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Redefining Member Economic Participation: The Potential of Pension Contributions in the Cooperative Economy

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Abstract: This research paper explores the potential of reinvesting a portion of the £665 million per annum paid by UK cooperatives as pension contributions back into the cooperative economy. Current investment practices leave the cooperative economy devoid of these substantial funds. The study argues for the development of cooperative financial instruments to funnel investment from 'friendly' cooperative investors, under existing guidelines for cooperative principle three, member economic participation. The paper proposes the inclusion of non-voting listed equity from cooperatives on stock exchanges, paired with listed cooperative bond instruments, as a plausible resolution. Moreover, the paper advocates for convincing index providers to incorporate these financial instruments into their indexes or encourage large mutuals to create custom indexes. Finally, the study urges the explicit recognition of this practice, termed here as 'member economic participation plus', in a future cooperative identity review.

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Keywords: pension funds, cooperative economy, cooperative financial instruments, financial indexes

Introduction

Pensions, as a critical element of socio-economic structure in the United Kingdom, have significant implications for individuals' long-term financial security. The pension system is designed as a long-term savings scheme, providing advantageous tax treatment to encourage and facilitate the populace's financial preparation for later life. As a key source of retirement income, pensions provide financial security for individuals in their later years and reduce reliance on public welfare systems. Private pensions also play a critical role in macroeconomics, influencing national savings, investment, long-term fiscal sustainability, and the labour market. Notably, pension funds are increasingly looking at Environmental, Social and Governance (ESG) factors when making investment decisions and some are looking to grow their percentage of assets involved with impact investing – the act of investing in projects, companies, or funds with the intention of generating both a financial return and a measurable, beneficial social or environmental impact.

Cooperatives *also* play an essential role in macroeconomics, offering economic resilience, promoting social inclusivity, and contributing significantly to GDP in many economies worldwide. Cooperatives, by nature, are one of the business forms most aligned with ESG ideals. 20.8% of the UK's population of 67m (Office of National Statistics, 2021) are members of cooperatives (14m) (Cooperatives UK, 2022) and 250,128 people are employed by cooperatives in the UK (Cooperatives UK, 2021). Coops are encouraged to consider paying a portion of their surpluses into a fund to found and strengthen other co-operatives (ICA, 2015) and one of the most important activities that members can – and should – choose to support, is to promote an economic environment favourable to the further development of the co-operative movement, locally, nationally, regionally, and internationally (ICA, 2015).

Given that cooperatives support private pensions by providing workplace pensions for their employees, the purpose of this paper is to research how private pensions do or could 'complete the circle' by supporting cooperatives. After a broad overview of the pension system in the UK, the paper makes a case that facilitating investment in cooperatives from pension funds is a way of supporting the cooperative economy that would both be compliant with the cooperative principle of member economic participation and generate ESG compliant pension returns. It investigates the current context and explores potential regulatory and cooperative principle changes that could improve pension

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fund investments in cooperatives. The research is intended to encourage debate within the cooperative movement about whether cooperatives can serve as an alternative to the entrenched system without providing pathways for private pensions to bolster them as well as to stimulate further research on measures to provide those pathways.

The Pension System in the UK

The Structure of the Pension System

The UK pension system can be broadly classified into three distinct categories: State Pension, Private Occupational Pensions, and Private Personal Pensions.

State Pensions

The State Pension, a governmental provision, becomes accessible upon reaching the State Pension age and is calculated based on an individual's National Insurance record. The concept of providing for the elderly can be traced back to the Elizabethan Poor Law of 1601 (UK Parliament, n.d.-a), although the first state pension in the UK wasn't introduced until the 1908 Old Age Pensions Act was passed, providing a non-contributory old age pension for eligible people over 70. The 1946 National Insurance Act replaced the former act with provisions for a contributory state pension, a significant departure from the earlier means-tested approach. Subsequent legislation in 1961 and 1978 made earnings-related additions to the state pension, aiming to give people a better standard of living in retirement. A means-tested benefit was introduced in 2003 to provide extra income for pensioners on low incomes. In April 2016, a new state pension system was introduced to simplify the previous system, providing a 'flat-rate' pension based on an individual's National Insurance record.

Private Pensions

Occupational Pensions, falling under employers' jurisdiction, follow two frameworks. Defined Benefit (DB) Pensions, or 'final salary' pensions, guarantee the employee a fixed sum until death in a similar way to the state pension. Conversely, Defined Contribution (DC) Pension payments are contingent on the sum of contributions from both the employer and the employee and their collective growth over time. Occupational pensions, provided by employers to their employees began to appear in the 19th century in sectors like the civil service, railways, and large industrial firms in the UK and the number grew substantially following World War II. In the 1970s and 1980s, the UK government introduced new regulations to better protect the rights of private pension scheme members.

In the 1980s, the Conservative government under Margaret Thatcher also encouraged the development of personal pensions as an alternative to occupational pensions. Personal pensions are arranged by individuals, offering flexibility in contribution levels, with the final pension value influenced by the contribution quantum and the investment performance in a similar way to occupational DC schemes. On retirement, individuals can select from various options to access their funds: lump-sum withdrawal, annuity-based guaranteed income, adjustable income, cash-in-chunks, or a combination of these options.

The Pension Schemes Act (1993) introduced significant changes to private pensions, establishing a regulatory framework for them and aiming to protect members' interests. Further protections were introduced in the Pensions Act 1995 and 2004, including the establishment of a minimum funding requirement for defined benefit schemes. Automatic enrolment, a revolutionary policy reform introduced in the Pensions Act 2008, mandates UK employers to enrol eligible workers into a pension scheme.

Frameworks

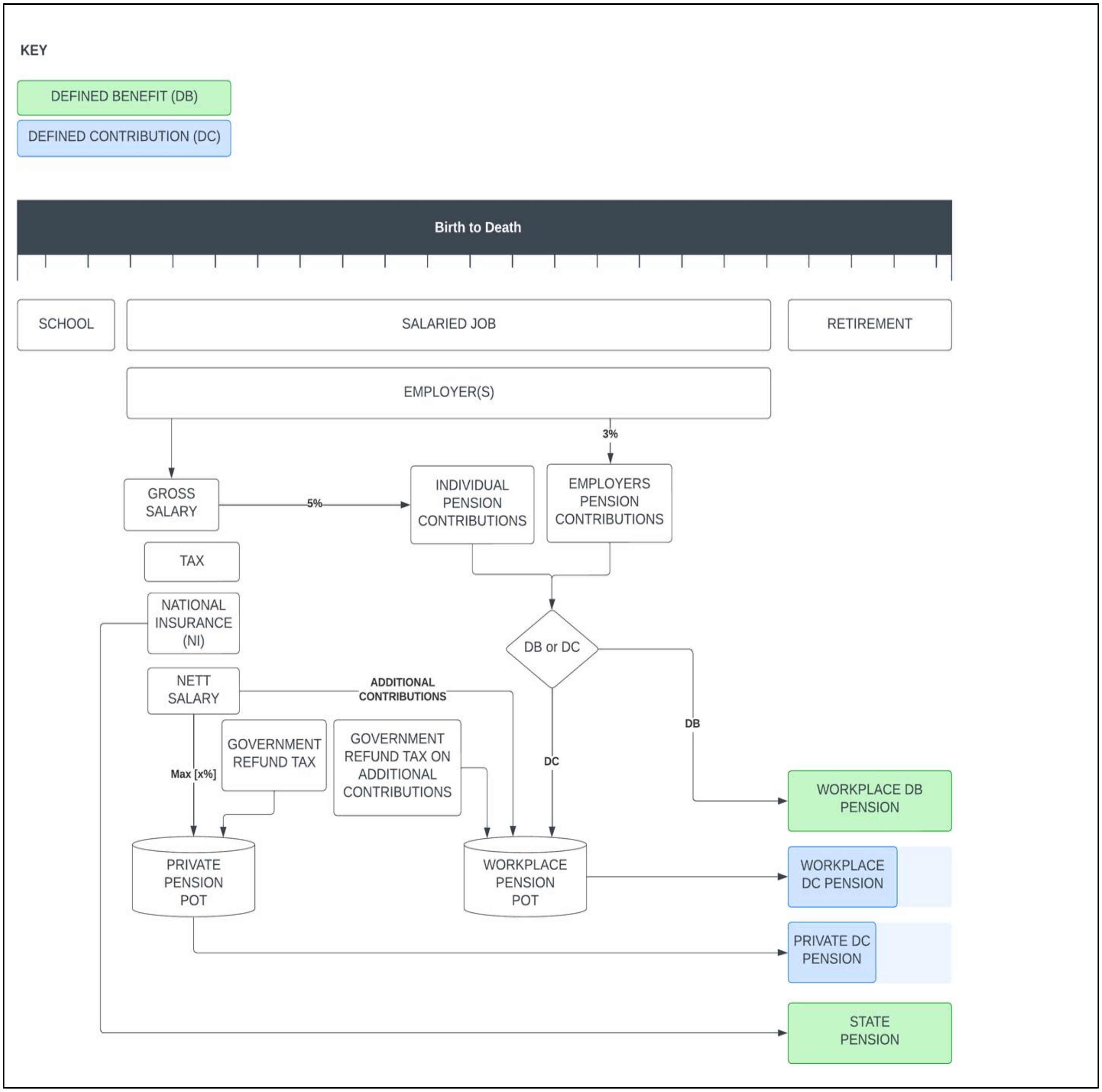
Given that around half of the working age population don't feel they understand enough about pensions to make decisions about saving for retirement (Money & Pensions Service, 2022), this paper breaks down the concepts behind pensions into two simple parts:

- Individual's income over time
- Pension Fund to Pension Providers

Splitting it this way illustrates more clearly who ultimately has control over whether money feeds back into the cooperative economy, and what parameters they need in order to do so.

