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Evidence of Cooperative Business Impacts – a Realist Perspective

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1.0 Introduction	3
2.0 Rapid Evidence Review – a summary	3
3.0 An introduction to 'Thinking like a Realist'	4
3.1 A brief history and limitations of 'What Works'	4
4.0 Approach to inquiry	5
Figure 1 - The Iceberg Metaphor (Jagosh, 2019, Annual Review of Public Health)	6
5.0 Plural and local ownership effects revisited	6
6.0 Expanding what counts as evidence	6
6.1 Literature synthesis	7
6.2 Stakeholder interviews	7
Table 1 – Additional insights from re-visiting Plural Ownership (PO) studies	8
7.0 Evidence of impacts from literature and interviews	9
7.1 Worker Coops Impacts	9
7.2 Energy Coop Impacts	14
7.3 Childcare Coop Impacts	17
8.0 Conceptual Abstraction	21
Figure 3 - What makes cooperative impacts possible? Abstracting mechanisms and conte	
outcomes	
8.1 Implications for cooperative support	21
9.0 Implications, limitations and strengths	23
10.0 Conclusion - connecting coops with policy ambitions	24
References	26
Appendices	33
Appendix 1 – Revisiting the Plural Ownership Studies	33
Appendix 2 - Descriptive Vignettes	40

1.0 Introduction

This report emerged from a Policy Lab commissioned by Kirklees Council and supported by the Cooperative Councils' Innovation Network and Power to Change. The Policy Lab focused on developing a framework and toolkit to help Cooperative Councils in their goal to support and develop more cooperatives. During the research, it was identified that better evidence was needed about the impact of cooperatives, as well as more knowledge about the breadth, depth and complexity of the cooperative movement (Appendix II: Primary Research Report). Around this time, a Rapid Evidence Review was published about plural ownership effects – that is, the effects of cooperatives, social enterprises and municipal enterprises - which found that overall "there is no strong evidence for or against claims about the importance of plural ownership for firm performance" (What Works Centre for Local Economic Growth, 2024a, p. 3). While this review was focused on areas associated with economic growth, such as employment, productivity, sales and production costs, the accompanying evidence briefing suggested that plural and local forms of ownership may have other benefits. These included businesses creating a sense of belonging, ownership, empowerment, and feeling proud of, and connected to, community. However, it was stated that, "in most cases, these benefits are likely to be small and difficult to measure" (What Works Centre for Local Economic Growth, 2024b, p. 19).

The 'What Works' perspective is underpinned by a particular set of assumptions which value certain types of research approaches and evaluations, and which tend to generate certain sorts of judgements. The purpose of this report is to provide an alternative and complementary perspective on evidence about the impacts of cooperative businesses.

This report will expand evaluative thinking, beyond 'What Works' and towards 'What works for whom and why'. It introduces a realist perspective on evidence and evaluation (Pawson, 2024; Emmel et al., 2018; Pawson, 2013; Pawson, 2006; Pawson and Tilley, 1997), which has been developed to embrace the complexity of social phenomena and moves beyond average effect sizes as the main or best way to understand or articulate impact.

This report unfolds in the following steps. First, a short introduction to the Rapid Evidence Review is provided. Then, the move from 'What Works' to 'What works for whom and why' is justified. The limitations of focusing on average effect sizes is demonstrated by revisiting the original Rapid Evidence Review studies on plural ownership. Following this, literature synthesis and stakeholder interview data are used to expand the evidence base on cooperative business impacts. Evidence about three types of coops – worker coops, energy coops and childcare coops - are synthesised. An initial explanatory framework that abstracts how cooperative business impacts are generated is presented. The report concludes by linking back to wider policy ambitions which cooperatives can support.

2.0 Rapid Evidence Review – a summary

The What Works for Local Economic Growth Centre recently published a 'Rapid Evidence Review: Plural Ownership (What Works Growth Centre, 2024a) and an 'Evidence briefing: Assessing the local economic impact of plural and local ownership policies' (What Works Growth Centre, 2024b). The Rapid Evidence Review reported on whether the performance of plurally owned businesses is different to other businesses. The review, based on just six studies, focuses on issues such as employment, sales and production costs, and found "there is no strong evidence for or against claims about the importance of plural ownership for firm performance" (What Works Centre for Local Economic Growth, 2024a, p. 3, emphasis added).

The accompanying evidence briefing provides wider information, though this is not linked to specific studies. A key issue identified in the briefing is "displacement and crowding out" (What Works Centre for Local Economic Growth, 2024b, p 8). Displacement occurs when higher employment at one business results in lower employment at other businesses, when, for example customers switch from an existing business to a new business. Displacement could be an argument against offering support to businesses in sectors where competitors exist in the same area, such as retail, for example, or where goods and services are less unique and more susceptible to local displacement. In addition, the review states that wider benefits such as "contributing to civil society and improving pride in place... are likely to be small and difficult to measure" (What Works Centre for Local Economic Growth, 2024b, p 3; p 17-20).

Where does this leave a group such as the Cooperative Councils' Innovation Network? Likely with more questions than answers. In the next section, an introduction to a realist perspective on evidence is outlined to provide the foundations for our alternative reading of the field.

3.0 An introduction to 'Thinking like a Realist'

The Rapid Evidence Review made its judgements based on a small number of studies because its methodological requirements involve using a 'hierarchies of evidence' approach (in their case, using The Maryland Scientific Methods Scale). This is the idea that the best available evidence is based on the type of study design. At the top of evidence hierarchies based on method are studies which utilise approaches such as randomised controlled trials, quasi-experiments, systematic review and meta-analyses and at the bottom approaches such as qualitative research, case studies and expert opinion.

Hierarchies of evidence have been the subject of much debate. In 2013, the UK's innovation charity NESTA proposed an evaluation landscape beyond hierarchies of evidence (Nutley et al., 2013), suggesting that hierarchies of evidence 1) focus too narrowly on the question of what works, meaning that large swathes of data are excluded, and useful evidence is lost; 2) pay insufficient attention to the need to understand what works, for whom, in what circumstances and why, and; 3) provide an insufficient basis for making recommendations about whether interventions should be adopted. They further highlighted the importance of a realist approach and draw on realist scholarship to argue that ideas about 'what counts as evidence' should be expanded.

Realist research, synthesis, review and evaluation were developed to address the weaknesses of systematic review, meta-analysis and experimental methods (Pawson and Tilley, 1997; Pawson, 2006; Pawson, 2013; Pawson, 2024). A basic assumption of the realist perspective is that a search for evidence based on a methodological hierarchy of evidence is inadequate in that it privileges method over the identification of data that can develop insight and build explanation. To understand why this distinction is important, a brief history of the emergence of the realist perspective in response to the limitations of 'What Works' is now outlined.

3.1 A brief history and limitations of 'What Works'

The phrase 'What Works' is associated with Evidenced Based Policy making, which initially emerged in medicine after World War II. The approach was subsequently expanded into other areas of social policy including education, social programmes and international development (Baron, 2018). The idea was to build "credible evidence about 'what works' to improve the human condition; and to use such evidence to focus public and private resources in programs, practices, and treatments... shown to be effective" (Baron, 2018, p. 40).

However, 'What Works' was the subject of much debate. One social scientist, Martinson (1974, quoted in Pawson and Tilley, p. 9) famously concluded an influential review of prison rehabilitative programmes by stating that there was "no sure way" of reducing re-offending. This assessment spurred a bleak "nothing works" conclusion and set the scene for a backlash against rehabilitation and the rise of "retribution" and "just deserts" in the criminal justice system (Pawson and Tilley, 1997, p. 9). It also set the scene for the development of a more realistic approach to evaluation. Researchers went back to the original works which Martinson had reviewed and pulled out more evidence. They found that most things had been found to work sometimes. This led to the assertion by Palmer (1975), that "Rather than asking 'what works for offenders as a whole?' we must increasingly ask 'which methods work best for which types of offenders and under what conditions or in what settings" (Palmer, 1975, quoted in Pawson and Tilley, 1997, p. 10).

Essentially, this historical side bar aims to show that focusing on 'What Works' alone has been recognised, for decades, to generate mixed and unsatisfactory results. It leaves decision and policy makers no clearer on what to do and how to do it. Extending evaluative thinking towards the more realistic goal of understanding why something works (or not) therefore provides good foundations about how to develop and target policies and programmes.

4.0 Approach to inquiry

In this report, we do not aim, nor have the resources to undertake, a complete realist synthesis, review or evaluation. However, the realist perspective can be adapted and developed for the task at hand, and in the case of this study, that has involved: revisiting the six studies on which the Rapid Evidence Review is based; conducting iterative literature searching and synthesising evidence; carrying out stakeholder interviews to identify impacts from three types of cooperative businesses—worker coops, energy coops and childcare coops; thinking through *how* impacts are generated by considering mechanisms and contexts, and connecting these findings with existing policy ambitions.

It is important to understand that different research and evaluation approaches have different underpinning philosophical (also known as 'ontological') perspectives (Greenhalgh et al., 2017). Without recognising and understanding the difference between research philosophies, it can be difficult to question the call for 'robust methodologies' and the use of the 'best available evidence', which the 'What Works' approach is wrapped up in.

We have not got the space to go into details here, but what we can say is that by moving; 1) beyond the idea that we can identify 'facts' about objective reality through observation and theory (*Positivism*), and; 2) the idea that knowledge is socially and individually constructed (*Constructivism*), realists develop the perspective that there is objective reality and a social world and that humans have agency to influence both, *but*, this action is constrained by the context in which people find themselves (Greenhalgh et al., 2017). Learning about these contextual conditions becomes a central goal of realist approaches. The realist position also involves thinking through how observable impacts are caused by underlying decisions and processes (mechanisms) and that contexts can enable or constrain what decisions and processes are available. After presenting evidence from our expanded literature search and interview data, we use the model illustrated by Jagosh (2019) in Figure 1 to develop a deeper understanding of what makes cooperative business impacts possible.

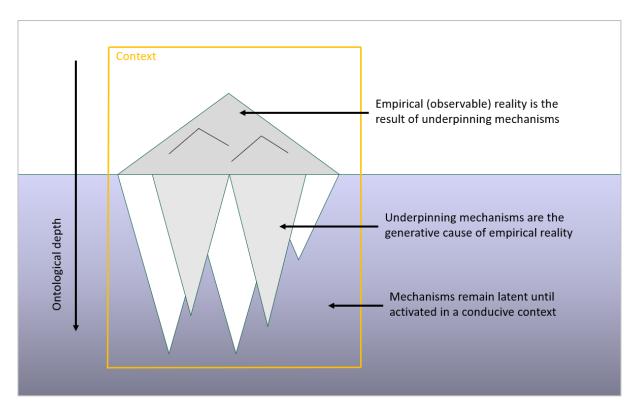


Figure 1 - The Iceberg Metaphor (Jagosh, 2019, Annual Review of Public Health).

5.0 Plural and local ownership effects revisited

In this section we briefly re-visit the studies on plural ownership on which the Rapid Evidence Review was based. Fuller descriptions of the studies are provided in <u>Appendix 1</u>. <u>Table 1</u> provides a summary of key findings – that is, the average effects sizes or headline statistics – but also includes *additional insights* from the studies. In the evidence briefing published alongside the Rapid Evidence Review, various key messages are intertwined with research and grey literature about plural ownership (What Works Centre for Local Economic Growth, 2024b). However, key messages and judgements are *not* linked to specific studies, so it is difficult to precisely trace back to and scrutinise the sources. However, the deeper dive behind the averages of the plural ownership studies helps to illuminate the complexity at work in cooperative businesses.

The Rapid Evidence Review also states that a further 13 studies were identified that looked at agriculture and fishing cooperatives. However, these studies were not referenced and the review states "...we do not include these studies as they are not the focus of plural ownership policy in the UK and the lessons are unlikely to be transferable to other sectors" (What Works Growth Centre, 2024a, p. 2).

Contrary to these assumptions, this report illustrates that - from a realist perspective - it *is* possible to: expand the field of evidence through literature synthesis and stakeholder interviews; to develop a deeper understanding about the impacts of cooperative business; *and* to learn transferable lessons from different sectors.

6.0 Expanding what counts as evidence

Expanding what counts as evidence involves moving from a 'hierarchy of evidence' approach towards an 'appropriateness of evidence' approach, where using evidence that is contextual and specific helps to show *how* something works (Abeysinghe and Parkhurst, 2013). Two key methods –

literature synthesis and stakeholder interviews - are used to pursue this goal and are introduced in the following sections.

6.1 Literature synthesis

In realist research there are different standards for literature searches and inclusion (Pawson et al., 2004). Literature searching can be iterative and diverse, and studies are included on the basis that they help build explanation. In addition, realists consider the *counter-factual*, that is, putting forward alternative circumstances to enable thinking through what something *is* in relation to *what it is not* (Danermark et al., 2002). A willingness to learn from different types of evidence means that realist researchers may find themselves overwhelmed by the volume of studies in a particular area (Pawson, 2024) and stopping points - limits and boundaries - must be put in place to manage a study. In projects where time and budget are constrained, the role of the report commissioner is vital in shaping and negotiating the focus of inquiry and making pragmatic decisions about what can be delivered within the timeframe (Tricco et al., 2017). We worked closely with the report commissioner throughout all stages of this project, from deciding how to limit literature searching, through to the structure, drafting and reviewing of the report.

