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BIG INNOVATION CENTRE

Policy Proposition Think Piece
Intangible Asset Reporting and an Intangible Assets Charter

The Intangible Gold Project - Building Britain's Intangible Infrastructure

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Launched in September 2011, Big Innovation Centre is a hub of innovative companies and organisations, thought leaders, universities and 'what works' open innovators. Together we test and realise our commercial and public-purpose ideas to promote company and national innovative capabilities in a non-competitive and neutral environment. We act as catalysts in co-shaping innovation and business model strategies that are both practical and intellectually grounded. Our vision is to help make the UK a Global Open Innovation and Investment Hub by 2025, and to build similar initiatives internationally.

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Executive Summary

Intangible Asset Reporting and an Intangible Assets Charter

The intangible economy – the universe encompassed by the revolution in technological advances, data, digitalisation, intellectual property and sophisticated services – is now the driving force of economic development. We recommend the establishment of an Intangible Asset Charter that sets out the rules, norms and protocols across the totality of Britain's intangible infrastructure, better to take advantage of the enormous opportunities from intangibles. This Charter would be a global first.

One dimension would focus on reporting ranging from more systematic corporate reporting on intangibles[1], revolutionised data collection, and changes to national income accounting including new measures of productivity.

The **second dimension** would be operational, focusing on the creation of better-functioning markets in Intellectual Property, enabling measures to underwrite better and secure finance for intangible investment, and revising the basis of corporate taxation.

In both dimensions we discuss the proposed **new rules, norms and standards** that would be needed to develop and Intangible Asset Reporting enabling environment. The seven areas where this new framework should be developed are described below:

Dimension One

1) Company Intangible Asset Reporting

No framework currently exists for company boards consistently to measure, manage and communicate the value they create from intangibles across stakeholder groups over the long term and relate this value to shareholders and other stakeholders in a compelling way. Reform demands that the varying accountancy practitioners and industry associations are brought together to work on an operationally feasible template; this will need to be closely based on the OECD's initiative on categorising classes and types of intangibles as the best means to find both national and international agreement. This task would necessarily fall to the Financial Reporting Council as the best placed to assume this convening role.

[1] Also requested in ''Reporting for Purpose'', the Policy Report of the Purposeful Company project (February 2017), Big Innovation Centre, London

The five reporting frameworks[2] which need to be brought together are:

1. **Statutory Company Reporting** (accounting standards and taxation)
2. **Economic reporting** (national economic bodies, such as the Office for National Statistics applying economic reporting to productivity measures)
3. **Intellectual Capital Reporting** (company approaches)
4. **Management Reporting** (management consultancies and business school approach)
5. **Corporate Social Responsibility Reporting** (CSR)

2) Data Collection to Fix the Foundation of the Intangible Economy

Public data collection of intangibles must be radically improved. UK based companies should be required annually to report on their intangible assets both to Companies House and the Office for National Statistics, to upgrade the knowledge of the stock and growth of intangibles drastically. Already BEIS has access to substantial and growing data about the UK's innovative capabilities through the local Science and Innovation Audits. As this evidence base accumulates, the invitation is to go further and ''crowd in'' all the data gathered by innovation monitoring organisations, integrate the results and publically publish them in a regularly updated national annual innovation audit. This task could be assigned to Innovate UK as best placed to give a rigorous, respected independent assessment.

3) Productivity Measurements to Build an Innovation-friendly and Sustainable Economy

A Productivity Commission under the HM Treasury should be established with sufficient funding to commission trial testing on how the deployment of intangibles boosts productivity. Its focus should be relentlessly empirical, piloting and running use-cases with a number of organisations using differing approaches.

Dimension Two

4) The introduction of a 'Data Charter'

A Data Charter should be launched, incorporating the EU Data Protection legislation which

[2] For details of the five reporting frameworks, see "Intangible Asset Reporting - Defining Britain's Real Treasures", published Big Innovation Centre, April 2017. (The interim version of this report was discussed at the Intangible Gold Round table held at the Bank of England, 13 December 2016)

might otherwise lapse post-Brexit, built on the presumption that data is owned by those who generate it. It should codify what can be done with personal and business data, so that everyone will know how their information is used, both to increase trust and create incentives to allow the sharing of data. The Data Charter will set out the principles for governance to ensure compliance and the process for redress along with a schedule of fines and penalties for any abuse. Setting these principles would mean a shift from policies around controlling the data itself to addressing how the data is governed and used. It would also involve changing policies from ownership rights to user rights (we are all part of a shared community creating joint value) and creating regulations and protocols on how the data is used.

The effectiveness of data use is that as far as possible data should represent the universe from which it is drawn, and there should be as few opt-outs as possible. Thus the Data Charter should be enabling: the aim is to produce agreed trusted and robust protocols, along with agreed processes for the address of grievances and complaints. 'Fair use' of personal and business data (if you are not competing with the owners of the data or harming their ability to monetise it) will create a free space to innovate by supporting entrepreneurship from the data revolution. It will unlock UK's competitive edge in a growing digital, and an artificial intelligence enabled economy.

The Charter will be mandatory for all and will contain different provisions for individuals and companies to retain the right of opt out if they choose - an 'Opted-In Unless You Opt Out' clause. In this vein, everyone is part of the digital data sharing economy from birth.

5) Markets for IP: Make the UK the Global Hub for Intellectual Property Trade and IP Exchange.

At present Intellectual Property (IP) is valued by specialist IP agencies and practitioners, throwing up individualised, subjective valuations that do not allow for comparison or independent validation. Until this is solved, stakeholders will be unable to assess and trust intangible valuations. What is needed is the same transparency offered by tangible assets markets. We propose that the government (under the direction of BEIS) should pilot new markets for the trading of IP so that companies and universities alike can actively trade and can better benchmark their IP inventory. Mark-to-market valuations of IP can be created and make Intangible Asset Reporting more objective and trusted. Another core rationale for piloting IP trading platform is to enable the buying and selling of IP at greater speed and lower costs than before and so reducing transaction costs. Market failures in technology markets can be significantly reduced through the piloting of more automated and standardised transaction methods. Policy options include:

- The government could require notification of all transactions in IP and intangible assets more widely, which could be published on an anonymised basis to give indications of their value and volume.
- The London Stock Exchange, working with Innovate UK, could contribute to this by

including IP assets from all existing IP exchanges (copyright, patents, technology, know-how, trademarks, designs, etc.) on one digital platform. Likewise, the government could also support the commercialisation of the output of the UK's science and innovation base by requiring universities to list publicly funded IP on the platform.

- The UK 's publicly funded innovation grants, loans or equity should be captured and listed (in private 'online walled gardens' or open for disclosure) on IP Exchanges for IP inventory management systems.

- The UK Government should build on these initiatives by publicly setting the target of making the UK a world leader in novel IP services, - IP trade, IP valuation, IP insurance, IP analytics. To assist their development government institutions (such as UKRI and UK Universities) should become a user of such private services and encourage online clusters and IP communities in frontier technologies.

