

Technology Strategy Board

Driving Innovation



Financial Services

Strategy 2010-2013

EXECUTIVE SUMMARY



Executive summary

The financial services industry plays a vital role both within the UK economy and society as a whole. The industry, particularly the global banking sector, is also currently at a time of crisis, having come perilously close to total collapse in 2007.

This document sets out the broad strategy through which the Technology Strategy Board will support the UK financial services industry in maintaining its globally competitive position and delivering growth at a sustainable level over the longer term.

Financial services are relevant to almost every aspect of societal and economic needs and are vital to the functioning of the economy. The sector also has a key role to play in driving forward innovation across the entire economy, for example, in making risk capital available to underpin new business investments or to evaluate, manage and share risks to mitigate the impact of losses or catastrophes.

Financial services have been a very successful part of the UK economy for decades but today the industry faces two sets of problems.

One set relates to the after-shocks of the financial crisis of 2007-2009, such as establishing the correct regulatory backdrop for the investment and commercial banking sectors.

The other set of problems, however, arises from the very success of the industry, for example in the growing complexity of handling and analysing very high volumes of data in real time.

Accordingly, there is strong support from both business and government for the Technology Strategy Board to play a part in spurring innovation across the industry.

Broadly speaking, this strategy addresses four important sectors of the UK financial services industry:

- banking
- capital markets
- asset management
- insurance/reinsurance.

It specifically excludes certain parts of the financial services industry (such as independent financial advisors or credit unions). Within the strategy, we do not focus on the retail aspects of banking or insurance but rather on the complex and international activities across the industry where the UK has a competitive edge.

Financial services – at a glance

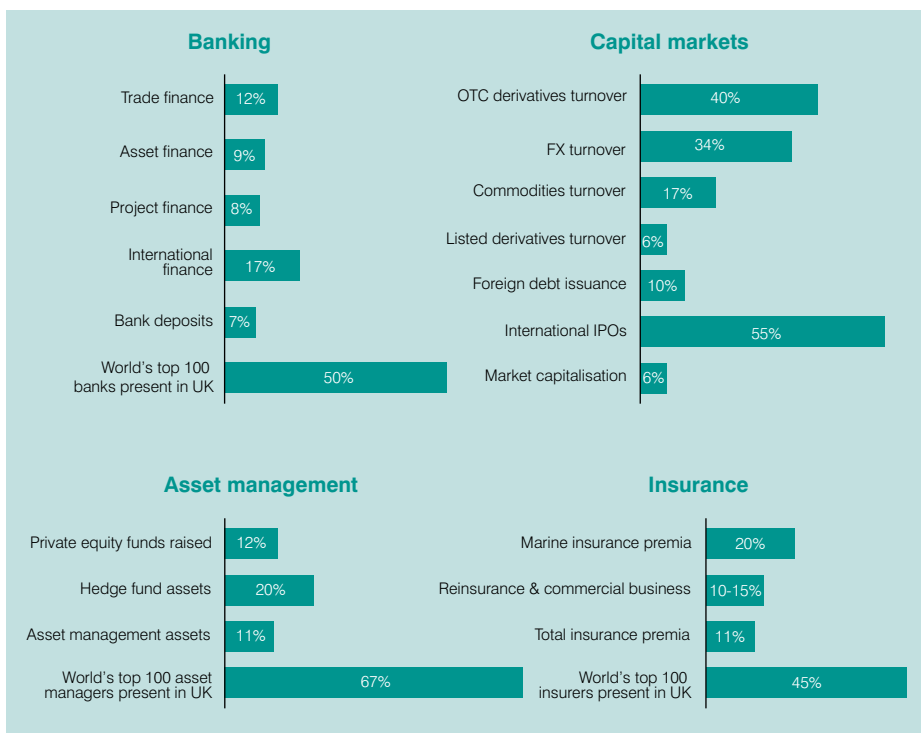
- represents 8.3% of UK GDP
- contributed an estimated £37bn to the UK's GVA in 2007
- directly employed just over one million people in 2009
- despite the recent financial crisis, its net exports grew to £50bn in 2008ⁱ.

