

Focus on International Financial Services & Fintech

December 2018



International Financial Services & Fintech

Ireland is home to leading global financial services institutions and emerging technology-rich Irish enterprises

IRISH EXPORTS

€2.9bn

Direct Economy Expenditure (DEE)

€1.5bn

Source: Department of Business, Enterprise and Innovation, Annual Business Survey of Economic Impact, 2016; DEE relates to total payroll costs, materials and services sourced from Irish suppliers



EMPLOYMENT

42,000

in 2017

Up 20% from 35,000 in 2015

Source: IFS 2020





has a strong, rapidly-growing cluster of international payment companies

Ireland...

is a globally recognised centre for specialist IFS with strong potential as a location for financial services after Brexit



is a leading financial technology innovation location

17 of the top **20**

global banks have a presence in Ireland

Source: PwC

11 of the top 15

insurance companies are in Ireland

Source: IFS



Ireland is the largest centre for fund administration in Europe

€4.7trn

worth of assets under administration

Source: Irish Funds



Prepared by the Department of Business, Enterprise and Innovation

The sector in numbers

Globalⁱ

Clobal			
Market Size	Growth Forecast		
	Investment Banking and Brokerage CAGR 1.4% (2016-		
Certain subsectors measured by size of funds managed,	2021) ⁱ		
others by revenues	Non-Life Insurance CAGR 3.4% (2016-2021)ii		
	Banking CAGR 5.6% (2016-2021) ⁱⁱⁱ		
	Capital Markets CAGR 8.2% (2011-2016)iv		

Ireland

	Employment (2017) ^v	% of National 2017	5-year CAGR (2012-2017)	Exports (2016) ^{vi}	% of National (Exports) 2016	5-year CAGR (2011-2016)	DEE (2016) ^{vii}
Agency	28,349	1.27%	6.28%	€2.9bn	1.5%	8.16%	€1.5bn
Irish	3,889	0.17%	5.26%	€1.1bn	0.6%	16.09%	€0.4bn
Foreign	24,460	1.10%	6.44%	€1.8bn	0.9%	4.5%	€1.1bn
IFS ^{viii}	Employment 2017		E	Employment 2015		% Change (2015-2017)	
IFS2020	2	12,000		35,000		20%	

- i) Global Investment Banking and Brokerage, Marketline, March 2017
- ii) Global Non-Life Insurance, Marketline, October 2017
- iii) Global Banks, Marketline, March 2017
- iv) Capital Markets Marketline, May 2012
- v) AES 2017, DBEI (data is gathered by DBEI with the Financial Services data categorised using NACE codes)
- vi) ABSEI 2016, DBEI (data is gathered by DBEI with the Financial Services data categorised using NACE codes)
- vii) Direct Economy Expenditure relates to total payroll costs, materials and services sourced from Irish suppliers viii)IFS 2015 employment numbers as per the IFS 2020 strategy and 2017 update from IFS Ireland https://www.finance.gov.ie/what-we-do/international-financial-services/

Description of the sector globally

- The global market for internationally traded financial services is generally categorised as:
 - Investment/asset management: including real estate, asset servicing/management, hedge funds, aircraft leasing and private equity
 - Banking, capital markets and payments: including trading debt, funds, foreign exchanges, commodity and derivative instruments and non-bank payments
 - Insurance/reinsurance and pensions
- Fintech is a dynamic segment at the intersection of the financial services and technology sectors where
 technology-focused start-ups and new market entrants cause disruption to the traditional value chain with
 new forms of products and services. Products and activities include payment processing, electronic check
 services, cyber and information security, business analytics, dynamic currency conversion, P2P lending,

- cryptocurrencies etc. The segment is characterised by a high degree of innovation and a short innovation cycle.
- Payments is a fast-growing subsector made up of credit institutions, processing services, card networks, emoney institutions etc. that facilitate card, cash, paper and virtual payments through a variety of methods
 including in-store PoS technology, prepaid cards, mobile & eCommerce payments and closed loop payment
 networks.
- Financial services is a regulated sector (although some aspects of payments and emerging fintech activities
 are not encompassed in the current regulatory regime).
- Regulatory requirements, the emergence of regtech as a sector, new entrants to the market, and the
 disappearance of intermediaries is resulting in increased competition, operating model pressure and a
 continuation of downward fee pressure.
- Strong growth prospects are driven by a changing global consumer base and demographics, high growth in emerging markets, a shift toward personalised and customer-centric products & services and market disruptions driven by technology adoption.

