Jersey's Contribution to Global Value Chains

A Cebr report for Jersey Finance

November 2021

Disclaimer

Whilst every effort has been made to ensure the accuracy of the material in this document, neither Centre for Economics and Business Research Ltd nor the report's authors will be liable for any loss or damages incurred through the use of the report.

Authorship and acknowledgements

This report has been produced by Cebr, an independent economics and business research consultancy established in 1992. The views expressed herein are those of the authors only and are based upon independent research by them.

The report does not necessarily reflect the views of Jersey Finance.

London, November 2021

Contents

© Centre for Economics and Business Research

Executive Summary

- The aim of the research is to understand Jersey's role within Global Value Chains (GVCs). This report assesses Jersey's global economic footprint, illustrating the island's role as a crucial international financial and economic conduit.

- A value chain is defined as the "full range of activities that firms and workers do to bring a product from its conception to its end use and beyond".[1] The different aspects of a value chain can be performed within the same firm or divided among different firms and countries. GVCs conceptualise the interconnected networks of global producers and consumers in the modern global economy, as well as highlight the increasing specialisation by certain geographies in the production and exporting of certain goods and services.

- Global investment flows – such as the ones that Jersey contributes to – stimulate large degrees of economic activity through the network of integrated Global Value Chains. This research aims to quantify the tangible footprint of this activity through metrics such as GDP, employment, and wages.

1 Gereffi and Fernandez-Stark. (2011). 'Global value chain analysis: a primer.'

© Centre for Economics and Business Research

- **Overall, we estimate that between 2017 and 2020, the average annual stock of capital intermediated in Jersey was £1.4 trillion which supported £170.3 billion of global economic output (0.27%), 5.1 million jobs worldwide, and £73.3 billion in associated wages through Global Value Chains facilitated by the island, each year.**

- As an illustration of the scale of the economic activity supported by Jersey's financial services sector, the direct GDP contribution of New Zealand in 2020 was approximately £172.0 billion, a country with a population of approximately 5 million.

- In 2020, Jersey's combined financial services sector allocated £1.44 trillion of capital around the globe, increasing from £1.30 trillion in 2017.

Table 1. Estimated geographic outward allocations of the gross annual capital stock, £bn, 2017 - 2020

Region	2017	2018	2019	2020
United Kingdom	£563.0	£581.3	£539.7	£529.2
Europe (excl. UK and Jersey)	£328.7	£318.1	£353.3	£364.5
North America	£178.9	£190.9	£191.7	£199.6
South America	£2.2	£1.9	£3.7	£4.5
Asia (inc. Middle East)	£167.5	£225.7	£254.1	£290.9
Africa	£40.5	£43.6	£30.1	£30.6
Oceania	£5.9	£6.5	£5.5	£5.6
Unattributed	£16.6	£14.6	£15.9	£17.9
Total (£bn)	**£1,303**	**£1,383**	**£1,394**	**£1,443**

Source: JFSC, Statistics Jersey, Monterey, Cebr analysis

- The United Kingdom is the most significant destination (and source) of capital across the period, while Europe is the most dominant continent, followed by Asia (inc. Middle East) and North America.

- Based on a modified Solow model framework, we have estimated the economic impact of this capital stock within each geography, that is supported by Jersey's role as a conduit within Global Value Chains.

© Centre for Economics and Business Research

- Across the three main financial services sectors (below), the trusts and all other asset holding vehicles (AHVs) sector administers the majority of the island's capital base. The following statistics relate to averages for the period 2017 to 2020 with the economic activity reference points based on the most contemporaneous data available.[2]

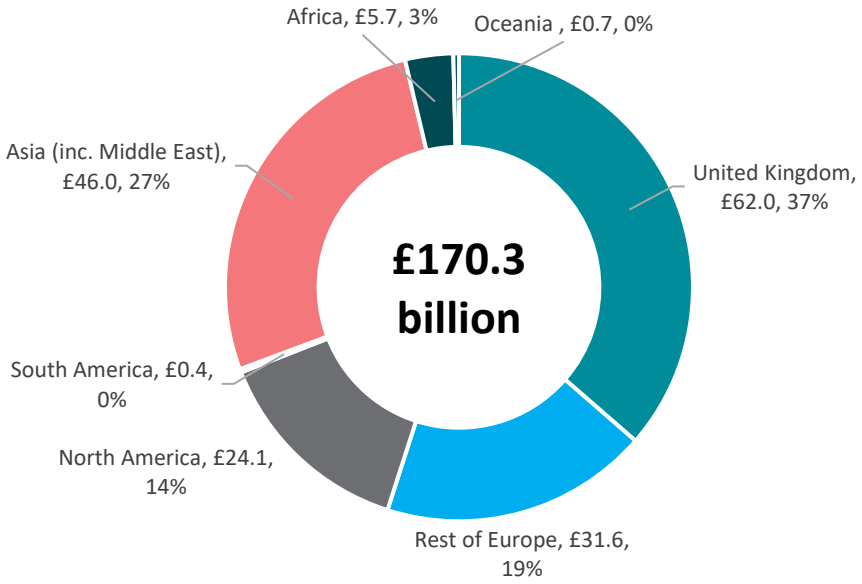
Funds	Banking	Trusts & AHVs
£225.9 bn of capital serviced by the sector, supporting …	**£142.2 bn** of assets administered by the sector, supporting …	**£1.14 tr** of capital administered by the sector, supporting …
£29.3 bn of global GDP via GVCs …	**£14.9 bn** of global GDP via GVCs …	**£126.0 bn** of global GDP via GVCs …
equivalent to **0.05%** of global GDP,	equivalent to **0.02%** of global GDP,	equivalent to **0.20%** of global GDP,
A scale of economic activity in line with the total GDP of **Bahrain** in 2020.	A scale of economic activity in line with the total GDP of **Iceland** in 2020.	A scale of economic activity in line with the GDP of **Hungary** in 2020.

2 For the purposes of this report, the scope of Jersey's fund sector was defined as regulated funds that are both domiciled, as well as administered, in Jersey. This definition is chosen because some non-domiciled funds do not carry out all functions of their activity in Jersey. As a result, we can be confident that the associated impacts of Jersey's fund sector are appropriately attributed to the island.

© Centre for Economics and Business Research

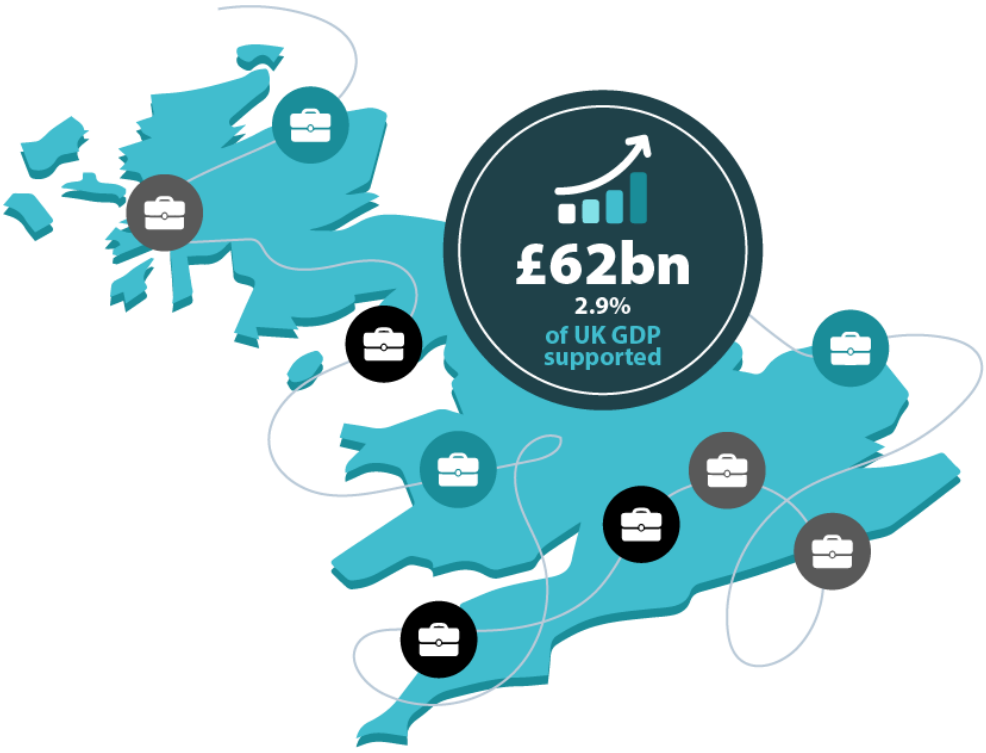
- Regarding the geographic distribution of the economic activity supported by Jersey, the United Kingdom accounted for the largest share, followed by Asia (including the Middle East), the Rest of Europe (excluding the UK and Jersey), and North America.

Figure 1: Jersey GVCs support of regional GDP, £bn, 2017 - 2020



Source: Source: IMF, World Bank, Cebr analysis

- The value chains that Jersey's financial services sector supports contributed an annual average of **£62 billion of UK GDP between 2017 and 2020**, representing approximately 2.9% of total UK output; a significantly greater share than in any of the regions analysed.



© Centre for Economics and Business Research

- A tangible example of Jersey's role as a financial conduit, facilitating the efficient functioning of Global Value Chains is via the fund sector. A wide spectrum of individuals, firms, and industries across the globe benefit from the funds that are administered on the island. For example, Japanese conglomerate SoftBank Group domiciled its Vision Fund in Jersey, raising over US$100 billion for international investment. While having its origins in Asia, it has a global base of investors committing capital to the fund, with major contributions from Middle Eastern Sovereign Wealth Funds and US tech firms such as Apple. Jersey plays a key role as a facilitator for the pooling and redistribution of this capital back around the world. Investments span industries including global technology, specifically artificial intelligence development, as well as the life sciences and healthcare sectors.

© Centre for Economics and Business Research

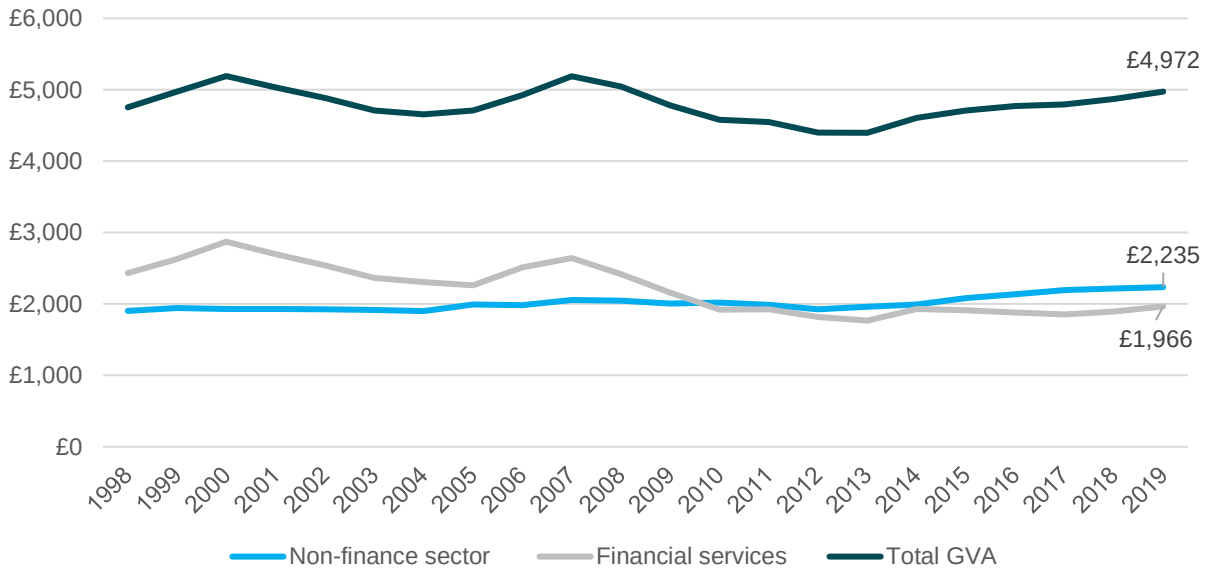
1. Jersey's domestic economy

The aim of the research is to understand Jersey's role within Global Value Chains. This report assesses Jersey's global economic footprint, illustrating the island's role as a crucial international financial and economic conduit. First, this section provides a high-level overview of Jersey's current economy, based upon the most contemporaneous data available.

1.1 GDP and GVA

In 2019, Jersey's GDP increased by 1.7% in real terms annually and stood at £4.8 billion. Similarly, the total GVA[3] of Jersey (£4.9 billion) increased in real terms for the sixth consecutive year, by 2.1% on an annual basis. The 2019 increase in total GVA was driven primarily by the financial services sector; this sector witnessed a real term increase in GVA of about 4% (£74 million), relative to 0.6% for the rest of the sectors in the economy.

Figure 2: Gross Value Added (excluding rental), £ million (2019 constant values), 1998-2019



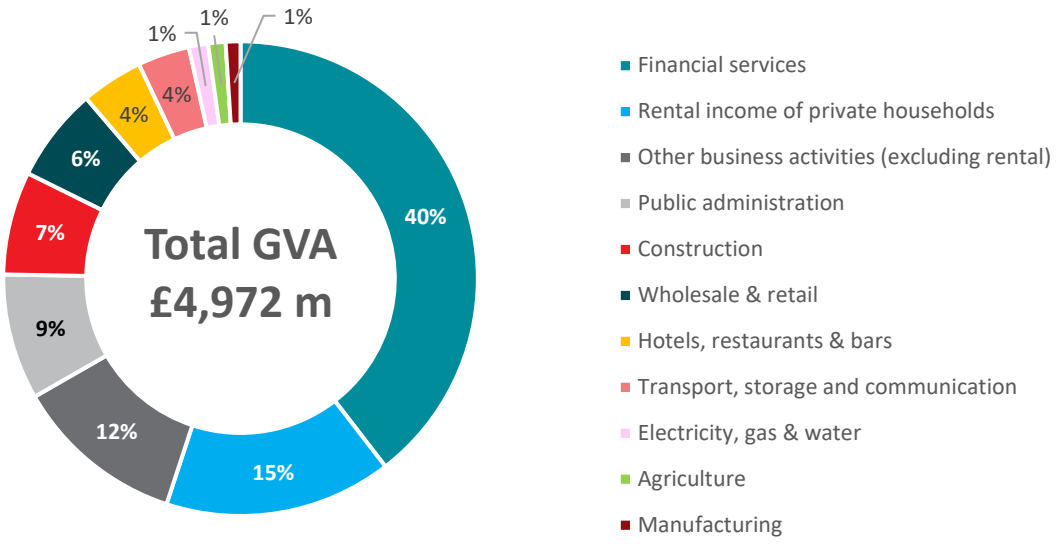
Source: Statistics Jersey, Cebr analysis

Figure 3 shows a breakdown of Jersey's overall GVA by sector for 2019. Consistent with trends across the period assessed in Figure 2, the financial services sector was the largest contributor (40%) to Jersey's total GVA.

3 GVA or gross value added is a measure of the value from production in the national accounts and can be thought of as the value of industrial output less intermediate consumption. That is, the value of what is produced *less* the value of the intermediate goods and services used as inputs to produce it. GVA is also commonly known as income from production and is distributed in three directions – to employees, to shareholders and to government. GVA is linked as a measurement to GDP – both being a measure of economic output – for the purposes of this report the two can be considered as interchangeable. Strictly, the relationship is (GVA + Taxes on products - Subsidies on products = GDP).

© Centre for Economics and Business Research

Figure 3: GVA by sector, £ million and %, 2019



Source: Statistics Jersey, Cebr analysis

Jersey's labour productivity as measured by GVA per full-time equivalent (FTE) worker saw an increase of 1% in real terms, in 2019. In the same year, financial services witnessed the highest productivity levels of £150,000 across all sectors. It is twice the GVA per FTE across all sectors of the economy, highlighting the importance of the industry for the island.

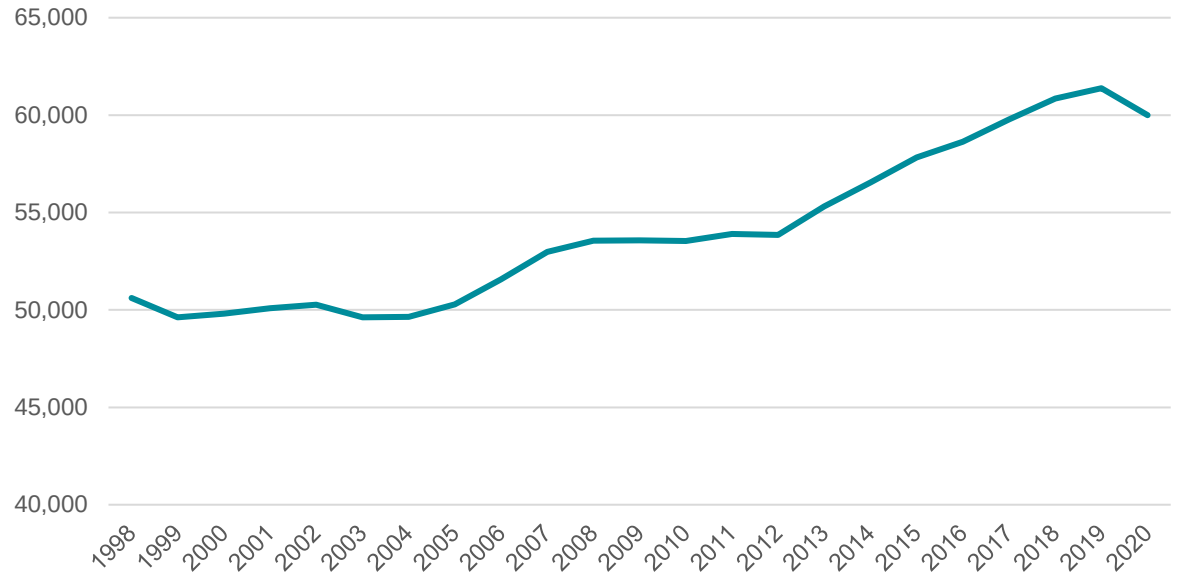
1.2 Employment

December 2019 saw the highest number of jobs at 61,380, since 1998. This was an annual increase of approximately 0.9% from December 2018.[4] In early 2020, the Covid-19 pandemic hit, leading to the decrease in jobs observed in 2020. The largest sectoral decrease was in hotels, restaurants, and bars (1,040 jobs), a trend observed internationally with the hospitality sector being one of the worst affected as a result of national lockdowns.

4 Statistics Jersey. (2021). 'December Labour Market Report Published'.

© Centre for Economics and Business Research

Figure 4: Number of jobs in Jersey, individuals, 1998-2020



Source: Statistics Jersey, Cebr analysis

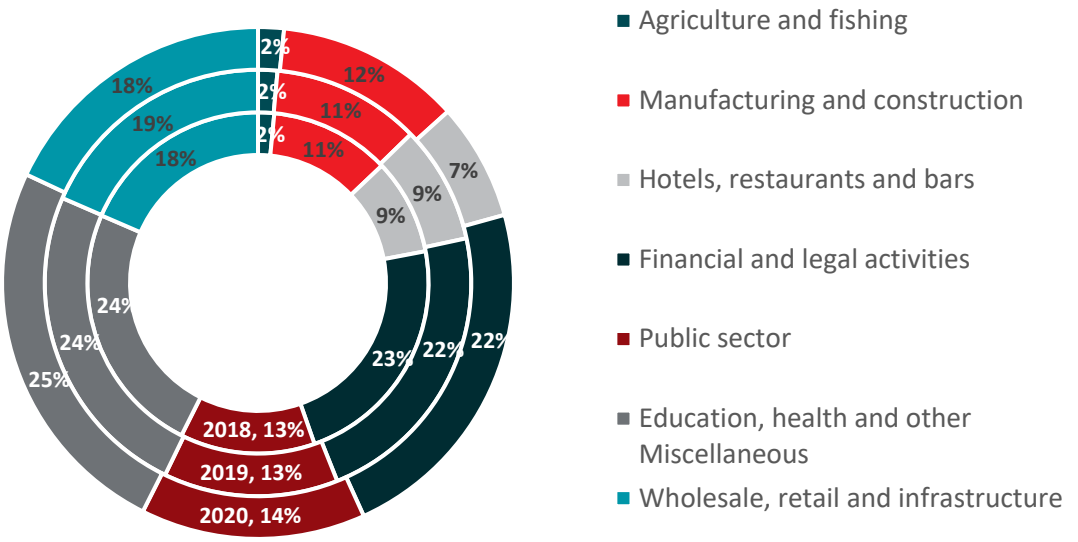
Over the five years between 2014 and 2019, financial and legal activities saw the second largest increase in job numbers in absolute terms, up by 1,010 (8%) from 2014. The highest number of job increases over this period was witnessed in education, health, and other services.

In December 2019, the finance sector accounted for the highest number of all the jobs, with 22% (13,800). Out of the 650 additional jobs created in 2019, 40 were created in finance and legal activities. Within this sector, the trust administration, legal activities and accounting and compliance sub-sectors all saw large increases of 90, 80, and 80 jobs respectively, however there was an annual fall in employment in banking and holding companies. Analysis here is for 2019 as this year provides the most contemporaneous data before the statistics are affected by the Covid-19 pandemic.

Between the years 2018-2020, the proportion of each sector in total jobs have remained broadly similar, barring the aforementioned recent decline in the number of jobs in hotels, restaurants, and bars, from 5,480 in 2019 to 4,440 in 2020.

© Centre for Economics and Business Research

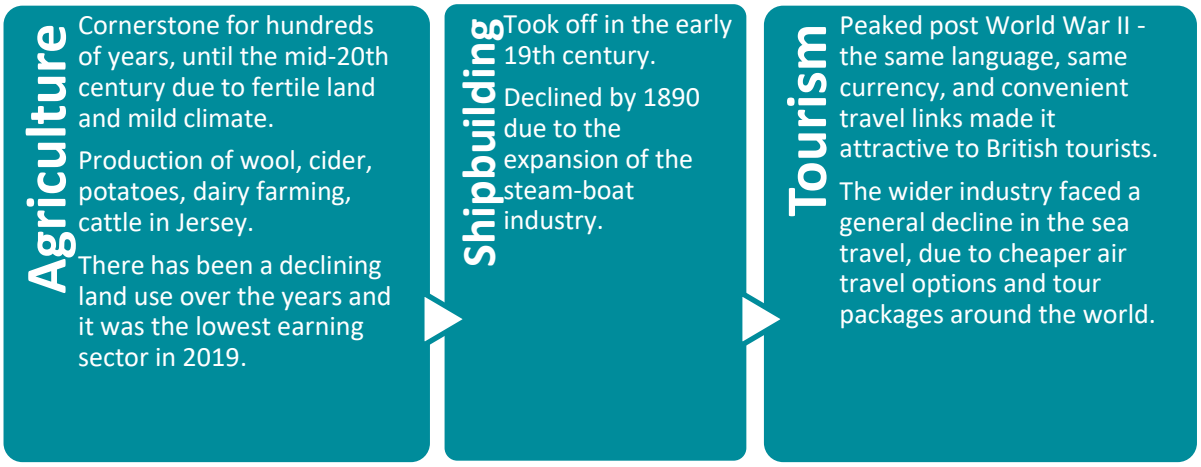
Figure 5: Distribution of jobs by sector, December 2018-2020



Source: Statistics Jersey, Cebr analysis

2. Jersey's role in the global economy

2.1 Early history

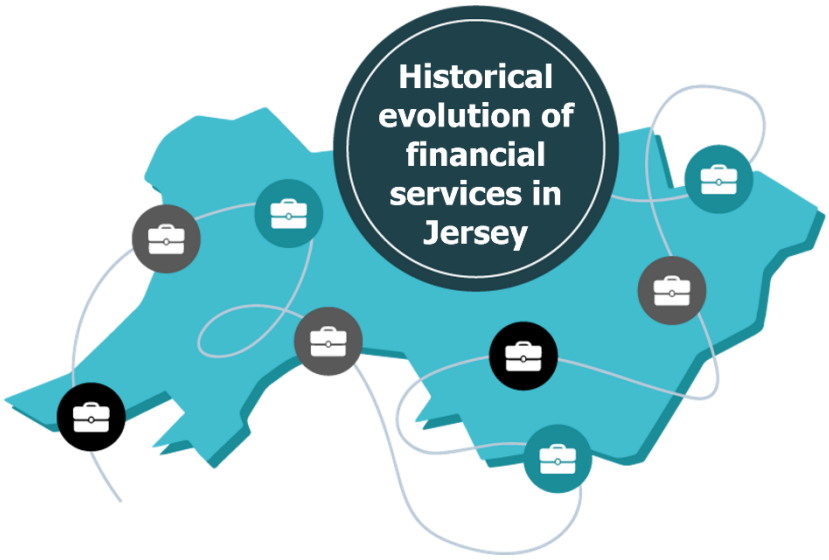


The Bailiwick of Jersey is a British Crown Dependency. It is not part of the United Kingdom, but is a self-governing, democratic island that is part of the British Isles but not geographically part of the archipelago of Great Britain and Ireland. It is defended and internationally represented by the UK government. Between 1066 and 1204, ownership of the island was contested between the British Crown and the Duchy of Normandy and William the Conqueror. Nearly a millennium later, the impacts of its history are still felt. For example, instances of both British and French influence remain in Jersey's legal system.