- This process should be facilitated by building a global IP Exchange to help make the UK a world leader in innovative IP services, building for example on the prototype, developed by Big Innovation Centre, www.IPExchange.global (Full Disclosure: Big Innovation Centre is a majority shareholder).

6) Securitization and Underwriting of IP in Finance to scale UK Enterprise

Improved IP valuation will open up new possibilities for IP services, in particular, the insuring and underwriting of IP. The government should create a public IP underwriting system, badging key financial products as enjoying public underwriting of part of their estimated valuation. This system would offer more confidence to finance providers that IP could be used as financial collateral, which would additionally help plug the financing gap many IP-intensive businesses suffer. It is likely that the development and administration of the scheme will involve both the British Business Bank and Innovate UK.

7) Rules, Norms and Standards in International Tax Practice to Mobilise Resources and Enforce Corporate Social Responsibility

The growth of the intangible economy has opened up opportunities to erode the corporate tax base – so-called base erosion and profits shifting (BEPS). The misallocation of profits on intangibles has been a considerable source of BEPS, and which the OECD addressed in its 2016 BEPS initiative. HMRG will have a considerable interest in wanting to see that intangible reporting will be consistent with the BEPS principles and international conventions to ensure compliance – and reduce the chance of further opportunities for tax avoidance.

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Intangible Asset Charter:
The Rules, Norms and Routines building Britain's Intangible Infrastructure

There is a new economy of fast, knowledge-based capitalism. Investment in intangibles ranging from digital information and business processes to intellectual property rights and digitally enabled networks is running at nearly twice the rate of investment in the tangibles of machines and factories. Intangibles are now driving business performance, the organisation of work and competitiveness.

Lack of knowledge of intangibles and their impact on product quality, business processes and general economic dynamism is pervasive in British business. Reported productivity and business performance measures are at best not embracing this new economy, at worst they are close to crisis.

The situation is aggravated by companies' inadequate reporting of their intangible assets – what they are, the difference they make, and what they are worth. Intangibles are of particular importance in both underpinning and driving forward purposeful companies. Yet, companies report systematically on the more easily identified tangible assets and inadequately on intangibles. There is growing agreement that traditional accounting methodologies, largely unchanged in their core principles since the industrial revolution and post-war assembly line paradigm, are no longer fit for purpose. **There is an urgent need to create a better reporting template for intangibles.**

Improved reporting of intangibles, and intellectual property (IP) in particular, is needed not just for better business valuations and risk management. It also extends into the core of current business processes such as assessing the collateral of IP for a loan or equity deal and the commercial prospects for early stage R&D. It would also expand to the prioritisation of research, technology transfer negotiations and IP co-ventures or even the degree to which IP is commercially tradable. Banks do not lend against an asset they cannot value. Unlike property as real estate, there is no reliable market price for intangible assets – nor even a well-functioning market.

Intangible asset reporting and valuation are no less relevant for SMEs. Intellectual capital is encapsulated in the companies' innovative capability, strategic networks, product and service competitiveness, strategic positioning, and financial strength. This information needs to be systematically collected, better imparted and deployed more effectively. Purpose is part of a paradigm in which intangibles are systematically neglected or undervalued.

We recommend a systemic approach to addressing these shortcomings. The most effective means would be the establishment of an Intangible Asset Charter that sets out the rules norms and routines of Britain's intangible infrastructure, better to take

advantage of the enormous opportunities from our intangible economy. This Charter would be a global first, signalling our national intent.

One dimension would focus on reporting ranging from more systematic corporate reporting on intangibles, revolutionised data collection, and changes to national income accounting including new measures of productivity**.**

The **second dimension** would be operational, focusing on a national Data Charter on how personal and business data can be used, measures to better underwrite and secure finance for intangible investment, the creation of better-functioning markets in Intellectual Property, and revising the basis of corporate taxation.

See Figure 1 below

The government has indicated that it is aiming to lift infrastructure spending as a pillar in its new Industrial Strategy. Nonetheless, another core objective of Industrial Policy over the next five years should be to unlock the value of intangible assets so they can be the cornerstone of the 21st-century economy – and the charter is the best means to secure that end.

In particular, the UK government has budgeted to create a £23bn National Productivity Investment Fund (Autumn Statement 2016). We urge the creation of a Productivity Commission to explore ways in which it might develop the Intangible Asset Charter as part of its response to the productivity challenge.

Figure 1. The Intangible Asset Charter

The response:
Radically to improve corporate reporting on intangibles, revolutionary approach to data collection and data ownership, and overhaul national income accounting better to foreground intangibles.

Operationally:
Focus on measures better to unlock the use of personal and business data, underwrite and secure finance for intangible investment, create better-functioning markets in Intellectual Property, and revise the basis of corporate taxation.

Dimension 1- Reporting

1. Company Intangible Asset Reporting: Identify and Measure Britain's Real Treasures

No framework currently exists for company boards consistently to measure, manage and communicate the value they create from intangibles across stakeholder groups over the long term in a compelling way.

If firms disclosed a more rounded set of performance data stakeholders would be better able to accurately assess whether companies are making the right long-term investments to build organisational capabilities and to maintain competitive advantage; value their future worth; and understand the full range of risks to which they are exposed. Intangible Asset Reporting frameworks will also allow managers within companies to be better informed on their decisions and to compare the effect of corporate strategies across the international intangible asset landscape. And it will allow the enforcement of international rules in transfer pricing and recover of taxation (as addressed in a later Section 7 of this Charter).

Reform demands that the varying accountancy practitioners, industry associations and UK's public reporting agencies are brought together to work on an operationally feasible template; this will need to be closely connected with OECD's Common Reporting Standard initiative on categorising classes and types of intangibles as the best means to find both national and international agreement. We identify five Intangible Assets Reporting frameworks developed for different purposes [3] and which need to be brought together:

1. **Statutory Company Reporting** (accounting standards and taxation)
2. **Economic Reporting** (national economic bodies, such as the Office for National Statistics applying economic reporting to productivity measures)
3. **Intellectual Capital Reporting** (company approaches)
4. **Management Reporting** (management consultancies and business school approach)
5. **Corporate Social Responsibility Reporting** (CSR)

[3] For details of the five reporting frameworks, see "Intangible Asset Reporting - Defining Britain's Real Treasures", published Big Innovation Centre, April 2017. The interim version of the reporting frameworks outlined in the report was discussed at the Intangible Gold Round table held at the Bank of England, 13 December 2016.

One operationally feasible reporting template will increase the scope of each reporting framework, reduce duplication and hence transaction costs of reporting practices. It will also identify gaps in Intangible Assets Reporting, and from which sources data can be obtained.

The Big Innovation Centre will pilot potential solutions related to purposeful corporate reporting (connected with the next work phase of the Purposeful Company project). And we believe that it will necessarily fall to the Financial Reporting Council as the best place to assume a convening role and build on Big Innovation Centre's work and other efforts in this area.