6.2 Stakeholder interviews

In realist research, stakeholders are recognised as knowledgeable actors (Pawson and Tilley, 1997). Although they might not have total awareness of the entire set of structural conditions which prompt action, their experiences and ideas are a crucial aspect of developing understanding (c.f. Pawson and Tilley, 1997; Manzano, 2016). Four stakeholder interviews were secured within the timeframe of this project. Questions focused on experience in and of coops, the impact of cooperative businesses, and the impact of cooperative business support. Interviews were transcribed and summarised into descriptive vignettes (see <u>Appendix 2</u>). The descriptive vignettes were shared with interviewees for member checking (i.e., where interviewees are invited to check and correct the text) and some interviewees engaged in ongoing dialogue to further articulate their thinking. Assumptions made in the Rapid Evidence Review (RER), or in the Plural Ownership (PO) studies, were compared against the expanded literature and interview data. The goal is not to come to a final judgment but to bring enlightenment and revise and refine understanding.

Plural Ownership (PO) study	Rapid Evidence Review (RER) Key findings	Additional insights from studies
PO-1 Employment and wages over the business cycle in worker owned firms: Evidence from Spain (Garcia-Louzao, 2021).	finds that a one percent increase in the national employment rate is associated with a 1.08 percent decrease in employment for privately owned businesses, but only a 0.34 percent decrease for worker owned cooperatives.	 Coops offer higher job security, there is more employment stability, especially at times of crisis. Wage penalties are possible (3eu a day less), but workers employment is more stable. By maintaining employment during crisis times, workers are insured against negative shocks and there is a reduced burden on the unemployment system. Mechanisms include: better workplace representation, enhanced reciprocity, internal solidarity. Coop business contribute to more competitive, sustainable economy with more and better conditions of employment.
PO-2 Are cooperatives more productive than Investor-Owned firms? Cross Industry evidence from Portugal (Monteiro and Straume, 2018).	finds that investor owned firms (IOFs) in Portugal are on average more productive than cooperatives at the aggregate level and the industry level for eight out of 13 industries analysed.	 Coops produce more than Investor-Owned Firm (IOFs), they tend to be more capital intensive; have more part time and female workers, on average; and import significantly less goods, indicating local linkages. Coops and IOFs are not really comparable, coops would significantly increase their output if they used the same technology as IOFs. Employee participation, informational advantages, vertical integration could be positively effect productivity, whilst lack of external information, a lack of equity-based incentives, and lower efficiency due to collective decision making could be negative. Coop firms, whilst pursuing a business model which aims to maximise social welfare as well as profit, are not conclusively different than an IOF in terms of productivity.
PO-3 The productivity effects of profit sharing, employee ownership, stock option, and team incentive plans: evidence from Korean Panel (Kato, Lee and Ryu, 2010).	finds that productivity is 10 percent higher in businesses with profit sharing and team incentive plans in place for a year or more, than in businesses with no plans. Team incentive plans in place for three years or more have no effect on productivity. Employee stock ownership or option plans have no effect on productivity over any time period.	 Study looks at private and publicly traded businesses, not coops. Reports on schemes such as Team Incentives Plans and Profit-Sharing Plans, where some individuals or teams might win prizes such as holiday/breaks or cash bonuses for better performance. Productivity is higher is firms with TIPs and PSPs but firms with employee stock ownership plans have higher employment. Employee stock ownership was encouraged by the government to accommodate employee investments in firms and as a way of securing much needed capital for investment.
PO-4 Efficiency in employee-owned enterprises: An econometric case study of Mondragon (Arando, Gago, Jones and Kato, 2015).	finds that faster sales growth in Spanish hyper markets with high employee ownership than those with modest employee ownership. For supermarkets, ownership had no effect on sales growth, apart from a sub-group of smaller supermarkets which operated as small neighbourhood grocery stores, sales growth in high employee ownership cooperatives was higher than in conventional stores.	 Coops have high job security, no coop members have ever been laid off Coop wage structures are compressed and more equal, non-managerial positions receive a 20% premium and the usual ratio of top to bottom payment does not exceed 5:1. Coop workers have a bigger stake in the company performance and are expected to engage in problem solving and business development, this can be stressful and coops are not simple panaceas, but the connection between workers' financial well-being and firm success are mechanisms for loyalty, commitment, and business performance. Different store types have different levels of employee participation, some stores (with less participation) feel like 'second class members' and the stores are working towards full membership.
PO-5 Corporatization and Firm Performance: Evidence from Publicly provided local utilities (Cambini, Filippini, Piacenza and Vannoni, 2011).	finds that production costs reduce when bus services provided by public transit systems from a municipal enterprise are transferred into an autonomous or limited liability company, even if public ownership persists.	 Study looks at publicly owned bus firms which are transferred into limited liability companies, not coops. Corporatization implies a change in ownership rights and the potential introduction of incentives. Additional risk and responsibility, freedom from government personnel, procurement, budget restrictions and long term investment, and an alignment of incentives between managers and shareholders are thought to increase cost reducing efforts. Cost reducing activities include re-structures and reducing excess employment.
PO-6 Spatial Patterns in new firm formation: are cooperatives different? (Diaz-Foncea and Marcuello, 2015).	finds that whilst there are some common factors underpinning private sector and cooperative starts, many of the factors driving start-ups are different, including cases where they have opposite effectsthe limited nature of this evidence means these findings need interpreting with care.	 Recognises that coops build and maintain SMEs in the marketplace, supply high quality services for people that might not have access. Cooperatives are 'business management schools' for people who otherwise could not achieve positions of responsibility. Coops are not just a left-wing phenomenon but are associated with right wing regions too. Worker coops are set up in rural and less dense areas, the situation and characteristics of entrepreneurs appear more relevant than the regional economic dynamics.

Table 1 – Additional insights from re-visiting Plural Ownership (PO) studies.

7.0 Evidence of impacts from literature and interviews

The following sections draw together the literature and interview data to develop a deeper understanding of cooperative business impacts.

7.1 Worker Coops Impacts

7.1.1 Cooperative purpose and job quality

The second plural ownership study (PO-2 Monteiro and Straume, 2018), suggested that it was difficult to compare the performance of cooperatives and Investor-Owned Firms (IOFs) as the two had completely different purposes. An expanded literature search allows us to explore this idea more fully.

To grasp the difference of cooperatives, and the *cooperative advantage*, it has been argued that it is important to recognise the circumstances under which cooperatives emerge (Spear, 2000). Cooperatives do not emerge in a vacuum. They are *not* typically formed when there are *no* workplace grievances, *no* contractual problems, or a community is *well served* with public goods. Rather, they emerge where there is excessive exploitation, monopolistic power, and in contexts where the state is failing to provide the quantity or quality of important goods and services such as health, care, education and housing (Spear, 2000). This means it is important to understand that cooperatives are a business structure formed *to* meet the needs of workers, members and communities. Cooperatives build on solidarity within communities, and extend these relationships for the betterment of enterprises, workers and community.

The Rapid Evidence Review and evidence briefing raises concerns about displacement, stating that "employment at supported businesses may come at the cost of employment in non-supported local businesses" (What Works Local Growth Centre, 2024b, p. 2). But knowledge about the alternative raison d'etre of coops provides a new perspective. Concerns about displacement misunderstands why cooperatives emerge in the first place. The first phase of a cooperative is establishing that there is an economic justification (Cook, 2018). Collective action emerges as a result of excessive market power, co-ordination inefficiencies, undue exposure, and alienation (Cook, 2018). Related to this, our Worker Coop Member felt that one of the biggest impacts of their coop (a large worker coop operating in wholesale and logistics) was the high wages paid to everyone at the coop: "I think you'd struggle to find... [work for] ... as much as we pay... in the entire UK". The wage is more than £5 per hour higher than the national minimum wage and everyone at the coop is paid the same. In addition to this, it was pointed out that people are "generally happy", "close knit", and that they also "have freedom". Members train themselves up, develop external relationships and contribute to business development. There are good conditions, various workplace accreditations to ensure health, safety and training, free meals, paid breaks and flexible working options. A great deal is invested, the interviewee noted, in democratic workplace practices that aim to maintain and improve working conditions.

The Worker Coop Member said: "...when you see documentaries about other large organisations running a warehouse, you know, people getting fired for being late by a minute or not being able to go to the toilet... it's just a million miles away". They said that evidence of this could be found in the cooperative's wage bill, its various accreditations, engagement metrics on meeting attendance and voting participation, completion and results of various workplace surveys for health, safety, well-being and culture, all of which track "how people feel about working at the coop". This puts concerns about displacement in a different light. It is not only about considering whether a supported businesses displace employment from an unsupported business, but rather, how coops can replace

'bad jobs' with 'good jobs'. This possibility of coops replacing bad jobs with good jobs is the focus of a study which investigates different levels of cooperative ownership at a packaging firm, a taxi firm and a social care firm (Jenkins and Chivers, 2022). The study includes interviews with stakeholders at the firms and assesses the impact of different levels of cooperative ownership on job quality dimensions such as: work organisation, skills and development, wages and payment, security and flexibility and engagement and representation. The authors conclude that the potential of turning bad jobs into good jobs depends on the *depth and degree of cooperative ownership*, and contextual *institutional and regulatory factors*. Where ownership and control were *not* shared, for example in the care company, wages stayed low and there were limited opportunities for workers to expand organisational democracy to change this. Where ownership was high, workers could exert control over matters that were important to them, such as wages and conditions of work, for instance, in the packaging company and taxi firm. The authors state that the "nature and degree of employee ownership matters when accounting for job quality outcomes" (Jenkins and Chivers, 2022, p. 532).

Additional contextual factors external to the companies also played a role. For the care company, the macro-political economy of marketisation and austerity in the care sector had a negative impact on job quality and served to further undermine the potential cooperative advantage. Additional action in the external sectoral context was needed to "focus on interventions beyond the workplace to improve work" (Jenkins and Chivers, 2022, p. 533). Related to this, our Coop Support Consultant interviewee made a distinction between cooperatives which are about "providing nice jobs for their members", and social enterprises, which can be "cooperation lite" and "based on a charity model" with a "built in fragility". The consultant suggested that the *social impact industry* meant that, in the policy environment, "mutual aid" was not considered or supported in the same way as philanthropy and social enterprise, which left cooperatives "jumping through hoops" in an unsupportive legislative environment. In summary, good quality work is an impact of cooperatives, but this is dependent on the extent of ownership and how empowered workers are to influence their pay and conditions, in addition to the supportiveness (or not) of the institutional environment.

7.1.2 Cooperative resilience

One impact that the Rapid Evidence Review highlights, and that studies on plural ownerships provide data about, is that cooperative businesses offer high job security and react to economic shocks and crises in a way that is different to Investor-Owned Firms (c.f. Arando et al., 2015 and Garcia-Louzao, 2021). Results from an expanded literature search further confirm this. Grashuis (2018), for example, collects case studies and print media publications to piece together how farmer cooperatives survive for long periods. He found that organizational growth was key to survival, which sometimes came in the form of vertical integration (consolidating and *owning* different elements of the supply chain), geographic expansion, and portfolio diversification. Other studies confirm that cooperative stability and resilience through the financial crisis (Carini and Carpita, 2014) and Covid (Tortia and Troisi, 2021).

One study which carefully explores the cooperative life cycle helps to explain this. Cook (2018) uses inputs from fifteen cooperative CEOs, graduate students and professors at the Graduate Institute of Cooperative Leadership and inputs from workshops, interviews and research surveys, to propose a cooperative life cycle model. A feature of this model is the notion of 'cooperative genius', which is the formal or informal process where participants identify potential problems in the coop, and then work to solve this, through 'cooperative tinkering.' Our Worker Coop Member interviewee reflected on this process, stating that while "several competitors" had gone bust over the past three to five years in their marketplace... "we keep getting through". They noted that high levels of information sharing mean everyone is aware of business performance and "up to date with how the coop is

doing... They get financial information, more information than any person could digest... and we've got a lot of skilled people that have been through those things and we're relying on that to get us through." This confirms what Arando et al. (2015), identified, which was that workers' financial well-being being tied to firm success and information sharing within cooperative firms, were mechanisms which fostered loyalty and commitment, as well as enhancing firm performance.

The Rapid Evidence Review excluded studies about agricultural and fishing cooperatives, but this means that an entire journal Special Issue about Cooperative Longevity, which included the studies by Bijman, Cook and Grashuis, were not considered. Numerous insights are provided as to how and why worker coops in agriculture survive so long. These include the importance of kinship bonds, acquaintance relationships and social capital (Chlebika and Pietrzak, 2018); the role of member diversity and members assets and value added that members bring (Elliot et al., 2018); the capacity to constantly adapt to crises and challenges (Giagnocavo et al., 2018); collaboration to design and implement solutions (Iliopoulos and Valentinov, 2018), and overcoming social dilemmas (Tortia, 2018). In summary, there are special qualities and processes that enable cooperatives to survive over time, some are which are highly practical, such as information sharing and problem solving, while others are based on shared values and relationships.

7.1.3 Cooperative growth

The Rapid Evidence Review did not include studies from certain sectors as they were deemed irrelevant. However, a case study about the dairy industry in the Netherlands (Bijman, 2018) explores the extraordinary performance of cooperatives in this sector and highlights how decisions taken by national government towards cooperatives have enabled them to survive and thrive.

The first cooperative legislation was enacted in 1876 in the Netherlands, and it took ten years for the first formal cooperative to be formed (Bijman, 2018). Cooperatives were considered a solution to the social and economic problems associated with widespread pauperism, poor urban housing, child labour and miserable working conditions (Mooij, 2020). From this point onwards, in the dairy industry, there were phases of rapid growth, consolidation and crisis, rationalisation and modernization, product innovation and brand building. Today, a small number of dairy cooperatives own 80% of the market, resulting in higher prices for farmers through economies of scale and greater bargaining power (Bijman, 2018). Cooperatives are now established and resilient institutions, changing the nature of the sector and the rules of the game. These impacts, and the benefits generated for farmers and communities, would not have been possible without "state support" and "interventionist policies", as Bijman points out: "Ever since the 1930s, cooperatives have received favourable treatment from the institutional environment" (Bijman, 2018, p. 13).