When it comes to external relations and trade policies, Jersey has certain dynamics that need careful interpretation. Since Jersey is a British Crown Dependency, it cannot sign international agreements under its own authority, but the Island does have autonomy over its domestic legislation through its constitutional rights of self-government and judicial independence. The UK and French markets serve as both its major export and import destinations. Jersey is in currency union with the UK and cannot print its own currency but does issue Jersey pounds that can be exchanged on par with sterling.

Regarding the historical evolution of the island's economy, there has been a sectoral shift from the early dominance of agriculture and shipbuilding before the twentieth century, as seen in the graphic above, towards tourism and the financial services industries from the mid-twentieth century until today. These trends, focusing on the rise of financial services in Jersey, can be seen in the timeline below.

© Centre for Economics and Business Research



18th Century:

Foundation of the Jersey Chamber of Commerce.

Establishment of First Bank in 1796.

Early 20th Century:

Income Tax Law (1928).

Setting up of Income tax of 20p in the pound (1940).

1950 - 1969:

Influx of banks to meet growing demands of British customers living or working aboard.

Abolishment of maximum rate of interest chargeable.

Enactment of regulatory legislation to protect depositors' interest.

Late 1960s:

Enactment of regulatory legislation (1967).

Opening of the first American bank in 1969.

1970s:

Jersey authorities limit bank licences to those in the world's top 500 banks.

Adoption of decimal system.

Protocol 3 to remain outside EU (1972).

Late 20th Century:

Regulatory regime for trust and company service providers.

Establishment of the Jersey Financial Services Commission and the Channel Islands Stock Exchange.

2000 - 2010: (i)

Jersey Finance was founded.

Commitment with the OECD Member States to negotiate bilateral tax information exchange agreements.

Design of a streamlined regulatory regime.

2000 - 2010: (ii)

Implementation of Taxation of Savings Income Directive.

Placed on the OECD 'whitelist'.

The new Foundations (Jersey) Law came into force for private wealth management.

2011 Onward:

Jersey Finance opened offices in Dubai, Hong Kong, and New York; with representation in London, Johannesburg and Shanghai; and a virtual office in Mumbai.

A report from MONEYVAL found Jersey to be 'largely compliant'.

The JFSC announces Jersey Private Funds (2017).

© Centre for Economics and Business Research

2.2 Globalisation and the growth of offshore finance

After World War II, the international financial system developed substantially. The liberalisation of capital flows in the late 1960s; the removal of fixed exchange rates and exchange controls; and the development of new financial instruments and new technologies, all contributed to significantly increased integration of the global financial system.

By the 1960s, Jersey's financial industry had begun to emerge as a major offshore finance centre (OFC). The first merchant bank established offshore operations in Jersey in 1961, marking the start of Jersey's modern financial services industry.

According to Economic Survey of Jersey by Powell in 1971, during the 1960s, the number of offshore banks and deposits increased drastically from £39m in 1960 to £470m by 1971. It attracted fund management, trust companies and international accounting firms[5]. This growth through the late 1960s and 1970s came at a time when UK fiscal policy was particularly taxing high earners. In 1970, the UK's top marginal rate of income tax was 83% and combined with high inheritance tax in the UK, Jersey saw a trend of some high net-worth individuals (HNWI) entering the island.

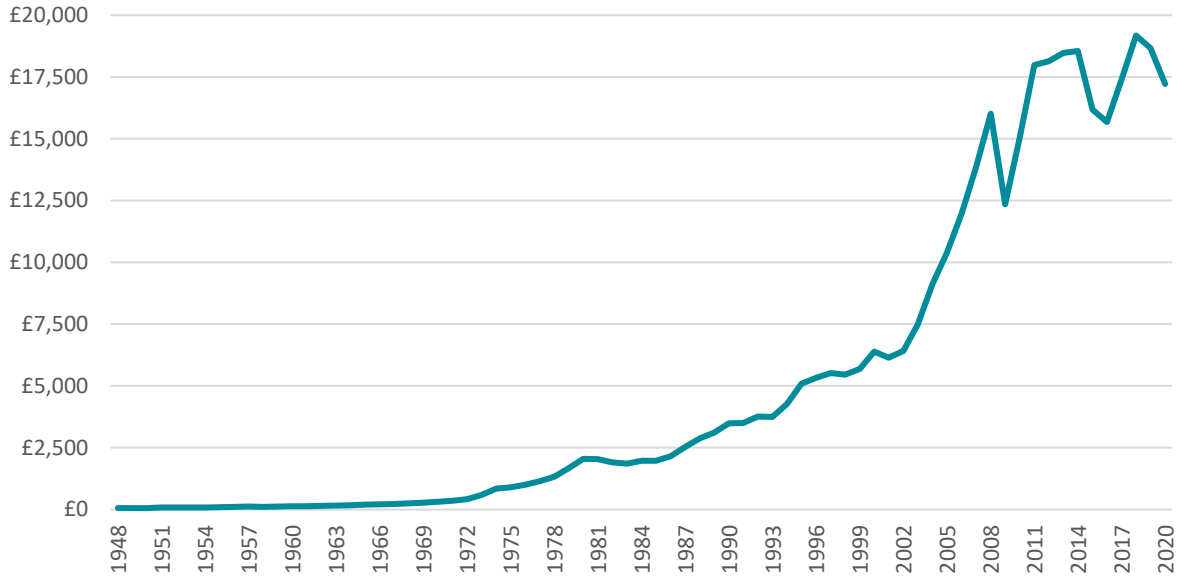
Moreover, due to the large presence of financial services, Jersey's increasing reputation and its quality of financial infrastructure further attracted new entrants. The number of companies formed in Jersey rose from 17 in 1962, to over 470 by 1970. Between 1980 and 2002, global production doubled while world trade tripled. Today, the levels of world trade have surged drastically by almost 300 times, relative to 1950 levels.[6]

There has been an exponential growth in world trade over the last 70 years (Figure 6), and as the wide body of trade theory suggests, world trade has been a key factor in driving economic growth. In 2019, the global trade value of goods exported globally increased to USD 19 trillion (current prices) as compared to USD 6.5 trillion in 2000.[6] Financial services such as those provided in Jersey, facilitate merchandise trade.

5 Hampton, M.P. (1996). 'Creating Spaces. The Political Economy of Island Offshore Finance Centres: the case of Jersey'.

6 Statista. (2021). 'Trends in global export value of trade in goods from 1950 to 2020'.

Figure 6: World trade, USD billions, 1948-2020



Source: World Trade Organisation, Cebr analysis

In a rapidly evolving global economy, high quality institutions are a significant driver of economic prosperity. From an economic perspective, institutions refer to the rules and arrangements that are part of a society. These can take a variety of forms- from informal social norms or cultural factors such as tipping at a restaurant, to complex formal structures that are relevant to Jersey's economy such as governments; the international monetary system; national legal frameworks; competitive markets; or a formalised system of property rights. Institutions play an important role in the success of offshore finance centres, while offshore financial centres such as Jersey also play an important part in the efficient functioning of international institutions.

The global business environment depends upon a wide variety of institutional considerations such as 'access to markets and profit opportunities; legal and regulatory framework; macroeconomic stability; skilled and responsive labour markets; and well-developed infrastructure'.[7] Jersey performs strongly across all of these factors; the island's institutional strength and stability is a key advantage for the island. Its strong governance, high quality legal system and rigorous regulatory environment are examples of the island's institutional quality. This helps to improve outcomes for both Jersey, and stakeholders that are impacted by the global economic activity that is stimulated by Jersey's financial services sector.

2.3 Global Value Chains

In line with increased globalisation, there has been a parallel growth in the volume of international financial transactions. Demand for reliable investment intermediaries has grown as the global stock of capital and investment opportunities have expanded, which is crucial in

7 Gordon. (2008). ' Investment guarantees and political risk insurance: institutions, incentives and development'.

© Centre for Economics and Business Research

the growth of financial centres such as Jersey.[8] These financial centres play a key role in intermediating these international financial transactions, facilitating global economic output. This globalisation of economic activity, with capital, financial transactions and real economic activity all intertwined and spanning multiple jurisdictions, is discussed in this report through the lens of Global Value Chains (GVCs).

The aim of the research is to understand Jersey's role within GVCs. This report assesses Jersey's global economic footprint, illustrating the island's role as an international financial and economic conduit.

A value chain is defined as the "full range of activities that firms and workers do to bring a product from its conception to its end use and beyond".[9] The different aspects of a value chain can be performed within the same firm or divided among different firms and countries. Global Value Chains highlight the increasing interconnectedness of the global economy and give insights into the shifting patterns of trade and production. Although the concept of outsourcing activities and value chains is not new, technological transformations have accelerated the trend of global fragmentations of production in recent decades. The main drivers of this phenomenon include significant decreases in the costs of trade, communication, and transport.

GVCs conceptualise the interconnected networks of global producers and consumers in the modern global economy, as well as highlight the increasing specialisation by certain geographies in the production and exporting of certain goods and services. Recognising and understanding these characteristics of GVCs is essential for policymaking.

Individual firm level supply chains consist of a range of different business functions such as production, transportation, manufacturing, procurement, R&D, and marketing. These supply chains often span multiple countries, with different stages of economic activity occurring around the world. The aggregation of all international firm-level supply chains is another way to conceptualise the comprehensive network of GVCs. Financial services are a part of almost all these functions across all Global Value Chains.

Access to capital is important across all business functions and across the entire lifecycle of businesses, from early stage, seed capital to Series C or D funding and even beyond in some cases. Jersey facilitates the flow of capital and investment around the world which, in turn, facilitates many of the previously mentioned business functions, thus highlighting the role played by Jersey in the efficient functioning of the global network of interconnected value chains and economies. This research aims to quantify the specific contribution by Jersey's financial services sector to this process.

8 Zuluaga. (2018). 'Offshore Bet - The benefits of capital mobility'.

9 Gereffi and Fernandez-Stark. (2011). 'Global value chain analysis: a primer.'

Finally, it is worth setting out in slightly more detail, the process by which the financial investment intermediated in Jersey, supports Global Value Chains through a concept known as financial openness. Financial openness, or the degree of openness of a country's financial market to other countries, encourages financial flows and enables capital to be allocated efficiently to find its most productive investment.

At this juncture, it is worth noting that *financial investment* can be distinguished from *economic investment*. Economic investment includes capital assets required in the production of other goods and services such as factory equipment or hiring of staff. Financial investment involves the trade of financial assets such as bond and stocks. They could be traded directly from the issuer in the primary market where the assets are created, or in the secondary market where the assets are resold.

Economic and financial investments are interdependent. The purchase of a financial asset in a primary market such as bonds is used to convert savings to investments. This helps allocating capital to an entity which requires funds to produce goods or services in the economy. Investors can also access and earn returns on their investments, through resale of assets in the secondary market. This creates liquidity and additional economic value in the market. Secondary markets are efficient as they are driven by prices through the forces of demand and supply. The returns earned in the market through financial investment can be re-invested in economic activity, supporting further economic growth. Jersey's role in facilitating primarily financial investments within this framework, provides significant opportunities for global economic growth.

Foreign direct investment (FDI) creates opportunities to widen the credit base globally and crowd in, i.e., encourage domestic investment in the economy. This encourages innovation and entrepreneurship in the local economy. A panel data study for 142 countries found positive spillover effects[10] through increased FDI inflows in nearby developing countries.[11] FDI has the potential for strong growth enhancing effects. Per the endogenous growth models in macroeconomic theory, FDI and 'technological factors' such as human capital, knowledge spillovers, technology, can help improve the productivity of an economy. Therefore, global investment flows such as the ones that Jersey contributes to stimulate large degrees of economic activity through the network of interconnected Global Value Chains. This research aims to quantify the tangible footprint of this activity through metrics such as GDP, employment, and wages.

2.4 Brexit

In the last decade, one of the most important milestones across the UK and European political landscape was the United Kingdom's 2016 referendum on European Union membership. This section details the associated impacts for Jersey resulting from the decision for the UK to leave the EU.

10 In this context, spillover effects - driven by direct and indirect trade or financial interconnections between economies - refer to economic impacts that are experienced in one country or region as a result of a seemingly independent event elsewhere.

11 Blanco and Rogers. (2014). 'Are Tax Havens Good Neighbours?'.

The UK and EU's new relationship affects Jersey only under the circumstances mentioned in Protocol 3 of the UK's 1972 Accession Treaty.[12] This made Jersey a part of the EU only to the extent of free trading of goods, while Jersey has always been treated as a "third country" (i.e., non-EU member) for the purpose of financial services. Trade in goods is the principal area of Trade and Cooperation Agreement (TCA) and Custom Unions. At the end of the transition period of Brexit, the TCA came into effect in the island. In March 2021, the UK and EU confirmed a *Memorandum of Understanding (MoU) on financial services*. It lays the groundwork for voluntary regulatory cooperation between the two, providing a platform to facilitate new dialogue on matters related to financial services, and hence the EU and UK can now impose their own financial agreements.

The exact path forward for all parties affected by the United Kingdom's exit of the European Union is unclear, but there are some instances in which Brexit may induce a positive indirect impact for Jersey's finance industry. The island has an opportunity to increase its geographic presence by facilitating cross-border investment flows into the UK as Britain seeks to build new trading relationships globally. Additionally, as found by our research, Jersey has strong financial links with Europe and the EU. These have been on an increasing trend between 2017 and 2020, which suggests that there is no immediate sign that Jersey's relationship with Europe is going to wane.

Additionally, the TCA is intended to encourage trade due to the minimum presence of barriers. This would further mitigate the impact of any short-term decrease in UK investment activity, and as such Jersey is likely to continue playing a key role in facilitating financial flows in the UK and the EU.[13] In the long term, the relationship between the UK and Jersey following the Brexit vote is expected to remain strong. Especially with the City of London being an important financial centre with strong financial links with St. Helier, it is unlikely that capital flows into London from Jersey will be disrupted substantially.

This concludes the contextual material for Jersey and its financial services sector. The next section of the report outlines the methodologies used across the research. Section 4 presents analysis on the main financial services sectors in the economy, detailing annual capital stocks for the funds, banks and the trusts and all other asset holding vehicles sectors. Finally, Section 5 extends the analysis to evaluate the overall contribution of Jersey's financial services sector on GDP, employment, and wages through its support of Global Value Chains.

12 Government of Jersey. (2007). 'Framework for developing the international identity of Jersey'.

13 Jersey Finance. (2017). 'Brexit Factsheet – The Implications'.

3. Methodology

The following section lays out our methodology, broken down by our approach to the survey – and, more specifically, how this differed for funds, banks, trusts and all other asset holding vehicles (AHVs) – and the modelling for the overall impacts.

3.1 The survey

The overall aim of the survey was to understand the support of global financial value chains, facilitated by Jersey's financial services sector. Publicly available data regarding Jersey's financial sector's geographic interlinkages is minimal at the level of granularity required for this report; as a result, primary research was required to estimate these international financial relationships.

Over the course of the Spring and Summer of 2021, Cebr ran three simultaneous surveys targeted at 109 of Jersey Finance's member firms. The three surveys focused on separate components of Jersey's financial ecosystem: the fund sector, the banking sector, and the trust administration plus other asset holding vehicles sector. Each survey comprised of questions requesting firms to identify the geographic origins of their capital base, as well as the geographic allocation of their administered capital over the observation period of 2017 to 2020.

To support the primary data, we used statistics from the Jersey Financial Services Commission, Statistics Jersey, material provided by Jersey Finance, and a variety of publicly available data on a sector-specific basis.

Across the following sections, we disaggregate all results at the continent level, with the exception of Europe. Here, the UK and Jersey are individually highlighted, leaving a region named 'Rest of Europe' that covers the remaining European links. Additionally, where it is possible given the quality and robustness of the data inputs, we also present data for 12 other countries of interest[14], as well as a small sample of key country blocs where possible.[15]

For the purposes of this report, the definition of **North America** includes the United States of America, Canada, plus all Caribbean islands and Central American countries. Additionally, Russia is defined as part of **Europe** and Turkey as part of **Asia (inc. Middle East)**.

Finally, used across this report, **we define the term assets under management (AUM)** as the sum of the absolute value of all assets managed (either actively or passively) by a firm or sector at the end of each year reported.[16] For clarity, in this context AUM is considered to capture the assets that are under both active management, as well as the assets that are

14 The 14 countries of interest cover the UK and Jersey, plus the USA, Netherlands, France, India, China, Hong Kong, South Africa, Kenya, Nigeria, United Arab Emirates, Saudi Arabia, and Bahrain.

15 The country blocs covered are the EU-27, OECD, Emerging Markets (defined by the countries in the MSCI Emerging Markets Index), Greater China, Gulf Cooperation Council, ASEAN, and CIS.

16 We consider the term funds under management to be equivalent to assets under management for the purposes of this report.

under the more passive custody of funds, banks, trust structures, or all other asset holding vehicles in Jersey.

Funds

For the purposes of this report, the scope of Jersey's fund sector was defined as regulated **funds that are both domiciled, as well as administered, in Jersey.** This definition is chosen because some non-domiciled funds do not carry out all functions of their activity in Jersey. As a result, we can be confident that the associated impacts of Jersey's fund sector are appropriately attributed to the island.

This definition differs from that of the JFSC, in their provision of their estimates for the total size of the fund's sector.[17] However for the purposes of this report, the total size of the fund sector in each year was estimated per the definition above, utilising data from the Monterey Insight Jersey Fund Report series results, as provided by Jersey Finance.

To produce the geographic distributions, the predominant data source was the Cebr survey across fund administrators in Jersey. These findings were combined with publicly available data for both the upstream and downstream components of the sector to fill any data gaps. This includes consideration of investment policies for Collective Investment Funds (CIFs) and Control of Borrowing Order (CoBO) only funds, via the JFSC[18]. As a result, the fund sector distributions reflect a range of data inputs across a range of sources.

As previously mentioned, to produce the estimates for the funding origins of capital administered by Jersey domiciled funds, the distributions were primarily survey driven in all years. The only other data input was Monterey data on promoter origin by country. Following conversations with Jersey Finance, this was used as a proxy for some funds where we did not have survey responses. As a result of data submissions where we were not able to allocate 100% of their yearly stock of capital to a specific country, there is additionally an 'unattributable' component to the funding origins distribution.

For the downstream allocation of assets administered by Jersey domiciled funds, the distribution was again primarily based on the survey results, and subsequently supported by public data plus Monterey Insight findings. Much of the data in this space is widely available through investor relations publications by fund administrators and promoters in Jersey. We conducted extensive portfolio analysis of the largest private equity and venture capital houses on the island to estimate a global distribution of the capital administered by Jersey funds, to support the analysis for specific funds for which we did not have survey responses.

There was a portion of unattributable capital that would not be appropriate to attribute to a specific country or region; for example, capital invested in exchange traded commodities, or other such derivative securities, without clear economic linkages to specific jurisdictions. The

17 JFSC. (2021). 'Funds statistics: Summary of statistical survey of Funds serviced in Jersey as of 30 June 2021.'

18 JFSC. (2021). 'Funds Statistics: Analysis of CIFs and COBO Funds Investment Code Policy.'

result was a portion of yearly assets under management[19] that we were unable to attribute at the continent level in the range of 3.8% to 4.9%.

We present results on a continent-level basis, with the United Kingdom and Jersey highlighted leaving a "Rest of Europe" disaggregation alongside the other five main continents.

Banks

The publicly available banking sector statistics published by the JFSC are extensive, allowing us to base the survey around industry-recognised balance sheet categories and subcategories. The main categories covered in the survey were customer deposits, bank deposits, and all other liabilities, plus customer loans, upstreaming / funding of group companies, and interbank loans and all other assets. Together this provided a very granular insight into the global linkages of Jersey's banking sector.

The balance sheet totals for assets and liabilities were obtained from the JFSC's publication of banking statistics.[20] The JFSC also publishes quarterly geographical analysis of deposits by selected regions. Discrepancies between Cebr's analysis and the JFSC's analysis appear to be a result of subtle differences in the groupings of countries and regions between the two distinct methodologies.

The result of Cebr's primary data gathering exercise combined with the figures from the JFSC is that we are able to estimate continent-level distributions for the main balance sheet activities of Jersey banks – namely customer deposit taking for bank liabilities and funding of group companies for bank assets – as well as continent-level distributions for the balance sheet totals regarding both funding origins and asset allocations.

Finally, we present additional material regarding the financial linkages for Jersey incorporated banks and registered branches with the fourteen countries of interest and seven major global blocs for both funding origins and asset allocations in 2020 per both aggregated balance sheet totals. This can be found in Appendix I.

Trusts and other asset holding vehicles (AHVs)

The survey for the trust and private wealth sector had the widest focus out of the three as it looked to capture trust administration plus all other AHVs for both private and corporate clients.

To estimate the total value of the assets administered by this broad sector, a blend of data sources was required. These included our primary data on the annual total asset values in Jersey trust structures[21] plus other asset holding vehicles, plus the employment that this AUM represents in each year; employment figures from Statistics Jersey for each year; JFSC data for the total assets under management of Jersey trust company businesses in 2018 and 2019; and the associated number of structures represented by this AUM.

19 The term assets under management (AUM) is defined as the sum of the absolute value of all assets of all assets managed by a firm or sector at the end of each year reported.

20 Jersey Financial Services Commission. (2021). 'Banking statistics.'

21 Defined within our report as the total market value of investments managed on behalf of a client, at the end of the year.

To produce an ultimate AUM figure for the wider trust administration sector in Jersey, multiple approaches were considered, combining the above data points. Underpinning all estimates was a scaling of the AUM represented in the survey data. The scaling factor used was based upon the share of employment represented in the survey submissions relative to total sector employment in each year. This methodology differs slightly from that in the funds/banking sectors, where the total value of assets was known, per pre-existing sources.

Statistics Jersey publish detailed time series figures on jobs in the finance and legal sector (Table 2). Across 2017 to 2020, combined employment in the 'trust and similar instruments' plus 'trust administration' sub-sectors ranged from 4,300 to nearly 4,600 jobs on the island.

Table 2. Jobs in the trust administration and similar instruments sub sectors, headcount, 2017 - 2020

Sub Sector	2017	2018	2019	2020
Trusts and similar instruments	170	180	150	150
Trust Administration	4,400	4,360	4,430	4,150
Total	**4,570**	**4,540**	**4,580**	**4,300**

Source: Statistics Jersey, Cebr

To triangulate an estimate for the total AUM of the sector, other data points were taken into consideration. These supplementary metrics included the average AUM per structure plus the total number of structures administered in each year.

Overall, our analysis suggests that the total value of the assets held and administered in Jersey trust structures plus all other asset holding vehicles is in the range of £1.11 to £1.17 trillion across the 4-year observation period.

3.2 Overall impacts

The ultimate output of the primary research phase was an estimate for the average stock of capital[22] originating in Jersey, allocated to different regions around the world, disaggregated at the continent-level.

We then estimate the share of GDP in each country that is supported by the Global Value Chains that Jersey directly contributes to. This mechanism works by using country level GDP data, country level capital stock estimates, Cebr's estimates for capital allocated by Jersey to each country, and the share of each country's GDP that is attributable to capital. We can estimate the share of a country's GDP that is attributable to the capital base by applying of one of the results from the Solow model. For full details of this process, please see Appendix I: Solow model framework.

