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## **Finance for a future of sustainable prosperity**

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## **Finance for a future of sustainable prosperity**

### **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 is that, to understand our political, cultural and environmental economies, unpacking the specific logic and practices behind the 'financialization' phenomenon 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

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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

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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.

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#### 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.

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### **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*



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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?

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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

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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 (Dörny & 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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