

## Finance for a future of sustainable prosperity

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### Abstract

Global society currently faces many challenges including climate change and rising inequality. This paper presents the results of a thematic coding analysis of a workshop comprised of senior accountants and actuaries who were asked to consider how a future of sustainable prosperity can be enabled by the finance sector. We found that mindset, skills, external drivers and decision boundaries were key themes that create barriers to change. Importantly, a reframing of the professions is required to underpin the changes required. The accountants and actuaries who took part believe that this represents a revolution from the way they currently operate with regard to regulation, exams, decision-making and their engagement with clients. They need to be more open to qualitative approaches to advice and focus on value creation, as well as re-constructing what is understood through value, rather than profit extraction.

Keywords: finance sector; sustainability; accountancy; actuary; thematic analysis; workshop

### 1. Introduction

Prevailing agreement in economic and financial geography that to understand our political, cultural and environmental economies - unpacking the specific logic and practices behind the phenomenon of 'financialization' is necessary (Christophers, 2015; Knox-Hayes, 2013; Ouma et al., 2018; Dörry 2016). Of particular concern are current financial sector practices acting as a barrier to sustainability (Shrivastava et al., 2019; Hafner et al., 2020). The short-termist and profit-seeking nature of the finance sector are seen to worsen environmental and social externalities. Tackling the sustainability challenges of modern society through the finance sector requires a more adequate understanding of financial systems (Martin & Pollard, 2017) and a better representation and management of the risks associated with the current pathway of economic development.

Two professions –accountancy and actuary – are at the front line of managing risks in the finance sector. Accountants prepare and analyse the financial records of all transactions for an organisation, while actuaries analyse the financial consequences of risks to which

organisations are exposed. Therefore, it can be argued that these two professions are key to understanding if, and how, the finance sector needs to change to underpin, rather than undermine, a future of sustainable prosperity.

This paper summarises the key findings of a workshop with senior finance experts from the actuarial and accounting practices. It explores how their expertise can enable a future of sustainable prosperity, and what the barriers are to this.

## **2. Background**

The world faces compounding challenges threatening to destabilise society, from climate change to rising inequality. Whilst policy is being implemented to encourage technological and technocratic fixes for some of these issues, others have argued that truly addressing these challenges requires “a fundamental re-orientation of society and the economy, not the implementation of some technical fixes” (Haberl et al., 2011).

Re-orienting society towards a future of sustainable prosperity requires a shift in economic valuation framings and techniques. Finance has often been considered neutral (Knafo 2013), while financial intermediaries have been understood as objective functionaries in the organising and sharing of market information. However, inherent nuances in the operationalisation of finance, and indeed the recent 2008 financial crash, are signifiers of this deep-seated crisis (Foster & Magdoff, 2009; Bichler & Nitzan, 2010).

Financialised capitalism requires an endless stream of novel asset streams upon which to maintain speculation and profits, and increasingly seeks to ‘capitalize’ on nature (Leyshon, & Thrift, 2007; Ouma et al., 2018). Yet, the finance sector remains indifferent to long-term value, and to a great extent, treats social and environmental issues as externalities outside of its responsibility (Fatemi & Fooladi, 2013). Alongside this, investors have traditionally expected fossil fuel energy to drive growth, as evidenced by high levels of capitalization in oil and gas companies (DiMuzio, 2012). However, more recent moves of fossil fuel divestment can be seen to disrupt capital flows into these sectors (Cojoianu et al., 2019), and ultimately lead to the potential of stranded assets (Bos & Gupta, 2019).

Such trends cause systemic risks to build up over time, and are a danger to which regulators are increasingly vigilant (Breedon, 2019). Although some have explored how finance can contribute to a more environmentally sustainable future (Jeucken, 2001; Silver, 2017) fundamental changes to practices in this sector are not currently apparent. To reimagine finance requires the ‘reintegration of social values into economic theory’ through a better understanding of a theory of the firm, economic agents’ behaviour, shareholders versus stakeholders, as well as ethical frames (Soppe, 2004; Knox-Hayes, 2015). This must be set in a wider discipline, such as financial or economic geography, and challenge mainstream literature.

Specifically, transforming the finance sector to enable sustainable prosperity requires shifts in how money and risk are managed. The main functions within the finance sector that deal with these issues are accountancy and actuarial practice.

Currently the link between sustainability and accounting, and importantly the implementation of solutions overcoming problems in linking these two concepts, is not sufficient (Çalışkan, 2014; Egan & Tweedie, 2018). There is limited evidence that accounting practice is engaged with sustainability, rather the evidence shows that accountants mainly act as gate-keepers between sustainability managers and higher management (Schaltegger & Zvezdov, 2015).

While there is a move to increase information disclosure related to sustainability, the use of this information to inform decisions is not strong.

On the actuarial side, less focus has been paid to how the profession does, or could, engage with sustainability (though see Dlugolecki & Silver, 2005). Any solutions discussed are 'relatively limited and small-scale in their outlook' (Aspinall et al., 2018). The assumptions within actuarial models are still predominantly based on economic models derived from mainstream finance and economics which typically use simplifying assumptions (e.g. rational agents) and include only measurable (economic) metrics, thus not representing social or environmental value.

Understanding the scale of change needed, and the tools and skills to underpin this change, are vital. It is not a question of removing the finance sector as an intermediary, rather how to repurpose it so that responding to the long-term challenges that we face as a society can be fully supported by the expertise available. Therefore, this paper explores perspectives of leaders of accounting and actuarial professions, where the barriers to a sustainable transformation exists and how to address these barriers.