Company Intangible Asset Reporting:

Policy Mechanics

Companies must be mandated annually to report their intangible assets both to Companies House and the Office for National Statistics.

The Intangible Gold Project's definition of Intangible Assets is a mixture of three criteria which we believe that it can satisfy all stakeholders. An intangible within a company is an asset if it:

- Creates financial and/or non-financial benefits (such as increased productivity, innovation, purpose, revenue, etc.);
- Can be traded in the marketplace; and/or
- Can be controlled by any stakeholder internal or external to the organisation.

We suggest that these three criteria should form the basis for the prototyping of an Intangible Asset Reporting scheme and data analytics tools for practical use by stakeholders. Importantly the resulting definition, using these criteria, is both consistent with the OECD categorisation and works in operational terms very effectively.

That is, to co-develop global standards for our internationally operating companies, the reporting regime should take as its starting point the OECD framework or definition of intangibles as digital information, innovative property and corporate economic competencies. The proposed new annual reporting structure will thus include an account of the investment in and stewardship of software, IT systems and databases under the OECD category of digital information. Under the category 'innovative property' it will include scientific and non-scientific R&D, creative and inventive activities, and formal Intellectual Property. Economic competencies will include firm-specific human capital (including the value of training) business process

investments and networks.[4]

Recommendation: The Financial Reporting Council (FRC) should convene the varying stakeholders and develop a template based on OECD standards – which is most likely to find international acceptance.

We urge the British Standards Institution to co-develop this approach. This template will build on and complement international efforts to create a Common Reporting Standard, incorporating better intangible reporting. It will also work with the grain of the BEPS (Base Erosion and Profit Shifting) initiative by the OECD (see Section 7), seeking to close down the estimated USD $100-$240 bn of global lost tax in particular by moving intangible assets into low tax jurisdictions[5]. To be operational, this will require an operational definition of intangibles, as proposed above.

Rationale

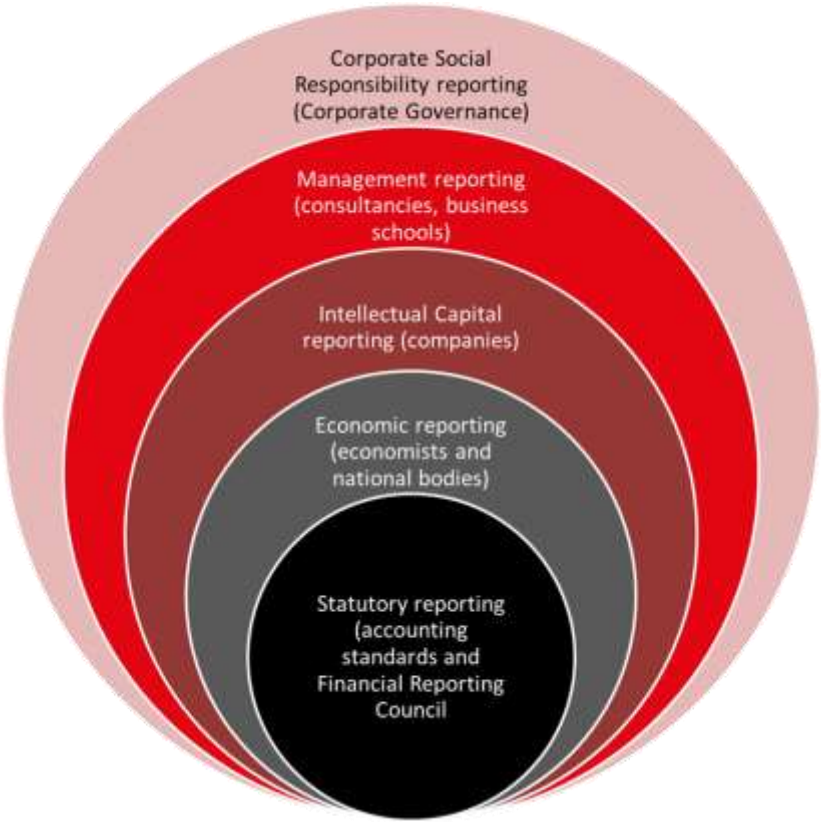
Intangible assets have become the most significant driver of economic growth and business models alike, but because of the intangible nature of these assets, and the fact that they are mostly off-balance sheet, they are difficult to identify, measure and value. Evidence is assembled by Big Innovation Centre's Purposeful Company Interim Report[6], which shows that the capital markets systematically undervalue intangibles.

There are five different 'layers' of reporting that a company may have to consider in respect of its assets contributors (for a detailed overview, see 'Intangible Asset Reporting - Defining Britain's Real Treasures', published Big Innovation Centre, April 2017)

These five reporting frameworks are not mutually exclusive; rather they should be viewed as different perspectives on similar assets (or similar economic and business variables) where the chosen one is the one that best meets the needs of the user. The types of frameworks covered and the nature of the data obtained (whether investment or expenditure or other) is listed in **bold** in the Table below:

[4] Big Innovation Centre aims to develop potential templates and pilots building upon the Economic Reporting approach to intangible asset classification which offers the most systematic, encompassing framework for intangible reporting to which the other methodologies can contribute. Nonetheless, we support and advocate an initiative to find a common approach to the measurement of intangibles.
[5] OECD G20 BEPS Explanatory Statement 2015
[6] The Purposeful Company Interim Report (May 2016), Big Innovation Centre, London

Figure 2. Layers of corporate reporting



Reporting	Description	Data Focus
Statutory Reporting	Accounting standards, taxation, and Financial Reporting Council IAS 38	Intangibles which: • Can be **separated** from other assets • Can be **controlled** or traded in the market • Can have future **economic benefits**
Economic Reporting	National economic bodies measuring productivity	**Investments**
Intellectual Capital Reporting	Company approaches	Intangible **contributions** to the firm's performance
Management Reporting	Management consultancies & business schools' approach	Operating **expenditures** related to how the company intends to achieve its strategy
Corporate Social Responsibility Reporting (CSR)	Corporate governance	Intangible **behaviour** affecting societal issues beyond the firm

Since all five reporting schemes are devised to serve their own particular ends, none of these approaches provides a comprehensive overview of the drivers of company performance and value that can aid management decision making or external stakeholder assessment. Integrated Reporting arguably intends to provide a framework within which companies may choose to operate, rather than a clear set of definitions.

To these layers may now be added a further dimension of complexity in transfer pricing, courtesy of OECD's recently introduced guidelines to tackle Base Erosion and Profit Shifting (BEPS). These, too, do not provide certainty regarding the assets that should be considered in each case.

It is important to accept the multiple definitions of intangibles and develop a workable commonly accepted synthesis or standard of how they can best be defined and measured in order better to analyse and understand them in various applications.