The significance of financial services to the UK is further underlined by the sheer scale of Government intervention in the aftermath of the financial crisis, with £61bn in emergency short-term liquidity support made available to two major banks by the Bank of England in the space of a few weeks in October 2008. The National Audit Office (NAO) estimates that the total amount of support for the banking system in the form of loans, guarantees, insurance and capital reached as much as £850bnⁱⁱ.

Looking forward, innovation in financial services must continue to respond to several factors:

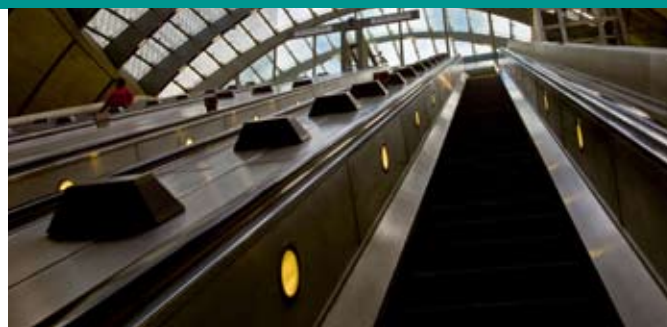
- business demand in the UK and global economy (especially the emerging economies)
- regulatory change following the financial crisis
- growing importance across the sector of high quality, data rich and knowledge-intensive information.

Chart 1: The UK's percentage share of global financial services activity, 2008



Source: The Bischoff report: *UK international financial services – the future*; HMT 2009.

i IFSL: *Economic Contribution of UK Financial Services*, Dec 2009



We will augment these trends by investing to stimulate innovation in certain key aspects of the industry. We will also seek to improve the level and nature of engagement between financial services businesses and the higher education and research sectors similar to that of other industries such as manufacturing.

Our resources will be deployed through three primary channels:

- a Financial Services Knowledge Transfer Network (FS KTN)
- a portfolio of knowledge transfer partnerships
- a programme of targeted interventions including research studies.

The FS KTN is one of a range of knowledge transfer networks, an over-arching national network designed to bring together people from business, universities, research, financial and technology organisations to stimulate innovation through knowledge sharing and exchange.

The knowledge transfer partnerships are a tried and tested method of enabling companies to obtain technology, knowledge or skills through new employee placements on short-term contracts, usually from universities or research organisations.

While one of the early objectives of the FS KTN is to carry out a major exercise of canvassing opinion on the key challenges for the overall sector, a series of discussions has already taken place between business, academia, Government and the Technology Strategy Board.

From these discussions, we have identified a wide variety of drivers ranging from global economic factors that impact on businesses and markets through to events – whether in the lives of individuals or in the form of global catastrophes such as earthquakes or hurricanes – right through to the availability of capital, liquidity and risk appetite in institutions.

Regulatory framework

The regulatory framework is a key driver for the industry and is undergoing significant changes following the Chancellor's announcement in June 2010ⁱⁱ of the abolition of the former 'tri-partite' regime. The Financial Services Authority will cease to exist in its current form and a new Prudential Regulation Authority will operate as a subsidiary of the Bank of England.