### **3. Methodology**

A workshop was held in London on 8<sup>th</sup> May 2019. The Institute and Faculty of Actuaries (IFoA) and the Institute for Chartered Accountants in England Wales (ICAEW) invited senior leaders from across their professional bodies to attend. Those invited were identified through their prior engagement with relevant (sustainability related) voluntary working groups or initiatives within the professional bodies. An invitation was sent including an agenda and the questions that were used to structure the discussions (as outlined below). The invitation confirmed the workshop would be held under the Chatham House rule.

Twenty-five individuals attended drawn from regulatory bodies, professional bodies, finance organisations, consultancies and networks. Job titles included Chief Investment Officer, Chief Financial Officer (Sustainable Finance), Head of Investment, Financial Sector Specialist, Senior Pricing Actuary, Assistant Director Corporate Sustainability and Senior Consultant. Participants were assigned to three roundtables to ensure a mix of participants from each profession, as well as a mix of gender and seniority. Participants on each table in general did not know each other prior to the event.

Ethics approval for the workshop was obtained through a University ethics panel process and all delegates were sent a Participant Information Sheet in advance of the workshop and signed a Participant Consent Form on the day.

The following questions were used to structure the discussions on the roundtables. A final plenary discussion summarised the findings and allowed further points to be raised.

- How are accountants and actuaries encouraging more long-term thinking in the financial sector?
- What should the role of actuaries and accountants be in shaping the future finance sector and its contribution to society, as opposed to responding to the challenges faced by the finance sector?
- What policies or technical tools do actuaries and accountants feel to be important in advancing a sustainability agenda?
- Where do actuaries and accountants most see their expertise as applicable?

Notes were taken throughout the meeting by a facilitator and a dedicated note taker on each roundtable (see Appendix). The three facilitators were two academics and a director of a professional body, all partners on the ESRC Centre for the Understanding of Sustainable Prosperity (CUSP). Note takers were two PhD students and a project manager drawn from CUSP partners. Facilitators were asked to ensure that the questions used to structure the discussions were understood by the participants and that enough time for each question was given.

Inductive thematic coding (Boyatzis, 1998; Fereday & Muir-Cochrane, 2006) was used on these six sets of notes to draw out specific points which are used to structure the discussion section of this paper. Coding was done manually by the lead author and then checked and revised by all other authors until a final set of themes emerged.

## **4. Discussion**

During the workshop four meta-themes emerged that will structure this discussion. Those themes were:

- Mindset
- Skills
- External drivers
- Decision boundaries

Additionally, the need to reframe the profession emerged as a theme and is discussed here.

### **4.1 Mindset**

There is a perceived barrier to a transformation due to the individuals' mindset within these professions. The sector has become excessively mathematical over the past few decades and there is a lack of a governance process associated with the potential downsides of managing decision-making based solely on quantitative measures. This reflects a deep-set 'economism' present across institutional investment professionals, reducing risk assessment to mere financials and narrower investment performance, a developing field in economic geography (Christophers, 2019: 8).

There is also a concern that the two professions are facilitating the problems that exist in today's economy rather than challenging or highlighting them. Accountants were characterised as being very good at selectively reporting information and actuaries use past risk measures to predict the future. When the future is very different to the past, these guidelines and methodologies may not be fit for purpose, but there is a lack of culture or process within the sector to allow a critique of how things are done. While this is true at the profession level it was also felt to be true at an institutional or individual level.

This culture within the two professions is well entrenched and new perspectives and approaches are challenging to implement. While many different tools exist that could be used to understand some of the sustainability challenges, individuals within the profession either do not know they exist or are reluctant to use them as they fall outside of the norm. It was noted that a lot of effort in the recent past has been focussed on making members of the professions aware that a focus on climate change (let alone other sustainability challenges) is not purely an ethical position.

Importantly, the finance sector is predominantly concerned with profit extraction, or maximising return on capital. The mindset for accountancy needs to change to enable more long-term thinking. Some argued that the formal processes associated with the two

professions were too set and a rival profession around finance tools for the future should be set up to avoid having to overcome the baggage of how things are currently done.

## **4.2 Skills**

Four key processes associated with skills development were highlighted during the discussions: qualitative versus quantitative, neoclassical economics, exams, and tools.

### *4.2.1 Qualitative versus quantitative*

An issue that was stressed at several points during the workshop was the need for more qualitative measures and skills within the professions. Not all risk or measures can be, or have to be, quantified, or at least, in the quantification some of the context and nuances around decisions can be lost. However, the move to rendering risk in financial and investible terms drives the work of quantification among intermediaries (Mawdsley, 2018). This is a key area where new methods from economic and financial geography are important. Moreover, there is a need to enhance comfort in making informed judgements. Thinking broadly about the issues affecting valuation or risk does not come naturally to accountants or actuaries (although the latter's expertise in contextualising risk, as well as technical competency in calculating and managing it, is a recognised quality of the profession – see Jarzabkowski et al. 2015).

To help bring in more qualitative information, more narrative reporting should be used. While organisations do have elements of narrative reporting these are not typically used by actuaries or accountants. Where elements of sustainability are included in these reports it is usually limited to climate change (and then mainly carbon emissions accounting) and does not cover the diversity of sustainability issues. Even where climate change is considered, the full range of potential impacts is rarely covered, considering, for example, that a two-degree future is fundamentally different to a 6-degree future.

### *4.2.2 Neoclassical economics*

As an underlying set of assumptions that dominates the discourse and analysis of both accountants and actuaries, neoclassical economic theory was highlighted (see Clacher, 2019 for a detailed critique on the link between economic theory and actuarial practice). It was felt that the dominance of neoclassical economics, and its understanding of uncertainty, treatment of time, resources, finance, government and actor behaviour, limits the ability of the professions to challenge organisations to better manage long-term value. New tools are needed to broaden the scope of professional advice but importantly the limitations of current tools need to be clearly articulated and understood.