Evidence

Since the earliest days of discussion on Intellectual Capital and Intangible Assets, there have been proposals as to how firms should report and value them for operating management, boards of Directors, national financial authorities (HMRC in the UK) and investors (both public and private).

The five reporting frameworks use different definitions of intangible assets, and these are described as:

Statutory Reporting. This definition of intangible assets is the narrowest and refers to those assets which can be separated out from other assets and purchased or sold on the open market. This definition is the one used by the Financial Reporting Council (FRC) which sets the reporting regulations for UK listed firms. It includes software applications and databases, patents, copyrights and trademarks but excludes most forms of Research and Development.

Economic Reporting. Economists use a broader definition which includes all intangible asset investments, which deliver a return beyond the current financial year. They include all the statutory assets cited above including data and ICT, but also innovative property plus Research and Development and economic competencies', which include investment in business model, networks and skills. The OECD developed this broader definition.

Intellectual Capital Reporting. This definition is broader still because it includes people and their contributions to the performance of the firm. Human, social and relationship capital are added to the list of 'intangible' assets even though these are not includable in any formal accounting definition.

Management Reporting. This definition is focused more on the strategy of the firm and how it intends to achieve its managerial objectives. As such it is more encompassing and extensive than the other definitions because it includes all types of assets (both tangible and intangible) and operating expenditure, exemplified by the 'balanced scorecard' approach to capturing all elements that contribute to company performance. This is part of a growing interest in better understanding how a company's strategy contributes to performance.

Corporate Social Responsibility (CSR) Reporting. This reporting scheme uses the broadest definition of all and goes well beyond management reporting. Firms have felt the need to respond to challenges to their licence to operate because of the environmental consequences of their behaviour, in particular on their contribution to climate change and decarbonisation, and their impact on employment and wider society.

Current State

There are many competing classification schemes being developed. EY, for example, is developing the six capitals approach, based upon the Corporate Responsibility Index [7] (financial, manufactured, intellectual, human, social and relationships and natural). The OECD has its own (see above). KPMG is developing a propriety intangible asset management tool, and newer IP consultancy firms as Ingott undertake bespoke IP asset valuations.

In addition, varying government agencies have particular classifications. For example, the EU and Office for National Statistics (ONS) have adopted the KLEMS approach (Capital, Labour, Energy and Material Services), the Bank of England has developed a classification scheme for their annual business survey, and the Community Innovation Survey (CIS) of the EU has developed another scheme. On top, there are varying approaches adopted by asset managers, academics and individual companies.

Furthermore, most of the above approaches simply aggregate intangible investment or quantify such assets (to the extent they can be quantified) in broad categories and do not go further in identifying particular intangibles or evaluate the difference they make in driving the company's business model or operations.

There urgently needs to be a coherent overview and sense-making to get agreement on which intangible assets to include or omit as productive assets, how they are measured and how the resulting metrics can be used to illuminate business decision-making. The Intangible Gold Project of Big Innovation Centre provides sets

[7] Business in the Community (2016) Corporate Responsibility Index, London, UK

out the issues in a publication on Intangible Asset Reporting[8]

Stakeholders ONS, Bank of England and HM Treasury, leading accountancy firms and accounting bodies, asset managers, intangible-rich companies

[8] For details of the five reporting frameworks, see "Intangible Asset Reporting - Defining Britain's Real Treasures", published Big Innovation Centre, April 2017. The interim version of the reporting frameworks outlined in the report was discussed at the Intangible Gold Round table held at the Bank of England, 13 December 2016.

2. Data Collection: Create Britain a Modern Data Infrastructure

Better company reporting of intangibles is only the first step. The wider aim is to create an ambitious and trusted UK data infrastructure, which supports the growth of the intangible economy and ever-growing information society to benefit the private and public sector alike. This ideal scenario would mean the integration of public and private data collection sources on one platform or information system, an upgraded focus on intangible asset data, and a direct link with stakeholder purpose.

Data Collection

Policy Mechanics

To remedy current deficiencies, and building on improved company reporting of intangibles, the appropriate public agencies should collect comprehensive intangible asset data at the most detailed organisational level possible and from all sizes of enterprise in both the public and private sectors.

Britain needs a common digital platform or shared information system to be created in which intangible asset data are reported by companies (using an agreed common framework and common definitions). In this way, different stakeholders would use these data for various purposes, for instance, for the strategic management of the companies themselves, accounting for tax purposes, productivity measurement purposes, or for intellectual capital research, as defined in Figure 2 above. For this, Big Innovation Centre will be piloting 'diagnostic tools' aimed at assisting companies and stakeholders in recognising intangibles as assets, quantifying their received investments, understanding their financial and non-financial returns, and meeting their various reporting obligations.

The focus should be on interactivity, usefulness and innovation:

- The standards of corporate reporting and national productivity reporting must be good enough to be usable by corporate boards and corporate managers to make decisions on how best to improve performance. The standards shall also speak to the rationales of the five key reporting frameworks outlined in Section 1 above.

- Corporate reporting and national productivity reporting must be salient enough to support the decision making of investors and policy makers in respect of tangible and intangible infrastructural investments.

- Productivity-growth measures must be purposeful and 'innovation-friendly' and with a focus on building sustainable businesses and societies at all levels.

Recommendation: The Office for National Statistics and Companies House should extend and broaden their efforts to collect intangible asset data, including 'crowding in' data from external data collectors. The Department for Business, Energy and Industrial Strategy (BEIS) has access to substantial and growing data about the UK's innovative capabilities through the local Science and Innovation Audits. As this evidence base accumulates, the invitation is to go further and 'crowd in' all innovation monitoring organisations, and publish the results in a regularly updated national Annual Innovation Audit. This task could be assigned to Innovate UK as best placed to give a rigorous, respected independent assessment.
Innovate UK, or whoever is charged with this work, could exploit existing capabilities to build the audit so that:

- **Design Council could use its data sources to monitor and audit UK's design innovation.**
- **The Intellectual Property Office (IPO) could similarly oversee and examine UK's intellectual property.**
- **The ONS could monitor and audit the UK's innovation related productivity growth.**
- **Big Innovation Centre could monitor and analyse: a) the industry system and innovation capability of the private sector and the regions and b) the entrepreneurial finance ecosystem, and UK's science, technology, R&D and entrepreneurship base.**

Policy Rationale

To create an ambitious and trusted UK data infrastructure and to integrate public and private data collection sources on one platform, complied with an upgraded focus on intangible asset data, and direct link with stakeholder use.

Evidence

There is currently a lack of data input to the Office for National Statistics, Companies House, Treasury, and Bank of England beyond that supplied by large multinationals. Data collected from SMEs and Public Sector organisations is missing or incomplete, and the design of collection structures are not fit for purpose and does not capture the intangible elements of the business and economic landscape.