The result is an estimate for the share of each country's income that is supported by the Global Value Chains that Jersey's financial services sector contributes to. Using these shares, we estimate the associated global employment and wages that are therefore supported by Jersey's value chains.

Finally, it is worth highlighting that the impact figures for GDP, employment, and wages should not be interpreted as the total GDP, employment, or wages in each country that are *directly*

22 The average stock of capital is calculated by estimating the total capital stock on December 31st in each year from 2017 to 2020 and averaging the four estimates.

caused by Jersey. These figures should be understood as the impacts associated with the overall value chains that Jersey directly supports. The mechanism for this is that capital is intermediated in Jersey and then subsequently redistributed around the world, thereby contributing to regional GDP, creating jobs, and supporting wage payments globally, via the associated value chains.

© Centre for Economics and Business Research

4. Jersey's financial services sector

In this section, we present our estimates for the annual capital stock across Jersey's financial services sector and the associated contributions to GVCs. However, before this it is worth reinforcing Jersey's role within the network of Global Value Chains.

4.1 Jersey's support of Global Value Chains

An important contextual distinction to bear in mind when evaluating the ultimate impacts of the capital intermediation activities across Jersey's financial services sector is the difference between the island's direct contribution to global output and the contributions to global output by the value chains that the island supports.

As an illustration of Jersey's **direct** contribution to global output, Jersey's GDP in 2019 was £4.9 billion. This equated to less than 0.008% of global GDP in that year. To demonstrate this another way, if global GDP was equal to £100, Jersey would contribute *less than one pence* to that £100 total. However, the impacts in this study are not associated with the direct contributions to global GDP by the Bailiwick. Rather, they are the contributions to global output by the value chains that Jersey's combined financial services sector contributes to. As will be seen, this contribution is significantly larger. This research adds to the existing literature by estimating the impacts associated with the economic activity around the world that is facilitated by capital intermediated in Jersey. **Put another way, our research estimates the global economic contributions of the value chains, intermediated in Jersey.**

A headline finding from our analysis finds that Jersey supported an average of 0.27% of global economic activity each year between 2017 and 2020 through its contributions to Global Value Chains (GVCs). To put this figure into some context and highlight the scale of the financial sector's global reach relative to the island's absolute size, the population of Jersey accounts for only 0.001% of the global population. This proportion is nearly three hundred times smaller than the wider impact of the associated value chains. Furthermore, as outlined in the paragraph above, the size of this wider footprint is nearly forty times larger than the size of Jersey's direct contribution to global output.

This section provides estimates for the scale and distribution of the capital stocks intermediated in Jersey's main financial services sectors, estimated at the end of each year from 2017 to 2020, while Section 5 presents the global impacts associated with the contributions of Jersey to GVCs.

Granular GVC analysis is important to be able to accurately assess policy impacts on firms and trade partners. For policymakers, GVCs emphasize how a country's export competitiveness is positively affected by the efficient sourcing of inputs and the efficient access to final producers and consumers, internationally.[23]

23 Economic Commission for Latin America and the Caribbean. (2014). 'Global value chains and world trade: Prospects and challenges for Latin America.'

4.2 Funds

Jersey's fund administration industry dates back approximately 60 years to when the first fund management groups set up offices in Jersey.[24] Since then, the products offered in the jurisdiction have grown, and for some time Jersey has been a globally recognised centre of excellence for fund administration.

The main five asset classes for funds in Jersey are Bond, Equity, Mixed (Bond and Equity), Money Market, and Specialist/Alternative. Per JFSC statistics, at the end of June 2021, 89.4% of the market was through Specialist or Alternative, asset classes. The majority of this asset base is in venture capital and private equity funds, however the asset class also includes real estate, hedge and derivative funds. Equity funds, primarily investing in stocks, account for the second largest share of Jersey's fund sector, channelling 5.4% of Jersey's total fund sector asset base in 2021 to equity markets around the world.[25]

Jersey is also a popular jurisdiction for administering funds in real estate and infrastructure for projects on a global level, such as student accommodations, shopping complexes and office spaces – with a particular focus on the UK real estate market due to strong economic and political links between Jersey and the UK.

In 2013, Jersey's adoption of the European Alternative Investment Fund Managers Directive (AIFMD) further aided the economy's position as a conducive environment for alternative assets. This regulation made Jersey the first "third country" offering fund managers the flexibility to market to potential investors inside the EU as well as helping bridge the divide between the UK and the EU following Brexit.

From a potential investor's perspective, Jersey's attractiveness as a centre for administration of investment funds may also be enhanced by the island's tax neutrality. This provides a favourable tax environment relative to other jurisdictions, allowing fund promoters to pool contributions from investors across the world without being double-taxed (i.e., taxed in more than one jurisdiction without need), and then distribute the accrued returns from global assets across borders with the same flexibility.

According to our analysis and supported by data from the JFSC[25], the value of the capital administered in Jersey's fund sector has been on a robust upward trajectory over recent years. The overall percentage increase in Jersey's fund sector's capital base from 2017 to 2020 was 71.5% **(£164.5 billion to £282.1 billion)**, highlighting the strength of Jersey's fund administration sector in recent years. Over the observation period, the biggest annual increase in Jersey's fund sector total AUM was observed from 2018 to 2019 when the total AUM increased by 28.9%.

For the purposes of this report, we define the scope of Jersey's fund sector to be the capital in fund structures that are both administered *and* domiciled in Jersey over the period 2017 to 2020. **This is to ensure that all functions of the fund servicing activity are attributable to Jersey**, and hence the associated impact of Jersey's fund sector across Global Value Chains is appropriately apportioned to the island and is not misrepresented by off-island

24 Financial Centres International. (2011). 'Jersey: the key milestones in the fifty-year history of an international financial centre'.

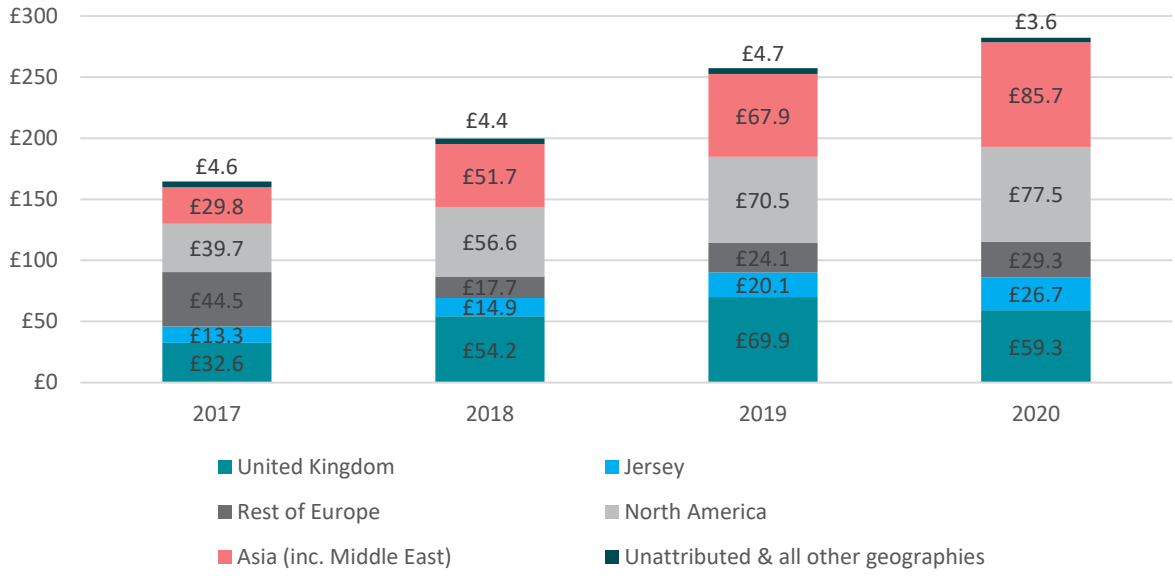
25 JFSC. (2021). 'Fund Statistics'.

functions. For completeness, this definition also captures all fund management activity on the island that also satisfies the prior two conditions of being administered and domiciled in Jersey.

We conducted geographic analysis of the origins and allocations of the capital base in such Jersey funds through a primary data gathering exercise. The aim of which was to track the upstream and downstream capital intermediation across the sector, ultimately tracing the value chains that Jersey's fund sector directly contributes to. These are visualised in case study examples at the end of this section.

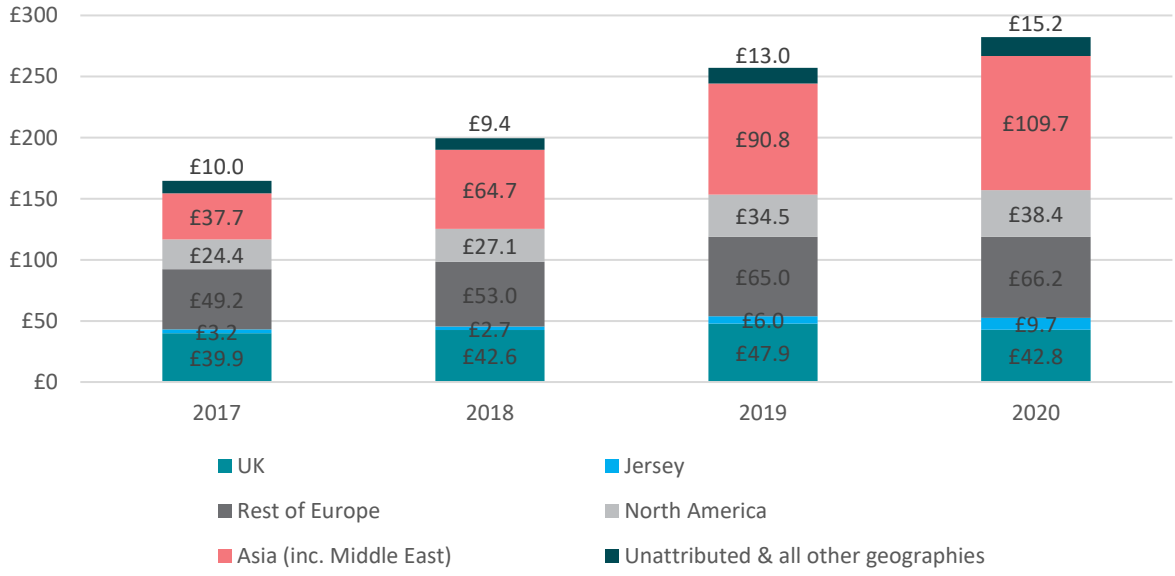
The headline results can be seen in Figure 7 and Figure 8 which respectively show the origin and allocation of capital intermediated in Jersey-administered funds.

Figure 7: **Origin of capital** in Jersey-administered and domiciled funds, £bn, 2017 – 2020



Source: Cebr survey, Monterey, JFSC, Cebr analysis

Figure 8: **Allocation of capital** by Jersey-administered and domiciled funds, £bn, 2017 – 2020



Source: Cebr survey, Monterey, JFSC, Cebr analysis

In the following sub-sections, we present estimates for the geographic origins and allocations of the capital in Jersey administered and domiciled funds. Funding origins are disaggregated by the immediate geographic location of the investor (or promoter where data is not available) that is committing capital to a Jersey fund, while the asset allocations are disaggregated by the immediate geographies to which capital is invested from a Jersey fund.

This is with the aim of tracking the actual flows of capital intermediated in Jersey's fund sector. Understanding these specific capital flows, rather than other metrics that are sometimes used to geographically apportion Jersey's fund sector (such as promoter geography), is critical to our research into the associated economic impacts, supported by the value flows intermediated by Jersey funds.

Funding origin

Table 3 below shows the full geographic distribution of the funding sources for the capital base[26] in funds that are both administered and domiciled in Jersey. Again, the funding origins are disaggregated by the ultimate location of the individual investors that are committing capital to the in-scope Jersey funds.

Table 3: Origin of capital for Jersey-administered and domiciled funds, £m, 2017 – 2020

Region	2017		2018		2019		2020	
United Kingdom	£32,610	*19.8%*	£54,207	*27.2%*	£69,945	*27.2%*	£59,252	*21.0%*
Jersey	£13,263	*8.1%*	£14,936	*7.5%*	£20,092	*7.8%*	£26,712	*9.5%*
Rest of Europe	£44,473	*27.0%*	£17,730	*8.9%*	£24,101	*9.4%*	£29,344	*10.4%*
North America	£39,721	*24.1%*	£56,618	*28.4%*	£70,490	*27.4%*	£77,533	*27.5%*
South America	£370	*0.2%*	£477	*0.2%*	£669	*0.3%*	£1,015	*0.4%*
Asia (inc. Middle East)	£29,830	*18.1%*	£51,681	*25.9%*	£67,939	*26.4%*	£85,739	*30.4%*
Africa	£1,411	*0.9%*	£1,354	*0.7%*	£1,308	*0.5%*	£958	*0.3%*
Oceania	£701	*0.4%*	£692	*0.3%*	£869	*0.3%*	£601	*0.2%*
Unattributed	£2,142	*1.3%*	£1,833	*0.9%*	£1,810	*0.7%*	£990	*0.4%*
Total AUM (£m)	**£164,522**		**£199,527**		**£257,223**		**£282,144**	

Source: Cebr survey, Monterey, JFSC, Cebr analysis

As of 2020, there are three primary funding sources for Jersey-administered and domiciled funds; Europe (£115.3 billion, or 40.9% of the total AUM), Asia (inc. Middle East) (£85.7 billion, or 30.4% of the total AUM), and North America (£77.5 billion, or 27.5%). Combined, these make up nearly 99% of the funding for Jersey funds. Only a very small share of the total funding (0.9%) originated from South America, Africa, or Oceania, but in absolute terms, this share equalled over £2.5 billion of capital.

It is notable that the capital originating from Europe is predominantly from the UK: in 2020, 51.4% of the sector's capital commitments from the continent were from investors or corporations in the UK (£59.2 billion out of £115.3 billion). However, the UK's share of total AUM decreased in 2020 to 21% from a high of 27% in 2018 and 2019. The share of funds originating in Jersey remained relatively consistent throughout the period, ranging between a

26 The scope of the fund sector is defined as funds that are part of the JFSC's list of regulated schemes and are both administered and domiciled in Jersey.

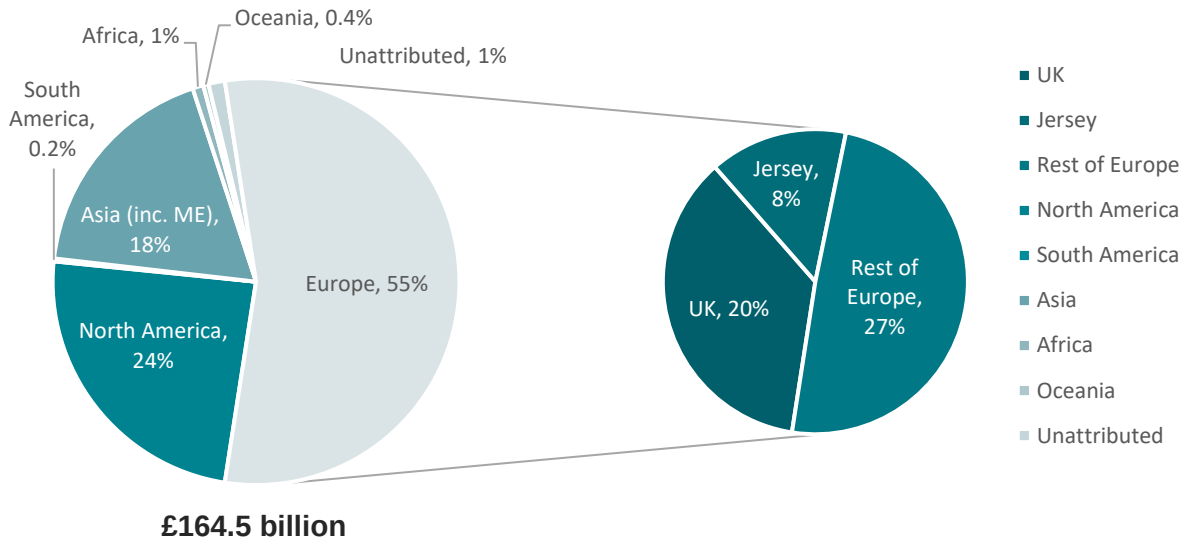
minimum of 7% and a maximum of 9% of the yearly total AUM in each year. Data from our survey suggests that on average, over 70% of the capital stock in 2020 that originates from elsewhere in Jersey is via trust structures and other asset holding vehicles for both private and corporate clients.[27] Approximately 2% of the total originates from other financial institutions in Jersey, with the remainder from other sources which includes Jersey-resident individuals and non-financial institutions.

Most of the growth in total AUM (£121 billion increase) over the assessed period, is attributable to strong growth in funding from the Asian (inc. Middle East) (growth of £56 billion) and North American (growth of £38 billion) markets. Combined, these contributed to an increase in funding of £94 billion, or 78% of the total growth over the period.

Much of this growth in Asian markets (in terms of both funding origin, and as will be seen asset allocation) is attributable to the substantial growth in the SoftBank Vision Funds (SBVF I and II, founded in 2017 and 2019 respectively), the Japanese venture capital fund. SBVF I is by far the single largest fund administered in Jersey, and is the world's largest technology focused investment fund, with over $100 billion in committed capital.[28] The total combined AUM of these funds grew significantly over the period, and is responsible for a significant share of Jersey's contribution to Asian value chains.

To further set out this shift in geographic focus, Figure 9 through Figure 12 shows the geographic distribution of funding origin, from 2017 through 2020.

Figure 9. Geographic origins of capital in Jersey-administered funds' AUM, % of total, 2017



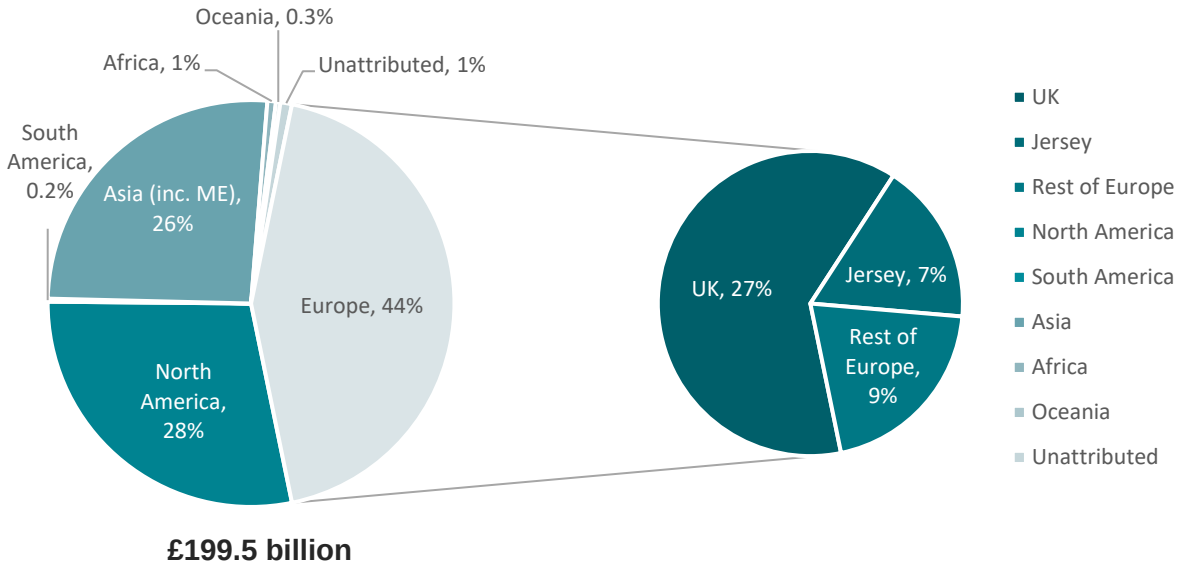
Source: Cebr survey, Monterey, JFSC, Cebr analysis

27 Regarding the geographic distribution of this capital, approximately 40% is from economic settlors from the United Kingdom, 30% is from the Rest of Europe (excluding Jersey and the UK), and 15% is from Asia (inc. Middle East). This information is presented fully in Table 10.

28 Financial Times, 2021, 'SoftBank's second Vision Fund speeds up pace of investment'.

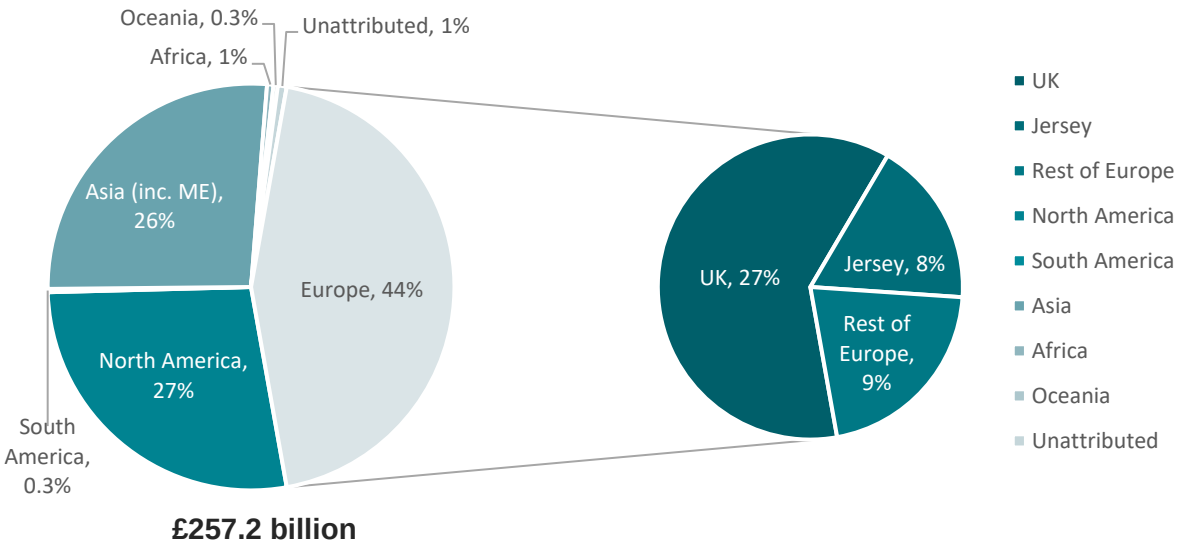
© Centre for Economics and Business Research

Figure 10: Geographic origins of Jersey-administered funds' AUM, % of total, 2018



Source: Cebr survey, Monterey, JFSC, Cebr analysis

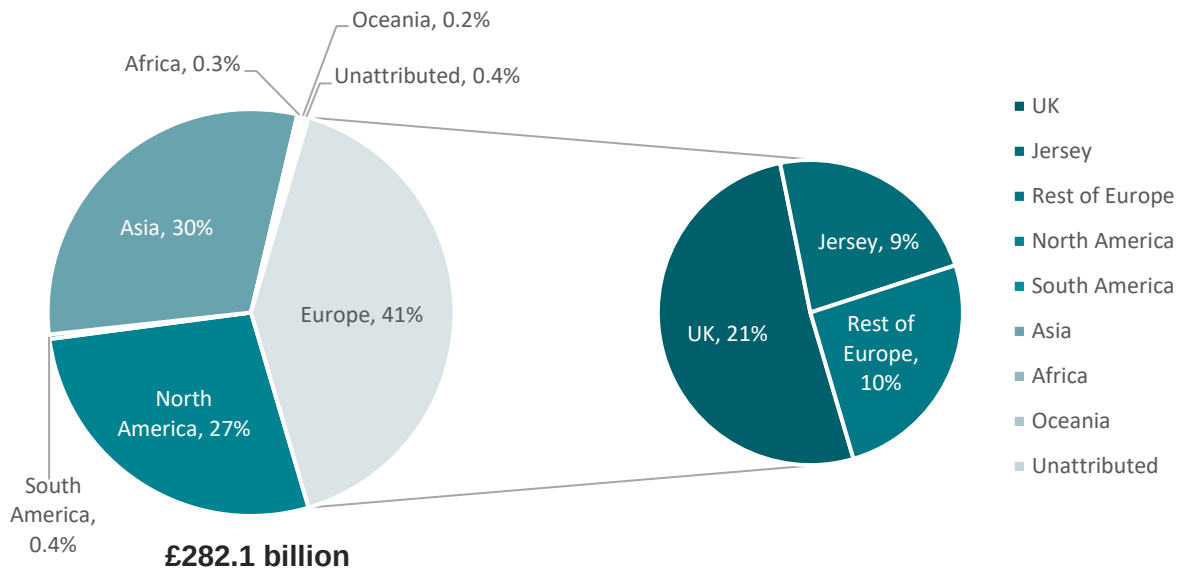
Figure 11: Geographic origins of Jersey-administered funds' AUM, % of total, 2019



Source: Cebr survey, Monterey, JFSC, Cebr analysis

© Centre for Economics and Business Research

Figure 12: Geographic origins of Jersey-administered funds' AUM, % of total, 2020



Source: Cebr survey, Monterey, JFSC, Cebr analysis

Alongside the observed growth in Asian and North American capital commitments (increases in funding origin share of 18% and 24% to 30% and 27%, respectively) there are several other trends worth touching upon.