Global developments and implications

- Firms located in the UK that rely on European regulations to offer their services across the EU are having to explore new locations within the remaining EU27 states to continue to access existing markets and customers post-Brexit. As a result, it has increased the number of mobile investments for regulated firms across all sectors. Ireland will be the only English-speaking, common law jurisdiction in the EU after the UK leave the EU. This means that IFS companies can establish here in order to service their international and European customers with a minimum disruption to their business, as evidenced by the firms that have already moved some, or all of their operations to Ireland.
- In addition, the European market is dealing with the implementation of a range of major regulatory initiatives such as MiFID II, for Investment Managers, Solvency II for Insurers, and CRDIV on the ongoing completion of Banking Union for Banks. These have implications for how resources are deployed in organisations and increase the imperative to have operations in the most competitive locations.
- The changing global customer base, with ageing demographics and growth of the 'middle class' in large
 emerging economies will require significant investments to rejuvenate out-of-date infrastructure in developed
 markets and support growth in emerging markets.¹ Growth in China, India, Brazil, and Mexico is outpacing
 mature markets.

¹ EY, Global Banking Outlook, (2015)

- The international financial services market has seen a period of significant change as a result of: disruptive technological advances and new platforms; lowering barriers to international trade; new business models; financial inclusivity (targeting the unbanked or underbanked); and the increase in eCommerce transactions.
- Financial institutions are evolving from "product-driven" to "customer-centric". Companies need to innovate for seamless integration, ease of use, 24/7 accessibility, personalisation, etc., leveraging advances in technology and analytics to respond to changing customer needs and to improve customer experience.
- Advances in technology are enabling new business models and product offerings for all segments of
 financial services including insurance (pay per use), regulation, crowd funding/peer-to-peer lending,
 blockchain, IoT, cloud computing, data analytics, machine learning and artificial intelligence some of which
 are in response to the collaborative/sharing economy that is premised on making better use of underutilised
 assets.
- Fintech companies are accelerating the digital transformation of the financial services ecosystem. Banks and financial institutions have been forced to modify their strategic plans by speeding up the launch of new digital products and services. Many of them are doing this through a cooperative approach with the fintech sector.
- The competitor landscape is fundamentally altered as new players enter the field including those from other sectors (e.g. retail outlets, Google finance etc.) and as consolidations and restructuring continue apace. The more established large scale corporate structures will need to adapt to the fintech world in terms of agility, innovation, talent attraction and development.
- With the high growth in digital/mobile services and apps, institutions are placing an increased emphasis on risk analysis and mitigation, data security, cyber security and information management.
- Potential significant job displacement arising from advances in artificial intelligence.

The sector in Ireland

- Ireland is a globally-recognised centre for specialist IFS and is home to leading global financial services institutions and technology rich Irish enterprises serving every major economy in the world. The largest banks, asset managers and insurance firms are foreign owned and trading internationally from Ireland.
- There are over 400 financial services companies operating in Ireland including 200 Irish owned. Companies include Citi, State Street, Northern Trust, BlackRock, BNY Mellon, Bank of America Merrill Lynch, Deutsche Bank, Zurich, Prudential, PayPal, GE Capital Aviation Services, Fexco and Taxback/Transfermate, Sysnet Global Solutions, Sentenial, Carne Group, Monex, Currency Fair, Rockall, Abbey Capital, Fenergo and Centaur Fund Services.
- Ireland is the 4th largest exporter of Financial Services in the EU and is the primary location worldwide for Alternative Investment Funds. There is €4,732bn worth of assets under administration in Ireland - over

14,000 funds, and promoters from 50 countries.² 17 of the top 20 global banks and 11 of the top 15 insurance companies have a presence in Ireland. 8 of the top 10 global aviation lessors and over 60% of the world's leased commercial aircraft are owned or managed from Ireland.