Framework 1: Individual's income over time

Figure 1: Framework 1 (Birth to Death Income for UK residents)



An employee entering the workforce and their employer are legally required to opt into a workplace pension plan. The employee is mandated to contribute at least 5% of their total earnings before taxes, and an additional 3% is to be provided by the employer over and above the employee's gross income. Monthly deductions for income tax and employee's national insurance contributions are made from the gross salary, and the net salary is deposited into the employee's bank account. The workplace pension plan can be a DB scheme or a DC scheme.

Apart from the workplace pension plan, employees have the option to make additional contributions from their net income to their workplace pension or to another private pension. The government also supports these contributions by offering tax refunds, making them effectively equivalent to those made from gross salary. It should be noted that because DC pensions' retirement payout is dependent on how the investment performs while the employee is still working, there is an inherent risk of exhausting the funds prior to the individual's demise. In addition to private pensions, the employee is eligible for a state pension, the amount of which is capped and depends on the national insurance contributions made over their employment duration.

Framework 2: Pensions

Pension schemes are split into 2 types: trust-based pension schemes where the employer (or employers) have a contract with the trust (on behalf of their employees), and contract-based pension schemes where the individuals have a contract directly with the pension provider (e.g., insurance company). A diagram of Framework 2 may be found in the Appendix.

Trust based schemes

Trust based pension schemes, which could be DC or DB, tend to give the employer greater control over the scheme design and potentially investment choices, particularly in the case of single employer trusts, and, as a result, they can provide flexibility in terms of structure, benefit design and investment strategy.
Trust-based pension schemes are managed by asset managers such as insurance companies, traditional asset managers (e.g. BlackRock, Vanguard or Fidelity), passive asset managers (e.g., Vanguard or BlackRock), Active Fund Managers (e.g., Fidelity), or Robo advisors (e.g., Wealthify or Nutmeg) and are split into three types:

- master trusts;
- industry wide, e.g., teacher's pension;
- single employer trusts – common for larger enterprises.

For industry wide and single employer trusts, the employer (or industry) creates the trust and appoints the trustees (individuals or corporate trustees) who own the assets, have a legal duty to act in the best interests of scheme members, and are responsible for managing the scheme, including overseeing its investment strategy. While setting up a single-employer trust-based pension scheme can provide more control and enable the employer to tailor the scheme more closely to the needs of its employees, it can be more complex and costly to administer. In contrast, a master trust enables multiple employers unconnected with each other to participate in their own segments of a larger pension scheme set up under trust and governed by a board of trustees who are independent of both the employers and the provider.

A trust's asset managers invest the funds in the pension scheme via a strategy agreed with the pension scheme's trustees. The scheme's strategy may be passive, active or a combination of the two. In a passive strategy, the asset managers will attempt to match an index, published by index providers such as Morgan Stanley Capital International (MSCI). Indexes comprise a list of pre-determined shares and/or bonds assigned a defined percentage of the whole, e.g., 4.3% in Microsoft shares. Matching an index establishes a fund price per unit, which represents the value of the fund's assets at a certain point of time. New members in the fund buy in at the current value and their cash is used to acquire further shares maintaining the ratios roughly in line with the index.

In an active strategy, the asset manager will invest the pension scheme's funds as per the strategy but without following a specific index. For example, they may choose to hold 10% as Microsoft shares, or 1%, or none. They may choose to sell shares when the price is high and rebuy when the price is lower. Often, the shares are held on behalf of the scheme's trustees by an asset custodian such as State Street, BNY Mellon, JP Morgan or HSBC.

Some pension funds don't buy assets directly, but instead buy units in mutual funds, investment vehicles that enable multiple investors –including pension funds – to invest in a diversified portfolio.

Contract based schemes

Contract based pension schemes do not have the same governance as trust based schemes, although some providers offer oversight by an Independent Governance Committee (Standard Life, 2023). The assets of a contract-based pension scheme are owned by a pension provider, such as an insurance company. Contract-based pension schemes are all DC.

They are split into five types:

- self-invested personal pensions (SIPPs);
- stakeholder pensions (SHPs) – for individuals;
- stakeholder pensions (SHPs) – for employers;
- personal pensions;
- group personal pensions (GPPs).

With the exception of SIPPs, most contract-based pension schemes are provided for and managed by insurance companies. Similar to master trusts, a Group Personal Pension (GPP) is an alternative for small businesses or those without the resources to establish and manage a single-employer trust-based scheme. GPPs provide a pension scheme in which the employer chooses the provider, and each employee has a contract with that provider. SIPPs are provided by specialist suppliers such as Interactive Investor because the individual invests in the shares, bonds or funds themselves.

Political and Economic Context

State pension systems in the UK and elsewhere have historically been intended to provide a safety net - a level of income below which no one would fall in their old age – rather than to replace the need for personal financial management or savings. The International Labour Organisation (ILO, 2000) sees "old-age pensions as a responsibility of the State" but has warned that the global situation is unsustainable – "90 per cent of the world's working-age population is not covered by pension schemes capable of providing adequate retirement income". Professor David Blake (n.d., as cited by Hill, 2017) goes further, suggesting that we will [soon] have a generation who can't really afford to retire. In the UK, The Office for National Statistics' (2018) latest projections show that the UK population has been steadily getting older and that in 50 years' time, "there are likely to be an additional 8.6 million people [in retirement]", making relying on working-age people [to fund those in retirement] all but impossible. Because public pension systems are "teetering on the brink of bankruptcy" all over the world (Weiss, 2015), governments need to urgently find a solution to impeding this collapse. The risk is high that governments will soon no longer be able to alleviate the issue of poverty amongst the elderly and, therefore, the private pension will no longer ensure a higher standard of living in retirement but instead be essential to have any standard of living in retirement.

Private Pensions, whether personal or occupational, serve as a cornerstone of retirement income systems in many countries, supplementing state pensions and personal savings. Private pensions are significant contributors to national savings. The capital accumulated through these pensions can boost the national saving rate, positively influencing the total amount of funds available for investment in the economy. By diverting a portion of current income into pensions, employees are effectively transferring consumption from the present to the future – and at the same time, transferring income tax from the present to the future, which gives the benefit of compounded returns. This process promotes a culture of saving, and, in a macroeconomic sense, encourages capital formation. Personal pensions, both DC and DB, hold an advantage over savings accounts, because the growth of the 'pot' is tax free (Volz, 2019).

As sizable institutional investors, private pension funds also play a vital role in financial markets. They often invest in equities, bonds, and property, contributing to the liquidity and stability of these markets. Given their long-term investment horizon, pension funds can absorb short-term market volatility, thus providing patient capital that can facilitate sustainable economic growth. Furthermore, private pensions can indirectly influence labour markets. Employees might choose to remain longer in the workforce to maximize their retirement benefits, which could increase the overall labour force participation rate, particularly among older workers. However, private pensions can also incentivize early retirement if they provide sufficient income replacement. The effect on labour markets hence depends on the specific design of the pension system.

Private pensions require rigorous regulation and governance to ensure they fulfil their role reliably. Mismanagement or failure of private pensions can lead to severe financial insecurity for retirees, which may necessitate costly state interventions or end in a dramatic drop in living standards for the retirees. Furthermore, the investment activities of pension funds can contribute to asset price bubbles if not adequately managed. In the context of strained public pensions systems, private pensions can help mitigate public finance pressures by sharing the burden of retirement income provision. However, the efficacy of this mitigation depends on the coverage and adequacy of the private pensions in question.

Private pensions can also affect income distribution, both within and across generations. Higher-income individuals tend to benefit more due to their higher propensity and ability to save, which can exacerbate wealth inequality. Similarly, private pensions can raise intergenerational equity issues, especially when, in the case of defined benefit schemes, current workers bear the brunt of pension fund deficits.

