the renewable sector represents a huge potential to transform the Scottish economy, creating highly skilled employment and regenerating rural areas. Regrettably, the UK government has now downgraded its priority for the renewable energy industry preferring instead to invest future energy generation in nuclear power plants e.g. Hinkley Point.

6. TOURISM

- 6.1 The tourism industry is a cornerstone of the Scottish Economy, and vital to the economic performance of towns, cities and regions across the length and breadth of Scotland.
- 6.2 The industry accounts for around one in every twelve jobs in Scotland, and around five per cent of the Scottish Economy's Gross Value Added (GVA). It plays an important role in the economies of Scotland's major cities, while also making a substantial contribution to sustaining employment and economic activity in Scotland's rural communities.
- 6.3 To guide and encourage the development of tourism in Scotland, the tourism sector has taken forward Tourism Scotland 2020 [1]. This strategy sets out a clear ambition for Scotland to be, "*– a destination of first choice for a high quality, value for money and memorable customer experience, delivered by skilled and passionate people*".
- 6.4 The strategy centres on improving the performance through improving leadership and digital capabilities across the sector; encouraging and influencing investment in the sector and supporting infrastructure; and on improving the quality of the visitor experience across Scotland.
- 6.5 Tourism, and referring back to section 6, Natural Resources, Scotland has a major advantage in tourism that is derived from its huge natural wealth.

Tourism-economic impact in numbers:

- Spending by tourists in Scotland in 2017 generated around £11 billion
 - Contributed around £6 billion to Scottish GDP
 - Attracted a total of 142 million visitors in 2017
 - The sector employs over 207,000 people.
- 6.6 Scotland's tourism industry is thriving and outperforming the UK in terms of growth. From world famous visitor attractions such as Edinburgh Castle, the National Museum of Scotland, the Riverside Museum in Glasgow and Kelvingrove Art Gallery, Edinburgh and Glasgow have now cemented their reputation for popular weekend breaks rivalling London and other European cities.
 - 6.7 It is important to recognise that the tourism sector is not confined to visitor attractions and festivals. The food and drinks sectors also contribute significantly to the tourism offering in Scotland. And this is not just down to the growth in the popularity of whisky and the huge growth in exports. With recognised high quality produce such as wild game, seafood, lamb and beef all with demonstrable provenance, Scotland can confidently claim an international standing in high quality foodstuffs.

- 6.8 This high-quality food has in turn influenced and helped promote a significant transformation in the hospitality sector with considerable growth of high-end restaurants, gastro pubs and continental cafés in the main cities of Scotland.
- 6.9 Glasgow is an interesting case study. Visits and spending by international tourists in Glasgow rose to its highest level on record in 2017 with Glasgow outperforming the Scottish average. Indeed, Glasgow with its focus on leisure and cultural tourism is aiming to position itself as a cultural powerhouse and the gateway to Scotland.

Source: 'Glasgow's Tourism and Visitor Plan to 2023'.

- 6.10 The age-old rivalry between Glasgow and Edinburgh is alive and well and promises to deliver significant economic benefits not just to our city economies but to expand and diversify the tourism offering to international visitors. These two tourism hotspots can help to disperse visitors elsewhere in Scotland thus helping to spread economic benefits to the more remote rural areas. In recent times Scotland has been able to improve markedly on our global profile as a key destination of choice for overseas visitors.

7. SCOTLAND'S FOOD AND DRINKS INDUSTRIES

Food Industry

- 7.1 Food from Scotland is recognised as being some of the best quality available in the world. Being derived from a high-quality natural environment and high welfare standards, serves to create and produce foodstuffs which have a high export value.
- 7.2 Also, their provenance is guaranteed and under the EU's Protected Geographical Indication scheme many traditional Scottish food products including Stornoway black pudding, Scotch lamb, Orkney cheddar have a protected status such that their unique nature and source cannot be copied or misrepresented.