- The industry encompasses front, middle and back office roles across a range of sub-sectors including asset management, international banking, insurance and reinsurance, funds servicing, aircraft leasing, fintech, and payments.
- The IFS sector is truly nationwide with 30% of employment outside Dublin.
- There are a number of Irish companies in support sectors such as business process outsourcing,
 cybersecurity, IT services, talent management and professional consultancy that serve the sector.
- Ireland has a strong skills base with a range of industry-led educational courses and apprenticeships³.
- The IFS sector promotes Ireland as a destination for financial services after Brexit with a predictable transition.

Ecosystem

- The IFS ecosystem in Ireland is supported by a variety of factors including: our labour laws; corporate tax rates; double tax agreements; our membership of the EU; that we are an English-speaking, common law country; and our domain expertise in specific areas i.e. cross border banking.
- Ireland has a strong international reputation based on core competencies in asset management, insurance and fund administration; stable tax and fiscal regime (including network of double taxation agreements); and regulatory and compliance expertise.
- IFS2020, Ireland's five year, whole-of-Government strategy for international financial services (IFS), underpinned by annual action plans and supported by industry and the public sector, seeks to drive the growth and development of the IFS sector in Ireland. IFS2020 aims to develop job-creation opportunities and grow employment to 45,000 by 2020. The strategy is on track to achieve its job creation target. By the end of 2017, 42,000 people were directly employed in the international financial services sector. This was an increase of 7,000 on the 2015 figure.⁴
- Ireland has a supportive banking sector with several seed funds. Enterprise Ireland is Europe's largest seed investor by number of investments. It offers a range of funding options to selected start-ups, investing a total of €32 million in start-ups during 2016 alone. Fintech is a prioritised sector in Enterprise Ireland's €65M Seed & Venture Capital Scheme. In 2017, Enterprise Ireland ran investment funds to support innovative export-oriented Fintech businesses.

² Irish Funds, https://irishfunds-secure.s3.amazonaws.com/1529925384-March-Factsheet-2018.pdf

³ More than eight out of 10 of those employed in the sector have at minimum a bachelor's degree

- Accelerator programmes include NDRC, the Mastercard programme and Accenture's Fintech Innovation lab, Deloitte's Blockchain Lab, Dogpatch in Dublin.
- From 2018, apprenticeships are available in International Financial Services Associate and International
 Financial Services Specialist. Financial Services Ireland (FSI) in partnership with the National College of
 Ireland designed, developed and deliver the new IFS Apprenticeships.
- FSI runs a CareerStart Programme, a training and work placement initiative for unemployed professionals to enter the sector.
- The IFS Skillnet is a national network of partner associations and companies operating in IFS in Ireland, focused on investment in the development of the necessary skills and expertise.
- There is a strong research and innovation ecosystem of relevance to IFS. National Research Centres include ADAPT, LERO, CONNECT and Insight and Technology Centres include the Government Risk and Compliance Technology Centre, GRC, the Innovation Value Institute (IVI), and the Centre for Applied Data Analytics Research (CeADAR). FMC² undertakes research in asset and risk management.
- The Central Bank of Ireland is responsible for the regulation of financial services firms in Ireland.
- Services companies have developed niche specialisms to serve the sector in regulation, compliance, tax etc. e.g. Kinetic Partners.