### *4.2.3 Exams*

Accreditation for actuaries and accountants are acquired through the exam process. Over time these exams have become more specialised and therefore narrower. While elements associated with ethics or sustainability have been introduced in some qualifications, much more detail in specific areas has crowded out the wider understanding of the purpose of accountants and actuaries. Exams have become more about demonstrating the ability to use a technique rather than having an ability to critically reflect. This has led to a path dependency in the system whereby the ability to self-critique as a set of professions diminishes with time.

### *4.2.4 Tools*

Within quantitative modelling, tools such as systems dynamics or agent-based modelling offer a more holistic approach to considering challenges alongside current quantitative tools. Conceptual tools to structure qualitative approaches and governance processes also exist, especially within economic and financial geography (Baccher et al., 2016), but could be embedded within the context of accountants and actuaries. It was felt that data science as a core to the professions will become redundant as artificial intelligence takes over. Therefore, to remain a dynamic set of professions it is important that they move beyond data science alone.

### **4.3 External drivers**

The external drivers were split into two groups: negative and positive drivers.

#### *4.3.1 Negative drivers*

It is an obvious yet important point that accounts are prepared predominantly for the benefit of those who provide capital and not for the public interest. This has contributed to all manner of conflicts of interest. Actuaries and accountants operate in situations where they should be serving the interests of multiple stakeholders, such as the members of a pension fund. Yet it is often the case that employer sponsors or executive managers have their interests best served by financial service professions (Sikka, 2015).

The tendency for financial markets to be self-governing in many aspects, including in relation to sustainability concerns, is not a historical accident but the result of political choices. Schemes for addressing environmental issues in the financial sector are overwhelmingly private, voluntary and self-governing (Thistlethwaite & Paterson 2016). It was generally agreed that financial regulation has to do much more than currently conceived by relevant bodies, including those managing macroprudential risk (D’Orazio & Popoyan, 2019). Currently, much hope is pinned by governments and others on one such scheme – the Taskforce for Climate-Related Financial Disclosure (TCFD). There is a real risk, however, that the TCFD will encourage a proliferation of information without any substantial action; a risk manifest in the assumption that disclosure automatically engenders market disciplining of climate laggards (Christophers, 2017). The professional bodies expressed the need to lobby regulators to change.

#### *4.3.2 Positive drivers*

The financial sector is not immune to wider social and public pressure, and recent demands for sustainable prosperity from grassroots and protest groups such as the climate school strikes or Extinction Rebellion have some effect. There is evidence that demands on the financial sector to do its part are coming through in requests for investment products that are more ‘ethical’ and ‘green’. Geographers should also be alert to how London is seeking to exploit its position as a major international financial hub to become a leading site for ‘green finance’.

These trends are being leveraged by pressure groups that evaluate financial institutions, and sector specific voluntary initiatives at national and international levels, who themselves in turn are giving leverage to those who work on sustainability in the accountancy and actuarial professions to emphasise their remit within their organisations. Where actuaries and accountants have particularly engaged stakeholders, whether endowments managing reputational risks or family trusts, these can be useful to drive sustainability concerns more broadly.

## **4.4 Decision boundaries**

Several boundaries used within decision making were highlighted in the discussions including short-termism, compliance, data, measurement and governance.

### *4.4.1 Short termism*

Both professions seem to discourage long-term thinking and decision making, especially through the use of metrics, tools, discounting, and models that are not suitable for long-term purposes. In discussions, the definition of long term was not clear – is long term defined as beyond the financial year (included within mark to market valuation practices) or is long term linked to pension liabilities over decades?

### *4.4.2 Compliance*

The stark contrast that financial reporting and sustainability reporting demand was highlighted. In particular, when exploring compliance against existing standards it was difficult to see how they would enable sustainability decisions to be supported, especially in the context of commercial pressures for individuals or firms to solely comply with reporting frameworks as opposed to offering wider guidance or advice. Whether it is possible (or desirable) to create a common global language for sustainability as International Financial Reporting Standard (IFRS) has for business affairs (Negash, 2012) is debatable, given the constraints of current accounting standards that are created through the IFRS.

### *4.4.3 Data and measurement*

While the challenges of sustainability may not lend themselves well to standardised sets of data or metrics, the availability and use of curated data through large data warehouses could be improved. In particular standard sets of scenarios could be developed. However, how these data are used is not clear if the fundamental purpose of measurement is not aimed at enhancing the underlying social value of an organisation. While accountancy uses different approaches to measuring the value of an organisation in different contexts, such as cost method, fair value, market value, net book value, and realisable value, none of these are seen as representing the 'real' value of an organisation if this is viewed through the lens of sustainability – notably the ability of an organisation to continue to exist over the long term by offering goods or services that support society (including building resilience and causing net zero damage to the environment).

What is measured is key. There are many different approaches to metrics that could capture sustainability issues. While efforts to create consistency or standards are underway (especially within the EU, including the taxonomy on sustainable finance or reporting on gender pay gaps) there is not enough urgency to resolve this at present.

### *4.4.4 Governance*

It is important to consider the hierarchy of decision making within the finance sector and where responsibility for decisions, or advice that those decisions are based on, falls. Effective change is often down to well-placed individuals rather than anything systematic. There is currently very little integration between business decisions and sustainability at a strategic finance level (the Chief Sustainability Officer, if they exist, does not talk to the Chief Finance Officer and departments work in siloes). This becomes even more complicated when considering responsibility down supply chains.