Current State

At present most data is collected at an aggregate level to make meaningful micro decisions in both the private and public sector. What we are proposing builds on the direction of travel already commended, for example, by Sir Charles Bean's independent review of government statistics. In its interim

report, of its eight recommended actions, five are supported by our proposed policy mechanism above:

- ***Action 3****: Improve user access to microdata;*
- ***Action 4****: Remove obstacles to the greater use of public sector administrative data for statistical purposes.*
- ***Action 5****: Exploit new methods of collecting data and explore the scope for using information gathered by private sector entities in the production of economic statistics;*
- ***Action 6****: Enhance the capacity of ONS systems and staff to develop and maintain the capability to exploit these new sources of data in the production of economic statistics.*
- ***Action 8****: Make more use of one-off studies – including drawing on new data sources – to investigate emerging measurement issues, collaborating with expert users in business, government and academia wherever appropriate – including through the use of institutional partnerships and fixed-term secondments into ONS.*

Stakeholders

Office for National Statistics, Bank of England, HM Treasury, firms, asset managers

3. Productivity Measurements: Build an Innovation-friendly, Purposeful and Sustainable Economy

Poor UK productivity needs addressing. Linking productivity targets and productivity measurement solutions to issues of purposefulness and the intangible economy are likely to uncover options beyond those usually canvassed.

A 21st-century productivity framework should capture the performance of knowledge-based services, new forms of manufacturing, and the digital economy including the effect of new forms of work, automation, smart devices, robotics and artificial intelligence. The conceptual, theoretical and measurement frameworks developed for a physical paradigm and past industrial revolution need re-addressing.

Productivity Measurements

Policy Mechanics

Britain needs a 21st-century productivity framework:

- Delivering productivity measures that are purposeful and useful: Official productivity methodologies and targets should also be about long-term value creation for business and society and not merely measures of short-term efficiency in resource exploitation. Metrics must be useful for business and not merely developed to inform macroeconomic policy.

- Using efficiency and performance measures that better capture intangible inputs as well as the sophistication and quality of outputs (not just quantities) to reflect 21st-century multi-factor productivity realities (see 'Evidence' section below).

- Measuring better the impact of skills on labour productivity: Labour productivity measures must be about building long-term sustainable labour markets, which simultaneously drive skills investment and demand, because we cannot, and should not, only compete on the basis of short-term austerity measures defining wage policies.

Recommendation: A Productivity Commission under the HM Treasury should be established (building upon the £23bn Productivity Investment Fund announced in the Autumn Statement 2016) with sufficient funding to commission trial testing and experimenting to pilot and run use-cases, in particular relating to intangibles. At this early stage, the government should not be one-directional, pooling all resources into one selected group or approach, but rather be open to as wide an array of possibilities and expertise as possible.

Rationale

Poor UK productivity measures can partly be explained due to blunt and outdated economic tools. Measures of productivity need to reflect performance and economic production relationships or systems in the new 21st century intangible economy.

Evidence

The UK has a productivity problem – we are 20% less productive than our main European competitors and 40% less than the USA[9]. With respect to labour productivity, output per hour in the UK was 18 percentage points below the average for the rest of the major G7 advanced economies in 2014, the widest productivity gap since comparable estimates began in 1991. On an output per worker basis, UK productivity was 19 percentage points below the average for the rest of the G7 in 2014. We also compare very unfavourably with the USA and France where we are 36% lower.

The former austerity-based framework of policy has not created a long-term value generating economy. Low-paid work, temporary jobs and more insecure earning power do not increase long-term productivity. Indeed, the International Labour Organization (ILO)' data show that productivity is lower under those circumstances, which may partly explain some of the productivity gap for the UK. Also, lower household incomes are unable to stimulate demand and growth.

However, it may be that the figures are distorted by failing adequately to capture the impact of the new intangible economy on productivity measurements – and thus help to understand what is happening and why.

Current State

Productivity measures used by national income accounting focus on quantities produced and physical measures such as machinery, buildings and hours worked. The dimensions of quality, sustainability and service generated by intangibles are not captured even though they are vital to successful company investment and government policy alike. Productivity measures are outdated, fitting better to the post-war industrial economy than today's knowledge-based digital economy.

For instance, today, energy services are meant to improve sustainability but productivity is still measured by how much energy is physically sold. So while energy providers invest in high-tech, supplier networks and manu-services that help consumers save energy, productivity is still measured by the quantity of energy delivered. Energy firms want to help consumers economise on their

[9] Office for National Statistics: International comparisons of UK productivity (ICP), 2015

bills, but the more successful they are, the slower the growth in sales of electricity and gas. Consequently, the productivity growth as conventionally measured would be slower. Similarly for financial services. Productivity measures should not be grounded in the number or size of transactions (loans and cash accounts), but how well the banks manage people's finances or that of the economy. Productivity, in short, needs rethinking.

Energy, health, transport, finance and retail are five major sectors where consumers are expecting improved quality and sustainability as opposed to more quantity. Most contemporary value added work is the deployment of intellectual capital in production, services and manu-services: here people do not produce more 'stuff', but increase its quality. Due to the lack of integration of the new 21st century features into standard productivity and performance measures, the government cannot properly plan its budget, infrastructure investment, tax levels, public expenditure for research, education, skills and social issues. It would also have difficulty in deciding the sectors and technologies around which to develop support strategies. Business leaders cannot even themselves set sound strategies for their investment and performance efficiency challenges.

Stakeholders

HM Treasury; Bank of England, Office for National Statistics, British business at large

Dimension 2 – Operational proposals to Support Growth of Intangibles, Stakeholder Value and Purposefulness

By reinforcing the accuracy of intangible reporting, the following three clusters of ideas seek to create institutions and processes that more actively support the growth of the intangible economy. They are part of the infrastructure supporting long-term value generating purposeful companies.

4. Data Use: A 'Data Charter' to unlock the potential of Big Data, Artificial Intelligence and the Digital Economy

Digital entrepreneurship and the intangible economy, including the establishment of national reporting frameworks, would be greatly strengthened by the creation of a Data Charter assuring all owners of data that their rights over their data are to be respected – thus freeing up its flow.

A Data Charter on how personal and business data can be used is a critical step to unlocking the next industrial revolution. IP and big data policy must shift from ownership rights and data protection issues to *governing the uses* of IP and data.

A Data Charter unlocking personal data

Policy Mechanics

We need a 'privacy commons' for business and society and a 'charter' on the uses of with personal and business data. The greatest opportunities from ideas and 'big data' require links across organisational boundaries. The data and IP rights regime needs to be reframed to foster the open innovation and sharing revolution, encouraging citizens, companies, universities and government to open up to each other and to co-create new technologies and business models.

We propose the creation of a Data Charter which would be built on the presumption that data is owned by those who generate it. It will be a first mover for Europe. Although it will be more liberal in nature (based on user rights as opposed to merely protection), we should aim for it to actively connect with and feed into EU Data Protection legislation, to the best of our ability post-Brexit.