Individuals who have a DC plan are fully exposed to market risk. Over the past few decades there has been a gradual shift towards DC pensions and, in some countries, DC plans now account for the majority of invested assets in private sector occupational pension plans and “shifting investment risk from the corporate sector to households …. [who] are therefore becoming increasingly exposed to financial markets, and retirement income may be subject to greater variability than before” (Broadbent, 2006). Orlova et al. (2015) suggest that “the transition … has left workers forced to make choices that may decrease their financial resources in retirement”.

Cooperative Capital in relation to Pension and Wealth Creation

Cooperatives also play an essential role in macroeconomics, offering economic resilience, promoting social inclusivity, and contributing significantly to GDP in many economies worldwide. In an ever-globalizing economy, cooperatives provide a unique counter-narrative to conventional capitalist structures. They emphasize stakeholder participation, democratic decision-making, and profit-sharing, advocating for a more equitable and sustainable economic model. However, their role in the pension eco-system is less clear. The potential of cooperatives there is not fully realised due to a lack of understanding and support from policymakers, inadequate legal frameworks, and insufficient access to finance.

Cooperative law began with the Industrial and Provident Societies Act of 1852. The legislation facilitated the creation of societies or entities which could amass capital through member contributions. This move represented a shift from the prevailing dependence on loans or investments from external entities, thereby embedding the foundational principles of modern cooperatives. The subsequent update to the Industrial and Provident Societies Act in 1893 ushered in a more structured legal framework for cooperatives. Not only did the Act confer recognition on these entities as cooperative businesses, but it also introduced the concept of limited liability. This ensured that members' financial responsibilities towards the cooperative's debts were limited to their initial investments. In the aftermath of World War II, the cooperative landscape experienced a paradigm shift with the advent of consumer cooperatives. These cooperatives functioned primarily on a mutual credit system. Members would contribute to a shared fund which could be accessed as and when required. This practice marked a departure from the earlier model of capital accumulation through member investments. Nonetheless, the legal framework governing these cooperatives still predominantly relied on the tenets of the Industrial and Provident Societies Acts. The 21st-century has seen significant legislative alterations with the enactment of the Cooperatives and Community Benefit Societies Act in 2014, which amalgamated previous legislations while simultaneously introducing critical changes to the cooperative law landscape. In terms of capital management, the Act allowed cooperatives to issue withdrawable share capital, effectively creating a novel and simplified method to acquire capital from members. It also permitted members to potentially earn a return on their investment, subject to certain restrictions. While most coops in the UK are formed under cooperative law, there are some that are formed under company law with cooperative articles of association.

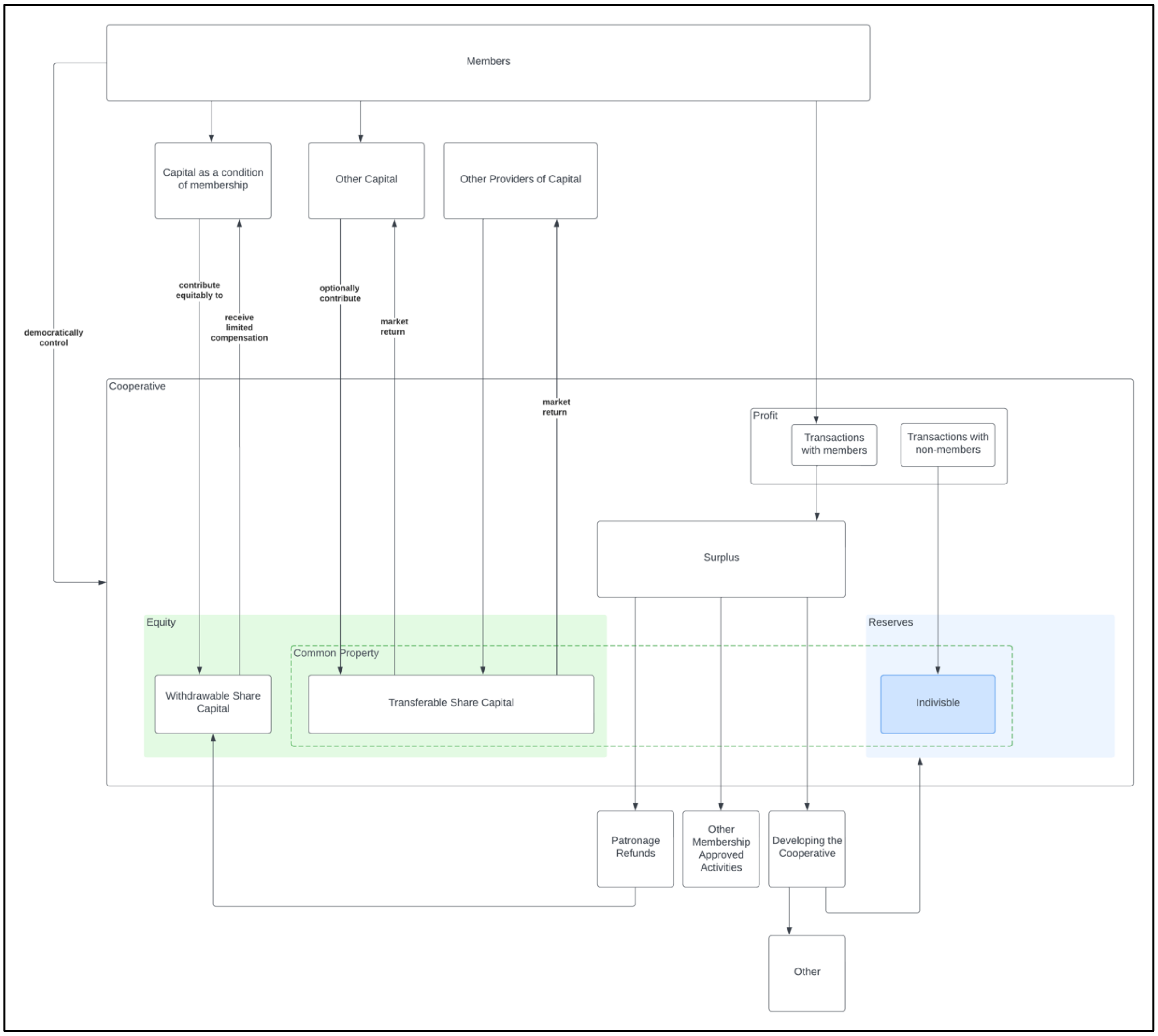
The principle of "Member Economic Participation" in the co-operative movement has evolved from the International Co-operative Alliance’s (ICA) 1895 adoption of the Rochdale Pioneers' principle of "Distribution of Surplus". This principle meant that profits or surpluses were to be shared among members in a fair and proportional manner, reflecting their individual transactions with the co-operative. In 1966, the ICA redefined this principle as "Member Economic Participation," indicating a shift in focus towards democratic control of capital and the equitable contribution of members to their co-operative's capital. The change marked a significant advancement in the co-operative ethos, placing members' participation and democratic control at the heart of co-operative management, while also stressing the importance of adequate capitalization to ensure co-operative sustainability and development.

In the 1995 revision of the co-operative principles, ICA offered more explicit and expanded guidelines regarding member economic participation and the deployment of co-operative capital, reflecting subtle yet influential shifts in the understanding of the co-operative model. While maintaining the focus on members' equitable contributions and the democratic control of capital, the revised principle unequivocally stated that part of the capital should be recognized as the common property of the co-operative. Moreover, the 1995 principles provided more explicit directions on the handling of surpluses. The new guidelines outlined a series of approved uses for surplus capital: development of the co-operative, establishment of reserves, and support for other member-approved activities. The revised principle continued to impose restrictions on the return on share capital and reaffirmed the precept that the needs of the co-operative and its members took precedence over returns on capital. The current definition of principle three, member economic participation, is as follows:

> *Members contribute equitably to, and democratically control, the capital of their cooperative. At least part of that capital is usually the common property of the cooperative. Members usually receive limited compensation, if any, on capital subscribed as a condition of membership. Members allocate surpluses for any or all of the following purposes: developing their cooperative, possibly by setting up reserves, part of which at least would be indivisible; benefiting members in proportion to their transactions with the cooperative; and supporting other activities approved by the membership. (ICA, n.d.)*

Of relevance to this paper is the concept of sharing distributable surplus with non-members, where that distribution is to aid members of other coops, and of raising capital via cooperative bonds. The guidance notes, published in 2015 by the ICA, offer more detail on the principles. It is noteworthy that the ICA defines earnings from transactions with members as surplus, whereas earnings from transactions with non-members is profit – with the latter being put into indivisible reserves.