Relevant Reports

Click on hyperlinks below

- IFS 2020 Action Plan 2018
- IFS 2020 'A Strategy for Ireland's International Financial Services (Government Publications, March 2015)
- The Finance Dublin Yearbook (2015)
- A Skills Needs Analysis of the International Financial Services Sector in Ireland (Summit Finuas Network, 2015)
- Skills and Research Needs of the International Financial Services Industry (EGFSN 2007)

Key actors

Government and Agency: D/Finance, D/BEI, D/FAT, D/Taoiseach, Enterprise Ireland, IDA Ireland

Regulatory: Central Bank of Ireland

IFS Groups: IFS2020 High Level Implementation Committee, IFS2020 Industry Advisory Committee

(Department of Finance)

Industry Associations: Financial Services Ireland (FSI),, Banking and Payments Federation Ireland (BPFI), Finuas Network (Skills), Fintech and Payments Association of Ireland (FPAI), Irish Funds,, Insurance Ireland (II), Aircraft Leasing Ireland (ALI), Irish Association of Investment Managers (IAIM), Federation of International Banks in Ireland (FIBI),, Irish Venture Capital Association, Chambers Ireland

Academia and Education: D/ES, HEA, HETAC, IFS Skillnet

Recent Developments

Company Developments

- Global financial services firm, Depository Trust & Clearing Corporation (DTCC), will extend presence in
 Europe by adding new location in Ireland ahead of the UK's planned withdrawal from the EU (July 2018)
- Irish-international fintech company, Fexco has announced an expansion of its operations headquartered in Killorglin, Co. Kerry creating 175 new jobs over 3 years (July 2018)
- Intertrust Ireland to create up to 60 new financial services roles (July 2018)
- Centaur Fund Services is expanding its Irish operations, creating at least thirty jobs within the next two years at a new service centre in Maynooth (June 2018)
- Arch Capital Group Ltd. [NASDAQ: ACGL] (Arch) plans to apply to the Central Bank to expand the group's
 underwriting operations in Ireland to ensure continuity of its operations across the European Union (EU)
 once the United Kingdom leaves the EU, subject to Central Bank approval (June 2018)
- Arch Insurance Company (Europe) Limited and Alwyn Insurance Company Limited announced they will write EU business from Ireland (June 2018)
- DMS Governance, an international GRC firm, is to create 50 new roles in Cashel Co. Tipperary. Between its
 Dublin expansion and the creation of new roles in Cashel, this will bring DMS' commitment to jobs Ireland to
 150 (June 2018)
- Subject to licence approval by the Central Bank of Ireland, Thomson Reuters plans to operate its FX
 Multilateral Trading Facility (MTF) from Dublin rather than London as a result of the UK's planned departure
 from the European Union (Brexit) on 29 March 2019 (May 2018)
- Darta Saving Life Assurance/Allianz Global Life, both part of the global Allianz Group, have announced Investment in new international headquarters in Dublin, providing financial services on a cross-border basis within the EU with the creation of an additional 25 jobs by 2019 (May 2018)
- Mastercard expands presence in Ireland, hiring 175 new staff to drive payments innovation (April 2018)
- Guidewire Software, Inc. (NYSE: GWRE), a global provider of software products to the general insurance industry, announced further expansion of its operations in Ireland. It now employs almost 300 staff, making Dublin the largest office outside the United States, where the company is headquartered, and is looking to fill about 40 more roles by the end of August (March 2018)

- Deutsche B\u00f6rse Group has announced that it will further expand its activities in Cork, Ireland, to reflect the growing funds business of its post-trade services arm Clearstream (February 2018)
- Carne, the Irish-founded global provider of fund management company solutions to the asset management industry, announced an expansion of its operations, creating 50 jobs at a new regulatory technology, development and operations centre of excellence in Co. Kilkenny (November 2017)
- Taxback International announced 80 new jobs in Kilkenny (November 2017)
- YapStone, global payments company, announced it will invest €41mn in the creation of 200 new tech jobs at its International Headquarters in Drogheda (November 2017)
- MetLife plans to employ approximately 200 skilled IT professionals with the opening of a new Global Technology Campus in Galway. (November 2017)
- Fidelity International, a global investment and retirement savings business, announced additional 250 jobs in its Dublin office (October 2017)
- Kroll Bond Rating Agency (KBRA), full service credit rating agency, announced its expansion into Europe
 with the opening of its European Headquarters in Dublin. The move is expected to create 100 new jobs over
 the next three years (September 2017)
- XL Group has selected Dublin as its preferred location for its principal European Union ("EU") insurance company, XL Insurance Company SE (September 2017)
- Graebel Companies Inc., opened the company's newly established Europe, Middle East and Africa (EMEA)
 Financial Shared Services and Operations Centre in Dundalk and plans to create 125 new jobs within the next three years (September 2017)
- West Cork based Global Shares, global provider of share plan administration software, share-dealing, global custody and financial reporting tools announced the creation of a further 80 jobs due to rapid global expansion, bringing its total global employee base to 228 (August 2017)
- Bank of America confirmed it has chosen Dublin as the preferred location for its principal EU legal entities following the UK's departure from the EU (July 2017)
- Citi announced that Dublin has been chosen as one of a number of European locations for expansion as part of its Brexit response (July 2017)
- Barclays announced that the bank plans to use their licensed EU subsidiary to allow them to continue passported activity post-Brexit (July 2017)