While Jenkins and Chivers (2022) expose the challenges faced by cooperatives in an unsupportive institutional environment, Bijman's study shows how cooperative growth can be achieved at scale in a supportive one. In relation to this, our Worker Coop interviewee suggested that the way to increase cooperative business impacts would be through the introduction of a Marcora Law, an Italian law where workers are able to buy out and recover companies from retiring or failed owners and investors. Of interest, one of the cases in the Jenkins and Chivers (2022) study was a packaging company where 19 employees achieved a buy-out by investing a £3,000 each.

The Rapid Evidence Review highlighted cooperative support mechanisms to include business support, grants and procurement, but legislation such as a worker buy-out schemes is also an option. The impact of this can be seen in a recent mapping of Marcora businesses in Italy (Bernardi et al., 2022). Benefits include the avoidance of public outlays of redundancy payments, social security and the creation of tax revenues. Since its inception in 1985, the legislation has enabled 323 coops to be

set up through worker buy-outs, with a survival rate of 71%. Using data from 33 coops over a tenyear period, it was estimated that the return on public investment was about 23 times, and on average a worker buy-out over its lifetime, generated a return on public investment of 7.9m euro.

The Worker Coop Member felt that one of their greatest impacts was the tax their employees paid, which could be evidenced by their membership of, and compliance with, the Fair Tax alliance, and the impact this spending would have on the local economy. In addition, higher wages means that workers are unlikely to be dependent on universal credit and/or other benefits paid by the treasury. This is increasingly important, as in-work poverty has been growing over the last two decades. More than 60% of families living in poverty have at least one adult who works (CIPD, 2023). In terms of achieving impacts on tax and livelihoods, literature on worker buy-outs identified that "clear regulation of the ownership rights transition, coupled with incentives" as well as "active cooperative associations" were important in the success of the policy initiative (Bernardi et al., 2022).

7.1.4 Community well-being and health impacts

The Rapid Evidence Review said that the wider benefits of coops were likely to be small and difficult to measure. In their interview, our Coop Support Consultant suggested that places with coops were "nicer places to live" and that "concentrations of housing coops and worker coops create alternative economies." They said that cooperatives are a vehicle for money to stay in communities, instead of being extracted by shareholders or off-shored. Other impacts, they said, would be peculiar to the coop in question, for example a shop selling organic veg might provide training or develop a therapeutic angle through outdoor work. Among the search results, a number of high-level reviews were found which add evidence about this.

One study looked at the effects of community business, including cooperatives, on health and wellbeing outcomes (McClean et al., 2020). A total of 17 items are included in the study, which categorises health and well-being outcomes broadly, aiming to capture the social determinants of health. The study highlights evidence that community businesses make a positive contribution to health and well-being. A major theme is their role improving social participation and alleviating social isolation via specific community-related activities. This has a broader impact, it is stated, on "social connectedness (social capital), feelings of belonging (social integration), decline in feelings of loneliness and engagement in meaningful social activity" (McClean et al., 2020, p. 474). The authors suggest that community businesses are important and illustrative examples of the expansive role of local communities themselves in contributing to positive health and wellbeing outcomes.

A realist perspective encourages researchers to consider the counter-factual, that is, putting forward alternative circumstances to enable thinking through what something is in relation to what it is not (Danermark et al., 2002). For example, in discussing firm productivity and whether a coop 'uses' labour in the same way as an Investor-Owned Firm, our Worker Coop Member suggested that they think differently about labour and that labour is not simply something 'to use'. From a cooperative perspective, labour is people, and in a coop, people are members who are democratically involved in organising their own work life. In the literature, humanistic governance and relationality is identified as part of the cooperative behaviours and difference (Novković et al., 2013; Byrne, 2022; Tremblay et al., 2019), which results in cooperative members willingness to work towards the long term and collective good. This can be counter-factually contrasted with precarious employment. This is the subject of a study by Pulford et al. (2022), which aimed to evaluate the impact of persistent precarious employment (lasting 12 months or more) on the health of working age adults, compared with more stable employment. Pulford et al. (2022) argue that paid work is an important protective factor for health and well-being, and the most important determinant of population health and health inequalities in advanced market democracies. The authors state that there is growing

recognition of the importance of psychosocial work environments, and the concept of good work characterised by job security, sufficient income, a safe physical work environment, clear responsibilities and procedures, a positive mental health environment, and employment rights. Precarious employment is generally viewed as bad work and is characterised by: employment instability, low material rewards, erosion of rights and protections, erosion of employee representation and imbalanced power relations (Pulford et al., 2022). Mechanisms through which precarious employment impacts health includes psycho-social stressors, unsafe working environments and material deprivation.

This adds evidence about the health impacts of bad work and connects to the idea that cooperatives can turn bad jobs into good jobs (Jenkins and Chivers, 2022). While it is important to remind ourselves that coops are not simple panaceas (Arando et al., 2015), evidence about the health and well-being impacts of bad work adds understanding to the impacts of being able to organise good work. Owning and sustaining a coop is not necessarily easy (Arnado et al., 2015), but set against the precarious alternatives it helps explain why cooperative members who experience stress (Arando et al., 2015) or wage penalties (Garcia-Louzao, 2021) stick with the work they have. There might be other psycho-social, emotional and health and well-being effects from which workers benefit, which studies focused on productivity and growth do not reveal.

Returning to the study by Pulford et al. (2022), the most reported outcome from exposure to precarity was mental health, with evidence also relating to adverse effects on general health, physical health and health behaviours. Precarious work also has economic costs. For example, an annex from a European Union report on mental health and precarious work (European Union, 2023) identified that in 2018 mental health problems cost more than €600 billion across the EU. Pulford et al. (2022), conclude that:

"There is an increasing need for policy responses that go beyond individual employer/contractor practices to broader policy areas addressing social, political and economic trends that could include, as general principles, strengthened employee protection, representation and collective bargaining, and social support" (Pulford et al., 2022, p. 915).

Another review on 'Levelling up Health' suggested that welfare conditions that *reduce job precarity* are promising for levelling up health (Davey et al., 2022), while a 'review of reviews' suggests that policy actions to *create a fairer economy* could tackle widening social, economic and health inequalities (Macintyre et al., 2024). This review concluded that instead of 'corrective' interventions for an economic system that has failed particular sub-groups, altering the economic conditions for the general population 'by design' was needed to ensure greater economic inclusion and wellbeing. The authors suggest that fruitful areas (with *emphasis* placed on those concepts that can be connected to cooperatives) for practice and research to reduce inequalities should include: incomebased policies such as minimum income standards; good work; *community wealth building* and *different forms of ownership models*; the delivery of *affordable essential services* including housing, transport, digital connectivity and food; *education, training and skills* (e.g. early years, childcare, primary, secondary and further education); *social capital and community infrastructure* (including the nonpaid economy such as caring, volunteering or mutual aid); *community empowerment and engagement*; and *addressing equitable wealth distribution*.

The importance of equitable distribution of rewards in cooperatives is addressed in a study by Altman (2015). It shows that cooperatives do something different with their profit, in the sense they use it to benefit their worker/members, creating security and sustained economic participations. Our

Coop Support Consultant interviewee argued that coops are about "more equitable ways of running the world", and we can now connect these qualities with wider well-being benefits.

7.2 Energy Coop Impacts

7.2.1 Maintaining cooperative options under hostile conditions

A striking theme in the interviews with two coop stakeholders from the Energy Sector were the setbacks and difficulties created by changes in the regulatory environment. This provides more evidence about how coops behave and adapt to maintain a cooperative option. This is related to resilience and longevity, but also with an emphasis on providing citizens a cooperative ownership option.

Our Energy Coop Consultant interviewee stated that supporting energy cooperatives is "something that should be a walk in the park but is an uphill climb". Changes to the feed-in-tariff, navigating legislation, the limitations of grid infrastructure and sharing were all unhelpful, but the greatest challenge was the "highly toxic anti-green agenda" where "each policy appears to be designed to make it harder for community involvement." It was noted that the impacts of Energy Cooperatives are related to making contributions towards *decarbonisation* and *democratising the energy sector*. The Energy Coop Consultant said that choice in the energy market was an illusion and that people have no real control over their energy costs. However, cooperatives can give people a say in the energy system "by actually owning and operating some of those assets".

Our Coop Energy Consultant advised that evidence for the impact of the community energy sector can be found in the *State of the Sector* report, collated by Community Energy (2022), and in the hundreds of community energy projects which exist across the UK. The report highlights 495 community energy organisations, engaging 217,489 people, raising £21.5m for new projects, and taking community owned energy capacity in the UK to 331MW (Community Energy, 2022). However, the report also notes that *growth* of community owned electricity capacity was *just 2.4%* (down from 81% growth in 2016 and 18% growth in 2018). As the report states:

"For the first time in several years, *no new organisations* reported involvement with an active electricity generation project, opting instead to focus on energy efficiency, low carbon transport and renewable heat initiatives, perhaps reflecting the perceived difficulty of developing community-scale generation projects in a post-FiT [feed-in tariff] environment" (Community Energy, 2022, p. 4, emphasis added).

Thinking counter-factually, it is possible to consider what could have occurred if a more enabling environment was in place, and growth continued. For example, if there were 495 organisations in 2021, an increase of 18 from 2020, the number of new organisations increased *than less than 4%*. If this number had increased by 18%, as capacity did *before the policy change*, the number of organisations could now be 563. While there is professional support to develop such projects, without an enabling environment and supportive regulations, growth is thwarted.

Within the Community Energy report, there is no specific breakdown of the impact of cooperatives. Data is presented on aggregate, and of the 495 community energy organisations it is said that 57% are "registered as Community Benefit Societies (BenComs), cooperatives or community interest companies", and that the remainder are made up of limited companies, charitable groups and unincorporated community groups. Our Energy Coop Member interviewee ran a coop but indicated that because the Financial Conduct Authority had changed its rules and "hardened its position" with regards to community energy being developed through cooperatives, they might change their structure. However, the Energy Coop Member also noted that sector support was maturing and that

there was an increasing track record of community share offers and increased skills and support within the sector.

The capacity of energy coops to survive in a *hostile environment* is discussed by Bauwens et al. (2015) in a study of wind power cooperatives. The study involved 40 interviews with key actors (cooperative managers and board members, intermediary actors, policy makers) in four countries (Denmark, Germany, Belgium and the UK) as well as analysis of various documents such as regulatory reports, legislation, annual reports of cooperatives. The study showed how wind cooperatives are impacted by support mechanisms (or not), planning policies, attitudes towards cooperatives and local energy activism. Overall, the study showed there has been a tendency towards "a more hostile environment for cooperative initiatives" who are at a disadvantage to traditional developers (Bauwens et al., 2015, p. 144). Tax incentives and feed-in schemes have been dropped. Meanwhile, costly large-scale turbines — out of reach financially for cooperatives and which create more planning difficulties for onshore wind — favour large corporations providing off-shore wind. Authors show how policies can "be cooperative friendly" or "cut all support", which demonstrates how "the role of power and interests" crafts institutions.

To counter this hostile environment, coops try to pool resources, form networks and adapt business models not simply to survive, but also "as an attempt to reach a more balanced distribution of political power in energy markets, which is very biased in favour of large-scale players" (Bauwens et al., 2015, p. 146). A mapping study of community energy also demonstrates this (Koltunov et al., 2023), revealing umbrella organisations added to the "survival chances and development of the sector" (Koltunov et al., 2023, p. 17). The vital role of cooperative umbrella organisations was also found by Łapniewska (2019), in a case study of German cooperatives. Cooperative institutions can also promote cooperative energy by installing equipment and generating savings (Coop Power, 2021). Therefore, an impact of energy cooperatives can be seen in the way that they cooperate to *maintain the possibility* of "citizens self-organization and participation", and, in the process, craft "resilient, just and democratic institutions... which are more likely to serve the common good" (Bauwens et al., 2015, p. 146).

7.2.2 Generating investment

In the Rapid Evidence Review, the plural ownership study by Kato et al. (2010), noted that employee ownership had been encouraged by the Korean government as a way to help firms obtain much needed capital for investment. The experience of our Energy Coop Member interviewee illustrates how cooperative share offers bring investment into the community energy sector. Our interviewee had a track record of delivering successful share offers: £400k for solar panels on houses in a deprived estate; £600k for a biomass boiler for a school; £265k for another biomass boiler on another large building. This money is invested by ordinary people, motivated, the Energy Coop Member said, by two main reasons. First, they "want to do environmental good...and see practical projects". Second, they see it simply as a "straightforward investment."

The critical role of citizen participation in investments in the sustainable energy transition is recognised by Broska et al. (2022). Citizen participation is important not just to increase the public acceptance of renewable energy projects and the sustainable energy transition, but because it is expected to "close the investment gap in renewable energy" (Broska et al., 2015, p. 1). Organisations such as Big-Solar Co-op and Ripple Energy are examples of strategic cooperative organisations which provide opportunities to invest. Big Solar Co-op runs community share offers where members can invest any amount from £100 to £100,000 to "support a new generation of community solar across the UK" (Big Solar Co-op, n.d.a.). Member Investors get an interest rate of "2% above the Bank of England base rate and a minimum of 5%". The website explains that 450 Investor Members from all

over the UK have collectively invested £1.2m in solar projects so far. As well as offering a "competitive interest rate", investors are contributing to "de-carbonisation," "reducing energy bills" and bringing solar to places which are "less sunny and less wealthy" (Big Solar Co-op, n.d.a.). Ripple Energy has a slightly different model, where people buy shares in, and become a member of, a cooperative society which owns its share of a wind farm or solar park (Ripple Energy, n.d.a.). Investors can buy up to 120% of their annual household energy consumption, then, once a project has been built, investors are 're-paid' through cheaper energy bills.