Figure 2 – Member Economic Participation as described by the ICA's Guidance Notes



The 'sustainability turn' in pension systems

Environment, Social and Governance (ESG)

ESG refers to standards used by conscientious investors and corporations to screen potential investments for their sustainability and ethical impact. ESG factors allow businesses and investors to evaluate companies based on how they manage these critical aspects in addition to their financial performance. By considering ESG criteria, investors are better equipped to anticipate potential risks and opportunities beyond traditional financial analysis. Environmental criteria assess how a company performs as a steward of the natural world, considering issues such as a company's energy use, waste, pollution, natural resource conservation, and treatment of animals. Social criteria examine how a company manages relationships with its employees, suppliers, customers, and the communities where it operates, considering aspects like human rights, labour standards, health and safety, and relations with local communities. Governance involves a company's leadership, executive pay, audits, internal controls, and shareholder rights and can encompass issues such as corruption, tax strategy, and corporate structure. Historically, the concept of ESG has roots in the broader field of socially responsible investing (SRI), which emerged in the 1960s as part of the broader civil rights and anti-war movements. Over the past decade, ESG investing has grown exponentially. Driven by an increasing awareness of climate change, social inequality, and the importance of good corporate governance, investors have recognized the materiality of ESG factors in business performance and long-term investment returns. ESG assets under management globally have grown into tens of trillions of dollars, and this trend shows no sign of abating.

Cooperatives are one of the business forms most aligned with ESG ideals. They often prioritise environmental stewardship as they are typically community-based, with a vested interest in protecting local ecosystems. The social element is inherent to the cooperative philosophy, which is grounded in the commitment to the well-being of their members and communities. Cooperatives embody governance transparency and accountability, integral to ESG considerations. Their democratic decision-making processes ensure a level of participation and oversight not typically found in other corporate structures. Every member has an equal vote, ensuring fair representation, and promoting a system of checks and balances. Thus, cooperatives align seamlessly with ESG objectives, fostering a business model that is intrinsically focused on long-term, equitable growth.

Impact Investing

Cooperatives similarly represent a business model that naturally aligns with the principles of impact investing. Impact investing involves directing funds into companies, organisations, and sectors with the intent of earning financial returns and generating measurable and positive social or environmental effects. Unlike traditional investments, this strategy, defined by the Global Impact Investing Network (GIIN), emphasizes dual goals: profitability and beneficial impact. This approach engages diverse investors, from individuals to institutions, who aim to combine fiscal and societal gains.

Why research is needed

Equation 1) shows that UK Cooperatives contribute £665 million per annum to the UK Pension system.

Equation 1 – Cooperatives contribution to UK Pension System by employees (per annum)

$$(52p(d+e))a = b$$

Where:
a = the 250,128 employees working for coops in the UK (Coops UK, 2021), n;
p = £640 median weekly pay for full-time employees (Office for National Statistics, 2022), £;
d = 5% minimum percentage of employee's gross salary mandated by law to be put in a pension, £;
e = 3% minimum percentage of employee's gross salary mandated by law to be put in a pension for the employee, £;
b = the value put into the UK pension system by members of cooperatives, £.

Whilst this UK specific data only represents a 'slice' of the pension market, it is a useful proxy for the global situation. Equation 22) shows that **£745 billion** flows into the *global* pension system per annum from people employed by cooperatives.

Equation 2 – Cooperatives employees worldwide contribution to Global Pension System (per annum)

$$(52p(d+e))k = b$$

Where:
k = the 280 million people that cooperatives provide jobs or work opportunities to, n;
p = £640 median weekly pay for full-time employees (Office for National Statistics, 2022), £;
d = 5% minimum percentage of employee's gross salary mandated by law to be put in a pension, £;
e = 3% minimum percentage of employee's gross salary mandated by law to be put in a pension for the employee , £;
b = the value put into the UK pension system by members of cooperatives, £.

According to the Thinking Ahead Institute (2023), the top 22 pension markets combined have USD 47.1 trillion of assets under management (AUM) which is mostly made up of equity in organisations (transferable shares) and debt; government debt (in the case of the UK, gilts); and organisation debt (bonds). The UK has USD 2.568 trillion of AUM, of which 33% is equity, 56% bonds, 2% in cash and 9% in other AUM (e.g., property). 81% of the UK's pension AUM are in DB pension schemes and 19% in DC pension schemes. Given that cooperatives and their employees are paying £665 million (Equation 1) to pension funds, that co-operatives are encouraged to consider paying a portion of their surpluses into a fund to found and strengthen other co-operatives (ICA, 2015), and that pension fund capital contributes to growth and jobs ("Pensions Europe", n.d.), research is required to find out how much, if any, of this money ends up 'completing the circle', back into the cooperative economy, founding and strengthening other co-operatives.

The link between cooperatives and pensions -- particularly the concept of how cooperatives could support pension funds by either sharing a portion of surplus through dividends to non-voting investor shares (equity) or by reducing available surplus due to paying interest on cooperative bonds – is not extensively researched. Bajo and Roelants (2011) showed that the 2008 global economic crisis exposed the unsustainability of the debt-based economic model, where economic growth is powered by increasing levels of debt. They questioned the logic of a system that leads to such crises and explored cooperatives as a possible alternative, including examples such as Mondragon's Eroski that issues cooperative bonds.

In its guidance notes to the Co-operative principles, the ICA (2015) explained that a limited return on capital is justified to compensate members but return to *members* beyond that would prevent the coop from developing its business by reducing its operating surplus. However, it also noted that the third principle allows for a *market return* on capital otherwise invested by members, i.e., on capital not required as a condition of membership. Cooperatives with high capitalisation requirements (for regulatory reasons, or otherwise) may need to go beyond what is possible to raise from members and source debt or equity capital from the financial markets *implying* a market return. The guidance notes state that large well established cooperatives have done this by listing non-member shares on stock markets. They also suggest that one of the most important activities members can and should do is promote an economic environment favourable to the further development of the co-operative movement and encourage coops to consider paying a portion of their surpluses into a fund to found and strengthen other co-operatives.

ICA (2017) in its Capital Conundrum report suggests that cooperative capital should not be seen as purely limited to the cooperative itself. Capital can be boosted by patient capital – instruments of "quasi equity" such as bonds that provide investors in the social economy with a fixed *minimum* remuneration and a variable additional amount indexed to the enterprise's results. Rabobank, a large financial coop in the Netherlands, did this, and the capital instrument qualified as Common Equity Tier 1 under European regulation. The bonds, which carried a substantial premium due to their subordinated nature, were traded on a Rabobank internal network. The report suggests that such instruments could be issued to match members' investments, thereby encouraging further capitalisation by members (the more the members invest, the more can be raised externally). It points out that to keep the costs of servicing such quasi equity instruments as low as possible, a high level of capitalisation and therefore credit rating, is paramount, and that high capitalisation enables cooperatives and mutuals to take advantage of immediate, tactical acquisitions. It also states that allowing external non-member investor capital is not incompatible with co-operative philosophy and cooperative business models, as long as care is taken to ensure the core purpose of the coop is not to pay dividends to investors and that demutualisation is impossible.

Methodology: Pension Fund Review

A review of selected pension schemes supported by UK cooperatives was conducted to determine how funds are invested and to what extent they complete the circle to support the cooperative economy.

Description of data collection plan

Collection Methods

The primary method of data collection was document analysis. All data were collected from the public domain. Relevant sources of information included official websites of master trusts, pension providers, mutual funds, and index providers; regulatory filings; and financial and investment reports. Secondary sources like financial news websites, articles, and databases were also utilised.

Purposive Sampling

The sampling process was purposive, a pivotal non-probability sampling methodology. This technique entails the deliberate selection of research participants predicated upon their distinctive characteristics or qualities. Given the sheer number of pension funds in the UK, the decision was made to focus the research on a very specific part of the pensions market: master trust based auto enrol pensions that offered ethical funds.

How the data was analysed

The data gathered was systematically analysed following the multi-stage process of selection, which incorporated both vertical and horizontal processes. The vertical selection process involved the selection of pension schemes based on specific criteria aligned with the study objectives. Upon identifying the 37 authorised master trusts in the UK, a categorical analysis was performed to discern which of these accepted auto-enrolment. The resultant subset of master trusts was then scrutinized to elucidate the pension providers they utilise. Any schemes that lacked pertinent information on their pension provider or the funds offered were eliminated. Further stratification was carried out to distinguish the providers that operate on a mutual basis, and a thematic analysis was performed on the tax relief arrangements of the remaining master trusts.