In absolute terms, capital originating from Europe increased from £90 billion to £115 billion over the period. However, it is worth noting that the share of capital originating from Europe decreased from 55% in 2017 to 41% in 2020, owing to the increase in the sector's capital base originating from North America and Asia (inc. Middle East). This does not necessarily signpost an increase in fund activity linked to North America (for example an increase in North American promoted funds). Rather, it reflects an increase in the share of capital, **considering the underlying source of funding for Jersey funds**, that is originating from the region.

The shares of AUM originating from Africa, Oceania and South America remained consistently small, although there was an observed decrease from 1.6% in 2019 to 0.9% in 2020 for these three continents due to Africa's individual share decreasing from 1% to 0.3%. However, in absolute terms there was a slight increase of the total capital commitments from these combined continents, increasing by £91 billion in 2020 from 2017.

Asset allocation

Alongside consideration of the geographic origin of capital intermediated by Jersey-administered and domiciled funds, we also estimate the allocation of this capital. This is of particular importance as it is an estimate for the fund sector's contribution to Global Value Chains and is shown in Table 4 below.

© Centre for Economics and Business Research

Table 4. Allocation of capital by Jersey-administered and domiciled funds, £m, 2017 – 2020

Region	2017		2018		2019		2020	
United Kingdom	£39,925	*24.3%*	£42,613	*21.4%*	£47,897	*18.6%*	£42,809	*15.2%*
Jersey	£3,235	*2.0%*	£2,729	*1.4%*	£5,954	*2.3%*	£9,750	*3.5%*
Rest of Europe	£49,181	*29.9%*	£52,998	*26.6%*	£65,034	*25.3%*	£66,153	*23.4%*
North America	£24,422	*14.8%*	£27,080	*13.6%*	£34,542	*13.4%*	£38,437	*13.6%*
South America	£833	*0.5%*	£635	*0.3%*	£1,933	*0.8%*	£2,504	*0.9%*
Asia (inc. Middle East)	£37,709	*22.9%*	£64,665	*32.4%*	£90,835	*35.3%*	£109,749	*38.9%*
Africa	£919	*0.6%*	£762	*0.4%*	£957	*0.4%*	£760	*0.3%*
Oceania	£298	*0.2%*	£393	*0.2%*	£380	*0.1%*	£458	*0.2%*
Unattributed	£8,001	*4.9%*	£7,653	*3.8%*	£9,693	*3.8%*	£11,526	*4.1%*
Total AUM (£m)	**£164,522**		**£199,527**		**£257,223**		**£282,144**	

Source: Cebr survey, Monterey, JFSC, Cebr analysis

As of 2020, the capital in Jersey-administered funds is predominantly allocated to Europe (£118.7 billion or 42.1% of the total AUM) closely followed by Asia (inc. Middle East) (£109.7 million or 38.9% of the total AUM). Within Europe, £42.8 billion is allocated to the United Kingdom, accounting for 36.1% of the continent total (or 15.2% of the global total), while the Rest of Europe – excluding the UK and Jersey – accounts for 23.4% of the total AUM (£66.2 billion). In 2020, assets allocated to Europe and Asia (inc. Middle East) made up more than 80% of the total capital administered in Jersey domiciled funds.

Asia (inc. Middle East) is the continent with the strongest growth across the observation period. In 2017, £37.7 billion (23%) of capital administered in Jersey was invested into Asian countries. However, by 2020 this grew to £109.7 billion (39%). Again, a major contributor to this is through SoftBank's Vision Fund – the world's largest technology focused investment fund, which has an Asian focus for a high proportion of their $100 billion portfolio.

Over the period 2017-2020, the share of AUM administered by Jersey funds and allocated to Europe dropped from 56% to 42%. The UK's share of the European total also declined (from 43% to 36%) suggesting that Jersey administered funds have invested relatively less in the UK compared to the rest of Europe over recent years. Still in absolute terms, the European and the UK shares of AUM administered by Jersey funds remain significant and both saw an increase in capital allocation. Therefore, this relative trend is not a function of the declining absolute importance of the UK or Europe as a source for investment from Jersey funds. Rather, the growth in the AUM of Jersey funds (and the associated impact to Global Value Chains) has simply been driven by increasing investment in other geographies.

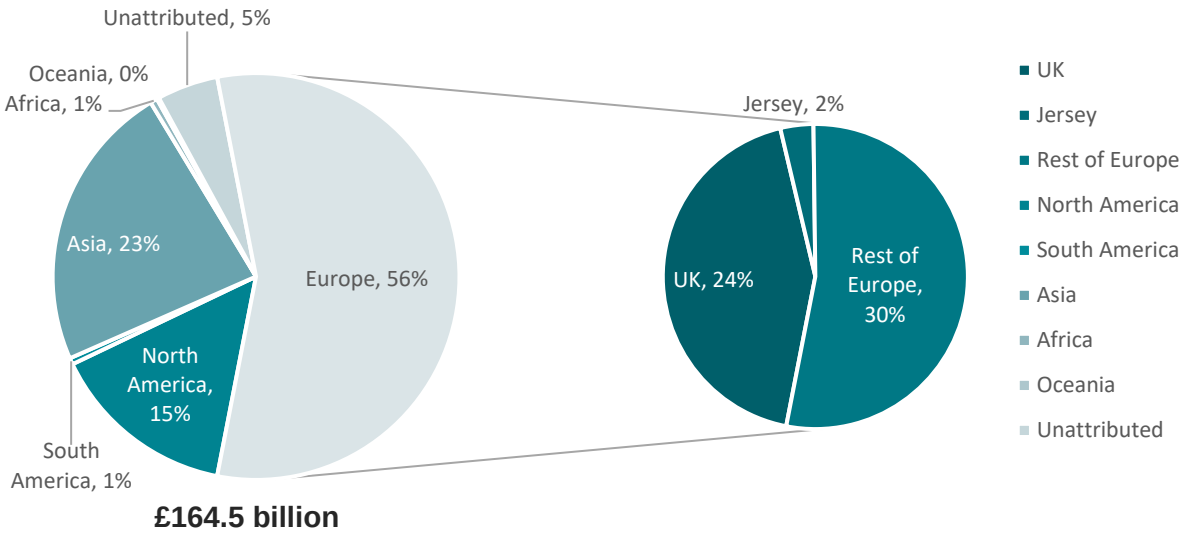
The remainder of funds is mostly invested in North America (14%). Whilst the share of total assets allocated to North American markets was consistent in all four years, the total value of investments increased strongly from £24.4 billion in 2017 to £38.4 billion in 2020, an increase of approximately 57%.

Lastly, very small shares are allocated to Jersey, South America, Africa, and Oceania. Across the period, the three continents of South America, Africa, and Oceania consistently remained as the least interconnected geographies with Jersey's fund sector.

The following four Figures illustrate the observed distributions for the allocation of the capital administered by Jersey's fund sector over 2017 to 2020.

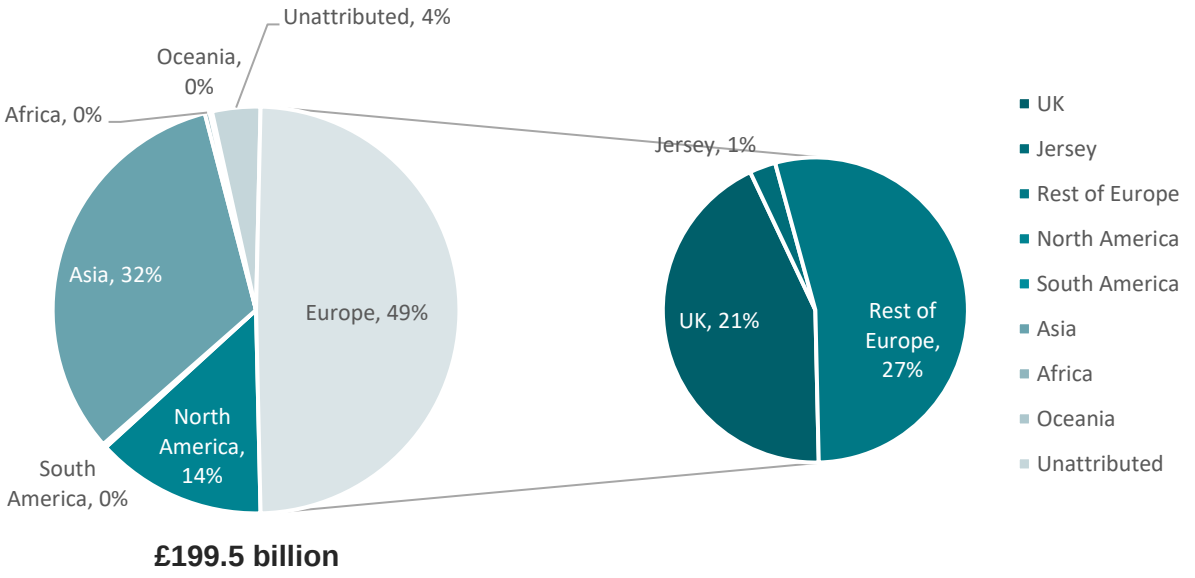
© Centre for Economics and Business Research

Figure 13: Geographic allocation of Jersey-administered funds' AUM, % of total, 2017



Source: Cebr survey, Monterey, JFSC, Cebr analysis

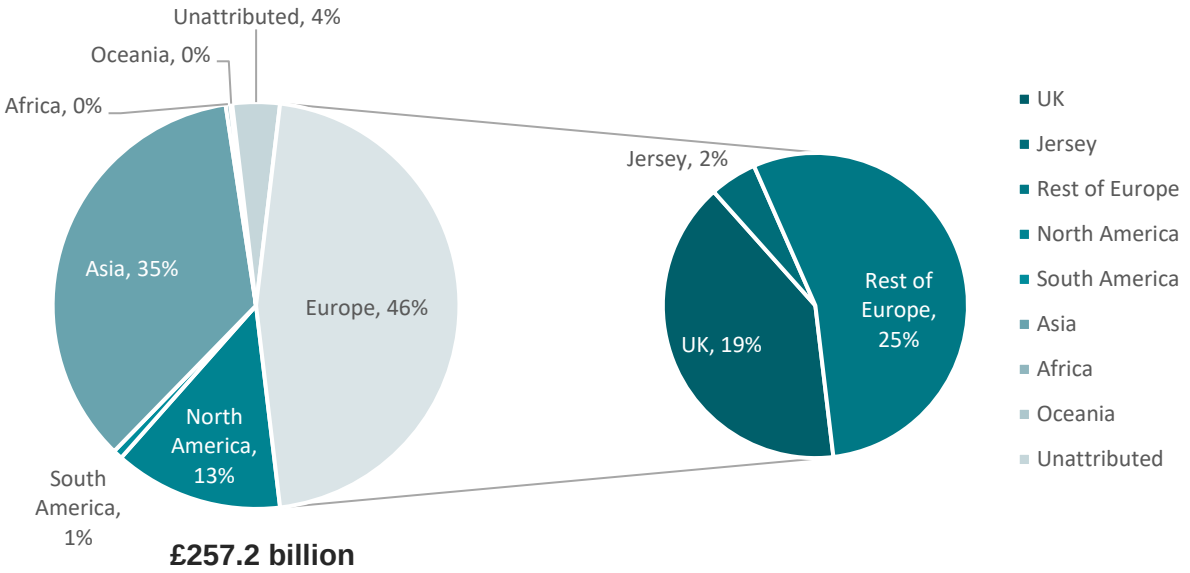
Figure 14: Geographic allocation of Jersey-administered funds' AUM, % of total, 2018



Source: Cebr survey, Monterey, JFSC, Cebr analysis

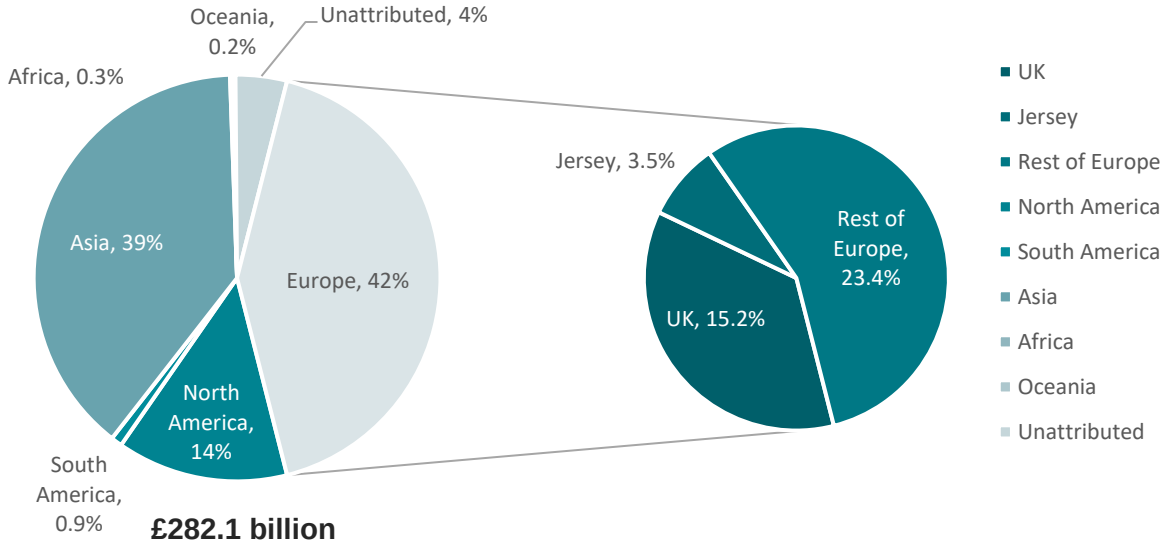
© Centre for Economics and Business Research

Figure 15: Geographic allocation of Jersey-administered funds' AUM, % of total, 2019



Source: Monterey, JFSC and Cebr analysis

Figure 16: Geographic allocation of Jersey-administered funds' AUM, % of total, 2020



Source: Monterey, JFSC and Cebr analysis

Value Chain illustration

While a significant proportion of Jersey-administered funds are indeed used to support businesses in the financial services, technological, and consumer/retail sector, there is a wide spectrum of firms outside these key sectors that benefit from funds administered from the island, especially over the last decade. Such firms can be found across countries all over the world, and many of them in turn cater to a global market base, reflecting the 'global' nature of the GVCs that Jersey supports. We have selected several examples to illustrate this, pulled from public domain information on the investments of funds both domiciled and administered in Jersey.

© Centre for Economics and Business Research

In 2017, Japanese conglomerate **SoftBank Group** domiciled its Vision Fund in Jersey. Over its lifecycle, it raised US$100 billion for international investment, making it the world's largest technology focused investment fund. While having its origins in Asia, it has a global base of investors committing capital to the fund, with major contributions from Middle Eastern Sovereign Wealth Funds and US tech firms like Apple[29], as well as a global network of advisors across 10 global offices, highlighting its global footprint. Jersey's key role is as a facilitator for the pooling and redistribution of the capital. Investing in the development of artificial intelligence is a key focus for the fund, with specific investments in global technology and life sciences/healthcare companies such as 10x Genomics, Aurora Innovation, DoorDash, Revolut, and Uber.

More recently there have also been investments in the clean and renewable energy sector, where Jersey-administered funds are promoting projects that are leading the ongoing energy transition to promote a more sustainable future. **Altor Fund V**, again both domiciled as well as administered from Jersey, signed an agreement to acquire a 30% stake in OX2 AB ("OX2") and to enter a partnership with Peas Industries AB ("Peas Industries") in an effort to promote a shift to renewable energy in Europe[30]. OX2 is a leading European renewables development company headquartered in Stockholm, Sweden, having realised almost 2.4GW of wind power. It currently has management contracts for 38 wind farms (2.1 GW) and has operations in Finland, France, Norway, Poland and Sweden. The company has taken a well-known position in large-scale onshore wind power over the past decade or so, and OX2's revenues in 2019 amounted to €463 million[31].

Additionally, Jersey-administered funds have played a crucial role in supporting firms in the healthcare industry. Michigan-based company Orchid Orthopedic Solutions has been a dominant name in the global orthopaedic market, that designs and manufactures medical device solutions and wearables. It specializes in implants and single use instruments particularly for joint reconstruction, hips, knees, spine, trauma, and dental surgeries, and it serves its wide consumer base through its 12 manufacturing sites in the USA, UK, Switzerland, and China. Interestingly, **Altor Fund III** ("Altor") was the majority owner of Orchid since 2011[32], but in 2019, the company was acquired by Nordic Capital, another European private equity investor whose funds and vehicles are based in Jersey. The relevant fund acquiring the company was Nordic Capital Fund IX that (has recorded a total of €4.3 million in committed capital), but Altor Fund III retains a significant minority holding in Orchid Orthopedic Solutions.

Nordic Capital Funds, domiciled in and administered from Jersey[33], have funded several healthcare projects, including investing in the Swiss-based pharmaceuticals company, Acino[34], which was founded in 1836. Acino is an established firm in advanced drug delivery

29 Aztec Group. (2018). 'Why the future remains bright for Jersey's funds industry'

30 Altor. (2020). 'Altor acquires a minority stake in renewables developer OX2'.

31 OX2. (2020). 'OX2 builds most wind power in Europe'

32 Altor. (2019). 'Altor divests majority stake in orchid orthopaedic solutions to Nordic capital'.

33 Nordic Capital. (2021). 'Nordic Capital'.

34 Nordic Capital. (2020). 'Acino'.

technologies specialising in modified release oral forms for which it has also registered several patents. Its medicines are marketed in fast-growing developing economies in the Middle East, Africa, Ukraine, Russia, Latin America and the CIS (Commonwealth of Independent States) Region. It is currently managed by the Nordic Capital CV1 subfund, employs over 2,400 employees and continues to supply finished in-house products as a partner of pharmaceutical companies worldwide.

4.3 Banks

The banking industry in Jersey is another significant component of the economy's financial services sector, serving markets across the globe.

While the banks in Jersey primary function is a deposit-taking role, they also provide a range of other services including multi-currency banking, offshore mortgages and investment solutions as the banking industry also supports the alternative investment funds industry.

The different types of banks on the island include retail and commercial banks, private banks (catering to High-Net-Worth Individuals), expatriate banking (for customers whose home bank branch is not present in their current country of residence) and custodian and depository banks (safekeeping of financial assets of individuals and businesses).

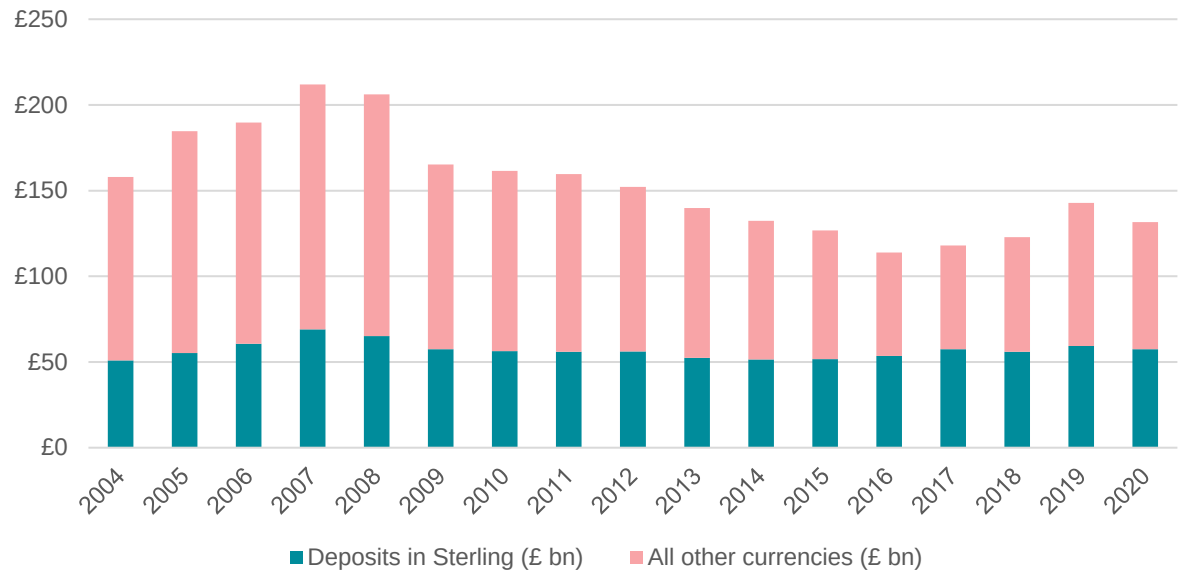
In 2018, the banking sector's GVA (£896 million) made up nearly half (49%) of the entirety of Jersey's financial sector's contribution. However as discussed previously, the broader economic contribution of Jersey's banks, through intermediating capital across Global Value Chains, significantly exceeds this. The value of these assets intermediated is discussed in this section, with the economic impact of this discussed in Section 5.2.

Total bank deposits held in Jersey were £131bn at the end of 2020, albeit with this approximately £80bn less than the peak of 2007 (Figure 17). Overall, deposits in sterling have remained stable over the years and therefore the majority of the observed variation in total bank deposits can be attributed to that in other currencies.

According to research by the Bank for International Settlements, since the global financial crisis (GFC), there has been wholesale structural changes to the global banking system, particularly regarding a reduction in business volumes of the banking sector for countries that were directly impacted by the GFC. The report found that in parallel to the introduction of new regulatory reforms, the crisis ended a period of growth in banking sector assets.[35] Therefore, the 2007 peak in bank deposits and subsequent decline across the next decade shown in Figure 17 is not a unique trend to Jersey, but a reaction to changes in the operating landscape for banks globally.

35 Bank for International Settlements. (2018). 'Structural changes in banking after the crisis'.

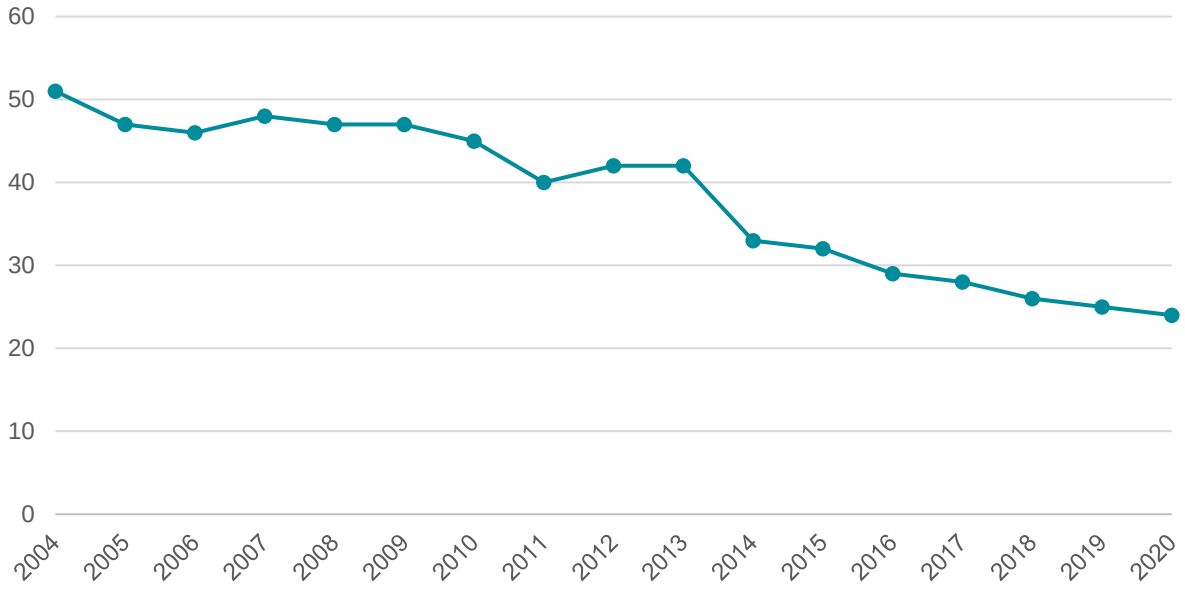
Figure 17: Total bank deposits in Jersey by currency, 2004-2020



Source: Statistics Jersey, Cebr analysis

In 2020, the number of registered bank licenses in Jersey was 24 – an all-time low in the past fifteen years. There has been a declining trend in the number of banking licences on the island over the past decade, suggesting a degree of consolidation in the industry. However, the sector remains strong as balance sheet totals have increased slightly to partially offset this, with the average value reported on registered Jersey bank balance sheets increasing from £5.4 billion to £6.0 billion between 2010 and 2020.