A study on the socio-economic power of cooperatives in the German energy sector identified 76,500 actors with 693m euros capital at their disposal at the time (Debor, 2014). Furthermore, 20% these coops had, on average, 200 members, and could access more than £2m capital, demonstrating the potential to grow renewable energy *and* investment returns. Entwistle et al. (2014) also show that sourcing capital locally, through *co-operative* shares, reduced the overall cost of capital, increased net project earnings, and contributed directly to household income of co-operative members. The co-operative share model increases total local GDP impacts by 35% compared to energy projects that rely on commercial debt (Entwistle et al., 2014). In addition, compared to investor-oriented firms, member behaviour in an energy coop may be driven by fairness concerns (Yildiz et al., 2014). Our Energy Coop Member could not think of a community funded energy project that "went bust", but rather said, if there had been a less profitable year or equipment had been damaged, then coop investors accept "blips in returns".

This potential to bring in investment goes beyond individuals. Our Energy Coop Member underscored that cooperatives were an increasingly important partner for cash-strapped councils: "community energy organisations [can] bring money in and tackle Net Zero at a time when resources are very slim." Evidence for this, it was suggested, could be found in the recent success of cooperatives such as Green Fox Energy which, in partnership with Leicestershire County Council, has just been awarded £2.56m from Innovate UK as part of its Net Zero Living programme (Green Fox Community Energy, 2024).

This additional investment could be a crucial contribution to developing the "decentralised" energy system imagined in policy (HM Government, 2020). Of course, decisions about dedicated support, targets and start-up finance, funding instruments, fiscal incentives and support for energy sharing all influence the potential community energy impacts (Krug et al., 2022). This makes local government key actors in the development of community energy (Koirala et al., 2016). The power of local government to unlock opportunity for scaling local energy is captured in case studies such as Saerbeck (Germany), and Lochem (The Netherlands), where ambitious, public, reflexive leadership local politicians and officials drives innovation and development (Hoppe et al., 2015). Communities can "absorb the more daunting financial, political and informational burdens of accessing schemes" and their "existing local ties" mean they also try to bring the benefits of community energy to lower-income groups (Stewart, 2021), but a supportive environment and public partners enables them to do more.

7.2.3 Building communities and people

The Rapid Evidence Review stated that there might be wider benefits to cooperatives, but these were likely to be small and difficult to measure. One study focused on the impact of renewable energy cooperatives on local communities. Using a variety of descriptive statistics and semi-structured interviews, the study examined the historical and social context, governance arrangements and norms, as well as different impacts (Koltunov, 2019). These included social benefits such as empowerment and skills development, community volunteering, local ownership and decision making, investing in local projects such as roads, kindergartens and psychological

benefits including energy self-sufficiency and security, the satisfaction of participation, new friends and the pride of being a member. Koltunov (2019) also suggest that detriments are possible, for example, emanating from tension among local actors, a complex energy system, policy changes and management conflicts. Recommendations for overcoming these issues include: taking more care to apply cooperative governance, offering salaries, and getting professional help. This study included economic calculations showing benefits to communities including the contracting of local companies, shareholder income, community income, salaries to employees and energy bill reduction. Another impact was where a new cooperative biogas plant eliminated odour and made the local area more appealing to tourists. Meanwhile a wind cooperative attracted 5000 "energy tourists" a year and an 'Energy Academy' was established to promote the energy transition and educate visitors (Koltunov, 2019, p. 60). Ambitious public leadership (Hoppe et al., 2015), and thoughtful, participatory community engagement processes enable diverse communities to work together and be invested in such projects (Kiamba et al., 2022).

Our Energy Coop Member interviewee suggested that there is a "social side" of cooperative energy, where people mix and work together to develop a project that benefits the community. They also discussed how they built their skills by volunteering on community share offers, before running their own energy cooperative. This experience – cooperatives as incubators of innovation – is an important one. Skills and knowledge can be an outcome of community energy development (Kiamba et al., 2022; Berka and Creamer et al., 207). Indeed, plural ownership study 6 (Diaz-Foncea and Marcuello, 2015), identify that cooperative forms are 'business management schools' for people who might not otherwise achieve positions of responsibility.

In a review of community owned energy (including 193 articles), authors focus on identifying conditions which support impacts. With regards to cooperatives, earning allocations, effective leadership, trust and homogenous interests *were preconditions* for skills and knowledge development, social capital, and longer-term impacts such as socio-economic regeneration and empowerment (Berka and Creamer, 2017). Energy Coop Consultant said that the trust, openness and authenticity that characterise cooperatives make the possibilities of cooperative energy "almost unlimited". Being part of an energy coop means "you're mentally and psychologically invested…you've got a stake and for that reason the potential of coops in the energy sector is unlimited."

7.3 Childcare Coop Impacts

Plural ownership studies highlight the possibility that ownership creates incentives and influences business start-up and performance (Kato et al., 2010; Cambini et al., 2011; Arando et al., 2015). In the final section, we turn attention to childcare coops. This is an area of the economy where workers tend to be more exploited, under-paid and/or precarious (International Labour Organisation, 2016). Efforts were made to speak with childcare coop stakeholders, however no interview with a cooperative child-care provider/support programme, large or small, at home or abroad, could be secured. Yet, the existence of independent childcare coops in developed economies (in the US, Canada and Australia as well as Europe), and the existence of a childcare coop support eco-system for independent cooperatives, (particularly in the US, Canada and Australia), can be observed through websites and guidance documents. In the process of trying to secure interviews with a childcare coop, academic colleagues in Canada and Australia provided leads and contact details. Though the interviews could not be secured within the time frame of the project, impacts can be gleaned by examining the support system and development of provision in those areas.

7.3.1 Creating provision

Even a cursory search on Google Maps reveals the existence of childcare coops (see Figure 2), and further searching unearths some dimensions of the eco-system which have enabled this. The State of Victora Department of Health and Human Services (2017) provide guidance about the steps to starting-up and the benefits of community managed childcare, including case studies from childcare cooperatives. People in the state are also supported by an independent non-profit organisation that provides training, resources, advice and advocacy to support the establishment and provision of quality, affordable, community-based family and children's services (Community Child Care Association of Victoria, n.d.a.). While the academic study of childcare coops specifically is extremely sparse, there is a well-established literature on the importance and effects of high-quality early years education, with greater gains made by children from less advantaged backgrounds and sustained impacts for children's cognitive, language and social development (c.f. Evangelou et al., 2007; Archer and Oppenheim, 2021).

There is also existing evidence that many children live in 'childcare deserts', for example, with an estimated 40% of children in the UK not having access to early education (Pollard et al., 2023). Again, this demonstrates that while the evaluation of cooperatives may be sparse, the work that they provide – in this case, *vital childcare which is shown to shape life chances* – has a well-established evidence base. In the UK, cooperatives have been proposed as part of a solution to unaffordable and insufficient childcare (c.f. the Lambeth and Southwark Childcare Commission; 2015; Round and Longlands, 2020). Yet, the sector is still characterised by low pay, high churn, little opportunity to progress and excessive profiteering. To address this, "innovative and purpose-led providers such as cooperatives" should be supported (Jitendra, 2024, p.25).

As many cooperative scholars have noted, decisions in the institutional environment can enable or hamper cooperatives (Spear, 2000; Bijman, 2018; Bernardi et al., 2022). In Canada, a federal \$4.3 billion/ten year plan aims to put \$10,000 a year back into the pockets of families by providing affordable, inclusive '10-dollar-a-day' childcare. The funding supports non-profits, indigenous-led organisations and *under-served* areas to set up provision, including coops. Women setting up coops get business plan writing support, grants for space and grants for operations. There are other examples of supportive legislation that enables cooperative provision. For example, family-run childcare cooperatives for up to 12 children in California are exempt from obtaining a childcare home license (International Labour Organisation, 2017). These institutional supports create impetus for cooperatives to start and continue. The impact of this is that when you conduct an internet search for 'Childcare Cooperatives' in these areas, for example in Melbourne, Australia, or Saskatchewan, Canada, you can find one, or you can find out how to set one up (see, for example, Figure 2).

7.3.2 Distributing power, rebalancing lives

The Rapid Evidence Review says that there are likely to be wider benefits of coops, but these are likely to be small and difficult to measure. In terms of impact of childcare coops, the guidance provided by the Victoria State Department for Health (2017) describes a variety of outcomes including: embedding volunteerism and intergenerational connections; building locally based organisations which encourage social and economic participation; supporting a sense of belonging and inclusion through quality and asymmetrical power relationships; achieving connected with families and the community through shared ownership of children's services. Particularly, the guidance noted that community ownership meant that people cared about equity, and individual and local needs were addressed in a locally appropriate way. Equitable services "promote a fairer distribution of economic resources and power between people" (State of Victoria Dept of Health and Human Services, 2017, p.34). As well as economic participation and the priority to provide quality

child-care, these community-based services can have knock-ons in terms of social and political participation, with people making connections, collaborating and working with groups and agencies to improve community life.

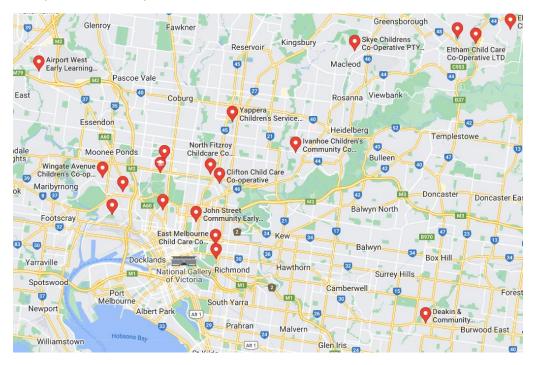


Figure 2 – (Google, 2024), Childcare Cooperatives in Melbourne, Australia.

Whilst there is not much academic interest in childcare cooperatives, two studies present qualitative and quantitative data to show the impact being a worker/member of a childcare cooperative has.

One study (Matthew and Bransburg, 2016), tells the story of the Beyond Care Childcare Cooperative (BCCC) in Brooklyn, New York, which was set up by women in Sunset Park, an area where approximately 90% of people are immigrants and face significant employment barriers. A group of mothers sought help from a group called 'Women's Action to Gain Economic Security' and took part in a free, ten-week course, which covered everything from child development and resuscitation (CPR) techniques, to cooperative values and principles, to brand development and the establishment of operating rules.

The impacts of BCCC can be evidenced by 58% increased hourly wages, and knock on improvements in emotional and psychological well-being, increased self-esteem, increased confidence as mothers, more time with their own family and greater confidence in advocating for their needs and the needs of domestic workers. Loneliness, isolation, depressive thoughts, and stress and anxiety were reduced through "social connectivity" and "interdependence" (Matthew and Bransburg, 2016, p. 17). Women were better off not just because their pay increased, but also because organisationally, the cooperative prioritised labour conditions which impacted women's well-being and the ability of its members to maintain their own family relationships. The BCCC website itself also provides evidence of the sorts of cooperative tinkering and innovation that is discussed by Cook (2018). The women do not simply provide regularly scheduled childcare, but also nanny sharing, group childcare, after hours rapid care. In contrast to the International Labour Organisation (2016), characterisation of exploited workers, there are pictures of the BCCC women at Cornell University, gaining certification and demonstrating an investment in themselves and the worker coop, providing an example of the plural

ownership study's assertion that cooperative forms are 'business management schools' for people (Diaz-Foncea and Marcuello, 2015). There are logos of organisations they partner with, including other cooperatives, women worker coop support organisations, an advocacy group for domestic workers, eco-friendly cleaning suppliers, and local family groups, reflecting the cooperative purpose to correct coordination inefficiencies and undue exposure through cooperation (Cook, 2018). In addition, BCCC states clearly the importance of ownership on their website: "We believe that when a worker receives 100% of the fee charged, they will give 110% of themselves to the job at hand. Beyond Care members work for themselves and are motivated not only by their love of children and need to earn a living, but also by a commitment to a fairness in wages and treatment." (BCCC, n.d.a.).

A study from Sweden adds quantitative survey data (Pestoff and Vamstad, 2014), about how women's lives can be rebalanced towards enrichment in the workplace through ownership. Using data from two existing work environment studies conducted in 1994-95 and 2006-07, the study explores and compares the experiences of childcare workers in municipal provision, parent run cooperatives and worker cooperatives. Survey data captures responses about issues relating to participation in decision making, possibilities for personal development, improved working environment, contacts with management and shared values. The authors summarise that the *staff of the worker cooperatives* are *clearly the most positive* about the work environment in comparison with parent cooperatives or municipal arrangements. They conclude that "one of the quickest and most direct ways of enriching work life...would be to decentralize the provision of services...", letting cooperatives run social services, but "with continued public finance" (Pestoff and Vamstad, 2014, p. 368).

Whilst these wider effects are not measured by the Rapid Evidence Review, it is not accurate that wider effects are difficult to measure. There is an economic movement which has developed frameworks and scales to capture value beyond GDP. The Well Being Economy Alliance identifies approaches including the Human Development Index, Genuine Progress Indicator, and Inclusive Wealth Index amongst many other examples (Well Being Economy Alliance, 2020). In Canada, the Canadian Index of Well-being (n.d.a.), measures indicators in eight domains: democratic engagement, community vitality, environment, leisure and culture, time use, education, living standards and healthy populations. This shows that what gets measured is a choice, rather than an inevitability caused by methodological limitations.