It should codify what can be done with personal and business data, so that everyone will know how their data is used, both to increase trust and create

incentives to allow the sharing of data. The Charter will set out the principles for governance to ensure compliance and the process for redress along with a schedule of fines and penalties for any abuse. It complements our proposals on Company Law and Reporting set out in Big Innovation Centre Purposeful Company Policy Report[10], and aims to generate trust in the digital age. However, the effectiveness of data use is that as far as possible data should represent the universe from which it is drawn, and there should be as few opt-outs as possible.

Thus the data charter should be enabling: the aim is to produce agreed trusted and robust protocols, along with agreed processes for the address of grievances and complaints. 'Fair use' of personal and business data (if you are not competing with the owners of the data or harming their ability to monetise it) will create a free space to innovate by supporting entrepreneurship from the data revolution. This will unlock UK's competitive edge in a growing digital and artificial intelligence enabled economy.

The Charter will be mandatory for all and will contain a provision for individuals and companies to retain the right of opt out if they. In this vein, everyone is part of the digital data sharing economy from birth. The government is recommended to include it, along with our recommendations below, as part of an Intangible Assets Charter in order both to raise the visibility of intangibles and the interconnectedness of the different proposals.

Recommendation: Introduce a 'Data Charter' on the uses of personal and business data, including a 'Fair Use' and an 'Opt In Unless You Opt Out' approach to data disclosure:

- **By introducing a 'Data Charter' on what can be done with personal and business data, everyone will know how their data is used, which in turn increases trust and creates incentives to allow data to be shared. This Charter would mean a shift from policies around controlling the data itself to how the data is governed.**

- **The Data Charter should be used as a reference for Ethics Boards in companies as well as consumer watchdogs dealing with data issues. As a first for Europe, the Data Charter should actively send proposals to the European Union to advance into**

[10] Purposeful Company Policy Report (February 2017), Big Innovation Centre, London

EU Data Protection legislation and harmonisation across borders.

- **Such a Data Charter should also introduce 'fair use' of personal and business data if people are not competing with the owners of the data or harming their ability to monetise it. This would create a genuinely free space to innovate by supporting entrepreneurship from the data revolution.**

- **The Data Charter should also adopt an 'opt-in unless you opt-out' approach to personal and business data disclosure. Allowing citizens from birth to be born into a data sharing revolution (in which there is a Data Charter governing the use of data including how business can deploy private data) will empower each citizen. Just as there is no point in being the only one with a telephone or on Facebook, people and companies could only capitalise on the opportunity from personal data when it is shared.**

Policy Rationale

A Data Charter on how personal and business data can be used is a key step to unlock the next industrial revolution. UK policies enabling the trusted sharing of personal and business data is essential for new and innovative business models (digital entrepreneurship) to take off in the UK. It is also the only way for individuals to reach the benefits from Big Data, Internet of Things, Artificial Intelligence (AI) and most other digitally enabled disruptive innovations. We need to make the smarter society a reality.

Evidence

One estimate by the consultancy BCG is that the applications created with personal data have the potential to generate as much as €1tn of value in Europe annually by 2020[11], with a third of the total flowing to private and public organisations and two-thirds accruing to consumers. But for this value to be unlocked, consumers need to feel comfortable about sharing their personal information – but too many are extremely wary about abuse, turning away significantly from organisations who they believe could misuse data and they are generally not swayed by monetary or social incentives to release their data. They need confidence and trust in the organisations that hold their data, in particular that the conflicts of interest, privacy and ethical issues will be addressed, and that proper redress is available when there are problems, transgressions or grievances.

Current State

The EU General Data Protection regulation, to be introduced by every EU

[11] The Value of Our Digital Identity, a report by The Boston Consulting Group, 2012

member state by 2018, is a significant step forward. Citizens would have more information on how their data is processed, presented in a clear and understandable way. They will have the right to know as soon as possible if their data has been hacked or disclosed. The 'right to be forgotten' will be clarified and strengthened. It will also be easier for people to transfer their personal data between service providers such as social networks – thanks to a new right to 'data portability'. Companies, where data processing is important to their business model, are required to establish a data protection officer.

The core framework remains that while more information will be made more available within a regime of significantly enhanced transparency, the onus remains on companies and individuals to insist that their data is used as they want. Given the possibilities of AI and machine learning, this is insufficient. Several companies are implementing Ethics Boards on how data should be used and governed, in particular when there is a strong AI and algorithms component (e.g. Microsoft, IBM, Apple, Amazon, Facebook and Google). For instance, DeepMind (leading AI company), in order to create trust, has felt compelled to develop protocols for the use of personal data along with an in-house appeals panel to handle complaints and non-executive directors to ensure the company is compliant with its own rules.

Regardless of these efforts, a more standard template for best practice is needed.

Stakeholders

People and households, society, key sectors as health, energy, finance and legal, company business models, AI entrepreneurs.

5. Markets for IP: Make the UK a Global Hub for Intellectual Property Trade and Lead with the World's First IP Exchange

At present IP is valued by specialist IP agencies and practitioners, throwing up individualised, subjective valuations that do not allow for comparison or independent validation. This practice disables the development of better reporting of intangibles that we call for above. What is needed is the same transparency offered by markets of tangible assets. Until this is solved, stakeholders will be unable to assess and trust intangible valuations.

Due to lack of transparency and standards in markets for IP, there is a market failure:

- Companies and organisations exchange their IP at low speed and high cost. Most IP is not traded at all.
- Universities are often not capable of commercialising their IP effectively, because of the lack of a suitable marketplace for their innovations.
- IP brokers operate without a structure and at high risk, but they could be true purposeful value creators.
- Even technology- and IP-rich companies and entrepreneurs- aiming to grow their business could release growth finance from their intellectual capital through an adequate IP marketplace.
- Investors are unfamiliar with IP as an investment option; there are massive investment opportunities if the IP market is capable of valuing IP and make it a collateral.

There is an opportunity to build a hub for world leadership in B-to-B IP commerce.