It was also highlighted that trustees still approach these issues by considering trade-offs between an ethical versus financial decision. They often fail to see the direct benefits from

taking action as these benefits can be global or have significant time delays. Additionally it is not clear who has the ultimate responsibility for the advice given to trustees – is it the investment consultants who offer the advice or the client who frames the questions asked to the consultants?

A fundamental challenge is the scale of change that is envisaged. With this complex set of challenges it may be important to allow more disagreement to exist and to use a proliferation of opinion to inform decisions.

#### **4.5 Reframing the profession**

A fundamental question asked during the workshop was “what is investment for?”, and, leading on from this, “what is advice for?” Why does society need the two professions? Within the discussions there was no clear answer to this and at present it was felt that they were both in fact acting against the public interest by selling the ability to ‘sleep at night’ rather than fundamentally exposing the risks and challenges that the organisations which they serve face. This issue has been raised within economic geography where, for example, accountants have facilitated markets for instruments that financialise risk in development finance (Mawdsley, 2018).

There was some criticism of the current moves within the profession to include sustainability-related externalities within current processes, such as those proposed under integrated reporting initiatives. A common sentiment was the idea of reverse-engineering a sector that is not fit-for-purpose (one participant described it as “integrated reporting lacks an integrated profession”).

It was felt that the professions needed to re-evaluate their purpose and their underlying principles. The professional bodies (ICAEW and IFoA) have a royal charter which obliges them to work in the public interest. However, what is in the public interest is unclear (ICAEW, 2012), even to the public who tend to discount the future very heavily when making decisions. The IFoA also use the public interest argument alongside a call to raise awareness of their profession: *“It is also recognised that a key part of our strategy is to speak up on relevant matters of public interest and to raise awareness of the work of actuaries and the value we add to society”* (IFoA, 2018).

A clear call for a ‘revolution’ in the professions was made. It was felt that current responses are not radical enough.

### **5. Conclusion**

This paper presented the results of a thematic coding analysis of a workshop comprised of senior accountants and actuaries who were asked to consider the future of finance. We found that mindset, skills, external drivers and decision boundaries were key themes that create barriers that prevent the actuarial and accountancy professions from fully embracing solutions to the challenges of achieving sustainable prosperity. Importantly, there was a clear call that a reframing of the professions is required to underpin the changes required.

This supports previous calls within economic geography for a critical approach when looking at how the finance sector considers and manages economic and environmental risks. Further research, in particular research that embraces qualitative methods from financial and economic geography, underpinned by a variety of different theoretical frameworks and perspectives is required to link the limits of financial practice itself, as identified in this paper, to research on radical change and transformation. A better theoretical and practical

understanding of how the expertise within finance, and elsewhere, can contribute to specific sustainable prosperity goals is needed. Those involved in the workshop believe that this represents a revolution from the way they currently operate with regard to regulation, exams, decision-making and their engagement with clients. Importantly they need to focus on value creation rather than profit extraction.

Further studies to investigate how institutions should be structured and regulated in order to support a sustainable financial system, connected to real economic, social and environmental values are suggested. Financial and economic geography approaches are well suited to addressing the situated role and production of expertise within existing structures, as well as exploring alternatives (Dörry & Schulz, 2018).

Understanding the professions' expressed challenges in the financial systems space allows for critical discourse around these key intermediaries' roles in mapping of financial geography. Exploring the geographical aspects of their activities (such as the boundaries and temporal issues around valuations, monetary policies and risk assessments) exposed the need for realignment with sustainable prosperity.

With increasing pressure from different parts of society, in particular a rising voice from younger people about the need for urgent action, agreeing a vision and redefining both accountants and actuaries as people who can understand, assess and respond to the risks and opportunities of the future, as well as care for it, is critical.

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## **Appendix: Supplementary Material**

These notes were taken by the facilitators and note takers and were used as input to the thematic coding. The notes are structured according to the questions asked. As these were notes taken during the workshop we have edited them to ensure anonymity of individual contributors and we highlight that quotes are not possible given that these were not verbatim notes. The discussions were not recorded, as agreed within the ethics process of this project, so transcripts are not available. Ethics approval for the workshop was obtained through a University ethics panel process and all delegates were sent a Participant Information Sheet in advance of the workshop and signed a Participant Consent Form on the day.

### **1. How are accountants and actuaries encouraging more long-term thinking in the financial sector?**

Facilitator 1:

- Both professions actively discourage long term thinking
  - Short termism embedded in text books
  - Accounting periods are too short
  - Cannot look at future with current models (discounting)
  - There is an approach to developing new models and some models do exist but individuals are very reluctant to engage (they just want to comply)
  - First job was making members aware that climate change is not just an ethical issue
- Domain problem is that actuaries think they are qualified to do everything but lack an ability to criticise themselves
- Constraints in the skills of actuaries & accountants
  - Chicago school base knowledge
- Not sure about legal constraints (some thought this was just an excuse others thought fundamental)
  - IFRS in accountancy is key problem
  - Accounts prepared solely for the benefit of those who provide capital and not for the public interest
  - Sustainability has been written out
  - Auditing is now about compliance with the relevant reporting frame (IFRS) rather than accounting to all stakeholders
- Examinations have become more specialist and therefore narrower (ie more detail in specific areas has crowded out the wider understanding of the purpose of accountants)
- In particular examinations are very focussed so even if sustainability is added onto the syllabus it is not examined
- Exams are about learning a technique rather than learning how to learn or being inquisitive or challenging
- Corporations now do not need to supply local economy audited accounts (at small company level) so no tools exist to measure local risk – this is a retreat from how it used to be done where risk identification at all levels could be done. Accounts are now just basic balance sheet information. No public record issues linked to ESG.
- All pressures are towards executive self enrichment (this has accelerated dramatically in the last decades)