Figure 18: Number of registered banks in Jersey, 2004-2020



Source: Jersey Financial Services Commission, Cebr analysis

While the intention going into our research process was to not focus on the banking sector above and beyond the other financial sub-sectors, due to strong data availability in the sector, we can present geographic disaggregation for the banking sector at a high level of granularity.

© Centre for Economics and Business Research

For total bank liabilities and assets, fourteen countries of interest[36] are presented as well as seven country blocs[37] alongside the continent splits. See Appendix I for tables defining the country groups, while the geographic results are presented in Appendix I: Supplementary banking sector data.

Liabilities

As of 2020, total liabilities of Jersey incorporated banks and Jersey registered branches are estimated to be approximately £143 billion. The primary funding source for Jersey's banking sector is deposits, with 91.9% of liabilities falling into this category. Of the £132 billion of all deposits, the large majority (73%) are customer deposits, with bank deposits constituting the remainder. Senior debt issued and all other liabilities & equity account for 8.1% of liabilities.

Table 5: Jersey Incorporated Banks and Jersey Registered Branches - Industry balance sheet totals: Liabilities

Category	*Sub-Category*	2017 (£m)	2018 (£m)	2019 (£m)	2020 (£m)
All Deposits		118,207	123,037	143,074	131,711
	Customer Deposits	*100,718*	*97,141*	*93,698*	*96,164*
	Bank Deposits	*17,489*	*25,896*	*49,376*	*35,547*
Senior Debt Issued		9,859	9,173	5,504	7,899
All Other Liabilities and Equity		6,779	5,347	3,817	3,773
Balance Sheet Total		**134,845**	**137,557**	**152,395**	**143,383**

Source: JFSC and Cebr analysis

Focusing on the geographical distribution of Jersey banking sector's funding, the continent with the largest share is Europe, which accounts for 80% of the total. Of this, approximately 30% comes from Jersey, 29% from the UK and 21% from the rest of Europe. The remaining 20% of liabilities are primarily funded by Asia (inc. Middle East) (9%) and North America (6%). While the share of funding attributable to the UK does increase slightly over the period (25% to 29% from 2017 to 2020), broadly these shares are relatively consistent, as can be seen in Figure 19.

Due to poor data availability in the Senior Debt and All Other Liabilities and Equity categories, we are unable to robustly identify the second-order origins for all the capital that originated from elsewhere in Jersey. However, for the Customer Deposits sub-category, we do have a strong evidence base. According to our survey data for 2020, of the subset of customer deposits that originated elsewhere in Jersey from either resident depositors or financial intermediaries, approximately 43% of the total was via Jersey resident depositors, 32% via the trust and other asset holding vehicles sector, and 25% via the funds sector.

Therefore, through these intra-Jersey linkages, we can understand the second-order origins of some of the capital intermediated in Jersey banks by applying the upstream distributions

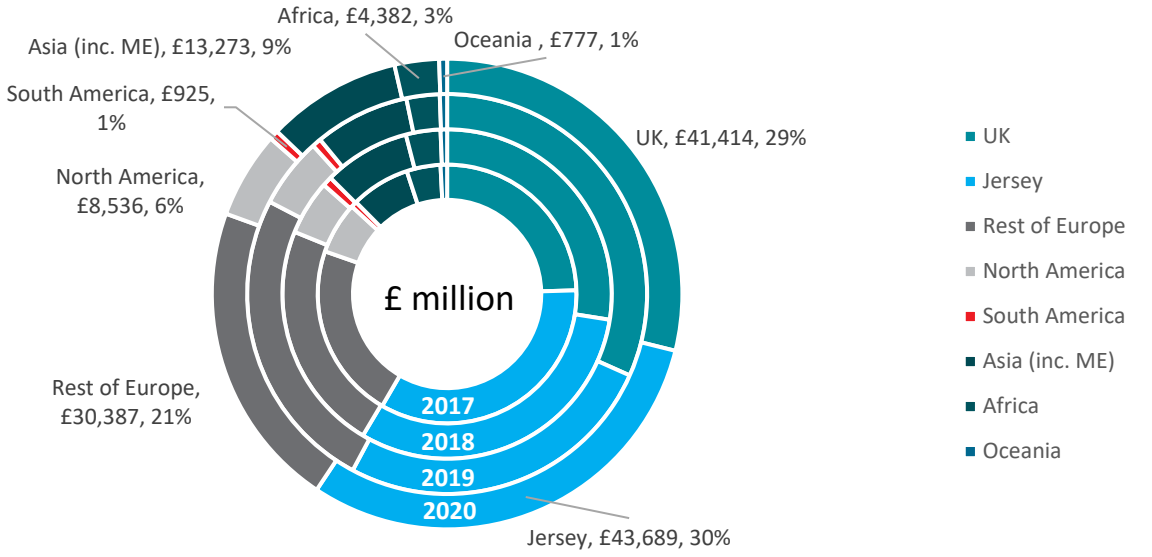
36 Countries of interest: Jersey, USA, UK, France, Netherlands, India, China, Hong Kong, South Africa, Kenya, Nigeria, UAE, Saudi Arabia, Bahrain.

37 EU27, OECD, Emerging Markets, Greater China, Gulf Cooperation Council, ASEAN, CIS.

© Centre for Economics and Business Research

from those respective sectors. In both cases, Europe is the main funding source, followed by Asia (inc. Middle East) and North America.[38]

Figure 19: Share of balance sheet total (liabilities) by region, %, 2017 - 2020



Source: Cebr survey and analysis

The full results by region, showing both the monetary value and share of all liabilities can be seen in Table 6.

Table 6: Balance sheet total (liabilities) by region, £m and %, 2017 - 2020

Region	2017		2018		2019		2020	
UK	£ 33,098	*25%*	£ 37,829	*28%*	£ 48,269	*32%*	£ 41,414	*29%*
Jersey	£ 45,610	*34%*	£ 42,707	*31%*	£ 39,860	*26%*	£ 43,689	*30%*
Rest of Europe	£ 29,644	*22%*	£ 31,105	*23%*	£ 37,799	*25%*	£ 30,387	*21%*
North America	£ 8,729	*6%*	£ 7,384	*5%*	£ 8,649	*6%*	£ 8,536	*6%*
South America	£ 1,005	*1%*	£ 1,297	*1%*	£ 1,128	*1%*	£ 925	*1%*
Asia (inc. Middle East)	£ 9,953	*7%*	£ 11,689	*8%*	£ 11,702	*8%*	£ 13,273	*9%*
Africa	£ 5,703	*4%*	£ 4,668	*3%*	£ 4,094	*3%*	£ 4,382	*3%*
Oceania	£ 1,102	*1%*	£ 878	*1%*	£ 894	*1%*	£ 777	*1%*
Total (£m)	**£ 134,845**		**£ 137,557**		**£ 152,395**		**£ 143,383**	

Source: JFSC, Cebr survey and analysis

We also consider the liabilities of Jersey banks, attributable to 14 countries of interest chosen by Jersey Finance, and several key country blocs. These results are presented in Figure 31 and Table 23, respectively, in Appendix I: Supplementary banking sector data.

38 We do not extend this quantitative analysis further as for the purposes of this report, we are identifying the international financial interlinkages on a **first-order** basis, highlighting the countries that capital immediately enters Jersey from, or that capital is immediately allocated to, from Jersey.

© Centre for Economics and Business Research

Assets

Alongside banks' liabilities, we consider the downstream allocation of these funds, via the assets of Jersey incorporated banks and registered branches. According to JFSC data, funding of group companies accounts for 61% of banks' assets (£87.6bn as of 2020), followed by customer loans (£41.3 billion or 29% of total assets) and investments (£11.8 billion 8% of total assets).

Table 7: Jersey Incorporated Banks and Jersey Registered Branches - Industry balance sheet totals: Assets

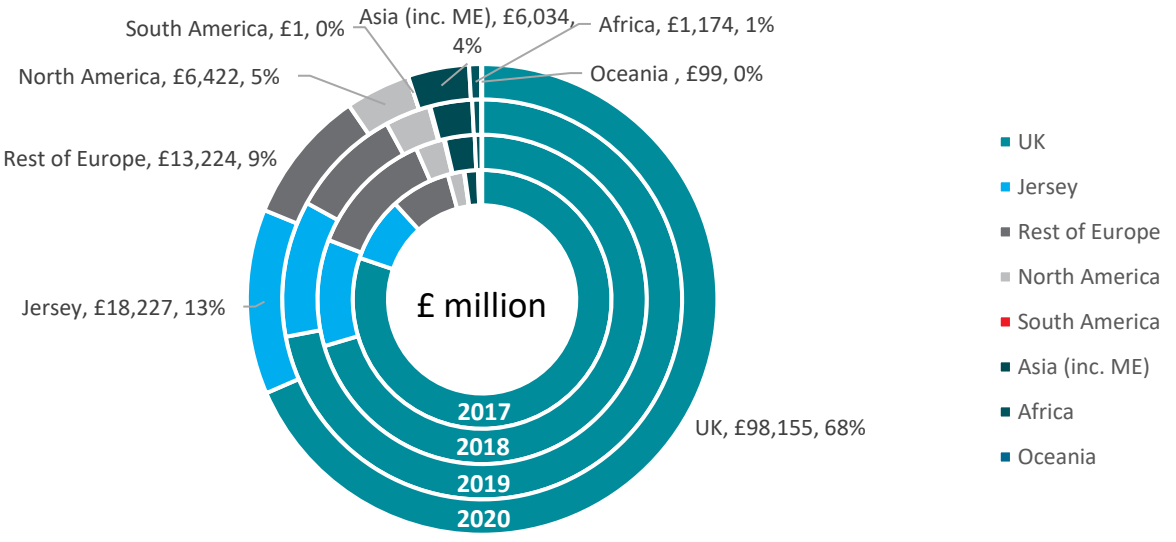
Category	*Sub-Category*	2017 (£m)	2018 (£m)	2019 (£m)	2020 (£m)
All Loans		123,228	124,482	140,293	130,440
	Customer Loans	*22,940*	*40,617*	*40,297*	*41,316*
	Interbank Loans	*1,161*	*1,052*	*1,546*	*1,489*
	Funding of Group Companies	*99,127*	*82,814*	*98,449*	*87,634*
Investments		8,702	11,575	11,525	11,853
All Other Assets		2,916	1,500	1,088	1,043
Balance Sheet Total (£m)		**134,846**	**137,557**	**152,906**	**143,336**

Source: JFSC, Cebr survey and analysis

From a geographical perspective, Jersey's banking sector again has a very European-centric focus, with over 90% of assets allocated to the continent consistently across the assessed period (including the UK and Jersey, alongside the rest of Europe).

In 2020, approximately 68% of total assets are allocated to the UK, 13% to Jersey and 9% to the rest of Europe, although notably the UK share has declined slightly in both absolute and relative terms since 2017. While both still small in absolute terms, the share of the banking balance sheet invested in North America, Asia (inc. Middle East) and Africa have all increased significantly over the period, by 136%, 168% and 81% respectively.

Figure 20: Share of balance sheet total (assets) by region, %, 2017 - 2020



Source: JFSC, Cebr survey and analysis

Table 8: Balance sheet total (assets) by region, £m and %, 2017 - 2020

Region	2017		2018		2019		2020	
UK	£108,150	*80%*	£96,861	*70%*	£110,100	*72%*	£98,155	*68%*
Jersey	£10,856	*8%*	£14,399	*10%*	£16,822	*11%*	£18,227	*13%*
Rest of Europe	£10,082	*7%*	£17,267	*13%*	£13,862	*9%*	£13,224	*9%*
North America	£2,717	*2%*	£3,884	*3%*	£5,567	*4%*	£6,422	*4%*
South America	£107	*0%*	£132	*0%*	£162	*0%*	£1	*0%*
Asia (inc. ME)	£2,252	*2%*	£4,017	*3%*	£5,174	*3%*	£6,034	*4%*
Africa	£650	*0%*	£931	*1%*	£1,108	*1%*	£1,174	*1%*
Oceania	£32	*0%*	£66	*0%*	£110	*0%*	£99	*0%*
Total	**£ 134,846**		**£ 137,557**		**£ 152,906**		**£ 143,336**	

Source: JFSC, Cebr survey and analysis

The geography with the largest share of funding of group companies in 2020 was the UK with 92%, whilst the rest of Europe and the USA accounted for 6% and 2%, respectively. Jersey banks are crucial in providing funding for parent operations in the City of London, with over £80 billion of balance sheet funding provided through these intra-group transfers. This has important implications; Cebr analysis suggests that across the period, an average of 0.54% of UK economic output is facilitated by the capital stock intermediated in Jersey banks.

We also consider the assets of Jersey banks, allocated to 14 countries of interest chosen by Jersey Finance, and several key country blocs. These results are presented in Figure 32 and Table 24, respectively, in Appendix I: Supplementary banking sector data.

Value Chain illustration

Capital is pooled in Jersey and subsequently redistributed through value chains. This redistributed capital is utilised as investments and loans to individuals, companies, and other banks worldwide, that generate further real economic activity, translating to employment opportunities and wage payments for individuals. Jersey's critical role is as a facilitator of this additional activity, improving the ease with which capital can circumnavigate the global economy.

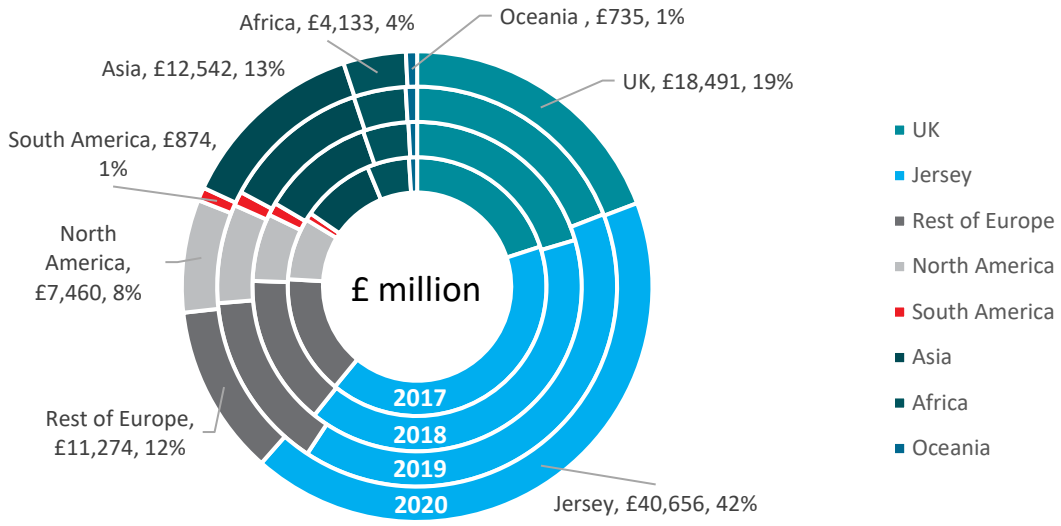
To illustrate the mechanism behind how the banking sector contributes to Global Value Chains, we leverage our most granular data and trace the hypothetical journey of £1 across international financial markets, passing through Jersey's banking system to be reallocated elsewhere in the world.

The illustrative journey that this £1 undertakes follows the largest up- and downstream components of the capital intermediation activities in Jersey's banking sector, namely, customer deposits and funding of group companies, respectively.

The largest component of the funding of balance sheets for Jersey incorporated banks and registered branches is capital sourced from customer deposits (Table 5). Across the period, an average of 68.5% of the balance sheet total is funded through customer deposits. Therefore, for every £1 in the Jersey banking system, approximately £0.68 is deposited there by individuals or non-bank institutions.

Regarding the geographic origins of this £0.68, our survey data finds that the most common geographic source of these customer deposits have been from the United Kingdom as well as the financial intermediaries or resident depositors located elsewhere on the island[39] (combined, accounting for about 60% of the total customer deposits). The origins for the majority of the remaining 40% is split between the Rest of Europe, Asia (inc. Middle East), North America. Our estimates suggest that between 25 and 30% of customer deposits originate from outside of Europe. This can be seen in Figure 21 below.

Figure 21: Share of customer deposits by region, £m and %, 2017-2020



Source: JFSC, Cebr survey and analysis

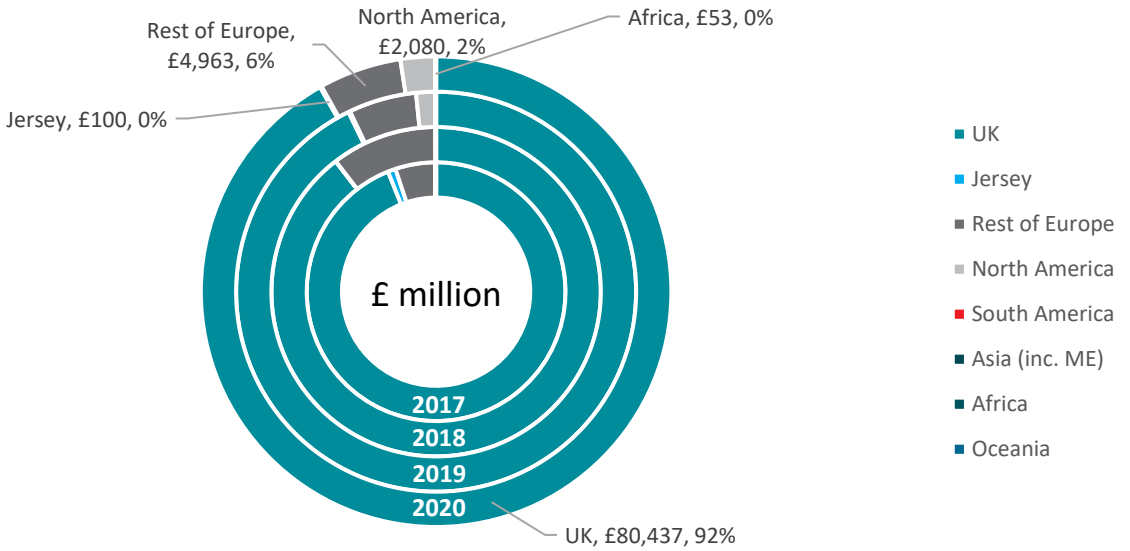
Next, to understand the main contribution of Jersey banks in the network of Global Value Chains, we trace the destination of this £1 to the largest component of the banking sector's asset base – funding of group companies. This accounted for 61% of the balance sheet total in 2020, meaning that in 2020, out of every £1 allocated by Jersey banks, £0.61 was redistributed to other companies that are part of the same wider group as that Jersey incorporated bank or registered branch.

39 According to our survey data for 2020, of the subset of customer deposits that originated elsewhere in Jersey from either resident depositors or financial intermediaries, approximately 43% of the total was via Jersey resident depositors, 32% via the trust and other asset holding vehicles sector, and 25% via the funds sector.

© Centre for Economics and Business Research

Regarding the geographic destination of this £0.61, based upon our survey analysis we find that the location of the parent company for more than 90% of the total upstreaming activity is the UK (Figure 22). Based upon London's dominance in the structure of the UK financial system, most of this intermediation is likely to be channelled to the City of London, with an estimated £80.4 billion of capital the capital stock administered in Jersey's banking sector allocated to parent companies based in the UK in 2020. This in turn supports economic impacts both in the UK and globally, as these parent companies likely use a share of this capital to invest further outside the UK.

Figure 22: Share of funding of group companies by region, %, 2017 - 2020



Source: JFSC, Cebr survey and analysis

In summary, we have followed the global journey of a representative £1 that enters Jersey's banking system and is redistributed via Global Value Chains. This is an illustration of the role of Jersey incorporated banks and registered branches in channelling funds to GVCs, facilitating significant levels of economic activity in other jurisdictions.

Akin to the role of the auxiliary services in Jersey that improve the efficient functioning of the island's financial services sector (Section 4.5), Jersey plays a similar role on the global stage as a financial conduit, supporting efficient capital market functions by channelling and redistributing funds around the world.

4.4 Trusts and all other asset holding vehicles (AHVs)

Private wealth management through structures such as trusts, foundations and family assets, allow both private and corporate clients to manage, protect and grow their assets, which can be in the form of cash, investments, property or land. It is another key sector within Jersey's financial services industry.

Since the 1960s, Jersey has been a global destination for the administration of trusts. A trust is an integral tool of the private wealth management industry and is used as an instrument for asset protection in the future. It facilitates a legal transfer of ownership of assets from one individual (settlor) to another person (trustee) for the benefit of a specified third party (beneficiary).

© Centre for Economics and Business Research

Jersey's Trust Law has aided the island's reputation as an attractive destination for private wealth clients, and the key features of this law have been adopted by several other jurisdictions. Common uses and advantages of administering a trust in Jersey include:

- **Confidentiality and anonymity** – Trusts are typically a private agreement between the settlor and the trustees as the only involved parties. The additional advantage in Jersey is that the laws do not mandate a registration for trust instruments, implying that in certain cases the beneficiaries might themselves be unaware that they are involved as a beneficiary, which is particularly helpful where the beneficiary is a minor.
- **Asset protection** – Since Jersey's economy and political environment have retained stability over the past 6 decades, the island is viewed as a relatively safer place for establishment of a trust structure.
- **Wealth preservation** – Trusts are often used as a vehicle to restrict the ownership of certain assets such as family businesses, within the family itself.
- **Tax planning** – Jersey trusts are tax neutral for international clients, while there is no capital gains tax, or stamp duty upon the creation or execution of a trust in Jersey.
- **Heirship rules** – Jersey's Trust Law avoids forced heirship provisions that are often features of civil-law legal systems. This provides an individual setting up a trust in Jersey with the flexibility to dispose of their estate by will on death, rather than the indefeasible share of their estate being forcibly passed to the next-of-kin.
- **Philanthropy** – Jersey's trust laws are also being moulded to serve philanthropic objectives. Charitable as well as non-charitable (for altruistic causes such as humanitarian, research, environmental) trusts are some of the available options.

A recent alternative to trusts is the Jersey Foundation, which was launched as a financial product in 2009, with the Jersey Foundations Law taking effect. Used as asset-holding vehicles, foundations are transparently registered with the Jersey Financial Services Commission and offer infinite duration and capacity. They are flexibly used for both charitable or non-charitable purposes (or sometimes both).