The horizontal selection process involved a cross-sectional analysis across the pension funds described as 'ethical' from pension schemes, aiming to compare, contrast, and assess them on multiple dimensions. It further refined the study group or dataset, ensuring comprehensive representation and diversity in line with the focus on auto-enrolment. Ethical funds were singled out based on the premise that cooperatives, if present in any of the funds, were most likely to be part of the ethical fund. The ethical funds were then classified as either actively managed, or passively managed and analysed to determine each pension fund's method of investment, either direct purchase of assets, or acquisition of units in a mutual fund. For the passive funds, an index analysis was performed, examining the indexes tracked by the mutual funds and the index providers. The final stage of the analysis involved a content analysis of publicly available information to ascertain whether cooperatives form a part of these indexes, or, in the absence of such information, to explore plausible reasons why cooperatives might not be included.

Analysis / Results

Master Trusts

There are 37 regulated Master Trusts in the UK. Of the 37, nine offer auto enrol pension schemes that small coops and other small businesses can enrol their employees into (highlighted in blue in Table 1 below). All 37 are DC schemes.

Table 1: List of the 37 Regulated Master Trusts (auto enrol in blue)

Aegon Master Trust	The Crystal Trust	LifeSight	Smart Pension Master Trust
The Aon MasterTrust	Ensign Retirement Plan	Mercer Master Trust	Standard Life DC Master Trust
Atlas Master Trust	FCA Pension Plan	National Employment Savings Trust (NEST)	Stanplan A
Aviva Master Trust	Fidelity Master Trust	National Pension Trust	Superannuation Arrangements of The University Of London (SAUL)
The Baptist Pension Scheme	HSBC Master Trust	NOW: Pensions Trust	Universities Superannuation Scheme
BCF Pension Trust	Industry-Wide Defined Contribution Section (Railways Pension Scheme)	Options Workplace Pension Trust	The University of Oxford Staff Pension Scheme
The Cheviot Pension	The ITB Pension Funds	The Pensions Trust (TPT Retirement Solutions)	Workers Pension Trust
Combined Nuclear Pension Plan	Legal & General WorkSave Mastertrust	The People's Pension	
Creative Pension Trust	Legal & General WorkSave Mastertrust (RAS)	Scottish Widows Master Trust	
Cushon Master Trust (trading as The Salvus Master Trust)	The Lewis Workplace Pension Trust	The SEI Master Trust	

Source: https://www.thepensionsregulator.gov.uk/en/master-trust-pension-schemes/list-of-authorised-master-trusts

Providers for the approved Auto Enrol Pension Schemes

Table 2 lists the Pension Provider used by each of the nine Pension Schemes. Standard Life are large enough to be their own provider. The schemes highlighted in red have been excluded from further analysis due to limited reach or inadequate public information.

Table 2: List of Regulated Master Trust Auto Enrolment schemes (highlighted in red are schemes removed from the results)

Automatic enrolment pension scheme	Partnership (Provider)
Creative Pension Trust	Scottish Widows
The Crystal Trust (appears to be trading as Evolve) https://evolvepensions.co.uk/	Legal and General
The Lewis Workplace Pension Trust https://lewismastertrust.co.uk	Legal & General
National Employment Savings Trust (NEST)	Legal & General CM (BMO)
NOW: Pensions	
The People's Pension	State Street
Smart Pension Master Trust	Legal & General
Standard Life Workplace Pension	Standard Life
Workers Pension Trust	

Source: The Pensions Regulator, 2023

The Ethical Pension Funds

Crystal Trust (2023) indicates its most 'ethical' fund is the Lifestyle Strategy: "Following a review … the Trustee implemented a change to ensure that the Legal & General Investment Management (LGIM) Lifestyle strategy have a much improved ESG score" (Evolve Pensions, 2023). Their Trustee designs the LifeStyle Strategy, which is made up of funds from Legal & General (Crystal, 2022).

The Lewis Workplace Pension Trust offers an "Auto Enrolment Responsible Investing Portfolio" (Lewis Investment, 2023) which appears not to be a portfolio but a single fund – the "Legal & General MSCI World Socially Responsible Investment (SRI) Index Fund" (Lewis Investment, 2023).

NEST offers an ethical growth fund. Figure 3 shows the breakdown of the fund.

Figure 3: NEST Ethical Growth Fund Breakdown

Nest Ethical Growth Fund	**100.0%**
BMO Responsible Global Equity Fund	62.5%
BMO Responsible Sterling Bond Fund	20.1%
LGIM Managed Property Fund	10.1%
LGIM Sterling Liquidity Fund	3.2%
Octopus Renewables Infrastructure Partnership V L.P.	1.3%
Octopus Renewables Infrastructure SCSp	2.7%

The People's Pension offer 8 funds, one of which is their 'ethical fund'. "This fund invests 100% in Global Shares. The fund's investments are weighted towards companies that demonstrate a strong track record of managing environmental, social and governance ('ESG') risks and opportunities." (People's Pension, 2023). 100% of this fund is invested in its provider's "State Street World ESG Index Equity Fund".

Smart Pension offers 17 funds, 9 of which take into account ESG factors. This research focusses on their "Smart Ethical and Climate Fund" which "aims to track a filtered index, which excludes companies that operate in industries that breach certain ethical criteria" (Smart Pension, 2023). Its underlying fund is the "Legal & General FTSE TPI Global (ex Fossil Fuels) Equity Index Fund" (Smart Pension, 2023).

Standard Life are a large supplier of workplace and private pensions and allow auto enrolled employees to choose any of their funds. Their default ethical fund is called "Standard Life Sustainable Multi Asset Growth Pension Fund". They note that "With most workplace pension scheme members opting to stay in their scheme default, it's important that it has a comprehensive yet clear strategy to meet most member's needs" (Standard Life, 2023) and "our default" investment option is designed for the majority of members. It aims to help members achieve a good outcome when they come to retire by … focusing on ESG factors we believe are financially material" (Standard Life, 2023).

In summary, there are five funds from Legal & General used by auto enrol master trust pension schemes, two funds from CT (BMO) and one fund from State Street. Standard Life, being its own provider, has many funds available. However, the default and main ethical fund for its Master Trust pension scheme is the Standard Life Sustainable Multi Asset Growth Pension Fund, which is made up of 13 different funds – 11 passive and 2 active funds. Table 3 lists the funds, the provider and the scheme which uses each fund and indicates whether the funds are under active or passive management. It is important to note that only pension schemes can invest in these funds.

Table 3: List of Pension Funds and their Providers (passive in green, active in red)

Pension Fund	**Provider**	**Automatic enrolment pension scheme**
Legal & General Global Equity Index Fund	Legal & General	The Crystal Trust
Legal & General MSCI World Socially Responsible Investment (SRI) Index Fund		The Lewis Workplace Pension Trust
FTSE TPI Global (ex Fossil Fuels) Equity Index Fund		Smart Pension Master Trust
LGIM Managed Property Fund		NEST
LGIM Sterling Liquidity Fund		
CT [BMO] Responsible Global Equity Fund	CT (BMO)	
CT [BMO] Responsible Sterling Bond Fund		
State Street World ESG Index Equity Fund	State Street	The People's Pension
Standard Life Sustainable Index US Equity Pension Fund	Standard Life	Standard Life Workplace Master Trust
Standard Life Sustainable Index UK Equity Pension Fund		

Pension Fund	Provider	Automatic enrolment pension scheme
Standard Life Sustainable Index European Equity Pension Fund		
SL abrdn Short Dated Global Corporate Bond Tracker Pension Fund		
Standard Life Sustainable Index Japan Equity Pension Fund		
SL PUTM Bothwell Emerging Market Debt Unconstrained Pension Fund		
Standard Life Sustainable Index Asia Pacific (ex Japan) Equity Pension Fund		
Standard Life Sustainable Index Emerging Market Equity Pension Fund		
SL Sustainable Global Property Securities Asset Fund		
SL Vanguard Global Corporate Bond Index Pension Fund		
Standard Life Property Pension Fund		
SL PUTM Bothwell Global Bond Pension Fund		
SL abrdn Global Inflation-Linked Bond Tracker Pension Fund		

Source: Authors own research

Mutual Funds

As opposed to buying shares and bonds directly, some pension funds are made up of units in mutual funds. All of Standard Life's passively managed pension funds are made up of units in mutual funds provided by Standard Life – for example, the Standard Life Sustainable Index UK Equity Pension Fund is made up of units in the PUTM ACS Sustainable Index US Equity Fund. Table 4 shows which pension funds are just units in another mutual fund.