- Market is not apolitical (even though economists believe it is and accountants/actuaries model it as such)
- Pressure for sustainable prosperity is only from the populous – everyone not in the room is out there making money
- Unusual engaged stakeholders are useful (such as family trusts)
- Pension funds do not account to their members
- Tax incentivisation is geared towards a huge portion of the UK investment markets (e.g. pensions) and does not drive any good behaviour

#### Facilitator 3:

- Can we define the long-term? It means different things for actuaries and accountants and for different areas within each profession – for accountants generally it is probable around 5 years.
- For actuaries managing assets and liabilities it can be up to 50 years
- The PRA has been considering the language around ‘the long-term’ and is moving toward using “in the order of decades” as a phrase to identify it.
- Accountants in the sustainability space are attempting to distinguish measurement from value, and put more focus on the latter. What is valued over the long-term is essential.
- For actuaries in finance and investment this is similar to the opposition between investment returns, which most actuaries and their clients are focused on, and value creation.
- Regarding the issue of alternative measures and metrics for reporting on what matters over the long-term, there is a competing universe of these in accounting. Several of the big firms have developed their own metrics, e.g. EY and its Embankment Project for Inclusive Capitalism (EPIC); PWC and its Total Impact Measurement and Management (TIMM). There is increasingly cooperation among these firms on this front, but it is rather fragile.
- Efforts to have consistency or standards on things like sustainable finance are underway at the EU level, e.g. the EU taxonomy on sustainable finance. But this particular initiative is only regarding economic activities, not reporting requirements.
- The TCFD is really useful because it is understood to be ‘market-relevant’
- There has been greater cohesion in reporting since the FRC’s 2012 ‘fair, balanced and understandable’ rule.
- We should make a distinction between ‘long-term thinking’ (what the question asks) and ‘long-term reporting’. If long-term reporting is not feeding back into business practice then it is not being very useful. There is a need for education and awareness raising so that l-t thinking can be brought back into practice.
- There is a tension between backwards and forwards risk perspectives. Much of the data looking back will not necessarily be useful for thinking about risk going forwards.

#### Note taker 1:

- View that over time actuarial practice has discouraged long-term thinking and has found this to be quite damaging.
- Found accounting profession to be the same. As an example, accountants delineate time into short accounting periods. Considers models accountants use to heavily discount the future and anything beyond 25 years is considered to be irrelevant. As such, do not think issues of sustainability can be addressed with existing models.

- Raises bigger questions about the role of profession as a whole. Professions say we will give you exams and then you need to go out and learn more and do more. Role for the profession and the professional body is to network and encourage. For example, IFoA's RE Board originally had role of correcting perception within the membership that CC is an ethical issue.
- Needs to be a recognition that actuaries cannot do everything. Considers actuaries to be too involved in investment and considers this irresponsible. Actuaries in oversight of investment is ok, however they lack ability to question self and to challenge their decisions and methods. Suggests pensions actuaries haven't questioned their methods in 20 years.
- The constraints are in skill and education and in the level of risk the employer is willing to take.
- In accounting, IFRS 17 is a constraint. IFRS 17 says to ignore certain user groups and as a result sustainability is written out. Auditing guidelines have been reformed and now the focus is on compliance with guidelines rather than true and fair judgement about whether things are ok. There should be a focus in producing accounts for all stakeholders. Has to extend audience to civil society.
- Exams don't feature sustainability very much. Believes they are more about testing problem solving skills than testing actual learning.
- Demand from market and employers is what drives the learning outcomes. ICAEW did some work looking at where sustainable practice is embedded in education at all levels. They are also seeing increased demand from young people here and they are selling a vision that the accountancy profession is one that cares about the future.
- Thinks accounting is failing here because it is not reporting to anyone, particularly to small/little businesses. Referenced an example in 1990 where all businesses had to put their public accounts on record and they had to be audited. This is no longer the case and as such local economy doesn't have the supply of information it needs. Also of the view that the profession doesn't account to holders of capital particularly well either. Members of pension funds provided as an example, reporting information is only going to pension fund trustees
- Do not believe the methods being used are particularly helpful i.e. looking into the past and extrapolating data. For climate change this doesn't work because the change in climate is very different to what came before in the past.
- Recommends the financial system is shaken up so that individuals aren't incentivised to take short-term actions

#### Note taker 3:

- Both professions seem to discourage long-term thinking, despite using the word.
- drafts on pension funds tend to incorporate long-term thinking, policies such ones from DEFRA and some others tend to "consider" long-term thinking.
- "Tomorrow vs Yesterday Project" in Brunel might be of interest.
- Should long-term be defined?
- Corporate "long-term" – particularly for accountants is generally about 5 years, whilst actuaries can look at up to 5 years.
- Actuaries claim to have long-term thinking but feels the short term constraints.
- Climate change risk not aligned with investor understanding of risk.
- Long-term Value Framework from EY (Ernst & Young) are building climate change risk/long-term thinking into the financial framework in the valuation in business. There are other similar frameworks: such as PwC's TIMM (Total Impact Measurement and

Management) and “fair balance value”. Accounting Big 4 firms are collaborating (plan to collaborate) on “EPIC” metrics project.

- One also needs to consider the hierarchy in the decision-making.
- There is a separate long-term value creation in the earnings concept (compared to risk assessment).
- There is a need for reporting metrics but there are competing metrics, is there a need for standardisation? One should also consider the difference between long-term thinking and long-term reporting. One may have impact on the other, moreover though both long-term, these may be temporally different (length-wise).
- Need to have some consensus on what is a green investment and what is not a green investment.
- Also need to consider uncaptured risk in accounts e.g. in pension schemes.
- Backwards vs forward looking:
- is this the wrong conversation?
- Constraints on investment performance:
- Climate change has no historical data, hence how can these be included in the equation?
- Need to up-skill accountants/auditors to prompt a fuller risk portfolio.