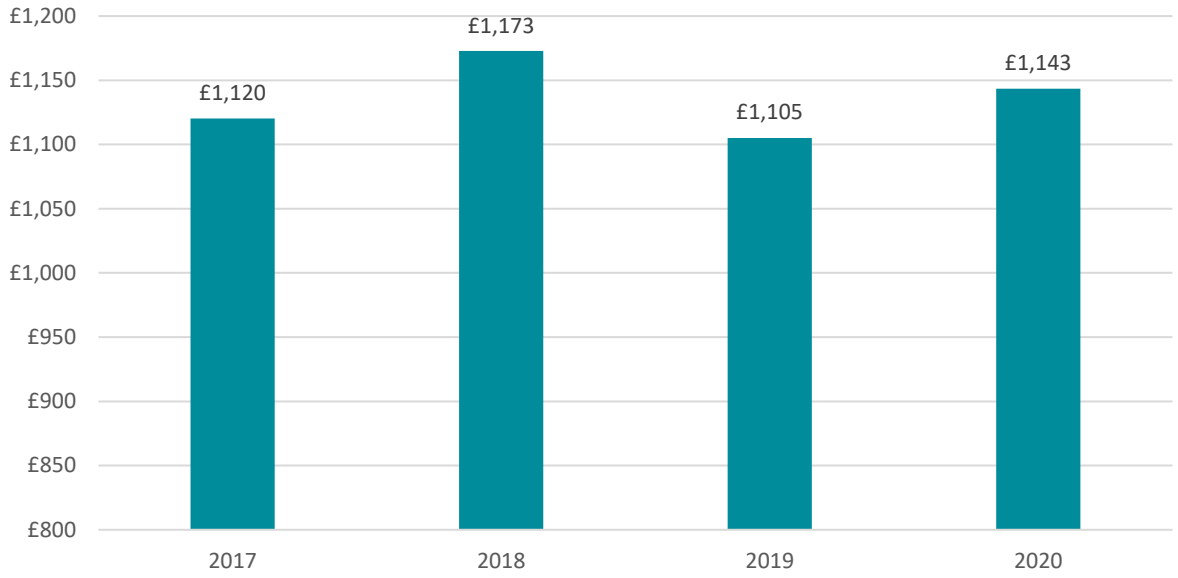
Official data collection on trusts and other asset holding vehicles is sparse due to confidentiality purposes; in the public domain we only have access to certain aggregate statistics about this subsector. As of 2020, the trust and company administration subsector employed 4,300 people, representing 32% of employment within the island's financial industry.

© Centre for Economics and Business Research

By employment, the trust and company administration subsector is the largest in Jersey's financial industry, although it lags behind banking in GVA contribution[40] (29%, compared to 49% for banking). Nevertheless, based on our survey data, the value of the assets held in Jersey trusts significantly exceeds that of either the banking or fund administration subsectors.

Total AUM in Jersey trusts and other asset holding vehicles

Figure 23. Estimated AUM in Jersey trusts and other asset holding vehicles, £ billion, 2017-2020



Source: Cebr survey, Statistics Jersey, Cebr analysis

As of 2020, the estimated AUM of Jersey trusts and other asset holding vehicles (encompassing both private and corporate clients) was £1.14 trillion.[41] This is roughly between our estimates for 2017 and 2018 (£1.12 and £1.17 trillion, respectively), although 3.5% higher than the estimated AUM in 2019.

As trusts is the least data rich subsector covered extensively within the analysis, it is reassuring that the estimates are all within a reasonable range of one another – with a maximum variation of £68 billion across the four years. However, it is worth noting that due to the lack of available data in the sector, we would caution against placing excessive weight on the year-on-year changes. Nevertheless, the trend of a slight decline in AUM[42] in 2019, is consistent with findings from the JFSC's National Risk Assessment.

40 Figures per Statistics Jersey and accurate as of 2019.

41 Note that we do not focus on the exact structure in which assets are held, rather focusing on the value and economic impact of said assets, agnostic to the vehicle in which they are administered.

42 We define the term assets under management (AUM) as the sum *or best estimate for* the absolute value of all assets managed by a firm at the end of each year reported.

© Centre for Economics and Business Research

Table 9: Share of total AUM in Jersey trusts and other asset holding vehicles by asset class, %, 2017 – 2020

Asset Class	2017		2018		2019		2020	
Cash	£178.2	*16%*	£191.5	*16%*	£181.3	*16%*	£187.6	*16%*
Shares	£267.6	*24%*	£285.3	*24%*	£245.2	*22%*	£252.4	*22%*
Other Financial Assets	£197.7	*18%*	£218.7	*19%*	£223.0	*20%*	£246.0	*22%*
Property and Land	£466.2	*42%*	£465.4	*40%*	£443.8	*40%*	£444.3	*39%*
Other	£10.5	*1%*	£11.9	*1%*	£11.7	*1%*	£13.2	*1%*
Total (£bn)	**£1,120**		**£1,173**		**£1,105**		**£1,143**	

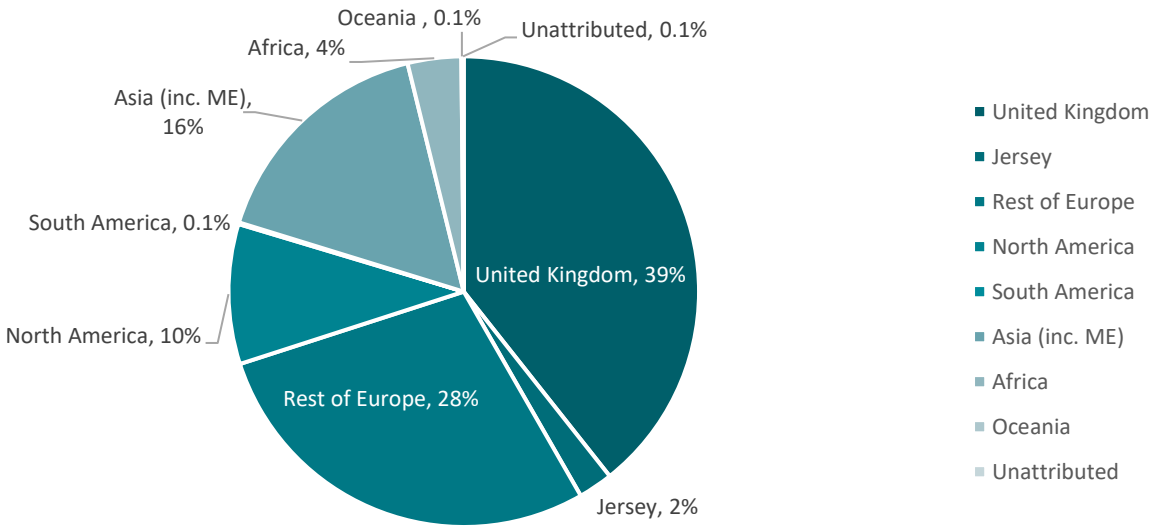
Source: Cebr survey and analysis

Of this total AUM, per our survey data we have also broken this down by asset class. These distributions are relatively consistent across the period. Just over 40% of the total AUM across the period is financial assets (split roughly evenly between shares and other financial assets), with another 40% property and land (£444 billion in 2020). Of the remainder, the significant majority (16%, or £188 billion in 2020) is cash.

Geographic disaggregation

Of these assets, there is a large European centricity when considering the location of economic settlor (and indeed beneficial owner and asset). Our survey data is strongest in 2020 and we therefore focus the analysis on this period for geographic distributions. The distribution of asset value, by location of economic settlor, can be seen in Figure 24 below.

Figure 24: Assets of Jersey trusts and other asset holding vehicles by geographic location of economic settlor, % of total, 2020



Source: Cebr survey and analysis

Of the £1.14 trillion in assets held in Jersey trusts and other vehicles, 70% (£785 billion) is settled by individuals resident in Europe. Within this, just over half (39%) are assets settled by UK clients; 2% from within Jersey; and 28% from the rest of Europe. The remaining 30% of assets are primarily settled by clients in either Asia (inc. Middle East) (16%, or £184 billion) or North America (10%, or £108 billion).

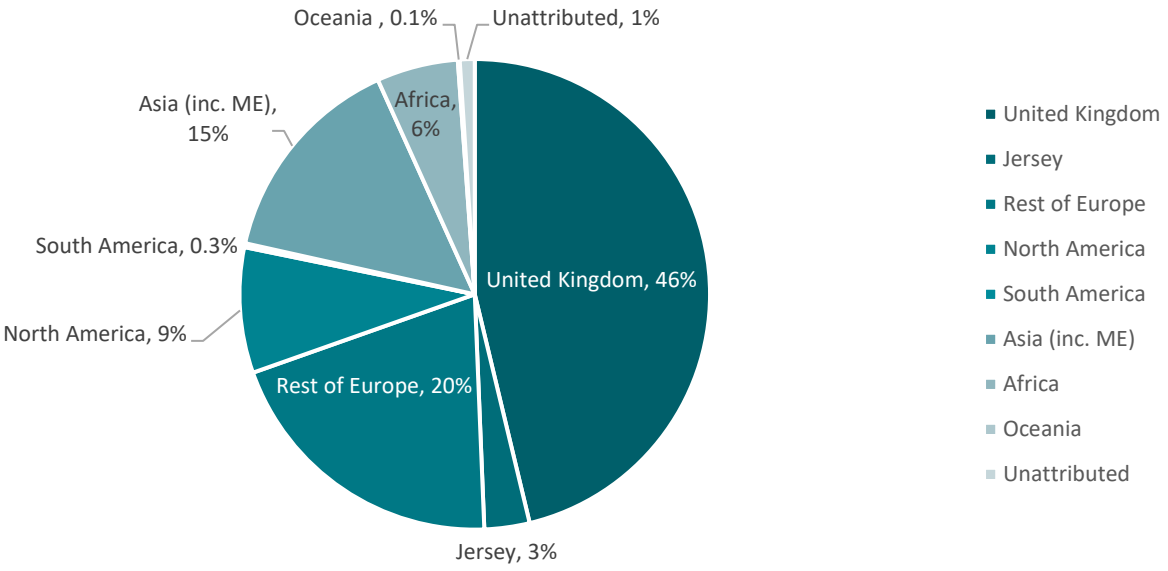
© Centre for Economics and Business Research

A similar trend is observed when considering the location of ultimate beneficial owner, although the contribution of UK resident beneficial owners here increases (46% compared to 39%), primarily at the expense of the rest of Europe (20%, compared to 28%). The implication of this is that net[43], slightly more European clients are settling trusts, for the benefit of British beneficiaries. Most of the rest of the geographic distributions are relatively stable, although the share of ultimate beneficiaries in Africa (6%) is also slightly higher than the share of settlors (4%). The full results can be seen in Figure 25 below.

According to the data, Jersey trust and private wealth structures are dominated by assets, settlors, and beneficiaries from the United Kingdom. Stringent legislation in the UK and Jersey means that these assets cannot be placed in Jersey trusts structures by UK resident taxpayers to avoid British taxes.

UK 'non-doms', or people with non-domiciled status, may be UK resident but not domiciled in the UK, i.e., with their permanent home in another country. These individuals may legitimately use Jersey trust structures as a convenient way to manage their assets as they move between countries, and their tax residence or even nationality changes. Holding wealth in a Jersey trust structure can provide long term continuity for UK non-doms that do not want to remit their foreign income and capital gains to Britain.

Figure 25: Assets of Jersey trusts and other asset holding vehicles by geographic location of ultimate beneficial owner, % of total, 2020

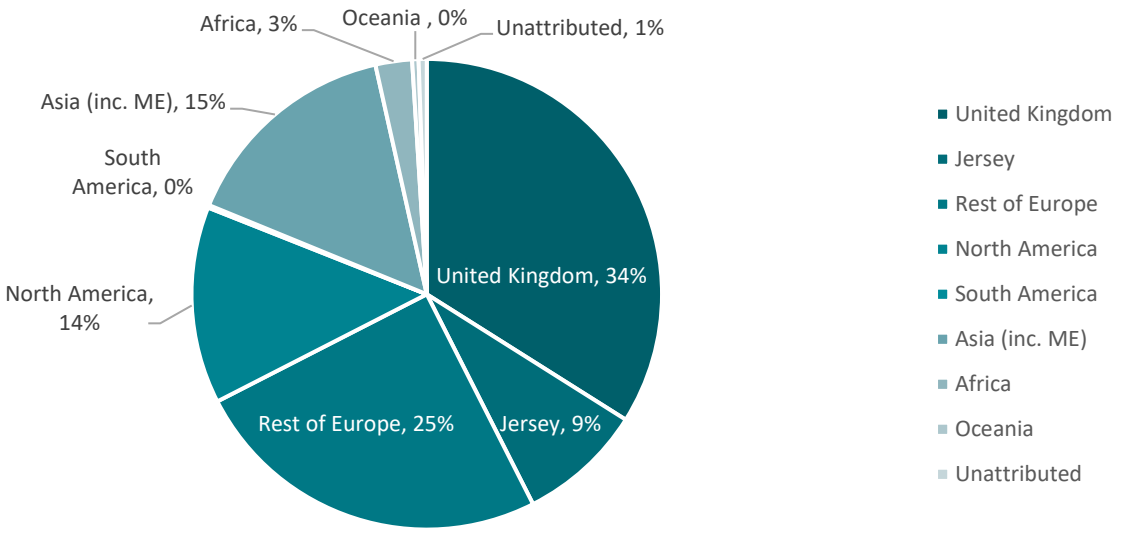


Source: Cebr survey and analysis

43 The 'net' component of this is an important distinction; in reality European settlors place assets in Jersey trusts for beneficiaries located across the globe, including a significant share for other European beneficiaries. However on average, more European settlors place assets in Jersey trusts for ultimate beneficial owners in the UK, than vice versa.

Finally, we also consider the geographic distribution of the location of the underlying assets, within Jersey trusts and other asset holding vehicles. This can be seen in Figure 26 below.

Figure 26: Assets of Jersey trusts and other asset holding vehicles by geographic location of underlying assets, % of total, 2020



Source: Cebr survey and analysis

Again, there is a European-centric concentration, with the UK, Jersey and the rest of Europe combined, contributing nearly 70% of the assets comprising the £1.14 trillion AUM in 2020. Unsurprisingly, given the concentration of assets intermediated in Jersey relative to its population, the share of assets located in Jersey (9%, or £98 billion) is slightly higher than the share of settlors or ultimate beneficial owners located on the island. The share of assets located in North America (14%) is also slightly higher than the share of owners (9%) or settlors (10%).

We have further extended the analysis, to consider the evolution of these geographic distributions, from 2017 through 2020. While again, we could caution against placing excessive weight on the year-on-year trends (particularly where the relative changes are small), there are some notable results worth identifying. However in general, given that many trusts are set up with a longer-term purpose, the relative year-on-year changes are not as significant as for funds and banks respectively.

Table 10, Table 11 and Table 12 below show these distributions, for economic settlor, ultimate beneficial owner and location of underlying asset respectively. Results are presented both in monetary terms, and as a share of the total AUM, within each year.

© Centre for Economics and Business Research

Table 10: Assets of Jersey trusts and other asset holding vehicles by geographic **location of economic settlor**, £bn and %, 2017 - 2020

Region	2017		2018		2019		2020	
United Kingdom	£427	38%	£468	40%	£445	40%	£450	39%
Jersey	£23	2%	£22	2%	£22	2%	£27	2%
Rest of Europe	£363	32%	£331	28%	£314	28%	£324	28%
North America	£106	9%	£121	10%	£109	10%	£110	10%
South America	£1	0%	£1	0%	£1	0%	£1	0%
Asia (inc. Middle East)	£145	13%	£172	15%	£170	15%	£188	16%
Africa	£51	5%	£54	5%	£41	4%	£42	4%
Oceania	£1	0%	£1	0%	£1	0.1%	£1	0.1%
Unattributed	£4	0%	£3	0%	£2	0.2%	£1	0.1%
Total (£bn)	**£1,120**		**£1,173**		**£1,105**		**£1,143**	

Source: Cebr survey and analysis

Table 11: Assets of Jersey trusts and other asset holding vehicles by geographic **location of ultimate beneficial owner**, £bn and %, 2017 - 2020

Region	2017		2018		2019		2020	
United Kingdom	£519	46%	£540	46%	£500	45%	£529	46%
Jersey	£19	2%	£24	2%	£27	2%	£35	3%
Rest of Europe	£275	25%	£268	23%	£248	22%	£231	20%
North America	£106	9%	£106	9%	£100	9%	£99	9%
South America	£2	0%	£1	0%	£3	0%	£3	0%
Asia (inc. Middle East)	£123	11%	£156	13%	£154	14%	£169	15%
Africa	£61	5%	£65	6%	£61	6%	£64	6%
Oceania	£2	0%	£2	0%	£1	0%	£1	0%
Unattributed	£14	1%	£11	1%	£10	1%	£12	1%
Total (£bn)	**£1,120**		**£1,173**		**£1,105**		**£1,143**	

Source: Cebr survey and analysis

Table 12: Assets of Jersey trusts and other asset holding vehicles by geographic **location of underlying assets**, £bn and %, 2017 - 2020

Region	2017		2018		2019		2020	
United Kingdom	£415	37%	£442	38%	£382	35%	£388	34%
Jersey	£102	9%	£110	9%	£98	9%	£98	9%
Rest of Europe	£269	24%	£248	21%	£274	25%	£285	25%
North America	£152	14%	£160	14%	£152	14%	£155	14%
South America	£1	0%	£1	0%	£2	0%	£2	0%
Asia (inc. Middle East)	£128	11%	£157	13%	£158	14%	£175	15%
Africa	£39	3%	£42	4%	£28	3%	£29	3%
Oceania	£6	0%	£6	1%	£5	0%	£5	0%
Unattributed	£9	1%	£7	1%	£6	1%	£6	1%
Total (£bn)	**£1,120**		**£1,173**		**£1,105**		**£1,143**	

Source: Cebr survey and analysis

© Centre for Economics and Business Research

There has been an increase in the share of trust business attributable to Asia (inc. Middle East) over the last four years. Considering each of economic settlor, ultimate beneficial owner and location of asset, the share of business attributable to Asia (inc. Middle East) has increased by three to four percentage points over the period. Given the size of the trusts sector, this represents approximately a £40-50 billion increase in AUM since 2017.

This has typically offset a slight decline in the share of European business, excluding Jersey itself and the UK. For both the location of economic settlor and ultimate beneficial owner, the share of business arriving from residences in the 'Rest of Europe' geography fell by four to five percentage points (approximately £40 billion in monetary terms), although this trend is not apparent for the location of assets.

In general, the trends over time are broadly stable; unsurprising given the nature of much of the trusts sector. There is less of a focus on short-term returns, with reduced significant variation in assets/asset portfolios, compared to either the fund administration or banking sectors.

Hypothetical Value Chain illustration

As referenced, specific data or examples of the usage of Jersey trusts is sparse. There is no register of trust documents under Jersey law and trust arrangements are not open to public view. Indeed, confidentiality is one of the often-referenced advantages of establishing a Jersey trust.[44]As such, we present two illustrative scenarios for the role that Jersey trusts play, in supporting Global Value chains.

Firstly, consider an individual resident in the UK (the settlor), who has deposits in a London-based bank, who wants to transfer ownership of this to a younger relative resident in mainland Europe (the beneficiary). This UK-resident individual could do so, by appointing a Jersey Trust Company to establish a Jersey trust. These assets are then transferred to a trustee, who is entrusted with the legal title to the trust assets, for the benefit of the European-resident beneficiary, who will receive the assets once they reach a certain age.

The interpretation of this, in terms of the role of the Jersey trust in supporting Global Value Chains, is slightly more nuanced than for the banking or fund administration sectors, where the asset flows intermediated in Jersey are more tangible. However, in our example here, conceptually there is an implicit (future) transfer of capital from the UK to the rest of Europe. Once the European beneficiary reaches a certain age, they are entitled to the previously UK-owned and resident assets. Depending on the decision-making of the beneficiary, this may then be used to support economic impacts in Europe (for example through consumer spending supporting European businesses, or direct investment). Equally the *knowledge* that this beneficiary is entitled to the assets in the Jersey trust at a future date, may incentivise present day spending or investment, supporting more contemporaneous economic impacts, even if the actual asset transfer is in the future.

Secondly, consider an individual domiciled and resident in a developing economy with an unstable political environment, with significant investment in both their own nation and other overseas geographies. While these investments support economic growth within the developing economy, the individual may prefer for these assets to strategically be owned through a Jersey trust, with themselves as both the settlor and beneficial owner. This could be for safeguarding reasons, such as preventing returns being confiscated/at risk from a

44 Ogier. (2016). '[The use of trusts in Jersey]'.

changing political environment. In this way, through strategically intermediating capital in Jersey, economic growth is supported both in the emerging economy and other countries of investment. This also demonstrates Jersey's role in supporting Global Value Chains.

4.5 Ancillary Services

Underpinning Jersey's annual administration of nearly one and a half trillion pounds sterling of capital are the ancillary services on the island. Across our interviews of Jersey Finance member firms, comfortably the most highlighted factor in what makes Jersey an attractive jurisdiction to do business from was the on-island availability of world-class professional and legal services.

All other industries within Jersey's financial ecosystem, require these firms to provide services including audit, tax and advisory services. As such, while the fund, trust and other AHV, and banking sectors in Jersey are key in directly facilitating Jersey's role within Global Value Chains, in turn the activity in these sectors is facilitated by the ancillary professional services network on the island. While it is more challenging to trace and quantify the support provided by the ancillary services to GVCs, it is no less integral.

Therefore, the focus for this section is to highlight the contribution of these supporting sub-sectors to Global Value Chains, above and beyond simply the direct economic contribution of these industries to Jersey's economy. This contribution to GVCs is not in the direct intermediation of the capital. Rather, the legal and professional services contribute to Jersey's ecosystem by creating an environment in which the sub-sectors that *are* directly involved in intermediating capital (fund administration, banking and trusts and other AHVs) can do so more efficiently and effectively than they otherwise would have been able to. This mechanism is a practical example of positive externalities creating spillover benefits as a result of agglomeration economies.

Economies of agglomeration

Beginning in the 1960s, the island experienced an influx of banks, fund management firms, and trust companies. This drastic increase of financial activity in Jersey subsequently attracted several professional services firms.[45] The legal and professional services in Jersey support the activities of sub-sectors of financial services industry and have in-part led to prosperity of Jersey's financial sector over the years. The interaction of these firms in proximity creates positive externalities (also known as spillover benefits) in terms of overall productivity gains, hence contributing to the overall quality of Jersey's financial services.

An agglomeration economy is defined as "a localised economy in which a large number of companies, services, and industries exist in close proximity to one another and benefit from the cost reductions and gains in efficiency that result from this proximity."[46] Financial centres such as Jersey enjoy these often large productivity gains because a wide range of firms and workers involved in similar sector are closely located to one another.

Spillovers or 'learning by imitation' is maximised within clusters. Agglomeration economies tend to be knowledge intensive and highly concentrated locations that can attract and retain a

45 Powell. (1971). 'Economic Survey of Jersey'.

46 Merriam-Webster. (2021). 'Agglomeration economy.'

talented and specialised labour force. The industrial policies enable domestic producers to adapt and adopt learning and knowledge spillovers from foreign investment.[47] The interaction of various legal and administrative services in Jersey creates such spillovers. When institutions engage in the best practices or skills that are exchanged due to proximity, this facilitates learning for an entire industry.

The high concentration or clustering of firms facilitates sharing of risk, opportunities for specialisation and suppliers supporting the main industry activities. One of the contributing factors stimulating the spillover benefits in Jersey is through the breadth of ancillary services that are offered on-island. For both well-established firms and new companies looking to grow, the access to the full range of business services allows for the efficient operation of all business functions.

For instance, a new financial service provider in Jersey may only be able to provide its services profitably due the volume of supporting businesses in St. Helier. Over time, this contributes to the development of a financial ecosystem, able to functionally and effectively support high levels of capital flows.

Additionally, globalisation has encouraged multi-national corporations that specialise in financial services to access previously unreachable global markets, leading to the supply of legal and financial services on offer internationally expanding.[48] This is an example of how Jersey can efficiently contribute to Global Value Chains: firms across St. Helier are well connected to global networks of financial centres and major economies, and hence the role of Jersey as a conduit to redistribute capital around the world is enhanced.

Other benefits of agglomeration economies include high concentrations of resources that facilitate connectivity between different markets and help overcome informational asymmetries.[49] Clustering makes the matchings of job-to-worker, supplier-to-firm, and firm-to-customer easier. In other words, the agglomeration creates a dense and easy to access pool of workers, customers, and business services providers. This makes it easier for firms to find both individuals who meets their specific skill requirements and other firms to buy and sell goods and services from.

In the Spring of 2021, Cebr conducted a series of 25 semi-structured, hour-long discussions with different members of Jersey's financial services sector. One of the subjects that was covered included the main factors reported by firms regarding the benefits of locating in Jersey. High up this list were the realised impacts of the agglomeration spillovers. Firms on the island suggested that their business functions were positively enhanced by the access to a wide range of corporate services.