Some key facts;

- There are around 16,500 companies involved in Scotland's food industry and they employ 107,000 people in Scotland
 - The industries turnover is in excess of £9.6 billion
 - International exports amount to more than £1.4 billion
 - Scotland possesses almost 30% of the UK's herd of breeding cattle, and 20% of the UK's breeding sheep flock
 - Scotland accounts for 94% of the EU salmon production and is the third largest producer of salmon in the world
 - Scotland also produces 2/3 of the world's langoustines.
- 7.3 The territorial waters thus defined as Scottish waters come under the jurisdiction of Scots law, and are also used for defining the area of operation of Marine Scotland, the governmental body responsible for the integrated management of Scotland's seas.
 - 7.4 One of Marine Scotland's key responsibilities is to promote sustainable, profitable and well-managed fisheries and aquaculture industries in Scotland. It also importantly is charged with promoting sustainable economic growth from the marine renewables industry and other marine and maritime industries.
 - 7.5 Scotland is among the largest sea fishing nations in Europe with Scottish fishing vessels landing around 2/3 of the total fish caught in the UK. Moreover, within the EU, Scotland's seas are the fourth largest of core European waters and make up over 60% of the UK's total European waters.
 - 7.6 The main fishing grounds are the North Sea and off the west coast of Scotland. The number of Scottish registered fishing vessels is 2038 as recorded in 2017. This fishing fleet employs 4823 fisherman.

- 7.7 Latest statistics for fish landed by Scottish registered vessels in 2016 are as follows;
- 41% increase in value for pelagic fish (e.g. herring, mackerel) to £226million
 - 18% increase in value for demersal fish (e.g. haddock, cod) to £169million
 - 25% increase in value for shellfish to £169million.
- 7.8 The sea fishing industry is in relative economic terms not hugely significant to the Scottish economy. It is however important to the fragile economies of coastal communities in terms of employment and also where inshore fisheries represent a key producer of shellfish to the burgeoning hospitality sector.
- 7.9 It is also worth noting that the industry is represented by a very vociferous lobbying body, the Scottish Fishermen's Federation. Fishermen have never forgiven the UK government for signing up to the EU's Common Fisheries Policy (CFP) under which fish quota shares are fixed, based on historical fishing patterns dating back to the inception of the CFP in 1970 and subsequently the UK's membership of the EEC in 1972. Indeed the UK's chief negotiator at the time Sir Con O'Neill has since described the negotiations during the accession process "the question of fisheries was economic peanuts but political dynamite".
- 7.10 The key principles of the CFP centre on the need to fish sustainably i.e. to conserve stocks, and to support the interests of coastal communities and fishers. The Federation has no disagreement with these principles but consider that the UK's quota i.e. under 40% of all fish caught in the UK's Exclusive Economic Zone (the EEZ extends to 200 nautical miles from the shore) is not acceptable. The balance of 60% is allocated to other EU member state registered vessels. It is also noteworthy that the UK fleet only catch 10% of its total catch from outwith UK waters.
- 7.11 Not surprisingly fishermen were in the vanguard of Brexit supporting businesses and remain deeply concerned that the EU see retaining fishing rights in continuing to access UK waters as one of their key negotiating mandates.

Drinks Industry

- 7.12 Scotch whisky is the world's number one globally traded spirit and is exported to 175 countries, with the EU taking almost a third of the total exports. However, the drinks industry is more than just whisky, gin and craft beers are fast growing businesses with currently (2018) 60 gin distilleries and 132 breweries, many of which are micro- breweries (83%).

Some key facts;

- Scotch whisky contributes £5.5 billion GVA to the Scottish economy
- Scotch whisky exports are worth £4 .7 billion annually
- Gin sales are forecast to increase to £1.5 billion in 2020
- Total revenues for beer sales is currently £500million and is predicted to double in the next 10 years.

7.13 The Scotch Whisky industry employs 10,000 people with another 3000 employed in the supply chain. Importantly, more than 7000 of these jobs are based in rural Scotland.

7.14 However, as many of the biggest selling whisky distilleries are owned by large multinationals such as Diageo and LMVH, their headquarters are outside Scotland. Thus as much as 30,000 jobs engaged in the industry are located elsewhere, mainly in London and Paris.

8. SCOTLAND'S TECHNOLOGY STRENGTHS

8.1 Scotland has a long and celebrated history of invention and technological advance. This should come as no surprise since Scotland can boast a substantial science base with 19 internationally successful universities making a contribution to society which is unmatched.

8.2 Professor Paul Boyle, chairman of the Scottish Scientific Advisory Committee in the SSAC's report 'Assessment of Scotland's science landscape 2007-2016' stated that *"there's a lot to celebrate about the Scottish science base with many indicators showing that Scotland punches above its weight in terms of the quality and quantity of research produced"*.