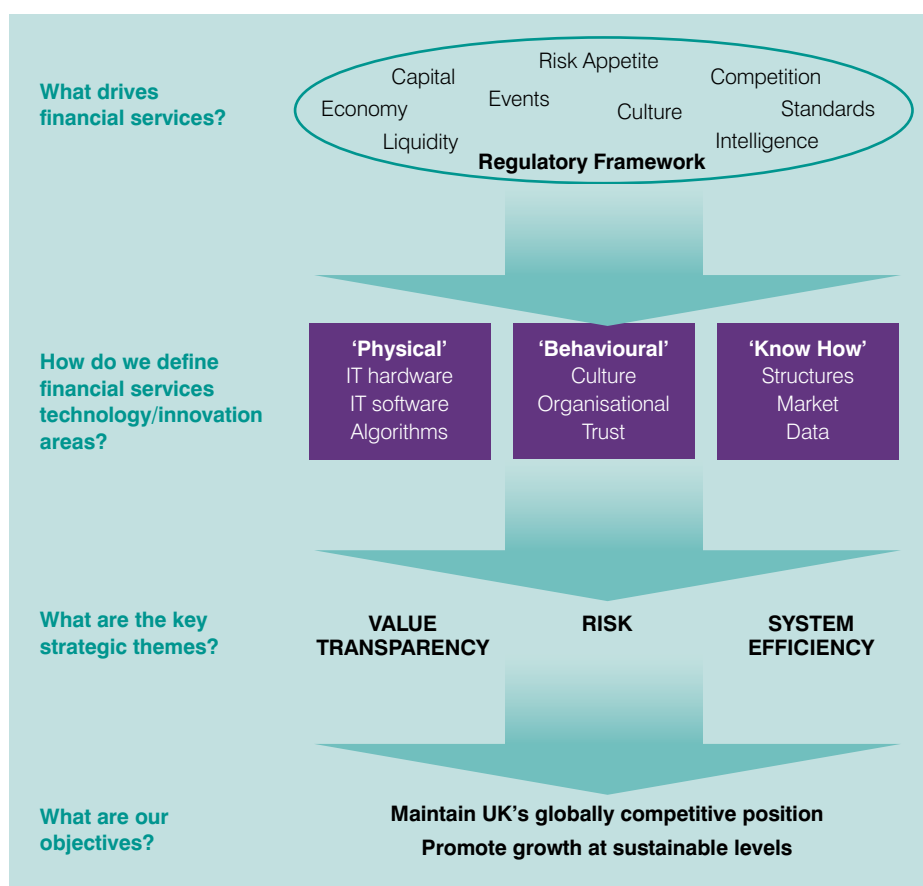
In addition, an independent Financial Policy Committee and a new Consumer Protection and Markets Authority will be created. These changes, which will take place over the next two years, are certain to have a major impact on the industry.

Technology and innovation

We believe that there are three main aspects to technology and innovation that are particularly relevant to this industry:

- the 'hard' aspects of technology such as computing, software and often highly complex algorithms
- the areas of 'know-how', such as data, structures and markets, where we also find many of the innovations on which the industry thrives
- 'behaviour', which includes aspects such as trust in financial services as well as the overall culture of the industry.

Diagram 1: Our strategic approach to financial services



ii NAO: *Maintaining Financial Stability Across the UK's Banking System* HC91, December 2009

Strategic themes

From these three areas of technology and innovation, we have highlighted three specific strategic themes which the Technology Strategy Board will help businesses to address:

- **Risk** – working with businesses and academics to improve industry capabilities in recognising, understanding and managing all kinds of risks
- **Value transparency** – without a proper understanding of what things are worth, there can be no trust in markets
- **System efficiency** – ensuring that the industry can meet customer needs at an appropriate cost level, using the right technologies and employing people with the right skills.

The Technology Strategy Board will:

- establish the Financial Services Knowledge Transfer Network within the industry
- focus on banking, capital markets, asset management and insurance
- facilitate knowledge transfer and sharing in the key strategic areas of risk, value transparency and system efficiency
- work with regulators, business and academia to align activities and generate critical mass for impact in these strategic areas
- scan for emerging opportunities and identify potential transformational technology/innovation areas that, through targeted interventions, can help in maintaining the globally competitive positions of the UK financial services industry and deliver sustainable growth.

The timescale of these actions will vary. While some of our activities will aim to deliver within a very short period, to match the expectations of parts of the industry, others will have a longer-term focus with outcomes expected within the next five years. Many of the activities may be carried out in London, but we will also be active in other locations, for example Edinburgh and Leeds, which have developed as centres of excellence with world-class capabilities.

The FS KTN will also collaborate with many of the other knowledge transfer networks, including, for example, the Industrial Mathematics, the Energy Generation & Supply, the Information & Communications Technology and the Nanotechnology KTNs.

To implement the strategy we will work with:

- the business community (including both financial institutions and other businesses involved in the sector as suppliers or customers)
- universities
- trade and professional bodies
- regulators (including the Bank of England, the new Prudential Regulation Authority, the new Consumer Protection and Markets Authority and HM Treasury)
- the research councils
- regionally based innovation organisations and the devolved administrations
- the Department for Business, Innovation and Skills
- the City of London and UK Trade and Investment.

This is a summary of the Technology Strategy Board's *Financial Services Strategy*. For the full document, see www.innovateuk.org.

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