Table 4: List of Pension Funds and related mutual fund, if applicable (passive in green, active in red)

Pension Fund	Mutual Fund
Legal & General Global Equity Index Fund	
Legal & General MSCI World Socially Responsible Investment (SRI) Index Fund	
FTSE TPI Global (ex Fossil Fuels) Equity Index Fund	
LGIM Managed Property Fund	

Pension Fund	Mutual Fund
LGIM Sterling Liquidity Fund	
CT [BMO] Responsible Global Equity Fund	
CT [BMO] Responsible Sterling Bond Fund	
State Street World ESG Index Equity Fund	
Standard Life Sustainable Index US Equity Pension Fund	PUTM ACS Sustainable Index US Equity Fund
Standard Life Sustainable Index UK Equity Pension Fund	PUTM ACS Sustainable Index UK Equity Fund
Standard Life Sustainable Index European Equity Pension Fund	PUTM ACS Sustainable Index European Equity Fund
SL abrdn Short Dated Global Corporate Bond Tracker Pension Fund	PUTM ACS Sustainable Index European Equity Fund
Standard Life Sustainable Index Japan Equity Pension Fund	PUTM ACS Sustainable Index Japan Equity Fund
SL PUTM Bothwell Emerging Market Debt Unconstrained Pension Fund	PUTM Bothwell EMD Unconstrained Fund
Standard Life Sustainable Index Asia Pacific (ex Japan) Equity Pension Fund	PUTM ACS Sustainable Index Asia Pacific ex Japan Equity Fund
Standard Life Sustainable Index Emerging Market Equity Pension Fund	PUTM ACS Sustainable Index Emerging Market Equity Fund
SL Sustainable Global Property Securities Asset Fund	
SL Vanguard Global Corporate Bond Index Pension Fund	Vanguard Global Corporate Bond Index Fund
Standard Life Property Pension Fund	
SL PUTM Bothwell Global Bond Pension Fund	PUTM Bothwell Global Bond Fund
SL abrdn Global Inflation-Linked Bond Tracker Pension Fund	abrdn Global Inflation-Linked Bond Tracker Fund

Source: Authors own research

Indexes

Thirteen of the funds that directly invest in equity and debt instruments are passive, meaning they track an index from an index provider – the index tells them what to buy. The other eight are actively managed, meaning investment decisions are based on an investment strategy decided by the fund manager. Two of the eight actively managed funds report against an index although the fund manager actively decides whether and what to invest in other securities. Table 5 lists the 13 funds and their corresponding index, with the actively managed but index tracked funds in red.

Table 5: List of Passive Funds (Pension or Mutual) and their corresponding index

Fund	Index
Legal & General Global Equity Index Fund	FTSE World Index
Legal & General MSCI World Socially Responsible Investment (SRI) Index Fund	MSCI World SRI Index
FTSE TPI Global (ex Fossil Fuels) Equity Index Fund	FTSE TPI Climate Transition Index Series: - FTSE All-World TPI Transition ex Fossil Fuel ex Tobacco ex Controversies Index - FTSE All-World ex Japan TPI Climate Transition Index - FTSE Developed TPI Climate Transition ex Coal ex Controversies ex Nuclear ex Tobacco Index - FTSE Developed ex Korea TPI Climate Transition Index - Russell 1000 TPI Climate Transition Index - FTSE Japan TPI Climate Transition Index - FTSE Global Core Infrastructure TPI Climate Transition Index
CT [BMO] Responsible Global Equity Fund	MSCI World TR Index
CT [BMO] Responsible Sterling Bond Fund	Markit iBoxx Sterling Non-Gilts Index
State Street World ESG Index Equity Fund	MSCI World ESG Universal Index
PUTM ACS Sustainable Index US Equity Fund	MSCI USA Select ESG Climate Solutions Target Index
PUTM ACS Sustainable Index UK Equity Fund	MSCI UK IMI Select ESG Climate Solutions Target Index
PUTM ACS Sustainable Index European Equity Fund	MSCI Europe ex UK Select ESG Climate Solutions Target Index
PUTM ACS Sustainable Index European Equity Fund	Bloomberg Global Aggregate Corporate 1 to 5 year index
PUTM ACS Sustainable Index Japan Equity Fund	MSCI Japan Select ESG Climate Solutions Target Index
PUTM ACS Sustainable Index Asia Pacific ex Japan Equity Fund	MSCI AC Asia Pacific ex Japan Select ESG Climate Solutions Target Index
PUTM ACS Sustainable Index Emerging Market Equity Fund	MSCI Emerging Markets Select ESG Climate Solutions Target Index
Vanguard Global Corporate Bond Index Fund	Bloomberg Barclays Global Aggregate Float Adjusted Corporate Index
abrdn Global Inflation-Linked Bond Tracker Fund	Bloomberg World Government Inflation-Linked Index

Source: Authors own research

Table 6 lists the four index providers and the breakdown of the 21 associated indexes.

Table 6: List of Index Providers and the number of associated tracked funds

Index Provider	Number of indexes
FTSE Russell	8
MSCI	9
Markit	1
Bloomberg	3

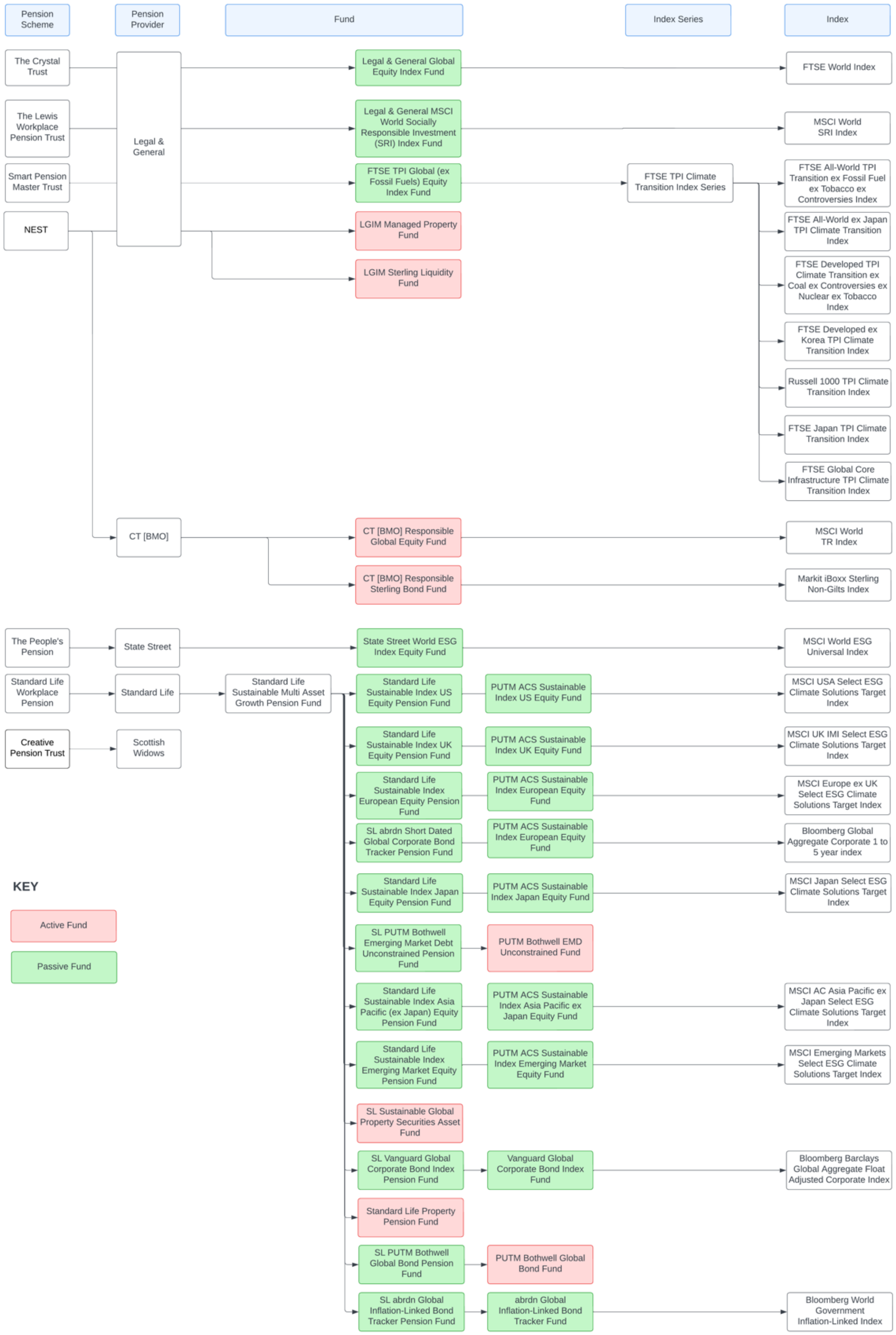
Source: Authors own research

Indexes are protected as a form of intellectual property. While the raw data used in the construction of an index (e.g., the prices of individual stocks) cannot be copyrighted, the specific methodology providers use to compile and weight its index can be. This prevents other entities from directly copying indexes. While the methodologies are publicly available, the constituents that make up the index are not, bar the top 10. However, "constituents of MSCI equity indexes are *listed companies* [emphasis added], which are included in or excluded from the indexes according to the application of the relevant index methodologies" (MSCI, 2022). This indicates that a cooperative's transferable equity or bonds would need to be listed on a stock exchange before it could be eligible for inclusion into an index. Given that the Cooperative Group (the UK's largest coop) is the only one with listed bonds, it is, then, reasonable to assume that almost *none* of the money UK cooperators pay into pensions per annum completes the circle back into the cooperative economy.