8.3 Some key facts:

- Scotland is number one in terms of high-quality research compare to other UK nations (and 10 other comparator countries e.g. Denmark, Israel)
- Around 10% of the UK's researchers are based in Scotland producing 12% of the UK's research
- Scotland publishes more papers per researcher than the other UK nations.

8.4 This creativity and innovation is clearly thriving thank you we found a number of surprising and welded in technology areas. These include;

- Life sciences
- Digital industries
- Space industry
- Renewable energy
- Chemical sciences.

8.5 Let's examine three of these key growth sectors.

Life Sciences – This is a wide-ranging industry encompassing pharmaceuticals, biomedical science, medical biotechnology and environmental sciences.

Some key facts;

- Scotland possesses is one of the largest Life Sciences clusters in Europe
- Scotland's universities are amongst the most influential research institutions in the World for pharmaceuticals and drug discovery (Dundee University is currently first followed by MIT – in the USA)

- Scotland is renowned for veterinary science expertise with its two veterinary colleges in Edinburgh and Glasgow ranked first and second respectively in the UK
- Scotland has five medical schools
- The sectors turnover is more than £5.2 billion a year and is forecast to achieve £8.0 billion by 2024
- Many of our universities are involved in pioneering research in areas such as drug discovery, stem cell research, personalised medicine and not forgetting Dolly the sheep, the first ever mammal to be cloned by scientists at the Roslin Institute in Edinburgh.

- 8.6 **Digital industries** – This is a relatively new term which blends together the original concept of Information and Communications Technology (ICT) companies and businesses now operating in the dynamic digital economy such as the digital games industry.
- 8.7 Abertay University in Dundee has been at the forefront of the digital games industry, promoting and developing the computer gaming industry in Scotland. It is now rated the top university in Europe for degree courses in games technology. Crucially, it has developed strong commercial links with the industry and indeed through spin-out companies has spawned blockbuster titles including 'Grand Theft Auto', 'Angry Birds' and 'Crackdown'. Outplay Entertainment the producer of 'Angry Birds' is Dundee based and is ranked as the UK's largest mobile games developer.
- 8.8 **Space industry** – The space industry is a fast growing part of the wider aerospace sector. Currently the space industry contributes £2.6 billion GDP to the Scottish economy with another £1.0 billion being provided through the supply chain.
- 8.9 Glasgow is home to world leading satellite manufacturers, while approximately 20% of all the UK space related jobs are based in Scotland.
- 8.10 Also of note is the fact that St Andrews and Edinburgh Universities are ranked third and fifteenth respectively in the Complete University Guide, the independent UK university rankings for astrophysics degree courses.
- 8.11 The UK Space Agency shortlisted to 6 Scottish locations from a total of eight for the UK for vertical launch spaceports in 2016. Space Hub Sutherland has since been selected to host the UK's first spaceport for the vertical launch of satellites into space. Construction is expected to begin in 2021 with a first launch anticipated in 2022.

9. FINANCIAL AND BUSINESS SERVICES

- 9.1 Scotland has a distinguished history in financial services that dates back over 300 years. It is one of Europe's leading financial centres and the second financial hub in the UK outside of London. The strength of Scotland's financial services industry lies in its diversity. It is a leading centre for banking, insurance, pensions, asset servicing and related professional services.
- 9.2 Financial and business services companies and institutions are located principally in Edinburgh and Glasgow, with Aberdeen as a secondary centre.

Some Key Facts - Financial services companies;

- Employ circa 9.5% of Scotland's total employment
 - Generate circa 11.2% of Scotland's GVA
 - Number more than 28,000
 - Produce £3.4 billion of Scotland's total international exports.
- 9.3 Financial services is not just about banking and insurance but comprises related businesses in the extensive supply chain such as accountancy firms, legal firms, asset management, IT and digital services.
- 9.4 Scotland's undoubted strengths in financial services taken alongside our technology capabilities has also led to an exciting and growing opportunity in what is called Fintech. This is the application of technology in financial services for example, cyber security and data analysis.

Gordon McLaren Organiser, SNP Breadalbane Branch
Michael Campbell, Treasurer, SNP Breadalbane Branch

March 2021.