7.3.3 Supporting women into cooperative entrepreneurship

The Rapid Evidence Review identifies policy options including business advice, support and innovation. It is clear that areas with childcare cooperatives have specific support for women cooperative entrepreneurs. In Western Canada, Cooperatives First have space creation grants, start-up grants and operational grants, paid directly to the facility to support affordable childcare (Cooperatives First, 2024). A report from the Canadian Cooperative Association (2007), traces the history of childcare coops in the country, which started largely by 'co-operating families', then developed into a nursery movement, and was grown by women who developed programmes and collaborations with educational establishments to raise the standards of care. While this report is not contemporary, a comparison of 'enabling environments' in different states demonstrates how well-developed cooperative childcare provision is, according to whether, and to what extent, there has been funding and support.

Education and training are considered to be the lifeblood of cooperatives (Hancock and Brault, 2016; Cook 2019), and programmes operate at every level of education including adult education (ECOOPE, 2017). Two recent annual reports for Cooperatives First (2022, 2023), show what education and support for women to start childcare coops looks like in practice. This includes employing an

'Entrepreneur-in-Residence', specifically to help groups starting daycare cooperatives, and who provides support with grant writing, business plan development and financing childcare coops (Cooperatives First, 2022). The following year, the annual report showed women being trained by the entrepreneur-in-residence, and news about securing funding for a new, 42-space childcare facility and a target of supporting 15 more coops to start in the next three years. An economic development grant had also paid for an additional new staff member, dedicated to supporting this work. The activity was supported by federal and provincial funding under the mandate of providing access to \$10/day childcare, which requires addressing Canada's childcare deserts' (Macdonald and Friendly, 2023). In summary, childcare coops demonstrate the cooperative advantage (Spear, 2000), where women provide a vital service, meet their own needs for childcare and transform exploitative work into improved conditions, pay and personal development. Using human focused and inclusive wealth development scales and indicators could capture this.

8.0 Conceptual Abstraction

Now we have an expanded perspective about the evidence of cooperative business impacts. In the next section, the realist goal of abstraction is used to develop understanding of what makes these impacts possible. Abstraction is a key explanatory tool in realist research in that it helps to develop understanding about an event as an instance of a more general class of happenings (Pawson, 2000). Abstraction is the thinking process that allows the development of transferable lessons (Pawson, 2000). The next section uses Jagosh's (2019) model of distinguishing between observable and unobservable reality to develop *realistic* thinking about *how* cooperative business impacts are generated.

Jagosh (2019), uses the iceberg metaphor - introduced in <u>section 4.0</u> - to illustrate this. <u>Figure 3</u>, overleaf, uses this model to organise realistic insights from our expanded view.

- The text we can see above the surface refers to empirical (observable) reality, which is the result of underpinning mechanisms.
- The first layer of text below the surface represents mechanisms decisions and processes that help produce reality at the observable level.
- The second layer of text below the surface represents contexts that are conducive for the mechanisms to activate.

The figure was developed by working backwards from observable outcomes and impacts and thinking through related mechanisms and contexts gleaned from literature and interview data.

8.1 Implications for cooperative support

While the Rapid Evidence Review suggests that a key concern for decision and policy makers is displacement, the analysis in this report offers an alternative perspective with regards to cooperatives. Marketisation, austerity and excessive power imbalances have eroded workers' rights and workplace democracy, which means precarious, poorly paid work with poor conditions, which negatively impacts on people and communities. Paradoxically, these sorts of crisis conditions are precisely the sorts of contexts in which, historically, public leaders and people have turned to cooperatives *because* of the different impacts they create. Cooperatives *aim* to displace bad jobs and improve the lives of workers and communities – that is their purpose. If people and communities are suffering, if in-work poverty is increasing, if public goods and services are inaccessible and pay and conditions are exploitative, these are *precisely the sorts of conditions* that make cooperative business models relevant.

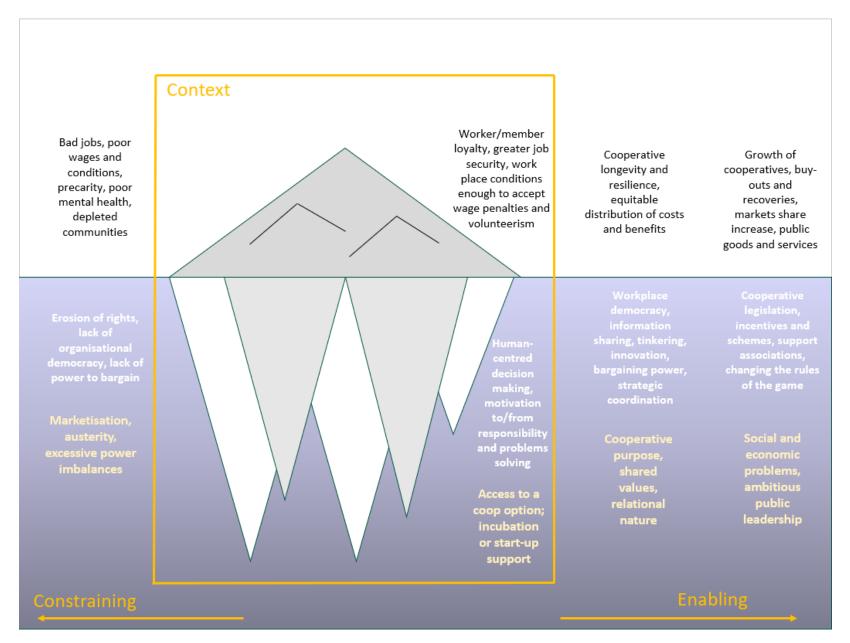


Figure 3 - What makes cooperative impacts possible? Abstracting mechanisms and contexts from outcomes

Furthermore, the data presented demonstrates policy options *beyond* business advice, access to finance, innovation support and procurement policies suggested in the Rapid Evidence Review. Cooperative legislation, regulations for worker buy-outs, supportive institutional arrangements around tax and planning, have all been used to accelerate cooperative growth. There are also dedicated graduate schools, education programmes at all levels of schooling and adult education and training, strong cooperative associations and communities built around shared cooperative ideals. Indeed, cooperatives can become a focal point in a community, increasing belonging and well-being. Cooperatives can activate people about issues which they can practically work on, such as fuel poverty, food production, service provision, work conditions and pay. The insights about the important of shared purpose, relational practices and humanistic values opens up thinking towards how these can be promoted. Public leadership and community activities which focus on participation, deliberation and connectedness help create the cultural conditions for cooperation. Activities which promote coops create awareness and knowledge development opportunities about the cooperative options. The outcomes and impacts of this expanded support can be measured by scales and indicators that value human and social, as well as economic development.

9.0 Implications, limitations and strengths

The government's evaluation strategy states that it will use the "best available evidence" to make decisions about the funding and delivery of programmes (Evaluation Task Force, 2023, p. 2). The implications of this report are that decisions made on hierarchies of evidence approaches alone are too narrow. Fifteen 'What Works Centres' have been established, conducting more than 500 trials since 2013. However, realist approaches are gaining ground. While the health What Works Centre, the National Institute for Health and Care Excellence, expanded its view on evidence more than a decade ago (NICE, 2012), other What Works Centres are following. The education (Demack et al., 2021), police (College of Policing, 2022), and Higher Education What Works centres (TASO, n.d.a.; Tyssen and Macgregor, 2023), are adopting or exploring the approach. Realist Evaluation was also the subject of supplementary guidance in the government's Magenta book on evaluation (HM Treasury, 2020). This shows that it is not only illuminating to adopt a realist perspective, but important and necessary.

In terms of the limitations of this report, time and resource constraints mean that many stopping points (Pawson, 2024), had to be placed on searching and reading. The result is that many relevant and insightful studies will have been omitted. When the scope of evidence is expanded from hierarchy to appropriateness, the sheer volume of potential evidence is vast. For example, in just two coop-focused journals alone, there were 272 and 141 results for cooperative impacts. Managing the volume of results meant: focusing on studies that were easily accessible (which excluded many chapters), focusing on studies which were written in the English language, and generally focusing on studies that were from Western Europe, and/or similar economies such as the US, Canada and Australia and focusing on impacts around the types of coops which were chosen as a focus. This implies many omissions. The report misses out on swathes of studies which explore and explain the impact of cooperatives in the Global South. By focusing on impacts, the report misses out on important literature which specifically illuminates cooperative challenges, such as cooperative degeneration (Diamantopoulos, 2012) and cooperative dissonance (Estrago, 2023), and the importance of cooperative education, principles and movement building in overcoming these. The focus on just three types of cooperatives means that other specific types of cooperatives - such as housing, social care provision, consumer cooperatives, platform cooperatives, financial cooperatives and primary evaluations about these, where they exist - are omitted. This means for example that interesting models such as The House Project (Dixon and Ward, 2017), where care

leavers develop a housing cooperative, are beyond our scope. However, at the end of this report we should have a better sense of *how* – by meeting the essential need of housing, building community and the cooperative enterprise acting as an incubator of skills and knowledge – this model generates impact. The many different terms under which evidence about cooperatives might exist also means much relevant information will have been missed. A review protocol about plural ownership and inclusive economies has been lodged which demonstrates the vast range of terms which need exploring (Tod et al., 2022). However, language and terms that are sector specific – such as *co-production* in childcare and *energy communities* in energy - mean that work to review specific types of coops is needed to coalesce knowledge about specific sectors.

Despite what is omitted, a strength of the report is in how it expands evaluative thinking beyond the limitations of 'What Works'. Cooperative councils and cooperative stakeholders want an evidence base that captures the complexity and breadth of cooperative business impacts. In this regard, at the very least, this report illustrates the benefits of moving beyond average effect sizes and complementing measuring with thinking.

10.0 Conclusion- connecting coops with policy ambitions

At the beginning of this report, it was acknowledged that the Rapid Evidence Review and its methodological approach and output, was limited by its interest in local economic growth only. Local Authorities generally, and Cooperative Councils specifically, have much wider concerns, for example, public health and social care, education, housing, community cohesion and culture, carbon reductions towards Net Zero and providing leadership in terms of place making and community wealth building.

Even with regards to local economic growth, the impact of inequalities on communities and place means that this is increasingly articulated in terms of sustainable and inclusive development and wealth sharing (Department of Levelling up, Housing and Communities, 2022). The UK's spatial disparities are among the largest in the developed world and cannot be thought of in purely economic terms alone (HM Government, 2022). Where people are born shapes not just their economic life chances, but also their education, opportunities, health and life expectancy.

This report shows that there is evidence of various impacts, from job quality and security, the growth and resilience of businesses, the development and health of people and places, the provision of vital services, contributing to decarbonisation, the generation of investment and the development of cooperative entrepreneurs that a focus on coops can bring. The cooperative purpose – building on community solidarity for the betterment of enterprises, workers and communities - means that the goal is to meet social as well as economic needs. While the private sector and social enterprises were named in the Levelling-up white paper, there was no mention of cooperatives. The previous government aimed to "generate evidence on what social enterprises need to do to flourish in disadvantaged places...encouraging the next generation of social entrepreneurs" (HM Government, 2022, p. 216, emphasis added). However, evidence from stakeholders and literature gathered in this report shows that ownership matters. Even cooperative governance can reproduce material inequality if workers don't have the ownership and control to alter their wages and conditions. Philanthropy, charity and social enterprise are different from the cooperative purpose of re-balancing decision making and power through ownership and democratic participation. The new government has promised to double the cooperative economy (Hadfield, 2022; Cooperatives UK, 2024). This specific focus on cooperative ownership, and the contextual conditions which enable this, is vital to deliver sought after cultural, social and economic renewal.

Material deprivation, worker dehumanization and exclusion have been growing (International Labour Organisation, 2012; International Labour Organisation, 2016). Cooperatives are a practical way of countering this as they elevate workers' dignity, facilitate individual and community well-being and share prosperity. Legislation, regulation, education and cultural foundations can create a 'cooperative friendly' environment, enabling more people and communities to benefit. By looking behind average effect sizes and broadening the scope of inquiry beyond economic growth, this report synthesises a more realistic picture about *how*, not just if, cooperatives generate impacts.

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Appendices

Appendix 1 – Revisiting the Plural Ownership Studies

These summaries were derived from a close reading of the six plural ownership (PO) studies which are included in the What Works Rapid Evidence Review.

PO-1 Employment and wages over the business cycle in worker owned firms: Evidence from Spain (Garcia-Louzao, 2021).

This study investigates whether conventional employees in cooperatives (wage earners, not 'working partners'), enjoy greater employment stability as compared to similar wage earners in capitalist enterprises. It uses an administrative data set, collected annually by the Spanish Social Security administration and linked to residents and tax records, from 2005 to 2017. The analysis showed that there was a wage penalty for cooperative workers, with them earning almost 3 euro a day less in 2000, and this increasing to 4 euro a day less by 2016. However, the study also found that whilst employment grew at similar rates during expansion periods, differences arose at times of economic crisis. Therefore, while the rapid review reports the overall employment elasticity, whereby a 1 percent increases in unemployment rate implies a 0.34 decrease in 'plant-level' employment in cooperatives as opposed to 1.08 decrease in capitalist firms. Greater differences in crisis are described, for example, during the housing bubble of 2008-9 and Eurozone debt and banking crisis of 2010-2013, employment contraction in conventional enterprises was 4% higher than in cooperatives (Garcia-Louzao, 2021, pp.425-426). In addition, a time-duration investigating job separation rate differences between cooperatives and conventional businesses found that employees of cooperatives were 14 per cent less likely to separate from their employer that similar workers in conventional enterprises. Taken together, the author says "the evidence indicates that cooperatives offer higher job security. They do not adjust employment levels over the business cycle as much as mainstream enterprises." (Garcia-Louzao, 2021, p 432). The author goes on the suggest mechanisms for this, including: workers being better represented in the workplace, daily interactions being less anonymous and more intimate, enhancing reciprocity and internal solidarity (p. 433). Further analysis is conducted to investigate whether employment stability was associated with working hours and wage volatility, but this is not the case. Cooperatives do not impose intense adjustments in working hours and wages of employed staff to cope with negative shocks, but instead lower profit margins to secure higher employment stability. The author suggests that the social nature of the organisational structure of cooperatives means that they have a different objective function and are willing to compress profits to protect employment: "...even if cooperatives are profit-maximising firms, they may rely more on cooperation and teamwork. Under this alternative production function, cooperatives may still be willing to protect employment to not disrupt the cooperation among workers, even if it comes at the cost of profits" (Garcia-Louzao, 2021, p 437). Overall, the analysis shows that worker owned firms offer higher job security. They do not adjust employment levels as much as conventional enterprises, and this employment security is shared, to some extent by all the workforce in those organisations, not just worker-partners, but wage earners too. More research is needed to understand how this stability is achieved, and also how management practices affect the efficient allocation of labour, and ultimately, productivity. The author concludes the study by saying the findings suggest that social economy businesses contribute to the conditions for a more competitive, sustainable and inclusive economy with more and better conditions of employment. From a policy perspective, the author points out that "the promotion of worker owned firms may insure workers from negative shocks" and by maintaining employment during recessions "reduce the burden of the unemployment insurance system" (Garcia-Louzao, 2021, p 438).