Results in diagram form

Figure 4 below presents the results visually.

Figure 4: Schemes to Providers to Funds to Indexes Diagram



Discussion

There are a number of factors that require further exploration to understand the potential for co-operatives to attract investment by pension funds and how to strengthen it.

Active vs Passive Investment

A majority of the pension funds analysed are passive in nature and the move from active to passive investment is a wider phenomenon. Crane and Crotty (2018) found that, “The number of index funds and underlying indices has grown tremendously over the last 20 years” and that “active funds no longer outperform index funds”.

A study by Chen et al. (2019) discovered that index “additions have significantly positive abnormal returns, while deletions have significantly negative returns in the interval from the announcement date to one day before the implementation”. Thus, index providers’ ability to affect the market significantly cannot be underestimated. For example, MSCI, the largest index provider, has a history of creating custom indexes such as the MSCI World Select Climate Target Index (MSCI, n.d.), which is based on the stock exclusions defined by Länsförsäkringar.

If the indexes that passive funds follow don't include cooperatives, it is improbable that the investment made in such funds would contribute financially to the cooperative economy. Therefore, for cooperatives to benefit from these investments, they need to be listed on a stock exchange and included in these indexes.

Member Economic Participation ‘Plus’

As described earlier in the paper, the guidance notes on the third cooperative principle, member economic participation, provided by the International Co-operative Alliance (2015) support the presumption that the principle does not rule out generating market returns from the financial markets. Interestingly, the ICA notes that several well-established, large-scale co-operatives have already ventured into raising additional capital by issuing equity shares (transferable) to non-member investors. These shares are listed and traded on stock exchanges, thus making them a part of the mainstream financial market (ICA, 2015). It therefore seems reasonable to conclude that co-operatives have the potential to issue non-voting equity and cooperative bonds that yield market returns.

Listed versus non listed financial instruments

Pension funds, like the ones available to auto enrol schemes, can invest in non-listed bonds, also known as private debt – debt investments that are not publicly traded on a stock exchange, and instead are typically issued by private companies or organizations. They must ensure that their investment in private debt is compliant with regulatory requirements, such as limits on the proportion of the fund that can be invested in illiquid assets. Therefore, investment in unlisted cooperative bonds is possible, but subject to enhanced regulatory requirements and it is a lot easier for pension funds to invest in listed bonds. As noted earlier, in the UK, only one coop has listed bonds – the Cooperative Group (tCG).

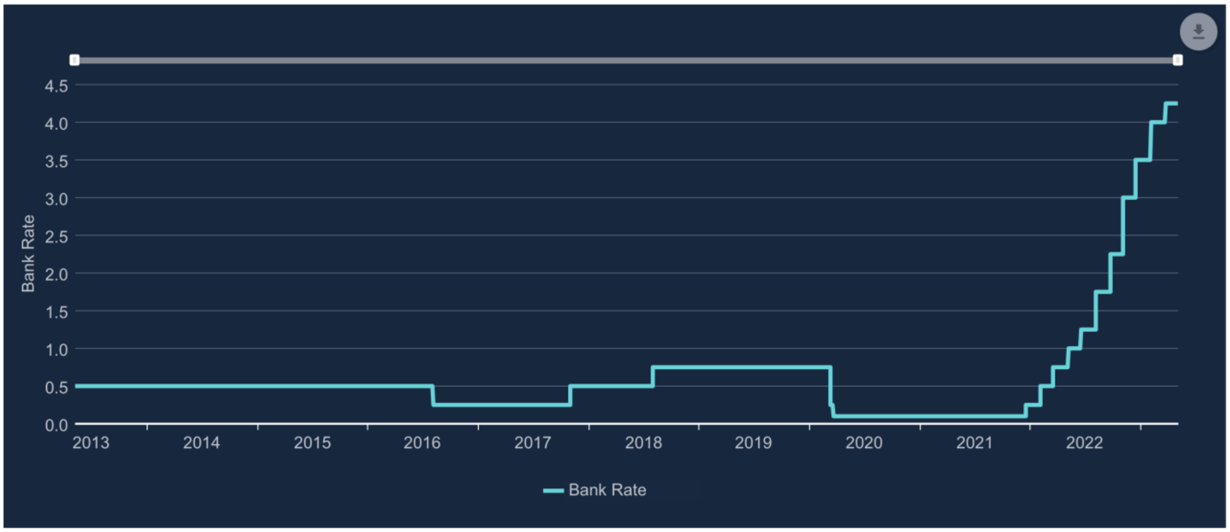
Given that most pension funds in the sample are passive and therefore linked to an index which requires listing as a pre-requisite to join the index, the importance of exploring a cooperative stock exchange is clear. Regulation 4 and Schedule 3 of the Individual Savings Account Regulations 1998 provide detail on qualifying investments for Stocks and Shares ISAs. The legislation specifies that the shares or securities must be officially listed on a recognized stock exchange in the UK or another European Economic Area (EEA) state, or on any stock exchange outside the EEA that is recognised by the UK Treasury.

Shares vs bonds (equity vs debt)

The topic of cooperative investor shares (equity) as compared to cooperative bonds (debt) warrants comprehensive examination. Cooperative bonds are a well-documented method of capital acquisition, with Rabobank, for instance, holding one third of its liabilities in bonds and other debt instruments primarily purchased by institutional investors at the time it was reviewed in *The Capital Conundrum for Co-operatives* (ICA, 2017). Conversely, there is a paucity of instances of cooperative non-voting investor shares.

The Thinking Ahead Institute's 2023 report states that 33% of the United Kingdom's pension funds' assets are invested in shares and 56% in bonds. The proportion of bonds has increased by 19 percentage points from 37% in 2012. This heightened allocation to bonds may change in the future since the United Kingdom's interest rates, as depicted in Figure 5, have been at historically low levels over the past decade, but have demonstrated a consistent incline since 2022.

Figure 5 - Bank of England Base Rate History



Bond prices and interest rates have an inverse correlation: an augmentation in interest rates precipitates a decrease in bond prices and vice versa. This relationship is particularly salient for government bonds, as they are considered risk-free investments, and their yield often forms the baseline interest rate in an economy. With respect to non-government bonds – corporate bonds, which includes cooperative bonds – interest rates are also influenced by the credit risk of the issuing organization. As the risk-free rate (derived from government bonds) escalates, corporations must proffer higher yields to attract investors, compensating for the additional risk undertaken. Therefore, corporate bonds are impacted not only by fluctuations in the general interest rate milieu, but also by organization-specific factors such as financial solvency and industry prognosis.

There are complex dynamics between cooperative investor shares (equity) and cooperative bonds (debt) in the context of fluctuating interest rates. The inverse relationship between bond prices and interest rates suggests that high interest rates make issuing bonds more expensive for cooperatives, potentially making equity more attractive despite its inherent risks (due to its dependence on the cooperative's performance). This study hypothesizes that issuing investor shares may be more beneficial for cooperatives during periods of high interest rates, while issuing bonds may be preferable during periods of low interest rates. However, the implications for pension funds are less clear, particularly due to the requirement for equity to be listed for purchase.

The relationship between elevated interest rates and the escalating costs associated with cooperatives' bond issuance is elucidated by an illustrative case from Midcounties Coop, as depicted in Table **Error! No bookmark name given.**6. A notable increase in their three-year rate from 4.08% to 6.5% has been observed. Despite this, they have successfully minimized the differential over the Bank of England base rate from 3.98% in 2020 to a relatively lower 2.25% in 2023.

Table 6 – Midcounties Coop historical bond rates

		GROSS					
Date		1 year	2 years	3 years		BoE Rate	Diff
12/08/2020		3.50%	3.68%	4.08%		0.10%	3.98%
17/01/2021		3.50%	3.68%	4.08%		0.10%	3.98%
23/06/2021		2.75%	3.19%	3.61%		0.10%	3.51%
02/01/2022		2.50%	2.95%	3.38%		0.25%	3.13%
29/05/2022		2.75%	3.25%	3.75%		1.00%	2.75%
14/08/2022		3.00%	3.50%	4.00%		1.75%	2.25%
28/11/2022		4.00%	4.50%	5.00%		3.00%	2.00%
16/03/2023		5.00%	5.50%	6.00%		4.00%	2.00%
08/05/2023		5.50%	6.00%	6.50%		4.25%	2.25%

Source: wayback machine (web.archive.org)

There are many arguments about fixed income versus equity, but there is a clear argument for a portion of surplus, perhaps partially from non member transactions that are normally recommended to go into indivisible reserves, to be ring-fenced for distribution to other cooperatives, and the best way to achieve this is to allow cooperative and mutuals to invest some of their pension funds – thereby completing the circle. Cooperatives could issue non-voting equity, and cooperative bonds, with, importantly, market returns. Bonds are higher risk for the society and therefore their members – because even in hard times, bonds are repayable. Issuing equity shares the risk and strengthens the coop's balance sheet at the same time.