## **2. What should the role of actuaries and accountants be in shaping the future finance sector and its contribution to society, as opposed to responding to the challenges faced by the finance sector?**

Facilitator 1:

- How do we for beliefs of the future?
- Governance process in overly mathematical world – we need more qualitative measures
- Dominance of neoclassical economics – don’t need there simplified assumptions which are demonstrably wrong – especially in a world where we have ample computing power to model things properly.
- Move away from market value
- Academic papers in business schools use neoclassical assumptions so underpin the wrong way of doing things
- Accountancy currently measures market value and not the ability of a company to make a profit
- Don’t do investment anymore (just gamble on market value – you can increase market value simply by changing interest on your debt) – this is betting on second hand pieces of paper
- What is investment? Clear articulation of what investment is is required (it is not market value betting)

Note taker 1:

- Professions should examine their use of neoclassical economics and the impact of its underlying assumptions within their work. Dominance of neoclassical economics is problematic as the assumptions underlying it are no longer appropriate. This causes poor regulation and accounting standards.
- Echoed that use, and inclusion, of financial economics in the syllabus has led to the development of tools considered to be not particularly useful.

- For the financial sector, feels as though the focus on measuring change in value between two balance sheets is unhelpful.
- Considers that actuaries don't do any investment anymore. Rather they are undertaking second-hand investments, just swapping shares and gambling. Because of this, the emphasis on disclosure is really important here.

Note taker 2:

- Financial system to deliver investments serving the society and the 'environment'
- As increasingly less investment flow into the real economy the financial system destroys itself as well (as there will be at some point nothing more to extract)
- The importance to deliver long-term investments was pointed out several times
- Some of the barriers towards the long-term vision
- There is still a perception that sustainable investments are characterised by lower returns (although research does not support this!)
- Sustainability is not concerned necessarily as performance relevant
- Lack of standardised data, metrics and models (in particular for the 'S' in ESG)
- Lack of demand for 'expertise' in sustainable investment (which stands against the claim of clients that argue there is not enough sustainable investment expertise)
- Financial systems evaluate short-term performance, which also influences firms investment behaviour
- Pension funds and insurances evaluation time horizon generally too short to consider long-term climate risks
- Climate risks challenging to quantify (due to deep uncertainty and hence forward-looking instead of backward looking elements are required to be quantified)
- Climate change related risks are not regulated sufficiently
- Lack of sustainability optics in the training of 'earlier' generations, leading to a lack of skills (and path-dependency in the system)
- Difficulty of single individuals in both professions to see the larger system picture and systemic risks of climate change or transition scenarios

Note taker 3:

- In ESG:
  - "S" is problematic
  - The difficulty in including the "S", the social. Difficulty in understanding and designing the metrics. It is difficult to measure total impact on society.
  - Social sustainability is catching up.
  - NCC (Natural Capital Coalition) □ Social and Human Capital Protocol
  - "E" is seen as more material
  - raises the question of "materiality".
  - This is also an issue in measuring environmental impact.
- Climate change is the only thing assessed in strategic risk allocation
- ESG as a more holistic understanding of sustainability
  - How investments effectively shape the future
  - Advancements in metrics technology & the process of quantification
  - Who do accountants/actuaries engage with to co-create
  - External challenge input: quite often this is needed for industry to engage with climate as "shared action space". Takes an engineering approach to problem solving.
  - The different departments within organisations are working in silos.

- “Transition Pathway Initiative”.

### **3. What policies or technical tools do actuaries and accountants feel to be important in advancing a sustainability agenda?**

Facilitator 1:

- Investigating what underlying theories we used in the policies and tools – need better tools
- Wealth creation process used to exist in accounting and actuarial professions
- Integrated reporting went wrong because it tried to backward engineer a process that was not fit for purpose
- Allow everyone to disagree and use that proliferation of opinion to inform decisions – currently try to eliminate any disagreement and get everything to fit
- Government wants a quick win (e.g. TCFD should allow diversity of approaches). Real risk TCFD will not solve anything and will just end up with reports no one uses.
- Accountants need to learn how to report rather than how to hide
- Don't just observe the business they are involved in – how to add value to it should always be asked
- Integrated reporting lacks an integrated profession
- There is no integration of business model decisions (the CFO does not talk to the CSO often) – if there is a CSO
- General professional competence is not good
- If accountants sell ‘the ability to sleep at night’ they do much better than if they sell adding value to a company

Facilitator 3:

- We can use evaluation and pressure from external organisations (like ShareAction) to leverage and accelerate change.
- Systems theory has a role in how we might think about how we get change in the financial sector. Relationship between hard effects at one end (such as rules and regs from the top) and changes to behaviour and norms at the bottom.
- It is difficult to consider a diversity of sustainability issues – in sustainability for financial services in accounting, it is only really climate and ‘long-term value’ that are considered.
- That said, we increasingly see things like gender pay on the agenda for reporting. Social sustainability is ‘catching up’, e.g. there is the social and human capital coalition which published a protocol.
- It is difficult to encourage conversation around the ‘S’ in ESG, especially in investment consulting. The ‘E’ is the only one that really permeates, and then only regarding climate risk. There are many things that could be considered – inequality, human rights, gender effects, employment effects etc.
- The legislative framework is constraining when it comes to considering sustainability more broadly. Actuarially, it's difficult to get ‘S’ on the agenda at all.
- There is an element of creative accounting with ‘S’ for accountants too. In measuring ‘total impact’ frameworks, S always nets out because if employees are reasonably well paid that is taken to cover ‘S’!
- We should really be bringing supply chain issues into the debate much more but this is a tricky question of scope and responsibility.