Improved Markets for Intellectual Property

Policy Mechanics

The UK Government should publicly set the target of making the UK a world leader in novel IP services, - IP trade, IP valuation, IP insurance, IP analytics. To assist their development government and academic institutions (such as UKRI and UK universities) should become users of such private services and encourage online clusters and IP communities in frontier technologies. This process should be facilitated by building a global IP Exchange to help make the UK a world leader in innovative IP services. The objective is to create mark-to-market valuations of IP so making Intangible Asset Reporting more objective and trusted. Policy options include:

- The government could require notification of all transactions in IP and intangible assets more widely which could be published on an anonymised basis to give indications of their value and volume.
- The London Stock Exchange, working with Innovate UK, could contribute to this by including IP assets from all existing IP

exchanges (copyright, patents, technology, know-how, trademarks, designs, etc.) on one digital platform. Likewise, the government could also support the commercialisation of the output of the UK's science and innovation base by requiring universities to list publicly funded IP on the platform[12]

- The UK's publicly funded innovation grants, loans or equity should be captured and listed (in private 'online walled gardens' or open for disclosure) on IP Exchanges for IP inventory management systems.
- Build the UK a global IP Exchange and to make the UK a world leader in novel IP services: IP markets, IP valuation, IP insurance, Big Data analytics. Work, for example, with BIC's IP Exchange - www.IPExchange.global - to create a prototype which works. (Full Disclosure: Big Innovation Centre is a majority shareholder)

Recommendation: We propose that the government (under the leadership of BEIS) pilots new markets for the trading of IP so that companies and universities alike can actively trade and better benchmark their IP inventory. Mark-to-market valuations of IP can be created so making Intangible Asset Reporting more objective and trusted. Another core rationale for piloting IP trading platform is to enable the trading IP at greater speed and lower costs, which would reduce transaction costs. Market failures in technology markets can be significantly reduced through the piloting of more automated and standardised transaction methods

Build Clusters and Communities of IP

To build innovative hotspots at the size of Silicon Valley or Boston the UK needs to create the 21st-century version of online IP clusters and IP communities. The UK should build clusters of IP and IP communities in the areas in which we are already investing, or should be investing, such as digital economy, artificial intelligence, energy systems and storage, water, cell therapy, high value manufacturing, transport systems, aerospace and FinTech. Innovate UK is already promising initiatives in these areas but they should they should be dramatically scaled up, and linked with the development of the newly created digital platforms for the trading and display of IP. These could be organised to have a regional and spatial focus.

Policy Rationale

The UK has a significant opportunity to build a sustainable market position by meeting unfulfilled requirements for IP trade, and by speeding up,

[12] The Intellectual Property Exchange (www.ipexchange.global) of the Big Innovation Centre and the Copyright Hub are two examples

simplifying IP searching process and subsequent transaction execution. This process can be seen as an extension of its already pre-eminent position in trading financial assets. An effective IP Exchange will not only support this drive but also become a crucial source of valuations of IP assets for Intangible Asset reporting.

Evidence

We are under-exploiting our IP assets. According to research by the EU Patval Survey (2004 and again in 2013), organisations across multiple sectors believe that they are unlikely ever to license between 25% and 75% of their licensable IP.

Of the 43% of the global patent market, only 8% of patents are currently being licensed. Average Brokerage Commissions to trade patents are 25%, compared to 5.3% for real estate and less than 1% for large and small capitalization equities.[13]

Markets failure effects:

- Companies and organisations exchange their IP at low speed and high cost. Most IP is not traded at all.
- Universities are often not capable of commercialising their IP effectively, because of the lack of a suitable marketplace for their innovations.
- IP brokers operate without a structure and at high risk, but they could be true purposeful value creators.
- Even technology- and IP-rich companies and entrepreneurs aiming to grow their business could release growth finance from their intellectual capital through an effective IP marketplace.
- Investors are unfamiliar with IP as an investment option; there are massive investment opportunities if the IP marketplace can value IP and make it a collateral.

Current State

The current market for sale & licencing of IP is opaque, inefficient and in desperate need of disruption. IP transactors (those selling/buying IP) are faced with three core problems.

1) There is no ‘marketplace’ for sellers and buyers to meet and have opportunities to trade with a wide range of potential transactions: as

[13] ITG, Real Trends, CDC Group, IAM (Intellectual Asset Management) magazine March/April, 2014

a result, it is difficult to find both the best, fit-for-purpose IP and its owners;

2) Transactions are too time-consuming and expensive, with too many parties at the table including internal decision makers, lawyers, brokers for each item of IP trade;

3) It is hard to assess the value of IP, undertake due diligence and negotiate a fair price/terms for any given deal.

Although the overall IP transaction market is growing slowly, there is evidence of significant pent-up demand and future potential growth in what is already a large and growing market. There is strong growth in IP registration applications, particularly in rapidly growing economies such as China. Global IP transactions in a market that is widely recognised as too opaque and inefficient are even now estimated at £300bn[14], with evidence that the market could be at least half as large again if organisations could more easily licence the IP they possess.

Universities TTOs: Universities globally are main generators of IP, although in general their record of commercialising and monetizing their IP is poor. In an environment of greater scrutiny of the impact of public funding, the requirement for more efficient marketplaces for university-generated IP is expected to increase. The poor commercialisation record of universities is highlighted by HEFCE showing that the addressable market for IP transactions and commercialisation involving UK universities is a mere £241m[15]. This figure is used to extrapolate a global university market size of £9bn.

Large Corporates' Licensing Departments: There is a well-documented trend towards more open innovation by large corporations, involving technology and know-how sharing in the creation of new products and services. Another major trend, which is widespread in consumer goods and healthcare sectors, involves scaling back of in-house R&D in order to focus on acquiring the best IP that the market has to offer.

London Stock Exchange: The London Stock Exchange raised nearly £1.8bn of equity and £11.3bn of Eurobonds in August 2016 alone but in many industry sectors intangible assets reported on the exchange account for 80% of total assets. The London Stock Exchange already provides market

[14] WIPO Statistics Database, May 2014 and October 2015
[15] Higher Education – Business and Community Interaction survey for UK higher education institutions, referring to the academic year 2013-14.

valuations for firms on a daily basis enabling shares to be bought and sold on the open market. This service also provides a well-developed set of reporting requirements within a well-established legal and regulatory structures. The London Stock Exchange could start to add intangible assets to its reporting requirements. As firms begin to report these intangible assets investors can start to use them for valuation and investment purposes. The next logical step is to create markets for these intangible assets

Stakeholders

Companies, Universities, IP-rich firms and entrepreneurs, investors and fund managers.

6. Securitization and Underwriting of IP in Finance: Grow UK Enterprise

Once there is a better system of IP valuation, it is open to BEIS to develop a fully fledged underwriting and financing scheme for IP and technology-rich products and services. Thus, addressing one of the most regularly observed market failures in UK finance, namely the inability of IP-rich companies to use their IP assets as collateral in order to access finance

Securitization and Underwriting of IP in Finance

Policy Mechanics

The hoped-for transformation of the reporting and the use of intangible assets at an operational level will enable investors to make better-informed judgements on how well particular firms have used and will use these assets to deliver profitable growth and stakeholder value in the future. But the need is to go beyond that and create a system for the underwriting and securitization of IP and other intangible assets, enabling an improved flow of funds to invest in intangibles.