PO-2 Are cooperatives more productive than Investor-Owned firms? Cross Industry evidence from Portugal (Monteiro and Straume, 2018).

This study investigates how two different forms of organising production – cooperative and investor-owned firms – affect the productivity of a firm. The study uses data from an annual survey conducted by the Portuguese National Institute of Statistics which collects firm level data from any entity, in any sector, of any size, which produces goods or services. In 2010 the survey added the classification 'cooperative' to its breakdown of legal forms, presenting a new research opportunity whereby data on investor-owned firms (hence forth IOFs), could be compared with cooperatives or labour-managed firms (hence forth, LMFs). Unlike previous studies, Monterio and Straume have a wide scope, including all types of cooperatives and making comparisons across substantially larger numbers of industries.

Before the authors perform statistical work on the data in relation to productivity, in is worth noting some comments they make about the entire, raw data set. They say: "It is evident that cooperatives produce, on average, more than IOFs. The output differential is large (35%) and statistically significant. It is even larger (50%) if the output is measured by value added (not shown in table." (Monteiro and Straume, 2018, pp 385-386). In addition, whether measured by input or output, cooperatives are considerably larger the IOFs. Cooperatives also tend to: be more capital intensive than IOFs; have more part time and female workers, on average, and import significantly less goods, potentially indicating the importance of local linkages. To this raw data, authors perform different statistical calculations - a random effects 'generalised least squares' (GLS) model and a System-Generalised Methods of Moments (System GMM) model. The authors do this because they recognise that GLS has two sources of potential bias built into the model. First there might be an "there is an endogeneity issue" (Monteiro and Straume, 2018, p 388), this means a crucial variable is omitted from the model or is difficult to measure or gather data on. Second, "there might be some unobserved characteristics that are correlated with the choice of being organised as a cooperative or an IOF" (Monteiro and Straume, 2018, p 388). The System-GMM model is more flexible and can better account for these issues. Another issue the authors describe is that cooperatives and IOFs use significantly different production technologies (labour, assets and inputs), and that these differences make it very difficult to compare the two types of firms. They say: "Where we allow the technology to differ between cooperatives and IOFs, we cannot conclude...whether cooperatives are more or less efficient than their owner investor counterparts" (Monteiro and Straume, 2018, p 391). The GLS model does indeed go on to show that cooperatives are less productive than IOFs, though "in the sense that cooperatives would significantly increase their output if they adopted the IOF technology" (Monteiro and Straume, 2018, p 397). They go on to say that the System-GMM results are less conclusive in nature, indicating that the GLS results be interpreted with caution and that "we cannot conclusively state that cooperatives are generally less productive than IOFs" (Monteiro and Straume, 2018, p 404). The authors summarise that: "In general, productivity differences might be related to unobserved (and therefore unmeasured) input characteristics that differ systematically between cooperatives and IOFs", and then suggest some possibilities such as differences in labour force, differences in the degree of competition, and differences in characteristics of managers, their efforts or their managerial practices. However, they also say, there is a lack of information and data about these issues. In addition, there are a number of qualities of cooperative organising, from employee participation, informational advantages, vertical integration which could be positive, and some, such as a lack of external information, a lack of equity-based incentives, and lower efficiency due to collective decision making which could have a negative influence. Exploring how these mechanisms work in practice would need different types of investigation. But overall, despite, or because of them, the cooperative firm is not conclusively different in terms of productivity, while pursuing a business model that aims to maximise social welfare as well as profit.

PO-3 The productivity effects of profit sharing, employee ownership, stock option, and team incentive plans: evidence from Korean Panel data (Kato, Lee and Ryu, 2010).

This study reports on the incidence and effects of employee financial participation schemes such as profit-sharing plans (PSPs), Employee Stock Ownership Plans (ESOPs), Stock Option Plans (SOPs) and Team Incentive Plans (TIPs). The study uses data from the 'Survey on Human Resource Management', which the Korea Labor Institute collects from all publicly traded firms which are listed on the Korea Stock Exchange. The authors work with the data in different ways, for example tracking the diffusion of financial participation scheme from 1980 to 2000, and also focusing on the year 2000, a year when 60% of firms completed the survey, to make comparisons between schemes. The authors note that performance effects of employee financial participation schemes in Newly Industrialized Countries (such as Korea), is very limited, so their study provides evidence of the incidence, diffusion, scope and effect of different forms of financial participation. The authors share the results of some field work, so that they can provide empirically grounded accounts of financial participation schemes. They describe two large manufacturing firms, Firm A and Firm B. Firm A is a large, publicly traded manufacturing firm, with 50,000 workers worldwide, which is known for its representative participation and labour-management work councils. Firm B has 1600 workers but is a leader in its manufacturing field and is privately owned. Both firms are unionised. An example of Firm A's Team Incentive Plan is that five production lines are monitored and every month, based on performance (such as productivity and quality as compared to targets), one line in the department will win and receive a cash prize. An example from Firm B's Team Incentive Plan is that instead of awarding prizes every month, a winning team will be selected every year, based on team performance in relation to productivity and quality targets, and winning team will be sent on a special three day trip to Je Ju Do, the Korean equivalent of Hawaii. In terms of Profit Sharing Plans (PSPs), Firm A, introduced a bonus scheme, determined as a percentage of the monthly salary base, which would be paid to employees based on firm-specific achievements. In Firm B, a PSP is decided through collective bargaining between labour, union and management at the end of each year. Depending on firm performance, some years there is no bonus, and sometimes it amounted to two months of base pay. The authors go on to clarify, that "In spite of their reputation as highly participatory firms" stock-based options were much less well developed, with Firm A not having issued any stock since 1993, and Firm B having no stock-based incentive plans (Kato, Lee and Ryu, 2010, p. 9). When the authors come to report the comparisons between schemes, they use a Cobb-Douglas production function to evaluate productivity, and summarise results on value added, employment, capital stock and capital/labour ratio. The main results the authors focus on is that in comparison to firms without such scheme, firms with a TIPs and a PSPs have a productivity gains of 12.2% and 10.6% respectively. What the authors also show in their summary is that all firms with three types of scheme – profit sharing plans, stock option plans and team incentive plans, have less employment (employment is between 9 and 59% smaller). Only firms with an employee stock ownership plan have increased employment (employment is 97% larger). As the authors are focused on productivity gains their analysis focuses on the effects of the type of scheme, and effects over time, noting that TIPs (prizes and holidays) effects waned, while PSP effects (cash bonuses direct to individuals), persist over time.

PO-4 Efficiency in employee-owned enterprises: An econometric case study of Mondragon (Arando, Gago, Jones and Kato, 2015).

This study compares the efficiency, in terms of growth, for different types of retail stores in Eroski, the largest member of the Mondragon group of worker cooperatives. Three types of Eroski stores are studied, 1) cooperatives, where there is significant employee ownership and voice, 2) GESPA

cooperatives, where there is modest employee ownership and limited voice, and 3) conventional stores which have no employee ownership. The study uses monthly sales data from the different stores to compare sales and growth and also uses regional market data from the Spanish National Statistical Institute to control for differences. The approach is described as an 'insider econometrics case', in that as well as using data, researchers explore the institutional realties of different types of cooperatives by reading company materials, making repeated visits to firm headquarters, extensive discussions with senior personnel and considerable time on field trips to different stores, where a manager and employees would be interviewed. Therefore, as well as data, the study provides rich detail on the history of the Eroski group, the development of different types of stores, and the different levels of employee ownership and involvement in theses contexts. In Eroski Cooperatives, employees become members by making a capital contribution, amounting to approx. 30% of their annual renumeration, which can be spread over 5 years. As the stores make profits, members receive interest, growing their stake, for example, from 6,000eu to 26,000 eu in a supermarket or 33,295 eu in a hypermarket (Arando, Gago, Jones and Kato, 2015, p. 403). Staff also attend meetings and participate in decision making. A key incentive for becoming a member is that no coop members have ever been laid off. In addition, coop wage structures are compressed, so that members in nonmanagerial positions receive a premium of at least 20% compared to their non-coop counter parts and the usual ratio of top to bottom payment does not exceed 5:1. GESPA stores are stores that were acquired by Eroski as the group grew. Unlike cooperatives, not all staff are expected to become members and the stake for doing so is smaller. Membership of GESPA provides 100% job security, no GESPA members have ever been laid off. But GESPA members have more limited decision making and participation opportunities, for example, they are ineligible to attend AGMs, meaning members is widely regarded as 'second class' and cooperative membership and participation in labour management committees is much reduced (Arando, Gago, Jones and Kato, 2015, p. 404). The conventionally owned stores have no employee ownership provision, however, working conditions and treatment by managers is better that before the acquisition and now workers have opportunities to participate in meetings, development and training and skill formation. The authors use data to compare the performance of these three types of stores in terms of performance and also job satisfaction. Authors use a first-difference model to estimate sales growth differences between stores, informed by their field work that this is the primary goal of Eroski. They highlight various potential difficulties with applying econometrics, such as recognising that the year a store opened, its location, its size (hypermarket vs supermarket vs local stores), and its cooperative history could bias results and describe various statistical controls aiming to minimise bias. Overall, they do find a difference between stores, in that in terms of hypermarkets, Coop stores grow faster than GESPA (by 0.2 percentage points per month, or 2.4 percentage points per year). There were no significant results for smaller stores (supermarkets), until an Eroski informant suggested looking specifically at the 'Supermarket City' stores, which are small, intimate grocery stores with high levels of customer service and here there was a difference, where coop stores in this segment had a 0.7% growth rate advantage over non-cooperative stores. This study dedicates a section to 'mechanisms' which might explain the cooperative advantage, and also provides a section 'How do coop stores outperform other stores?' These sections cover processes such as: employee involvement (providing employee owners with more opportunities to share useful knowledge and respond effectively to local shocks), incentives for workers to take advantage of employee involvement opportunities (as workers have a stake in their firm there are strong incentives to produce valuable local knowledge and to respond quickly and effectively to local shocks), and an emphasis on training and skill formation. As there was less information available on this, the authors went on to study data from employee satisfaction surveys and compare data from the different types of store. They looked at specific questions (from a 68-item survey, which used a 5 point scoring system), on general work environment, autonomy,

communication, training, selection, job security, promotion and pay and intrinsic reward. For all eight items, coop workers are responses are always less satisfied than their counterparts in other stores. The authors characterise a coop as a High Performing Work System and use theory from this field to suggest that while coop employees are paid more and have greater job security and employee voice, they also have a bigger stake in the company performance and are expected (by themselves and colleagues) to go beyond routine work and engage in problem solving and business development. Authors conclude that this evidence adds a nuanced understanding of being a cooperative worker, and the complexity that underpins the cooperative advantage.

PO-5 Corporatization and Firm Performance: Evidence from Publicly provided local utilities (Cambini, Filippini, Piacenza and Vannoni, 2011).