- Many measures and technologies exist but it's the understanding that sits behind them that we need to interrogate. We might also look to innovations in the public sector such as the Social Value Act to guide thinking in this area. There is really a need to move away from self-reporting of CSR activities.

Note taker 1:

- Believes that pressure is coming from the wider public who are watching the news. Institutions look at 2050 and say we will be there. Important to start building that 2050 portfolio.
- Provided example of chemical company who an award. Shareholders of the company were mostly named family trusts. The company sought to integrated sustainability into the organisation and provided training in sustainability as part of this. The named family trust said they also wanted to receive the training because their reputation was at risk.
- Investigating theory which is underlying tools and techniques would drive thinking. It will be necessary to critique the basis of practice and start to tweak in response.
- Noted that government is seeking quick wins with regard to driving this thinking. Example provided of BEIS asking whether TCFD should be made mandatory. ICAEW responded that it shouldn't be mandatory and there should be an opportunity for organisations to experiment on how they can best make their disclosures.
- In order to better drive long-term thinking, accountants need to stop observing and start participating and adding value.
- Noted that integrating reporting framework is great but there is no integrated professional to take this on. Not seeing the demand from business for someone who meets this specification. However suggests that businesses are not always very good at understanding what it needs or has the ability to articulate what it needs.
- Professional skills market very similar across the board in the UK. Believes that both professions need to articulate why they are necessary. Important to have a clear understanding and articulation of what would happen if these professions are not a thing. For actuaries, important role in addressing problems that don't follow the past e.g. climate change
- Actuaries have the conceptual tools to advise on future financial stability. However, if we want people to invest in sustainability how do we deal with the fact that the future is so heavily discounted.
- With regards to reforming the system, an exercise should be undertaken to identify core principles that receive broad public support. These could then be used to replace IFRS17, rather than make tweaks standard by standard. Could underpin the new core principles with something other than neoclassical economics.
- Do both professions need to do better when failure occurs? Are we just setting up a process where by people fail and we bail them out, rather than learning from this.
- Put existing accounting and regulatory system aside and then think 'how do I want people to behave and what system do I need for this to occur?'
- Both should make efforts to become better at narrative reporting. If you are unable to tell the story, people are unable to understand it.

Note taker 2:

- Some pointed towards the need to change the fundamental mechanisms in the financial system
- Regulatory changes required (as they define the framework (or box) in which investors operate)

- Open availability of standardised data (e.g. comparable to mortality data), metrics and models (i.e. scenarios with show impacts on specific portfolios)
- Lobbying (e.g. public affairs departments of insurances) towards regulatory changes
- Professional guidelines -> this also would demonstrate that current regulations need to be changed
- Less quantification (or is quantification of risks in this case required, as a two-degree is so fundamentally different from a 4-degree world)
- Making climate investment to a competitive investment case
- Training (e.g. better understanding of climate related risks is required and in particular how they are related to (short-term or long-term) financial risks)
- Redefinition of investment and value added
- Find ways to make 'long-term'-behaviour as a business practice
- Introduction of a 'public interest obligation' for investors
- There is now also Human & Social Capital coalition: <http://social-human-capital.org/>
- Solutions likely not to be implemented by politics

#### 4. Where do actuaries and accountants most see their expertise as applicable?

Facilitator 1:

- *Why does society need actuaries and accountants?* Not sure what the answer is to this question and it is fundamental. ICAEW and IfoA need to answer this question and be explicit about it. What are the core principles that the professions bring?
- Truth, prudence, wisdom and justice are the 4 pillars of accountancy (on the roof in the entrance to ICAEW). Not sure these still hold true.
- Future of actuaries is when the future is not well represented by the past.
- Data science will work itself out of a job (not actuaries and accountants if they can move beyond data science).
- Tools around what keeps a financial system stable. Conceptual tools do exist. Also need to be open to new methods like SD and ABM.
- What happens if the rate of return rises over time?
- For sustainable prosperity you need to look at the people involved in the governance of a company (run, incentivise control) – can't look at their accounts
- Can you add value over time as an investor?
- Need to return to the conceptual framework
- Royal charter – what is the public interest obligation
- Individuals in both professions do not act in the public interest. The intention is that the collective (or the societies) act in the public interest as a whole (ie a collective of individuals not acting in the public interest will all add up to a body that acts in the public interest...)
- Once identified what the public interest obligation is then work out what should be reported
- Need to embrace failure (and learn from it)
- Nothing more effective than admitting there is a problem and learning from them
- Crisis can drive honesty about exposure in some organisations (e.g. a crop failure in a supply chain can make a company develop a strategy to diversity its risk)
- Narrative reporting should be introduced (OBR in 2005 was the closest to this)
- Problem solving and long term thinking
- Original principles – what are these?

- Culture
  - Need people to know they should use the alternative tools
  - Know that they are taking a risk by not considering sustainable prosperity
  - Need to encourage using the other side of your brain
- Set up a rival profession as over 100 years of baggage is difficult to get rid of
- Negative feedback loop that accounting creates has to be eliminated

Facilitator 3:

- Some firms, e.g. Mercer, are doing a good job of merging traditional actuarial modelling services with advise on climate change.
- Here the role of the actuary and accountant runs into the question of professionalism vs commercialism. The pressures from the latter prohibit elements of the former.
- Actuaries need to have a combination of technical skill and comfort with making judgements. This concerns the role that uncertainty plays in the profession's work. At the PRA there are active training sessions attempting to develop means to deal with uncertainty, exploring 'what if?' scenarios.
- Final point to make is that the professions have a crucial role in lobbying for regulatory change.