Recommendation: The government should explore:

- **Introducing a government insurance scheme, mandating Innovate UK and the British Business Bank (BBB) as the two most obvious institutions, to underwrite IP for asset-based lending and equity finance to be used by banks and investors. There needs to be a substantial redirection of funds to value-creating businesses, and particularly to small companies as they scale up to become medium sized, and medium sized companies as they scale to become large.**

- **Encouraging banks to be more accommodating about adopting private IP underwriting schemes into their portfolio, especially when third party public bodies are doing the underwriting.**

There are a variety of options, ranging from underwriting IP with a public kitemark to a “sell-relicense-buyback” scheme. For example, a company which looks for innovation finance would sell its single IP (or a bundle of IP) to, say, Innovate UK (or the BBB), but the company would retain exclusivity to use the IP (or license the IP for revenue) and buy it back over time. Using IP as the collateral, public funding will be de-risked: should the organisation get in financial distress, the public buyer would own the IP and could sell or license it in the market. Also, because IP-rich companies are more likely to succeed, the government is more likely to get its financing back.

Policy Rationale

Help the UK high growth firms to unlock their potential in the UK and stimulate technology-rich companies to grow and create jobs in the UK, retaining UK ownership.

IP backed finance is not a core part of any UK funding programme. The UK has provided no challenge to match Google, Amazon, and the country should aim to scale up a target - say 1000 IP and technology-rich companies - in the UK before 2025.

Evidence

High-growth firms have 74% more intangible assets and intellectual property on their balance sheet than their slower growing counterparts, but these firms do not get the support from the financial ecosystem which matches their potential[16].

For instance, between 2001 and up to the burst of the financial bubble in 2007 the total capital raised in the UK financial system increased by £1,340bn, but investment in innovation and intangible assets over the same period grew by a fraction of this, just £26bn[17]. Moreover, innovative firms are finding it harder over time to get funding. From the total that was surveyed 57% of innovators had trouble obtaining finance in 2012, up from 38% in 2007, and there is no evidence that the situation has changed radically since[18].

Current State

High-growth SMEs are key contributors to the regeneration of jobs and economic growth in the 21st century. Unsurprisingly, the very same firms which show the strongest signs of innovation, are IP-rich and rich in intangible assets. For high-growth small and medium-sized companies the financing problems are particularly severe.

In the UK case, they are often forced to sell off shares far too quickly and cheaply, which hampers their ability to scale up. Often they sell to foreign companies for no better reason than the lack of access to appropriate finance, at a loss to the nation in which the start-up was once born. Britain is renowned for coming up with great inventions – the jet engine, the computer, the medical

[16] Quested, Gareth and Sameen, Hiba (2013) Disrupted innovation: financing small innovative firms in the UK. The Big Innovation Centre, London
[17] Sameen, Hiba (2013), Two Spheres That Don't Touch: The relationship between British finance and British innovation, Big Innovation Centre, London
[18] Lee, Neil , Sameen, Hiba and Martin, Lloyd (2013) Credit and the crisis: access to finance for innovative small firms. Big Innovation Centre, London.

scanner and now graphene – but it is other countries and companies who have gone on to exploit them.

The decades ahead are going to see many more disruptive and transformative general purpose technologies, of which digitalisation is the most important. We need young and old, small and big companies incorporating these ideas to come to the forefront and to support our companies as they change their business models.

Stakeholders Technology-rich business, asset managers and investors.

7. International Tax Practice: Mobilise Resources and Enforce Corporate Social Responsibility

Intangible assets are widely recognised as the 'currency of the knowledge economy', and sophisticated management teams know that appropriate investment in a range of areas (from formalised IP to development of proprietary skills) is critical to commercial success. However, because these assets are intangible, they are mostly off-balance sheet, difficult to identify, and challenging to measure and value.

In the sections above, we have learned that no current approach provides a comprehensive overview of the intangible drivers of company and national performance and value that can aid management decision making or external stakeholder assessment, including for policy.

To this Charter, we can add a further dimension of complexity – namely transfer pricing, courtesy of OECD's recently introduced guidelines to tackle Base Erosion and Profit Shifting (BEPS). These, too, do not provide certainty regarding the assets that should be taken into account in each case, but they provide a starting point on how the UK must think internationally about taxation

International Tax Practice

Policy Mechanics

The growth of the intangible economy has opened up opportunities to erode the corporate tax base – base erosion and profits shifting (BEPs). Misallocation of profits on intangibles has been a major source of BEPS, and which the OECD addresses in its 2016 BEPS initiative. HM Revenue and Customs (HMRC) will have a substantial interest in wanting to see that intangible reporting will be consistent with BEPS principles and international conventions to ensure compliance – and reduce the chance of further opportunities for tax avoidance.

Recommendation: HMRC should promote the Intangible Asset Charter as a means of creating more transparency in intangible reporting for taxable income, and ensure that all proposals are consistent and use the same protocols.

Policy Rationale

The lost tax opportunity from reporting intangibles.

Evidence

OECD estimates that taxes not collected amount to between USD $100bn and $240bn each year – up to 10% of global tax revenue.[19]If these figures are pro-rated for the UK (based on GDP share) between an estimated $3.7bn and $8.8bn each year of tax revenues are lost to the UK economy.

According to the OECD, '*the losses arise from a variety of causes, including aggressive tax planning by some multinational enterprises (MNEs), the interaction of domestic tax rules, lack of transparency and coordination between tax administrations, limited country enforcement resources and harmful tax practices.*'[20]

Since the 2008 financial crisis and the impact on government revenues and borrowing there has been an increased focus on multi-national firms and their moving of intangible assets between tax jurisdictions as a means of minimising tax payments.

Firms, even the very largest multinationals, have head offices and stock market listings which are within the jurisdiction of one or more sovereign states. When they trade in some 200 independent countries and territories they must also obey the laws of each sovereign state. One of the key engagements between the firm and the sovereign states in which it resides and with which it trades is the payment of taxes. These taxes may include taxes on employment, taxes on sales, taxes on premises used (industrial, office and retail) and taxes on profits.

But as we have seen, the digital knowledge-based economy is very different from the old economy. Digital economy firms have very high levels of intellectual capital, of which some percentage will be capitalised as intangible assets. These businesses benefit from the increasing returns to scale and first mover advantages, and have, within a short period, overtaken the largest companies in the old economy like automobile manufacturers and energy suppliers. Unlike tangible assets, intangible assets have neither mass nor location; they are both weightless and stateless, which means that they can be transferred from one tax jurisdiction to another at the speed of the internet.

This fact is well understood by the OECD whose international perspective is uniquely qualified to provide insight in this area.

[19] OECD G20 BEPS Explanatory Statement 2015; IMF World Economic Outlook for GDP
[20] OECD G20 BEPS Explanatory Statement, 2015

Current State

This new focus led to the implementation of the Base Erosion and Profit Shifting Initiative (BEPS) by the OECD and the G20 Finance Ministers. Meetings are currently taking place globally, since 2015.

For an overview of the BEPS package and the activities towards a Common Reporting Standard – see section on 'Base Erosion and Profit Shifting (BEPS) Reporting' in the BIC report 'Intangible Asset Reporting - Defining Britain's Real Treasures', published Big Innovation Centre, April 2017.

Stakeholders

HM Treasury, Bank of England, UK Department for Business, Industrial Strategy, UK citizens

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