This study investigates the effects of the corporatization process – the transformation of a municipal firm into a limited liability company – on the production costs of local public services whose ownership is still maintained by the local government. They note that despite huge waves of privatization that started in the mid-eighties, many public utilities in Europe, especially at local level, are still under the control of the state, and that through ownership, or golden shared, that central or local governments still control many of the privatized firms (60% when the paper was published in 2011). The authors suggest that even with publicly provided services, a firms internal governance many change over time, following a process called 'corporatization', where companies take on a hybrid form, between state ownership and pure privatization. Corporatization implies a change in ownership rights and the potential introduction of incentives to managers performance. It is thought that dimensions such as additional risk and responsibility for managers, freedom from government personnel, procurement and budget restrictions and alignment of incentives between managers and shareholders pushed the former to increase cost reducing efforts (Cambini et al., 2011). The study uses information on cost structures and the institutional organisation of 33 Italian local bus companies from a period of 1993-2002. Through this time, all firms remained owned by local government, but some of them changed their governance status from a fully public-owned company to a corporatised one. This transit system, the authors say, therefore represent a natural experiment to evaluate the effect of corporatisation. When relating the study to existing literature, the authors discuss previous work on 'the ownership effect', that is, the relationship between ownership issues and managerial performance and a firm's efficiency. Various issues are said to be linked with statecontrolled firms, such as the absence of informational signals from stock market participants, this lack of information reducing managers incentives to behave efficiently and managers not obtaining enough benefit of cost-reducing efforts. On the other hand, when managers have additional control rights over a firm – through a corporatisation process - they may, at least partially, engage in costreducing activities, re-structures and reducing excess employment. Corporatisation, where the firm remains publicly owned but is run as it would be in a private context could be "an institutional mechanism to enhance firm efficiency" (Cambini et al., 2011, p. 199). The article provides some historical context on the background to corporatisation. The establishment of local public services was enshrined in law in 1903 and this lasted until the beginning of the 1990s, where a new regime was introduced which defined a 'special company' which could be controlled by local government but with more budgetary and operational autonomy. In 1997 a "much more powerful reform" was introduced, which provided incentives to transform special companies into standard limited liability enterprises (Cambini et al., 2011, p. 203). Then a new law in 2003 aimed that all special companies had to re-organised as standard limited liability companies, but subsequent reforms postponed this, meaning that each municipality could decide whether to manage its service through a publicly controlled firm (in-house), or through a limited liability firm. More recently other public services such as water and waste were also privatised. The purpose of the reforms was to "spur economic

efficiency within the local public sector, more specifically, within local public utilities...to be an important instrument for reducing costs and for providing better services to citizens" (Cambini et al., 2011, p. 203). The authors investigate the impact of organizational changes on total cost. They take into account the total production cost, size of the network, average commercial speed, prices of capital, energy and labour inputs to test for the effects of governance form on costs. To get data the authors carried out a survey using mail questionnaires, sampling small, medium and large operators to report cost and technical data as well as governance forms of their organisations. This sample covered 33 bus transit companies, and data was gathered from between 7 to 10 years from this sample. As well as a mix of company governance types, bus firms were also from different geographical areas (northern regions, and central and southern Italy), and operating in urban, or urban and intercity areas. A link between cost performance and organizational form is tested through various statistical analysis where variables such as total costs, seat kilometres, network length, rolling stick, workforce and labour practice and energy and capital price are used to determine firm specific differences. An econometric technique called the random effects model is used to assess the difference between a municipal company, an autonomous company and a corporatised company (a limited liability company. Transformation of municipal companies into special companies has a stronger impact in terms of costs (-4%) than a transformation into an autonomous company (-2%). The authors wonder whether efficiency gains ca be sustained over the years, without introducing real privatisation of local utilities and the associated profit motive. Overall, they conclude that transforming a municipal firm into an autonomous company or a limited liability form can exert a reducing impact on production costs, providing evidence for the theoretical argument that effective incentive schemes put into place under corporatization can occur in the stage preceding full privatization.

PO-6 Spatial Patterns in new firm formation: are cooperatives different? (Diaz-Foncea and Marcuello, 2015).

This study uses panel data on the entry of worker cooperatives, capitalist firms and cooperative firms to test the 'spatial determinants' – that is, supply, demand and institutional factors at a regional level. The authors note that this approach is innovative because literature on cooperatives has scarcely dealt with the phenomenon at a regional level or made comparisons between different organisational models. The study uses data about the annual creation of different types of firms over a 15-year period, from 1995 – 2009. The data on the creation of capitalist firms comes from the Mercantile Registry Census available at the Spanish National Statistics Institute. The number of cooperatives created is sourced from the Ministry of Labor and Immigration directories. The data on cooperatives was split into worker cooperatives vs the cooperative sector as a whole. In terms of background, the authors say they are attempting to respond to a recurring question about cooperatives which is: why are cooperatives so scare in market economies? The approach they take is to look at regional factors, since knowing factors that affect firm creation is a key for efficiently targeting public policy. In terms of policy interest, authors note that cooperatives have been recognised by the European Commission as a type of entrepreneurial activity that can stimulate 1) building and maintaining SME strength in the marketplace 2) supply of high quality services to groups that would not otherwise have access and 3) development of firms based on knowledge for people who would not otherwise achieve positions of responsibility (Diaz-Foncea and Marcuello, 2015, p. 172). Authors state that when an entrepreneur begins a business venture, one of the first decisions is the choice of legal form. While previous research has focused on economic perspectives, personalpsychological characteristics and political position, this study is distinct in the way it focuses on supply and demand factors and the institutional environment. Demand factors are related to the existence of firm creation opportunities, for example consumer demand and diversity in consumer

financial capacity. The authors choose a range of demand factors, such as population growth, GDP per capita growth, wage level, labour costs, and added value of service and manufacturing sector to study in regards to this. Supply factors refer to the characteristics of the population, their resources and habits, culture and institutional environment. The authors choose a range of supply factors including unemployment level, human capital (level of higher education and secondary education), population density, the existence and density of cooperatives and worker cooperatives and the political party in government. When discussing these factors they draw on the work of Perotin (2006), who conducted a study with a similar research question: why are there so few labour manager firms in capitalist economies? Perotin was interested in this issue as French cooperatives, while a fraction of the French economy, were remarkably resilient, with the oldest trading since 1882, and 16 created before World War I. This phenomenon caused the author to suggest that coops maybe immune to the main exit processes for capitalist firms – "self-extinction by under-investment and degeneration to the capitalist form" – and that it was problems with firm creation, rather than dissolution, that explained the limited incidence of labour managed firms (Perotin, 2006, p. 296). In addition, while Perotin identifies that "those who favour economic democracy belong to a broad spectrum of political currents in France", she also noted that left-wing administrations may set up supportive agencies and may make tendering more accessible to cooperatives, meaning that barriers to entry for cooperatives may be lower and more information readily available, when left-leaning administrations are in power. Returning to the Diaz-Foncea and Marcuello study featured in the rapid review, their purpose is to observe differences between regional determinants that affect the creation of each organisational model, and to examine specifically, the determinants which affect worker cooperatives in particular. The authors signpost that some results varied according to the type of statistical calculations they undertook (Ordinary Least Squares vs Panel Corrected Standard Errors) and the table of results of estimations shows different figures according to the different calculation approaches. The demand factors they find have a positive and statistically significant influence on the creation of worker coops is population growth and salary. In terms of supply factors, the unemployment rate is the only one that is significant, as in, the higher the unemployment rate, the greater the number of cooperatives created in that region. In contrast to the previous study which noted that cooperatives might be associated with left-leaning administration (Perotin, 2006), this study found that, among the institutional factors, a right-wing party in regional government was associated with the creation of worker coops at a higher rate. Overall, though, the authors suggest that the creation of worker coops is more disconnected from the economic dynamic in a region than are capitalist firms. Worker coops are set up in rural and less dense (than urban) areas, thus the authors say the "situation and characteristics of entrepreneurs appear as more relevant determination for worker cooperative creations than the dynamic of the regional economy" (Diaz-Foncea and Marcuello, 2015, p. 185).

Appendix 2- Descriptive Vignettes

Worker Coop Member

This Worker-Coop member is a member of a large worker coop in wholesale and logistics. They started working in the warehouse as their first 'real job' and now work in the management office. Over their time in the worker coop, they have undertaken multi-skilled work, developing themselves in different areas of the business. The worker-coop member said while "...some people have a vision of a worker coop that everyone does everyone else's job...it's not like that...[but] there is crossover" and sometimes there is "a bit of a drive" to move people to different parts of the business. The Worker-Coop member felt "one of the big things" of the impact of the worker coop is "the wage" that is paid. "I think you'd struggle to find [for the type of work the coop does] as much as we pay for it in the entire UK". People are well paid (more than £5 more per hour than the minimum wage), and everyone across the coop is paid the same. "Generally, the feeling on pay is positive. There are moments where you think 'I'm doing lots more' or 'very skilled,' but overall, it's quite comforting, as it's just not an issue of thinking you might be rewarded as much as someone else, it's just never a concern". For individuals there is also freedom within the workplace, to train themselves up, to develop external relationships, to contribute to business development. There are good conditions, various workplace accreditations to ensure health, safety and training, free meals, paid breaks and flexible working options. For individuals this means they are "safe" and it's "nice to work there". The Worker-Coop member said: "...when you see documentaries about other large organisations running a warehouses, you know people getting fired for being late by a minute or not being able to go to the toilet...it's just a million miles away from it [here]." Members are both "close-knit" and "have more freedom", making for a more "bought-in workplace" where people are, in tough times, are "more willing to adapt and move with it...because it's more theirs than someone else's". There is a sense that working in this way is "different" and "special" for people: "I mean, maybe in the day-to-day, you're not sitting around thinking why it is great to work at a coop, you're just getting on with your job most of the time..." but, when you do think about it, you "appreciate it". The Worker-Coop member suggested that evidence of this would be found in: the cooperative's wage bill, its various accreditations, engagement metrics on meeting attendance and voting participation, completion and results of various workplace surveys for health, safety, well-being and culture which track "how people feel about working at the coop". For example, being a coop doesn't make a business immune to problems, but problems concerning workers are dealt with: "[on a survey]...people will say 'oh this thing happened to me, and that wasn't a nice thing, but because we've got this group, I could go into it..." and, as a result "people are generally pretty happy and like it." Worker-Coop member discussed the challenge of "...having scores of people on the same wage and having the same say in the business...", but this is an area that the worker coop invests in: "[we]...try lots of things and we put a lot of time into it...". Members are given time to engage with the business during business hours through forums, surveys, general meetings and coordination groups. There can be "peaks and troughs" in member engagement: "I wouldn't like to sit here and be like 'every person's completely engaged all the time and on it". However, high levels of information sharing mean everyone is aware of business performance: "...people keep up to date with how the coop is doing. They get financial information, more information than any person could digest...and we've got a lot of skilled people that have been through those things and we're relying on that to get us through." When the worker coop has had financial peaks and troughs it is the members who "played a major part in getting through". The Worker-coop member noted that "several competitors" had gone bust over the past three to five years in their marketplace, while "we keep getting through". The Worker-Coop member referenced various subscriptions to coop support organisations, consultants and regular business development advisors such as auditors and banks. The worker coop had approached the local council to find out about support, but nothing was on offer for coops and/or larger businesses. The Worker-Coop member highlighted the link between worker ownership and the effort to sustain and develop. "It generally comes back to the workers...to drive it on...everyone's got a shared understanding that they need to do what they need to do" but there is also "the notion" that "you're doing something different and it's yours...if it does well, you do well, if it doesn't, you don't". These ownership effects influence a particular perspective on productivity, in comparison with investor-owned firms: "...we view assets, specifically labour, as something we'd treat differently. If we 'used' it like an investorowned firm, we might have the same productivity, but we wouldn't view it as something to be used, and would suggest by having ownership and value, that we get more out of it." Evidence of this difference in attitude is demonstrated by different actions towards labour management, for example, the worker coop has only ever had one round of voluntary redundancy, following a period of covidrelated fast growth and contraction, but has never undertaken compulsory redundancies. "Being owners makes you less likely to move to redundancy...it isn't going to be your first plan" but it did allow some people to leave that wanted to, and freed up ongoing wages to enable the coop to continue. Overall, it "wasn't entirely negative because it was voluntary" and "it was part of being resilient that we found a way through to keep going." Before the Worker-Coop member worked at the coop, its reputation rippled through the community where they lived: "I knew about the worker coop because I lived locally. I'd met a few people who worked there at the time and they'd talked about it in a really positive light [that] it was a decent place to start working." Another impact the Worker-Coop member felt strongly about was the economic ripple effects: "more people, getting paid more, and paying more tax." Many people live locally, in an area that is relatively deprived and has become more deprived over the last five years. "One of the big impacts...is the amount of people we employ in the local area and the wage we pay them and the tax they pay". The Worker-Coop Member said: "I don't think we have ever put the entire wage bill out..." [but] "we've started doing an annual sustainability report" and the coop is a member of the Fair Tax alliance. Evidence of the coops institutional values and ethos can be found in the various accreditations and standards it adheres to, though the coop has decided against additional certifications such as B-Corp (a certification designed to show that a business meets high standards of performance, accountability and transparency on factors such as employee benefits to supply chain practices). The Worker-Coop member said: "...we thought it would be better to spend time and money marketing ourselves as a coop and this is how it's good and why, and why it's good for you to shop at a worker coop or a different sort of coop." Cooperatives and worker cooperatives "are not well understood" but are "more widespread than people think" and "if you talk to people about them, they grasp it." The Worker-Coop Member highlighted countries where unions and coops worked together to secure jobs and became a "cooperative union". Meeting the needs of workers and industry gives coops broad appeal: "you'd imagine it's quite a Labour thing, but you'll get some Tories who are big coop fans because they like them for other reasons". Creating incentives for coops would enable more impact, for example the Worker-Coop member highlighted: "More places go employee owned because there's a tax break for it, and worker coops don't have that. So, there's almost an incentive to move to employee ownership rather than give workers the actual control." They concluded that coops could have more impact if they were an easier option for people: "...certainly there's a lot more worker coops in France and Italy...and there's the Marcora Law, where if a business goes under the state will help the workers take it over...they see it as a saving in social security payments".