The problem with a Coop Pension Scheme – Employer related investments (ERI)

The Pensions Regulator insists that "not more than 5% of the current market value of pension scheme assets may at any time be invested in employer related investments" (The Pensions Regulator, 2023). This is not relevant to auto enrol pension schemes using master trusts, but should a coop become large enough to run its own scheme, this would restrict them from effectively investing in themselves. In addition, employer-related loans or guarantees and ERI transactions at an undervalue are prohibited (The Pensions Regulator, 2023). What is particularly interesting, and potentially of concern, is that ERIs are defined as "shares or other securities issued by the scheme employer *or by any person who is connected with, or an associate of, the employer* [emphasis added]" (The Pensions Regulator, 2023). In theory, it could restrict the ability of a coop or mutual to invest in the bonds of another coop when it is a *member* of that coop. Equally, they may need to be a member in order to purchase bonds – so this presents a dichotomy.

Risk-adjusted returns – advantage coops

According to the Thinking Ahead Institute (2023), the top 22 pension markets combined had USD 47.1 trillion of assets under management (AUM) in 2022 – a 17% reduction from the previous 12 months. The volatility demonstrated by this reduction indicates a greater risk, as it signifies more uncertainty in the returns of the investment. Volatility is typically measured by the standard deviation of a security's or portfolio's returns. Advanced measures of risk such as the Sharpe ratio and Zero Risk Beta offer nuanced insights into the risk-return tradeoff, enabling more informed decision-making.

The Sharpe ratio quantifies the risk-adjusted returns of investment portfolios, empowering investors to adjust their portfolios towards an optimal balance of risk and return. Cooperatives, especially those well-established within their communities, can often provide stable, albeit potentially lower, returns. In such cases, the Sharpe ratio may be comparably high, indicating an efficient risk-return tradeoff, particularly for investors interested in stable, long-term investments.

Zero Risk Beta adjusts the traditional Capital Asset Pricing Model (CAPM) Beta, which measures the systematic risk of a portfolio relative to the market, by considering a hypothetical scenario where the risk-free rate is zero. It provides a more reliable and realistic portrayal of the portfolio's market risk under extreme market conditions, such as those involving near-zero interest rates. Cooperatives might demonstrate lower Zero Risk Beta if their performance is less tied to broader market fluctuations, which is often the case for localized cooperatives insulated from global market dynamics. This potentially lower correlation could mean a lower Zero Risk Beta, suggesting that the cooperative represents an opportunity in an investment portfolio.

The Fonterra dairy coop is New Zealand's largest exporter of dairy products, and one of the largest dairy manufacturers in the world. In November 2012, it listed units in the Fonterra Shareholders' Fund (FSF) on the New Zealand and Australian stock exchanges, where "the primary objective was to remove the obligation of the co-operative to issue and redeem its shares, which had posed significant balance sheet risk" (ICA, 2017). It is of interest that, "growth is funded primarily by retained earnings, [which] has resulted in a more cautious approach now used to value the units and the appearance of a risk beta not dissimilar in size to the one used when [member] shares were valued before [the fund]" (ICA, 2017). Figure 6 shows the performance of the FSF fund since inception, illustrating that although the price has fallen from the initial 5.21 to 3.23 in June 2023, volume has dramatically decreased recognising that these units represent income from retained earnings.

Figure 6 – FSF performance since Nov 12 to Jun 23

Widening wealth inequality

It's generally recognised that the current economic paradigm is widening wealth inequality, yet it's a legal requirement for cooperatives to contribute to the problem. Braun (2021) explains that "whereas the comparative political economy literature has long treated dispersed ownership and weak shareholders as core features of the U.S. political economy, a century-long process of re-concentration has consolidated shareholdings in the hands of a few very large asset management companies". He goes on to underline that these companies' holdings are diversified and that they are disconnected from the corporations whose stock they hold.

Toporowski (2000) thinks that a focus on maximising capital gains "rather than dividends or interest, makes financial investors relatively more indifferent to the management of the companies that pay those dividends or interest and more concerned with following conventional speculative trends in order to maximise capital gains." This shift in focus has made them indifferent to the management of the companies they own, leading to a disregard for wealth distribution.

Furthermore, the transition from defined benefit (DB) to defined contribution (DC) employer-sponsored plans, contrary to popular belief, has not been a significant driver of wealth inequality. The Federal Reserve, the central bank of the United States, suggests that “both DB and DC wealth are highly concentrated near the top of the wealth distribution (and have been for the past three decades)” (Volz, 2019). The Federal Reserve’s own data shows that the wealthiest quartile, which already receives substantial private pensions, places the largest burden on the social security system, further deepening the wealth gap.

Cooperatives –the natural choice for ESG compliance

This research has highlighted that cooperatives are the natural home for ESG, but a generally accepted cooperative financial instrument hasn’t been created yet. Paul Skinner’s work (described in Hadfield, 2022) suggests that businesses, particularly co-operatives, social enterprises, and B Corps, can be powerful agents of positive change, but that their adoption doesn't guarantee optimal purpose. Despite the potential for ethical and socially useful business practices, many companies, such as Apple, continue to promote harmful consumption. Meanwhile, the UK government's report indicates that most employers prefer to offer ESG schemes as optional due to concerns about potential risks and poor investment returns. This demonstrates the complexity and challenges of integrating ESG compliance into mainstream business and investment practices.

Risk transfer from Employer to Employee

The shift from DB pensions to DC pensions is increasing in the private sector (Thinking Ahead Institute, 2023). While the Federal Reserve concluded that both DB and DC schemes contributed to widening wealth inequality, it failed to recognise that the risk of the fund not delivering enough to retire comfortably now rests with the employee, not the employer or the government. Compounded returns and percentage minimums (as stipulated by the UK government) will always benefit those who earn more and in doing so will only *exacerbate* wealth inequality. Coops also need to be careful, because “The Pensions Regulator carried out research into DC schemes which found that 95% of members stay in the default investment” (Standard Life, 2023). It would be easy for this to be missed because it is the employee who has to change from the default, not the employer. Weiss (2015) noted that, despite individuals acting responsibly as savers and citizens, they increasingly bear the risk of market uncertainties, a development at odds with long-standing expectations of economic security offered by capitalism and capitalist governments. This shift in the risk landscape and its impacts represent not only the failure of the system to protect its workers but also the source of individuals’ discontent with their pension providers.

Conclusion

The study findings definitively illustrate a lack of support for the co-operative economy by the master trust based pension schemes that offer automatic enrolment. The discussion highlights factors that should be addressed to develop the potential for cooperatives to tap into such support. Including non-voting listed equity from cooperatives on stock exchanges, paired with listed cooperative bond instruments, is a plausible resolution. Convincing index providers to incorporate these financial instruments into their indexes or encourage large mutuals to create custom indexes is also important. ICA research and guidance suggest that such actions can be undertaken in a way that is consistent with the third cooperative principle, member economic participation.

With this in mind, should we propose that if the cooperative movement’s intention is to present itself as a viable alternative to the current system, as opposed to reliant on it, then it logically follows that private pension contributions should be channelled back into the cooperative economy, thereby closing the loop?

Further research

There is a pressing need to investigate whether the findings from the examination of selected UK master trusts also apply in other areas of the pension system in the UK and it would be beneficial to expand the scope of the research to other countries.

Further research is also required on the third cooperative principle, member economic participation, and what the guidance notes mean by encouraging coops to use a portion of their surplus to found and strengthen the cooperative economy, along with promoting an economic environment favourable to the development of the co-operative movement. There is also a significant need for comprehensive research to explore the dynamics between cooperative bonds and cooperative equity, in various economic scenarios, including recessions and cost of living crises.

Finally, research is required into the cooperative movement's perception of itself as an alternative to the prevailing economic system. Bollier (2015) posited a pertinent question:

> *How are we to imagine and build a radically different system while living within the constraints of an incumbent system that aggressively resists transformational change? Our challenge is not just articulating attractive alternatives, but identifying credible strategies for actualizing them.*

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Appendix

Framework 2: Pension Scheme to Pension Providers