Note taker 1:

- Actuaries have long-term problem solving and making decisions in the face of uncertainty.
- Recognition that culture has a role to play. While there are definitely more tools it would be nice to see, it's more important that those within the professions believe that sustainability is their responsibility and part of their role.
- Questioned whether graduates would consider entering either profession. Acknowledged millennials are a valuable voice in challenging and changing the profession.

Note taker 3:

- Accountants
  - ICAEW: traditional accounting and auditing work
  - Need active training sessions
  - Litigation as prompt to change
- Actuaries
  - IFoA
  - They do investment / actuarial modeling
  - Question of professionalism vs. commercialization
  - In training; raise the question of long-term view, and skill-up its members
  - Important issue: What is the capital impact?
  - role of using scenario modeling (what if modeling)
- Both roles are crucial to address social/environmental problems

## 5. Feedback session (general comments)

Facilitator 1:

- Sustainable ethics in professions
- How to make people own their investments

- Politics cannot change it – need a revolution
- Professions should go out of their way to inform the public that the professions are acting against the public...
- Do not report profit we report rent
- People are pissed off with capitalism how do we respond?
- Finance is the biggest risk to itself
- How to structure finance to deliver the SDGs
- Are we being radical enough?

#### Facilitator 2:

- Short term thinking is encouraged by mark to market metrics, and one year insurance contracts, and few people think beyond five years. However perhaps in the profession short term thinking is less the problem than narrow thinking. After all thinking about life expectancy and pension liabilities requires thinking about the long term. However thinking broadly about the issues affecting valuation does not come naturally to actuaries. Related to this point, actuaries and accountants like to quantify everything – that is their professional skill – and are not always good at dealing with uncertainty (as opposed to quantified risk). In some cases this is not helpful: the fact that something is difficult to quantify and uncertain can lead to it being downplayed. One way round this is scenario planning which can be effective – the final stage may be some quantified result but the intermediate stages and the process can be equally if not more valuable.
- One problem is that the profession is not trained to think in the ways required by sustainability problems, or to make the kind of judgments required. New entrants to the profession can be trained, but existing practitioners cannot be forced to become competent as things stand.
- Effective change is down to well placed individuals at the moment, rather than anything systematic.
- The issue is presented in terms of risks because this is a concept that actuaries are comfortable with.
- If one was to start with the problem (climate change) and was designing a system to deal with it, you could come up with something very different.
- Who is responsible for the poor advice given to trustees by investment consultants – the client or the consultant? Smaller funds in particular may fail to buy the products required – although it should be possible to develop products that they can afford if larger clients are buying the fuller products. Different firms have different policies. One problem is trustees still think in terms of ethical versus financial factors – even now after all the discussion that has been had. They still perceive trade-offs and still fail to see the connection between addressing systemic problems and the financial returns their beneficiaries will enjoy. However who is to blame is not really the point: either way the solution is guidelines from the professional bodies and publication of relevant evidence, which can make clear that the relevant advice can and should be offered.
- This demand will create pressure on consultants to interpret and make better use of the data provided by the big data warehouses. These data are not perfect but are at least a starting point, and if the demand is strong will improve.
- Regulation has to underpin this, and the regulators – eg the FCA – have been very weak in this area. The professional bodies need to lobby the regulators for change – and individual professionals need to work with the public affairs departments of their employers to help set the lobbying agenda.

- The social in ESG is also important, and it would be possible to have standards in this area – but our conversation on this was cut short.

#### Facilitator 3:

- CUSP paper on professional ethics and sustainability was very useful and could be the basis for an event.
- Our profession (actuary) deals with ‘other people’s money’... and they’re getting screwed, we need to go out of our way to help people engage with companies and what is happening in the financial sector. This might end in parts of the financial sector shrinking away.
- Finance is concerned with rent, understood as rate of return on capital. It’s not about enterprise.
- We need to re-establish a conceptual framework in which accountants have to take stock of social impacts
- What if XR had an accountancy or actuarial arm! What would they do?
- ‘finance is the biggest risk to itself’ has to extract from someone
- Need to invite ‘the other side’ at future events – those who are not already bought into sustainability issues
- Are we radical enough? How can we be more radical?
- Individually we’re not going to change the world.
- Engagement strategy (with unsustainable companies) is limiting.
- Shouldn’t we just put [sustainable action] into practice?
- What is our theory of change?
- Professions enjoy immense respect/prestige. They have much more leverage.
- Need to change the dominant economic paradigm, number of initiatives working to this end. We need a revolution in economics and alternative economic models are already making headway e.g. Agent-based modelling.

#### Note taker 2:

- Dilemma of time horizon: Climate impacts have centuries of a time delay (they thus will not in near time influence investment returns directly)
- How trigger actor dynamics: Climate impacts increase the risk for everybody, but profit only those that invest in ‘brown’ assets -> thus, there is no direct incentive to disinvest if there are no regulations in place
- Unheadability of climate risks (i.e. related to climate change, and not transition) (-> shouldn’t we therefore do everything to align investments with a 1.5/2-degree target?)

#### Note taker 3:

- Explore some positive vision in the financial sector.
- There are shared points of interests and common struggles – and shared understanding of barriers.
- Is the vision not radical enough?
- CUSP’s: Sustainable ethics and professionalism
  - As a provocative document
  - Looks at short-termism in capitalism
  - Politics is not an effective system to change
- Focus on profit reporting on IFRS as opposed to change in wealth Balance Sheet (t1) and Balance Sheet (t2) for example.

- One claimed that IFRS says “no obligation to civil society”.
- What is the real rate of return in investments?
- Rent extraction is it about redistribution?
- Challenge: what if there is some that don't welcome the conversation?
- There is a dominant economic paradigm.