Coop Support Consultant

Coop Support Consultant has a background in coops, having worked in one as a graduate and appreciating the values: "It was about more equitable ways of running the world, which didn't seem to me to be a very nice place, and seems even less nice now." The Coop-Support Consultant provides business development support to cooperatives and community businesses, covering anything from governance, legals structures, finance, business plan development/writing and conflict resolution. For larger organisations, services include strategic development, facilitation and training for new members and board members. With smaller and start-up groups, the most challenging aspect of the work is that "the inability of most of the people who need my support to actually pay for my time". This means the Coop-Support Consultant does "quite a bit of work for free" and lives frugally to be able to do this. A further challenge is that many groups lack capacity and expertise, whether that be for example, understanding complex financial projections for larger projects or having the time to engage in support. "A classic example is that we've worked with a few groups of couriers looking to set up their own delivery coops...[but] they're so busy working all the time to survive, on the whole they've failed." Furthermore, for larger as well as smaller groups, the legislation and policy environment is "set up for conventional, for-profit businesses, so coops "are jumping through hoops...and just as you get used to something it all gets ripped apart." The greatest support would be to pay people for their time, as people are "really, really struggling because they need to earn a living" while at the same time devoting the time to do "quite big projects". Another issue for coops start-ups is that granted don't include revenue funding for time or experimentation. Returning to the courier example, the consultant suggested that a UBI (Universal Basic Income) would expand opportunities: "...give someone a day a week for a year to set it up...get them over the starting line..." Funding mainly operates around pre-start, but doesn't help coops that have got started and then hit bumps in the road. A 'Coop Doctor' service is needed here, as conflicts do crop up, but could be resolved with help. The consultant shared they help close three coops last year which could have been saved with earlier intervention. The businesses the consultant supports have to "constantly reinvent themselves to fit the grants that are coming along", because there's limited support on offer a group "has to present themselves with that need, and then we're having to smuggle what they really need in with what the funder needs as well." As well as working with coops and community businesses, the consultant delivers training to councils and other alternative business support organisations. There are some opportunities, such as community owned pubs, which are increasingly well known, meaning that if a pub is endangered "there's a critical mass of community owned pubs" and someone has heard it's an option to take it over. A "real missing piece" is the educational aspect, including "getting into universities...careers fairs...schools" and "looking across the whole piece to [ask] how do we get the Co-op option in there?" In terms of impacts from support, start-ups of cooperatives and community businesses are the major output. And from the more established coops, impacts include innovation, wealth building and place building. "...cooperatives are incubators of innovation...they tend to work as academies...we find people who join a cooperative and then go on to set up other stuff." In terms of wealth building and taking on assets "you've got whole areas of the country where there's nothing, and then areas where something has happened, which has catalysed something else, which has catalysed something else." This "real chain reaction" could be harnessed where regions are targeted, buddying is developed, and coops are facilitated to connect and learn from each other. The knock-on of coops for place is that "areas with high amounts of coops are much, much nicer places to live ...they can be key employers...offering quite high wages" and where "concentrations of housing coops and worker coops create little alternative economies." The consultant mentioned Nottingham and Birmingham as examples where this was happening, and where it was creating a "multiplier effect," bringing money into communities, where it is recirculated: "There's no extraction, there's no shareholders that are just making money in an area and

then sucking that out of the area, and even offshore. Coops just tend to keep their profits local." Other impacts will be peculiar to a particular type of cooperative. For example, a veg box scheme will have knock on health impacts, and impacts on the local economy as local suppliers will be prioritised. A shop selling organic veg might provide training as well, or develop a therapeutic angle through outdoor work. However, the consultant stressed that cooperatives main impact was to develop "nice jobs for their members" and made a distinction between coops and the "social impact industry" based on a charitable model. A challenge of the charitable model of social impact is that "programmes are not even recognising social impact unless it's 'here's a poor person and we've improved their lives slightly'...as soon as you say 'here's a person that's part of a worker cooperative and their lives improved with it' they say 'that's not social impact'". Mutual aid, the consultant said, is not recognised in the same way, in the policy environment, as philanthropy. The consultant said that social enterprises, which are social entrepreneur led, have a "built in fragility" whereas cooperative enterprises are more resilient. Social enterprises "are 'cooperation lite', it's like, well, let's do the thing, but we can't be bothered with all the democracy." A challenge of starting cooperatives is matching people with different energies and skills, so that a coop has a chance of getting off the ground: "You know, the Belbin Team role, I have a different version of that where it's 100 acre wood and I meet groups of Tiggers that are really excited and bouncing around, and they've got an amazing idea, but they're not going to read anything for more than 20 minutes. Sometimes, if it's Eeyore's, we just dive into the spread sheets, but they can lack a creative spark." One possibility, the consultant suggests, is to build on an "emerging...economy-focused approach". This is where there are collections of "cooperative activity" where "mutual peer support" and "professional support" can be combined to get cooperatives "revved up in a local area" and shared through networking and conference. Areas where this underway, such as with Middleton Cooperating, the Preston Model, are using slightly different approaches, and this could be shared to help spark locally centred coop development zones.

Energy Coop Consultant

Energy Coop Consultant's background in coops was accidental, in the sense that they went to work for a "well-thought-of" engineering company, which turned out to be a cooperative. The company was considered "the best in the business", and "it became apparent that the employee ownership aspect of it was a big part of how they got such good results." It was clear working there that "everybody was very, very committed to the organisation, the values, the ethos". There was a quality to the team work in terms of "reliability" and "interoperability of teams" and a "real sense of wanting to demonstrate that the business model was better than a regular business". The Coop Energy Consultant said they believed that "a belief that their own work, their own outputs, could result in better achievements...stemmed from participation in the coop". Even when the coop firm hit a bust period after a period of growth, they did survive, "...it was about prioritisation of the welfare of the people who were part of the coop...they refused to pay creditors because they did not want to make people redundant, they did survive and the cooperative ethos continues to drive the business." As well as commitment, other factors in this coops success were assessed to be: the ability to retain high quality staff and investing in personal development "in a way that a regular business might consider excessive." After departing coops for some time in "regular companies", the "unsatisfactory" and "quite toxic" working environments prompted an intentional search for work in cooperatives, and a move into supporting renewable energy projects. Now the consultant provides feasibility and project development, landowner liaison, business planning, accountancy services and book-keeping, business administration and tax support. Many community energy companies are incorporated as BENCOMS (Community Benefits Societies), and tend to be run by volunteers and funded by "ordinary members of the public who want to do something about the climate crisis". By

providing professionalised services to these groups, the "volunteer energy" can be used on more interesting and important elements, for example promoting community share offers. The biggest challenge in all of this work, is the "collapse in support, both real and political, from our leaders." From the loss of the feed-in tariff to the complexity of navigating the 1989 Electricity Act, to the limitations of grid infrastructure sharing and costs, "something that should be a walk in the park is an uphill climb", which has "strangled the ability for large scale deployment of renewables by communities." In the current situation, the only people that can put solar panels on their roof are "relatively affluent", as there is no incentivization for companies to install systems and then re-coup costs by providing electricity back to the grid. Now, the "economics of it are completely different" and only "...[if] you can afford it, you've got your own energy." The "highly toxic anti-green agenda" has limited cooperative activities in the energy space, to the extent where "each policy appears to be designed to make it harder for community involvement." The promotion of off-shore wind, which is only accessible to large companies, the near impossibility of building a wind turbine onshore in England and the many constraints around grid connection, mean that the UK's capacity to take in generating capacity in a "decentralised way...is just not there." Applications for solar community owned solar PV are sometimes blocked because "the cost of updating the local transformers is £1m...and not planned til 2035." Energy and heat are key areas where "decarbonisation activity can take place" but models would also "rely upon a wholesale cultural change of attitude in the UK towards the idea of sharing". Instead of everyone having their own gas boiler, or everyone having their own heat pump, or biomass boiler, sharing heat with neighbours is needed: "there isn't really a technical barrier besides the appalling state of most of the housing stock...the barrier is social." Technical, planning and legal solutions are available, and standard in Sweden, Germany, Denmark and even Netherlands, but "would require a change of gear...in social attitudes too." Current efforts in the policy environment in relation to this include mapping out opportunities for district heat networks in the UK and allocating long term rights, "...the model, the proposal as it stands, would appear to allocate quite long-term rights...and essentially could result in the creation of monopolies." Under this scenario people might be "compelled to join district heating systems...and then be unable to change supplier, therefore people are potentially captive and have no control over their energy costs." This allocation of rights to develop heat networks is "probably going to result in big private companies being able to secure rights over large urban areas and create conditions for monopolies." The consultant said: "My first response to that was 'why don't we just create a massive coop?" but achieving that was a "big ask". Though if the coop sector could "get organised...consolidate...and compete on the same footing" it would create the possibility of delivering carbon savings while giving people a say in the energy system "by actually owning and operating some of those assets". Cooperatively owned and operated energy creates an impact by enabling "people that want to do something about the climate crisis" an opportunity to fund renewable energy projects." Evidence of this is in the £35 million of share capital raised across 70+ community energy projects and the related carbon savings. And the "democratic participation in the energy system by ordinary people" evidenced by thousands of hours of volunteer time." The 'State of the Sector' report by Community Energy England is the only centralised place where such evidence is collated, but it is not mandatory (to report to it), and community energy projects run by volunteers "do it on deadline day" or "don't get round to replying". Overall, there are a "lack of paid positions" in the community energy sector, "sector bodies are themselves not particularly well resourced" and consultants are "pretty overspent a lot of the time." Furthermore, in terms of reporting, different community energy groups have different motivations. For example, in a community with "immense fuel poverty" the focus is on "...getting people out of fuel poverty or at least moving in the right direction... and no one is recording carbon savings..." recording these impacts is neither "standard" or "mandatory". In terms of the support the coop energy consultant provides, they say that they are only intentionally,

modestly profitable because "we put all the money back into paid staff roles to be able to deliver more services." These "ongoing services enable clients to keep existing...and to keep buying services". The consultant said: "...a cooperative concept is that coops help other coops. Its inbuilt into the main motivations and I want [our service] to be better than they can get elsewhere." Trust, openness and authenticity characterise "symbiotic interrelations" in a way "I've never seen in the regular private sector." These qualities make the possibilities of cooperative energy "almost unlimited" if tweaks were made to "aspects of the electricity industry" and coops were able to "trade effectively". Being part of an energy coop means "we have a right in the running of it...[you have] some influence over your energy costs because you own it... you're mentally and psychologically invested...you've got a stake and for that reason the potential of coops in the energy sector is unlimited." They said "there is an illusion of market choice in the UK energy market. Really, it's which version of 6 or 7 massive companies would you like to take the Mickey out of you? That's what market choice amounts to in the UK." The consultant concluded: "more people would be interested than not among the general population...it's the rules that's the barrier...and the leadership and dedicated resources to be able to compete with 'business as usual.'"

Energy Coop Member

Energy Coop member sees community energy as a key strategy for reducing energy bills and contributing to addressing fuel poverty. Their first large scale project was in an extremely deprived ward (Top 20 in the UK), where they worked with a community association to secure £400,000 of solar panels to benefit the community. There were various impacts, foremost that "All those houses came off pre-payment meters and onto direct debit, which is cheaper". Also, the project "went down really well" which could be evidenced by the fact that there was "no damage to the panels", on an estate where "when people wanted to move social housing, they would set their house on fire." Working on this project was enabled by gaining experience on two previous community energy projects, first, volunteering on a bio-mass boiler installation in a different region and then bringing those skills back to secure a biomass boiler for a school. "I was taking some of the skills and learning back into my own region...I was copying what had been done before." While the first project took six months to raise £600,000 community share capital, the second project raised £265,000 in 15 days "because we had a really good track record having delivered the first project." In addition, the biomass project needed a local supply chain, and a grant was obtained to work with a local farmer to start a wood processing plant, creating local employment. "As soon as you have a community energy organisation and they start raising shares and money from the local community, if you can keep that money and supply lines in the local community...the community's finances are much better, and...that's quite important." The Energy Coop member said that community investors were motivated to invest for two main reasons: they "want to do environmental good...and see practical projects" and "straight investment". Community share offers tend to be national, with a minimum of £250 and a maximum of 10% of the total figure. "They're mostly individuals...they may have some disposable income [the average age is 57]...we had some youngsters, but it was the older generation that invested more money". The Energy Coop is now working with someone who can "stump up" more significant investment, in order to be able to act quickly on opportunities "...we lost many solar farms...because a developer is not going to wait around for a share offer." This is where partnerships are important: "that is another way councils can do it...[help secure investment] and then [the community] buy it back and put it in community hands." Councils could support "from a governance and planning permission angle" to help establish community energy in their area. In terms of formal support to set up cooperative energy projects, using model rules and getting help navigating complex and changing FCA rules was important. Before the sector was still young and "unstructured" but now there are specific energy coop consultants working to develop and support projects. Councils are

working with community energy organisations in different ways, sometimes setting up their own community energy organisation and seconding people to develop it, and sometimes acting as a partner in community led projects. Either way, as councils are "really struggling financially" they are reaching out, or willing to collaborate on community energy projects: "...the opportunities for community energy are huge, [it] can add financial clout and add value by bringing money into an area". In addition, as reduced budgets mean councils are focusing on statutory delivery, community energy is a way of "attracting investment to try and deliver on Net Zero goals and aspirations." Progress has been complicated by limits and changes in rules: "...legislation changed, the FCA hardened its position...and was not allowing, or wanting, community energy organisations to become cooperatives...and they were sent down the community benefit route." Changes to feed-in tariff also changed the opportunity landscape, in that a model for a "business plan to flourish" was taken away. But, the Energy Coop member said "things are changing", including talk about using council pension funds to invest in renewables, and flexible (in terms of when anything is paid back) community share offers increasing investment in this area. "With a share offer, you are estimating the amount of money you would get back...but there's the caveat that if you have a bad year, you might not pay anything back to shareholders.... you're allowing the community to take that risk, but you're supporting them through policy and networking and guidance." As a result, the Energy Coop member said: "there might be blips in returns [where less income is earned for example because less energy was produced or equipment was damaged] but the whole time I've worked in the sector, I've never seen any of them go bust that I know of." As well as carbon savings, fuel bills and local supply development, there's "a social side" of cooperative energy, where people mix and work together to develop a project and "keep the money local". Most developments in the community energy sector have come about through "lobbying" and that's where local authorities can have an impact. Previously councils have been "wedded to commercial operations rather than the community", which may be perceived as "inherently, sort of fluffy and less organised". The worst situation the Energy Coop member found themselves was when they presented a business plan for solar panels on some community buildings and the council could "see it makes sense...and said, 'we'll do it' but didn't do it...then lost the opportunity of bringing all this extra funding...and allowing that money to be spent locally." Councils are key: "they should embrace it, if they haven't already...community energy organisations [can] bring money in and tackle Net Zero at a time when resources are very slim."