High-quality solutions related to legal, accountancy, investment advisory services are all available on-island, supporting all other financial services sub-sectors. For example, all of the Big Four accounting firms have a presence in St. Helier. Agglomeration economies are a rich topic within economic theory, and the responses by firms in Jersey provide supporting evidence for the argument. When speaking to trust companies in particular, we found that on top of the professional services on offer, the standard of the courts, legal system, and law

47 Morrissey. (2011). 'FDI in Sub-Saharan Africa: Few Linkages, Fewer Spillovers'.

48 Chen, Bao, Mai and Lv. (2014). 'Agglomeration and location choice of foreign financial institutions in China'.

49 Pakhus. (2015). 'Innovative Services in the 21st Century'.

firms was also beneficial. Jersey is a world leader in the trust and private wealth sector and the evidence collected suggests that the quality of Jersey's courts and legal system is a key contributor to the quality of the overall service that can be provided by Jersey trust and private wealth companies.

Legal services

Jersey has a well-established legal system, with a prevalence of service providers across all specialisms. The origin and development of the current legal system in Jersey can be traced through its historical ties to both the British Crown and the Duchy of Normandy, and as such, the legal system in Jersey is pluralistic.[50] In the 13th century Jersey retained the Norman customary law and since then has developed it in parallel with English common law and modern French civil law.[51] The source of Jersey law is in both French and English; in fact, it was not until after the Second World War that English became the main working language of the legal system.[52]

Today, Jersey's leading legal practices are centred around corporate trust, banking and commercial law, insolvency cases, family law work, and regulatory work including anti-money laundering compliance and data protection. Some of the leading global law firms, including many that are part of the 'offshore magic circle' of law firms, are in Jersey include Appleby, Carey Olsen, Mourant, Ogier and Maples Group (which returned in 2018).[53]

In terms of its contribution to the Jersey economy, the legal sub-sector is an important component of the professional services sectors. In 2018 it represented around 16% of all GVA from finance sub-sectors (£212 million), and it has grown moderately over the years, even when taking inflation into account. Since 2010, the earliest data available, the legal sector has grown by 9% in real terms.

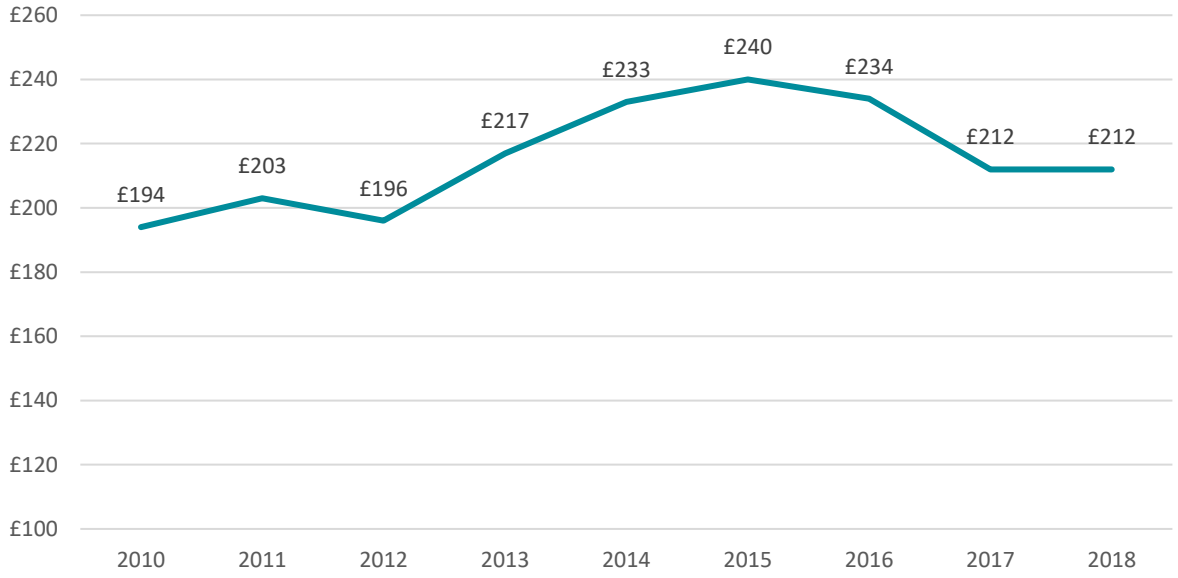
50 Legal pluralism refers to the coexistence of more than one regulatory order in a society (Griffiths. (1986). 'What is Legal Pluralism'.)

51 Nicolle. (2009). 'The origin and development of Jersey law: an outline guide'.

52 The Jersey Law Review. (2005). 'The Language of the Law: The Importance of French'.

53 The Legal 500. (2020). 'United Kingdom Solicitors Guide - Jersey'..

Figure 27: GVA contribution (in real terms) of legal sub-sectors, £ million, 2010-2018



Source: Statistics Jersey, Cebr analysis

In terms of revenue and number of employees, the legal sector is the third largest sub-sector of Jersey's wider financial services sector. The revenue generated by the legal sector stood at £240 million, contributing to almost 9% of the entire revenue generated by the finance sector, in 2018. However, from 2017, the revenue declined by 4% in nominal terms, in 2018.

Above and beyond these statistics, given the focus of our report, the real economic contribution of Jersey's legal sector is the facilitation it provides as an auxiliary service to the main finance sub-sectors covered above, which are the main drivers of Jersey's contribution to Global Value Chains. For example, Jersey's 'Trust Law'[54] forms the template for similar legislation adopted by manor other major OFCs. The flexibility and stability associated with this has supported the development of a Trust and Other Asset Holding Vehicles sector, which as of 2020 had an AUM of over £1.1 trillion. This illustrates the facilitatory role that Jersey's legal system plays, in supporting activity within the 'core' sub-sectors that directly contribute to Global Value Chains.

Accountancy, advisory, and other professional services

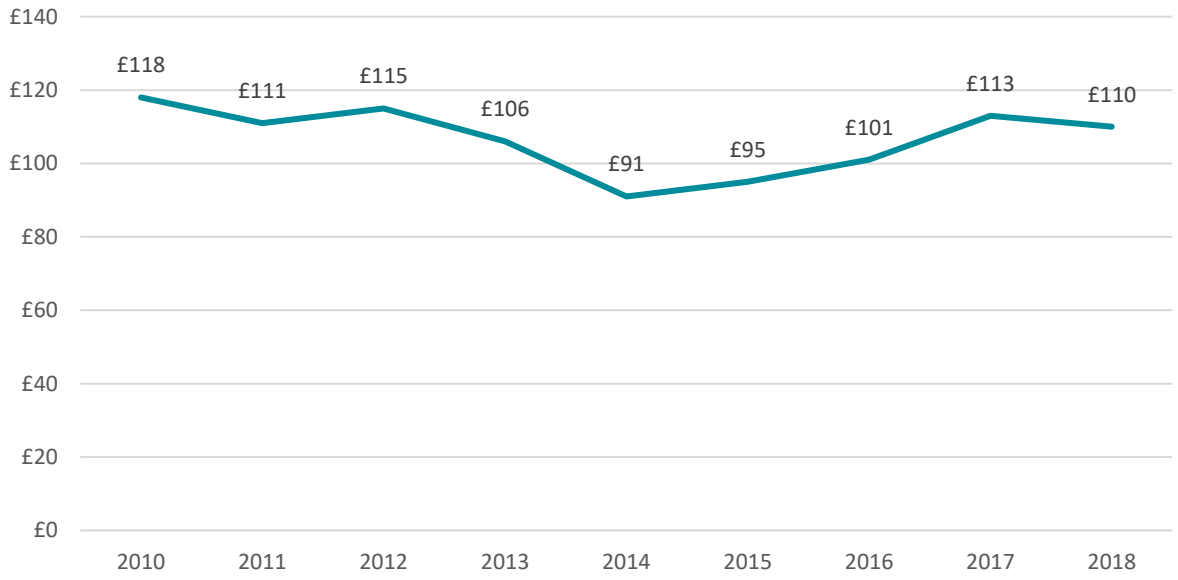
The available professional services firms based on-island cover business consultants, investment consultants, financial advisors, lawyers, legal services, management consultants, corporate governance consultants, non-executive directors, family offices, registrars and tax practitioners. As mentioned in the previous section, Jersey is a home to multiple major 'offshore magic circle' law firms, but on top of this, the Big Four accounting and auditing firms and numerous other corporate service providers with large global networks have offices on the Island. Due to this wide range of ancillary services providers, organisations directly involved in the intermediation of capital, such as a fund administrators or banks may be incentivised to open in Jersey, taking advantage of the benefits of agglomeration economies.

54 Strictly defined as 'Trusts (Jersey) Law 1984'.

Regarding the business demography of the sub-sector, in accountancy, over 80% of the accountants are members of a professional body and over 50% are sole practitioners. The sector forms less than 4.5% of the total financial services sector revenue. The island accommodates the 'Big 4' accounting firms which generate 70% of the income and employ 60% of the staff in the accountancy sector. [55]

In 2018, the accountancy, advisory and other[56] professional service sub-sectors accounted for 6.0% (£110 million) of the total GVA contribution of Jersey's finance sector (£1,843 million), in constant 2018 values. Since 2010, there has been a marginal decline in the real GVA contribution by the accountancy, advisory and other professional service sub-sectors from £118 million to £110 million (6.8% decline) in 2018. However, the sub-sector's performance was relatively strong in the latter half of the decade, its real GVA contribution grew by 20.9% compared to the wider financial services industry that witnessed a slight real GVA decline of 2.0% between 2014 and 2018.[57]

Figure 28: GVA (real terms) contribution of accountancy, advisory and other sub-sectors, £ million, 2010-2018



Source: Statistics Jersey, Cebr analysis

The accounting and compliance, insurance, and other professional services sectors, saw an increase of 20%, 13% and 37%, respectively, in jobs between the period 2015-2020. Combined, the sub-sectors contributed over 2,500 jobs in Jersey.

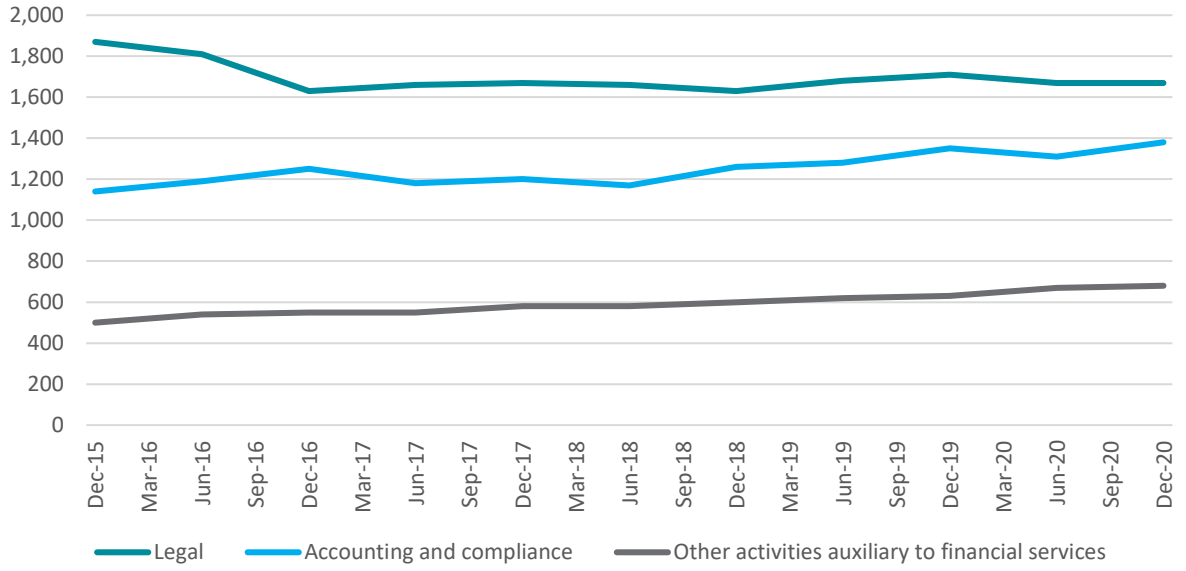
55 Government of Jersey. (2021). 'National Risk Assessment of Money Laundering in Jersey'.

56 Other includes companies classified as financial services but which do not fall within one of the listed sub-sectors. This includes predominantly those operating in insurance as well as independent financial advisors.

57 This is predominantly driven by the decline in the GVA contribution of the banking sector across this period.

© Centre for Economics and Business Research

Figure 29: Number of jobs in ancillary services sub-sectors, 2015-2020



Source: Statistics Jersey, Cebr analysis

Anecdotally, regarding the labour force in Jersey, the largest ancillary service firms are especially important in recruiting new employees for the island. From evidence gathered across Cebr's interviews with members of Jersey's financial services sector, there are large outreach programmes in place to train local students in accountancy, tax, and digital skills. In turn, once they depart these upskilled employees can go on to provide further economic benefit for other firms in Jersey.

Across our interviews of members of the financial community in Jersey, one of the key potential risks that was identified was the possible detrimental effects of the new migration policy changes, potentially leading to complications for firms to bring in new workers. The role that firms in these ancillary services sub-sectors play in developing and training the workforce already within Jersey should not be understated, allowing the continued effective function of Jersey as a key capital intermediator within Global Value Chains.

© Centre for Economics and Business Research

5. Overall Global Value Chain impacts

This section estimates the overall global impact of the value chains that are supported by Jersey's financial services sectors. Typically, reported statistics or previous research focuses on quantifying the monetary value of assets intermediated in various sectors of financial centres. **This report presents those findings but then extends the analysis, by considering the economic impact of the Global Value Chains facilitated by this intermediation of capital.** This methodology is outlined in Section 3.2, while the concept of value chains is introduced in Section 2.3: Global Value Chains.

5.1 Quantitative assessment of Jersey's support of GVCs

We have first combined the quantitative findings across the three main financial services sectors in Jersey and stripped out the interlinkages between these sectors to prevent double counting (for example where a Jersey trust may deposit in a Jersey bank). For the purposes of this research, the following capital allocations are estimated on a first-order basis. This means that all asset allocations are attributable to the country that immediately receives capital channelled from Jersey's financial services sector.

As a result, the total combined value of the assets intermediated in Jersey's financial services sector, outwardly allocated on a first-order basis around the globe is presented below for the gross annual capital stocks (Table 13).

Table 13. Estimated geographic allocations of the gross annual capital stock, £bn, 2017 - 2020

Region	2017	2018	2019	2020
United Kingdom	£563.0	£581.3	£539.7	£529.2
Europe (excl. UK and Jersey)	£328.7	£318.1	£353.3	£364.5
North America	£178.9	£190.9	£191.7	£199.6
South America	£2.2	£1.9	£3.7	£4.5
Asia (inc. Middle East)	£167.5	£225.7	£254.1	£290.9
Africa	£40.5	£43.6	£30.1	£30.6
Oceania	£5.9	£6.5	£5.5	£5.6
Unattributed	£16.6	£14.6	£15.9	£17.9
Total (£bn)	**£1,303**	**£1,383**	**£1,394**	**£1,443**

Source: JFSC, Statistics Jersey, Monterey, Cebr analysis

Based on our analysis, the estimated total AUM in Jersey funds, banks, and trust and other asset holding structures was approximately £1.44 trillion in 2020.

Throughout the 4-year period, the yearly capital stock experienced a persistent upward trend, going up from £1.30 trillion in 2017 by nearly 11% (3.5% year-on-year average). The strongest year in terms of growth was 2018, when the total AUM grew by 6.1% on 2017 levels.

Roughly 62% of the total capital stock was allocated to Europe in 2020. The region is followed by Asia (inc. Middle East) and North America, with around 20% and 14%, respectively.

© Centre for Economics and Business Research

Within Europe, the most significant source and destination of funds is the United Kingdom, having contributed 59% to the region in total. This proportion has stayed relatively consistent across the period, except for 2018, when the UK's share of European capital originating funding Jersey's financial industry rose to 65%. The gross capital stock allocated to Asia (inc. Middle East) increased by 74% across the period. The second largest rise is linked to North America, with capital allocations growing by more than 20%.

5.2 Global impact of Jersey's financial services sector

Based on a modified Solow model framework (explained further in Appendix I), we have estimated the economic impact of this capital base within each region, that is supported by Jersey's role as a conduit within Global Value Chains. Specifically, we estimate the gross-value added (GVA) supported by capital in each of the geographies, and in turn the share of this supported by capital intermediated in Jersey.[58]

To improve robustness of the results, we have aggregated the four annual point estimates to produce period averages for the global impact of Jersey's financial services sector in terms of GDP, employment, and wages through Global Value Chains. This helps to minimise excessive annual volatility resulting from the nature of the global financial services industry, as well as the volatility in the data gathering and modelling processes used to produce these statistics.

Contribution to regional GDP

Overall, we estimate that the average capital stock[59] of £1.4 trillion intermediated in Jersey, supported an average £170.3 billion of global economic output each year between 2017 and 2020.[60] As an illustration of the scale of the economic activity supported by Jersey's financial services sector, the direct GDP contribution of New Zealand in 2020 was approximately £172.0 billion, a country with a population of approximately 5 million.

58 Gross value added is a measure of the value from production in the national accounts and can be thought of as the value of industrial output less intermediate consumption. That is, the value of what is produced *less* the value of the intermediate goods and services used as inputs to produce it. GVA is commonly known as income from production and is distributed in three directions – to employees, to shareholders and to government. GVA is linked as a measurement to GDP – both being a measure of economic output – for this report, the two can be considered as interchangeable. Strictly, the relationship is (GVA + Taxes on products - Subsidies on products = GDP).

59 As taken on December 31st in each year from 2017 to 2020.

60 Due to a small share of our downstream impacts being unattributed, the overall numbers are likely to be slight underestimates, however, the difference is not of a significant magnitude and does not significantly influence the results of this section.

The UK, the rest of Europe and Asia (inc. Middle East) provide roughly 82% of the total global output supported by Jersey. While Africa's absolute level of economic output supported is approximately a tenth of Asia's (inc. Middle East), it's average relative share is higher: Jersey's average annual £5.7 billion contribution accounted for 0.31% of Africa's total GDP, while Asia's £45.9 billion represents 0.20% of its total output.

These results, breaking down the regional GDP supported in both absolute and relative terms, can be seen in Table 14 and Table 15.

Table 14. Jersey GVCs support of regional GDP, % of regional GDP, 2017 – 2020 average

Region	Share of average annual GDP supported (2017-2020)
United Kingdom	2.88%
Europe (excl. UK and Jersey)	0.22%
North America	0.13%
South America	0.02%
Asia (inc. Middle East)	0.20%
Africa	0.31%
Oceania	0.05%
Total Share of Global Output	**0.27%**

Source: IMF, World Bank, Cebr analysis

Table 15. Jersey GVCs support of regional GDP, £m, 2017 – 2020 average

Region	Average annual GDP supported (2017-2020)
United Kingdom	£61,974
Europe (excl. UK and Jersey)	£31,590
North America	£24,057
South America	£402
Asia (inc. Middle East)	£45,952
Africa	£5,659
Oceania	£657
Total (£m)	**£170,290**

Source: IMF, World Bank, Cebr analysis

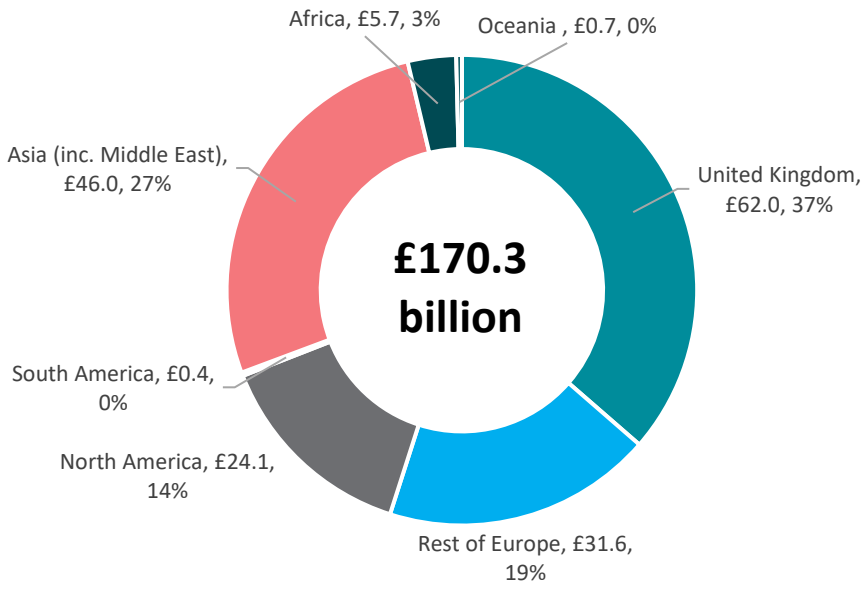
© Centre for Economics and Business Research

The region most significantly supported by the value chains that Jersey facilitates was the United Kingdom. In relative terms, the £62 billion supported towards UK GDP on average, represents 2.88% of total output; significantly more than any of the regions analysed.

While the relative value of Asia's total GDP is much further away from the United Kingdom's (0.20% vs 2.88%), due to the UK's GDP being over ten times smaller than Asia's, in absolute terms, the gap is much smaller. The value chains facilitated by Jersey's financial services sectors contributed nearly £46 billion to the Asian economy. While the 0.20% share of total Asian GDP may appear small, £46 billion is a significant annual contribution to Asia's GDP for an island of 108,000 people, located in the English Channel, as the scale of this economic activity is equivalent to the GDP of Croatia in 2020.

The absolute values and global distribution of the GDP supported by Jersey's GVCs can be seen graphically in Figure 30. This shows that the UK, Asia (inc. Middle East), and Rest of Europe account for over four fifths of Jersey's Global Value Chain-induced GDP impact.

Figure 30: Jersey GVCs support of regional GDP, £bn, 2017 - 2020 average



Source: Source: IMF, World Bank, Cebr analysis

Sectoral analysis: Funds

The capital intermediated in Jersey's funds sector supported an average of £29.3 billion of global economic output annually, equivalent to 0.05% of world GDP. As an illustration of the scale of the economic activity supported by Jersey's fund sector, the direct GDP contribution of Bahrain in 2020 was approximately £31.1 billion. Equally, the scale of the average annual GDP that was supported by Jersey's fund sector over the period is equivalent to approximately half of the total economic activity generated by Northern Ireland in 2019.

Asia (inc. Middle East), the rest of Europe and UK provide 85.4% of the total global output supported by Jersey's funds sector. These results, breaking down the average annual regional GDP supported by Jersey's fund sector in absolute terms between 2017 and 2020, can be seen in Table 16. While United Kingdom's absolute level of economic output supported is similar to North America's, it's relative share is almost eleven times higher: £4.85 billion contribution accounted for 0.23% of UK's total GDP, while North America's £3.92 billion represents 0.02% of its total output.

© Centre for Economics and Business Research

Table 16: Jersey Funds sector's GVCs support of regional GDP, £m, 2017 – 2020 average

Region	Average annual GDP supported (2017-2020)
United Kingdom	£4,852
Rest of Europe	£5,369
North America	£3,917
South America	£192
Asia (inc. Middle East)	£14,793
Africa	£131
Oceania	£43
Total (£m)	**£29,298**

Source: IMF, World Bank, Cebr analysis

Sectoral analysis: Banks

Through the integrated network of Global Value Chains, **capital intermediated in Jersey's banking sector supported an average of £14.9 billion of global economic output annually between 2017 and 2020, equivalent to 0.024% of world GDP.** As an illustration of the scale of the economic activity supported by Jersey's banking sector, the direct GDP contribution of Iceland in 2020 was approximately £17.6 billion, which is 18% larger than the economic activity stimulated by the banking sector globally.

Table 17 presents the results for the regional GDP supported by the value chains that Jersey banks contributed to in absolute terms.

Table 17: Jersey Banking sector's GVCs support of regional GDP, £m, 2017 – 2020 average

Region	Average annual GDP supported (2017-2020)
United Kingdom	£11,574
Rest of Europe	£1,468
North America	£617
South America	£13
Asia (inc. Middle East)	£1,044
Africa	£223
Oceania	£9
Total (£m)	**£14,946**

Source: IMF, World Bank, Cebr analysis

The UK and Rest of Europe provide over 87% of the total global output supported by Jersey's banks, highlighting the strength of the interlinkages between the regions and Jersey's banking sector.