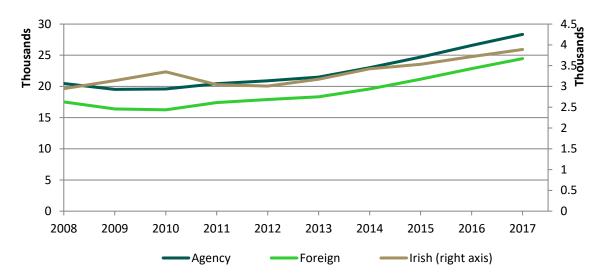
Sector Developments

 Enterprise Ireland's Future of Fintech event (January 2018) brought together more than 100 leaders, collaborators and disruptors from international banking and fintech hubs such as New York, Singapore, Sydney, Toronto and Mumbai

- Enterprise Ireland launched a new €750,000 Competitive Start Fund for Fintech and Deep Tech start-up
 companies that have the capacity to succeed in global markets. The fund is designed to enable recipient
 companies working in areas including fintech, proptech, artificial intelligence, machine learning, augmented
 and virtual reality, the internet of things, blockchain and cloud, to reach key technical and commercial
 milestones (June 2018)
- The European Financial Forum took place at Dublin Castle marking the third year of the Forum bringing together international and Irish financial industry leaders from banking, finance, insurance, regulation, fintech and asset management (January 2018). The fourth European Financial Forum will be held in Dublin Castle on 13th February 2019.
- Shard Capital Partners announced the launch and first closing of the Suir Valley Venture Fund of Suir Valley Funds ICAV ('the Fund'), the first Irish focused venture capital fund in Ireland that uses a regulated fund with a fully regulated Alternative Investment Fund Manager ('AIFM'). The Fund invests in early stage software companies in the Financial Technology ('fintech'), Augmented Reality ('AR'), Virtual Reality ('VR'), and Internet of Things ('IoT') sectors. The Fund's first close has been funded via commitments of up to €20mn from Enterprise Ireland, the Irish Government Agency, and Shard Capital (February 2017)

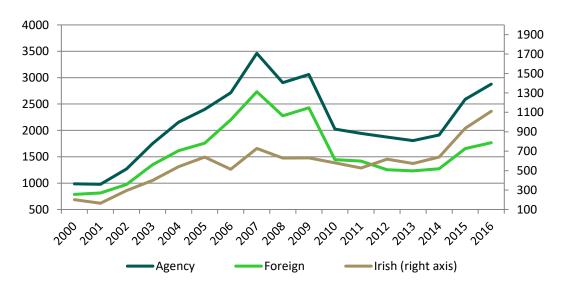
Data Trends





Although some reduction in employment was experienced after the global and national economic downturn, employment has continued to grow over the period from 2006-2017.

2. Exports of Agency-Assisted Companies in the Financial Services Sector (2000-2016) (€ million)



Agency exports experienced sharp growth from the years 2000 to 2007. Following on from the global financial crisis, exports decreased significantly. Irish enterprises have shown signs of recovery during 2014, although some volatility is evident over the period since 2011.

Source: Annual Employment Survey (employment), ABSEI (exports) - various years