Sectoral analysis: Trusts and other Asset Holding Vehicles

Jersey's trusts and AHVs sector supported an average £126.0 billion of global economic output annually via the capital channelled through international value chains across the period, equivalent to 0.20% of world GDP. As illustrations of the scale of the economic activity supported by Jersey's trust and other asset holding vehicles sector, the total direct GDP contribution of Hungary was £125.5 billion in 2020 while the direct GVA contribution of Yorkshire and the Humber to the UK economy was approximately £128.0 billion in 2019.

© Centre for Economics and Business Research

Over 79.7% of this supported output is in Europe and Asia (inc. Middle East). Out of the £126.0 billion global support, £45.5 billion is in the UK specifically. The regional results, breaking down the regional GDP supported in absolute, can be seen in Table 18. In the trusts and other AHVs sector, Asia's (inc. Middle East) absolute level of economic output support is more than that of rest of Europe's, but it's relative share is lower: £30.1 billion contribution accounted for 0.13% of Asia's total GDP, while for Rest of Europe's £24.8 billion represents 0.17% of its total output.

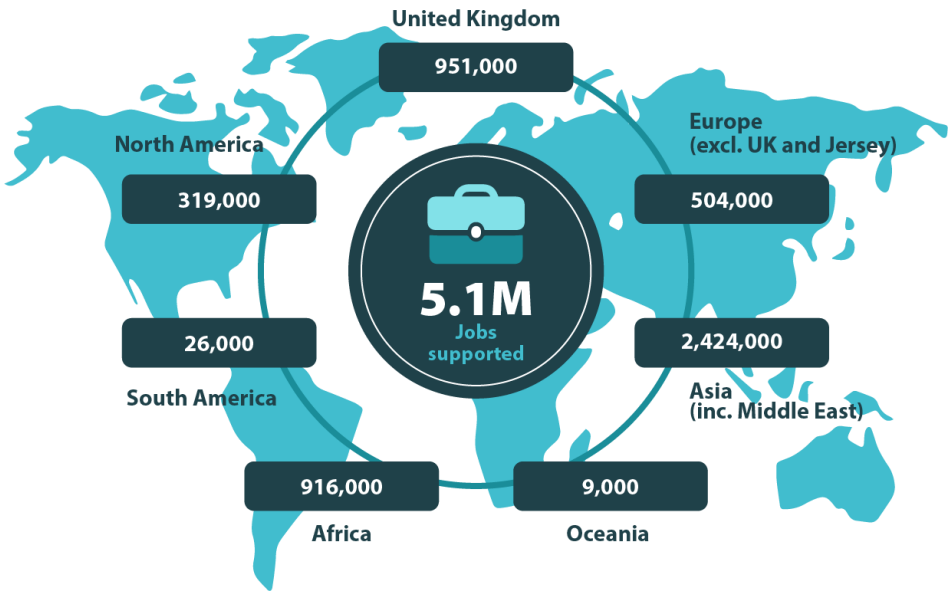
Table 18: Jersey Trusts and AHVs sector's GVCs support of regional GDP, £m, 2017 – 2020 average

Region	Average annual GDP supported (2017-2020)
United Kingdom	£45,548
Rest of Europe	£24,753
North America	£19,523
South America	£197
Asia (inc. Middle East)	£30,115
Africa	£5,305
Oceania	£606
Total (£m)	**£126,046**

Source: IMF, World Bank, Cebr analysis

Based upon anecdotal evidence from interviews with members of the financial services industry, individuals noted that over recent years there has been a trend of growing trust sector business activity in Asia (inc. Middle East), with a predominant share of this asset base from the Middle East. Based on the relatively small number of submissions that we received, these trends are reflected across the (incomplete) sample meaning that our empirical evidence *may* support the anecdotal evidence. However, further research would be required to verify this, because at present, these trends are not robust at this level of disaggregation due to data availability.

Employment supported



Considering the average productivity of employees by region, we can estimate the jobs required to produce the GVA estimated above. Conceptualised another way, the below provides an estimate for the employment supported by Jersey's role as a conduit for capital flows, within each geography. The average annual employment supported by value chains intermediated in Jersey was 5.1 million over the period.

Table 19. Employment supported by Jersey GVCs, headcount, 2017 – 2020 average

Region	Average annual employment supported (2017-2020)
United Kingdom	950,673
Europe (excl. UK and Jersey)	504,374
North America	318,493
South America	25,975
Asia (inc. Middle East)	2,423,616
Africa	915,957
Oceania	8,428
Total (Headcount)	**5,147,515**

Source: World Bank, Cebr analysis

To contextualise the scale of Jersey's global impact, just 60,000 people were directly employed in Jersey in 2020, with over 5.1 million employed worldwide. This is larger than the labour forces in 2020 of Belgium (5,114,000) and Switzerland (4,959,300).[61] Indeed**, for every job in Jersey, the Global Value Chains facilitated by the island support approximately an additional 90 jobs globally.**[62]

47% of all jobs supported by Jersey's GVCs were in Asia (inc. Middle East). This large proportion is due to the region's low labour share of income, and in turn the implicit relatively high productivity of capital, alongside a slightly lower than average output per worker (meaning for a given level of output supported, more jobs than average are associated). To illustrate the scale of the employment activity supported across Asia (inc. Middle East) by Jersey, data from the World Bank indicates that the size of the total labour force of Ireland was 2,427,093 in 2020.

18% of all jobs supported were in Africa, which is the same share as for the UK. This is a much higher proportion of the employment total than Africa's share of total GDP supported (3%) as a result of the same mechanism outlined above. Again, as an illustration of the scale of the employment that is supported in Africa by Jersey's GVCs, the approximately 915,957 jobs are in the same order of magnitude as the total labour force of Latvia (982,531) in 2020.

61 World Bank. (2020). 'Labour force, total'.

62 This framing can also be considered in the specific context of financial services. From this perspective, for every *financial services* job in Jersey, the Global Value Chains facilitated by the island support approximately an additional 380 jobs globally.

Wages supported

By extending the analysis an additional step, we can estimate the total wages that are supported by Jersey's role as a conduit within Global Value Chains. This is estimated by combining the average wage for each country with the respective number of jobs that are supported by the Global Value Chains that Jersey directly contributes to in country. The result is an estimate for total wages globally that are supported by the capital intermediated in Jersey (Table 20).

To populate a complete dataset for average wages by country, a range of sources was required. These included the Office for National Statistics, International Labour Organisation, World Bank, and numerous other national statistics offices.

An important point to note is the similar overall supported wages in the UK and Asia (inc. Middle East). The average annual value of total wages supported by Jersey was £24.0 billion in the UK and £22.1 billion in Asia (inc. Middle East). This is despite the result that Asia (inc. Middle East) has three times more employees supported by capital intermediated in Jersey than the UK. The cause of this result is due to a differential in wages, with UK employees paid more on average. Arguably there are second-order economic consequences here – for example these UK workers on average have more money to spend in their domestic economy, further supporting economic variables such as domestic output, employment, and tax revenues, however these induced effects are not captured within the figures below.

Table 20. Wages supported by Jersey GVCs, £ million, 2017 – 2020 average

Region	Average annual wages supported (2017-2020)
United Kingdom	£24,026
Europe (excl. UK and Jersey)	£13,520
North America	£9,367
South America	£139
Asia (inc. Middle East)	£22,134
Africa	£3,746
Oceania	£325
Wages Supported (£m)	**£73,258**

Source: ONS, International Labour Organisation, World Bank, IMF, Cebr analysis

© Centre for Economics and Business Research

The UK and Asia (inc. Middle East) account for 32.8% and 30.2% of the total £73.3 billion in wages that are supported globally by Jersey via GVCs, while Europe (excl. UK and Jersey) and North America contribute the next largest shares at 18.5% and 12.8%, respectively. This makes intuitive sense based upon the higher average wages paid in those high economically developed regions, as well as Jersey's strong financial links to Europe and North America across the period (as seen in Table 13). The remaining regions, Africa, Oceania, and South America account for a combined 5.7% of the total wages supported by Jersey's GVCs due to their less significant financial links with the island, relative to the other global regions identified.

© Centre for Economics and Business Research

Appendix I

Solow model framework

The ultimate output of the primary research phase was an estimate for annual stocks of capital originating in Jersey, allocated to different regions around the world, disaggregated at the continent-level. To produce associated global impact figures, the following mechanism was considered:

$$Jersey\ Support\ of\ GDP_i = GDP_i \times \alpha_i \times \frac{Jersey\ K_i}{\bar{K}_i},$$

where GDP_i is the gross domestic product of country i, α_i is the share of GDP (income) in country i that is attributable to capital, and $\frac{Jersey\ K_i}{\bar{K}_i}$ is the share of the total capital stock in country i that originates from Jersey.

Country level GDP data, GDP_i, is available through statistics by the World Bank, while Cebr's primary research produced an estimate for $Jersey\ K_i$. The total capital stock in each country, $\bar{K}_i$, was estimated using IMF data. Therefore, the remaining component of the value chains mechanism is α_i, the share of income in country i that is attributable to capital and is based on a main result of the Solow model.

The Solow model is a macroeconomic model of long-term growth theory operating under the framework of neoclassical economics.

The baseline model given by Robert Solow in 1957 explains long-term economic growth by using inputs such as capital accumulation, labour growth and changes in technical progress given by the total factor productivity (A_i).

The full model, also known as a production function, is as follows,

$$GDP_i = A_i K_i^{\alpha} L_i^{1-\alpha}$$

Where GDP_i is the income of country i, A_i is the productive efficiency of inputs, K_i is the stock of capital in country i, and L_i is the size of the labour force in country i.

This production function tells us that the GDP of a country at a certain time can be expressed as a result of the capital stock in the country, the number of people employed, and the amount of technological progress at that point in time.

Our economic analysis to estimate the share of capital stock in a certain country supported by Jersey and the consequent effects of that Jersey-supported capital on the respective country's GDP, employment, and wages, relies on a creative application of just one of the results of the Solow model. Our coefficient of interest in this case is α.

According to the equilibrium results of the Solow model, this tells us a country's capital share of income, or the share of income in country i that is attributable to the capital base. This simplified result alleviates the need for reliance on econometric regressions between the two variables (capital stock and GDP), as we can simply find the ratio of income paid to capital in a country to its nominal GDP.

However, there is a certain caveat to getting these ratios. We steer away from utilising direct coefficients on any regressions between capital stock growth and GDP growth directly from academic research papers due to two reasons: first, we found that there was a general lack of empirical studies exploring the relationship between capital stock and economic growth for the sample of our countries of interest; and second, we realised that the existing research

papers on this topic were often plagued with several estimation issues in their econometric design, thereby causing us to have low confidence in such estimates.

We get around this problem by looking into the labour share of income instead $(1 - \alpha)$, and we derive the capital share of income from the former by using the relationship that both factor shares must sum up to 1. An advantage of using the labour share of income is that since it is broadly defined as the total compensation earned by workers in a certain period divided by the total economic output, this ratio is an integral component of labour economics and has been widely estimated for a number of countries.

To produce these estimates on a consistent cross-country level basis, we use Guerriero's 2019 paper, "The Labor Share of Income Around the World: Evidence from a Panel Dataset", which compiles a global dataset of the labour income share across 151 economies—both developing and developed. We observe that for countries such as USA and UK, capital share of income accounts for about 33% of the national income, however for capital intensive countries such as Saudi Arabia, UAE, or Bahrain, this figure is as high as 70%. Regarding the real-world validity of the theoretical model, the literature has confirmed the existence of a long-run equilibrium relationship between real income growth and its determinants, namely capital and labour.[63]

The theoretical results from the model have been widely implemented in empirical studies to:

- Derive measures of productivity across countries;
- Explain growth convergence in advanced economies such as the USA and UK; and
- Demonstrate the high degree of variation in GDP growth rates across countries.

The inventive application of the Solow model helped us to precisely overcome these gaps and aided our methodological design for this project: not only it is a widely applied model in macroeconomics with multiple peer-reviewed academic papers backing it up, but also there is no dearth of studies for our sample of our countries of interest since the parameters of the model have been estimated for a wide variety of nations over the past decades.

Using our country-level estimates for α, we can estimate Jersey's support of each country's GDP through the above mechanism.

In the absence of other information, we have assumed that the jobs supported by the capital intermediated in Jersey are distributed on average, in industries with average labour productivity. Therefore, to calculate the employment supported by the Global Value Chains that Jersey's financial sectors directly contribute to, we use the estimates for Jersey's share of each country's GDP and apply these to total headcount employment in each country. This is then aggregated to total jobs that are supported by the international value chains that Jersey contributes to across each continent.

Finally, we can estimate the total wages supported by the value chains that Jersey's core financial services sectors are directly linked to by estimating the average wage for each country and combining this with the respective employment supported by the value chains that Jersey directly contributes to in a country. To populate a complete dataset for average wages

63 For example, see Barossi-Filho *et al.* (2005). 'The Empirics of the Solow Growth Model: Long-Term Evidence' or Ahuru and James. (2019). 'Testing the Solow Model in Nigeria's Economy'.

by country, a range of sources was required. These included the Office for National Statistics, International Labour Organisation, World Bank, and numerous other national statistics offices. Across each continent, the links that Jersey has with each country are not proportional. Therefore, to aggregate from a country-level to a continent-level, weighted averages based upon the observed financial linkages that Jersey displays to individual countries are considered as part of the aggregation process.

Continent and country bloc definitions

Table 21: Continent definitions

Europe		
Albania	Greece	Netherlands
Andorra	Guernsey	North Macedonia
Austria	Hungary	Norway
Belarus	Iceland	Poland
Belgium	Ireland	Portugal
Bosnia and Herzegovina	Isle of Man	Romania
Bulgaria	Italy	Russian Federation
Croatia	Jersey	San Marino
Cyprus	Kosovo	Serbia
Czech Republic	Latvia	Slovak Republic
Denmark	Liechtenstein	Slovenia
Estonia	Lithuania	Spain
Faroe Islands	Luxembourg	Sweden
Finland	Malta	Switzerland
France	Moldova	Ukraine
Germany	Monaco	United Kingdom
Gibraltar	Montenegro	
North America		
Antigua and Barbuda	Curacao	Panama
Aruba	Dominica	Puerto Rico
Bahamas, The	Dominican Republic	Sint Maarten (Dutch part)
Barbados	El Salvador	St. Kitts and Nevis
Belize	Grenada	St. Lucia
Bermuda	Guatemala	St. Martin (French part)
British Virgin Islands	Haiti	St. Vincent and the Grenadines
Canada	Honduras	Turks and Caicos Islands
Cayman Islands	Jamaica	United States
Costa Rica	Mexico	Virgin Islands (U.S.)
Cuba	Nicaragua	
South America		
Argentina	Ecuador	Trinidad and Tobago

Bolivia	Guyana	Uruguay
Brazil	Paraguay	Venezuela
Chile	Peru	
Colombia	Suriname	
Asia (including Middle East)		
Afghanistan	Jordan	Qatar
Armenia	Kazakhstan	Saudi Arabia
Azerbaijan	North Korea	Singapore
Bahrain	South Korea	Sri Lanka
Bangladesh	Kuwait	Syrian Arab Republic
Bhutan	Kyrgyz Republic	Tajikistan
Brunei Darussalam	Lao PDR	Thailand
Cambodia	Lebanon	Timor-Leste
China	Macao SAR	Turkey
Georgia	Malaysia	Turkmenistan
Hong Kong SAR	Maldives	United Arab Emirates
India	Mongolia	Uzbekistan
Indonesia	Myanmar	Vietnam
Iran	Nepal	West Bank and Gaza
Iraq	Oman	Yemen
Israel	Pakistan	Taiwan
Japan	Philippines	
Africa		
Algeria	Ethiopia	Niger
Angola	Gabon	Nigeria
Benin	Gambia, The	Rwanda
Botswana	Ghana	Sao Tome and Principe
Burkina Faso	Guinea	Senegal
Burundi	Guinea-Bissau	Seychelles
Cabo Verde	Kenya	Sierra Leone
Cameroon	Lesotho	Somalia
Chad	Liberia	South Africa
Comoros	Libya	South Sudan
Congo, Dem. Rep.	Madagascar	Sudan
Congo, Rep.	Malawi	Tanzania
Cote d'Ivoire	Mali	Togo
Djibouti	Mauritania	Tunisia
Egypt, Arab Rep.	Mauritius	Uganda
Equatorial Guinea	Morocco	Zambia
Eritrea	Mozambique	Zimbabwe

© Centre for Economics and Business Research

Eswatini	Namibia	

Oceania		
American Samoa	Micronesia, Fed. Sts.	Samoa
Australia	Nauru	Solomon Islands
Fiji	New Caledonia	Tonga
French Polynesia	New Zealand	Tuvalu
Guam	Northern Mariana Islands	Vanuatu
Kiribati	Palau	
Marshall Islands	Papua New Guinea	

Source: World Bank

Table 22: Country bloc definitions

EU27		
Austria	France	Malta
Belgium	Germany	Netherlands
Bulgaria	Greece	Poland
Croatia	Hungary	Portugal
Cyprus	Ireland	Romania
Czech Republic	Italy	Slovak Republic
Denmark	Latvia	Slovenia
Estonia	Lithuania	Spain
Finland	Luxembourg	Sweden

OECD		
Australia	Hungary	Norway
Austria	Iceland	Poland
Belgium	Ireland	Portugal
Canada	Israel	Slovak Republic
Chile	Italy	Slovenia
Colombia	Japan	Spain
Czech Republic	Korea	Sweden
Denmark	Latvia	Switzerland
Estonia	Lithuania	Turkey
Finland	Luxembourg	United Kingdom
France	Mexico	United States
Germany	Netherlands	
Greece	New Zealand	

Emerging Markets		
Argentina	India	Poland
Brazil	Indonesia	Qatar
Chile	Korea	Russia

© Centre for Economics and Business Research

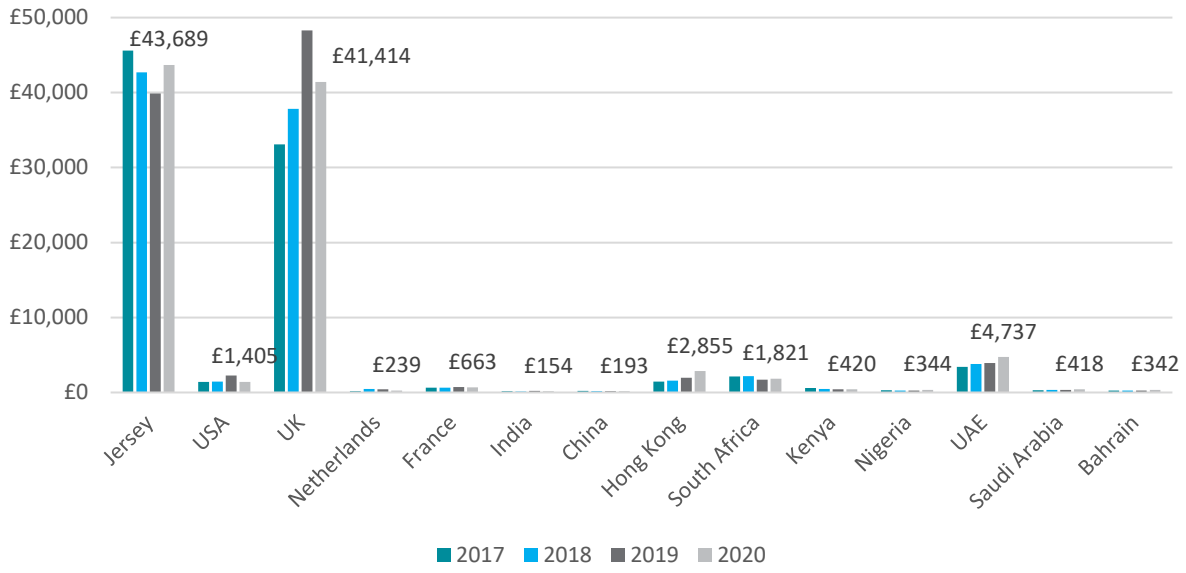
China	Kuwait	Saudi Arabia
Colombia	Malaysia	South Africa
Czech Republic	Mexico	Taiwan
Egypt	Pakistan	Thailand
Greece	Peru	Turkey
Hungary	Philippines	UAE
Greater China		
China	Hong Kong SAR	Macao SAR
Taiwan		
Gulf Cooperation Council		
Bahrain	Oman	Saudi Arabia
Kuwait	Qatar	UAE
ASEAN		
Brunei	Malaysia	Thailand
Cambodia	Myanmar	Vietnam
Indonesia	Philippines	
Lao PDR	Singapore	
CIS		
Armenia	Kazakhstan	Tajikistan
Azerbaijan	Kyrgyzstan	Turkmenistan
Belarus	Moldova	Ukraine
Georgia	Russia	Uzbekistan

Source: MSCI and World Bank

© Centre for Economics and Business Research

Supplementary banking sector data

Figure 31: Share of balance sheet total (liabilities) by country of interest, £m, 2017 - 2020



Source: JFSC, Cebr survey and analysis

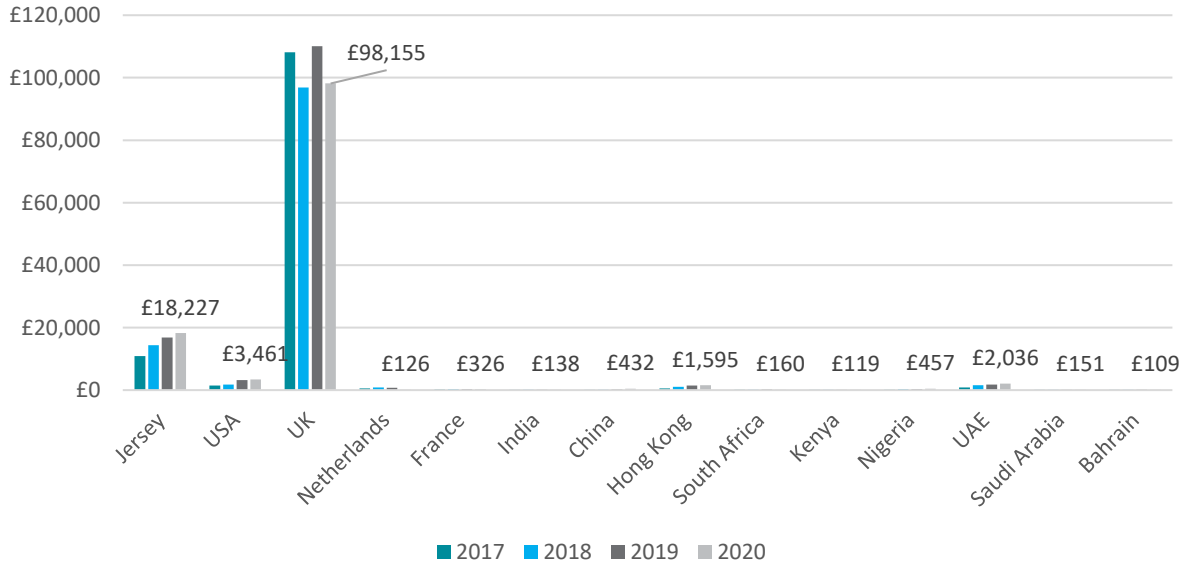
Table 23: Share of balance sheet total (liabilities) by country bloc, £m and %, 2020

Country Blocs	2020		*Bloc share of global GDP*
EU27	£6,023	4%	*18%*
OECD	£104,400	*73%*	*62%*
Emerging Markets	£10,930	*8%*	*37%*
Greater China	£3,156	*2%*	*19%*
Gulf Cooperation Council	£6,331	*4%*	*2%*
ASEAN	£1,673	*1%*	*4%*
CIS	£204	*0%*	*2%*

Source: JFSC, Cebr survey and analysis

© Centre for Economics and Business Research

Figure 32: Share of balance sheet total (assets) by country of interest, £m, 2017 - 2020



Source: JFSC, Cebr survey and analysis

Table 24: Value and share of balance sheet total (assets) by country bloc, £m and %, 2020

Country Blocs	2020		*Bloc share of global GDP*
EU27	£5,980	4%	*18%*
OECD	£127,024	89%	*62%*
Emerging Markets	£3,695	3%	*37%*
Greater China	£2,027	1%	*19%*
Gulf Cooperation Council	£2,570	2%	*2%*
ASEAN	£751	1%	*4%*
CIS	£41	0%	*2%*

Source: Cebr survey and analysis

© Centre for Economics and Business Research