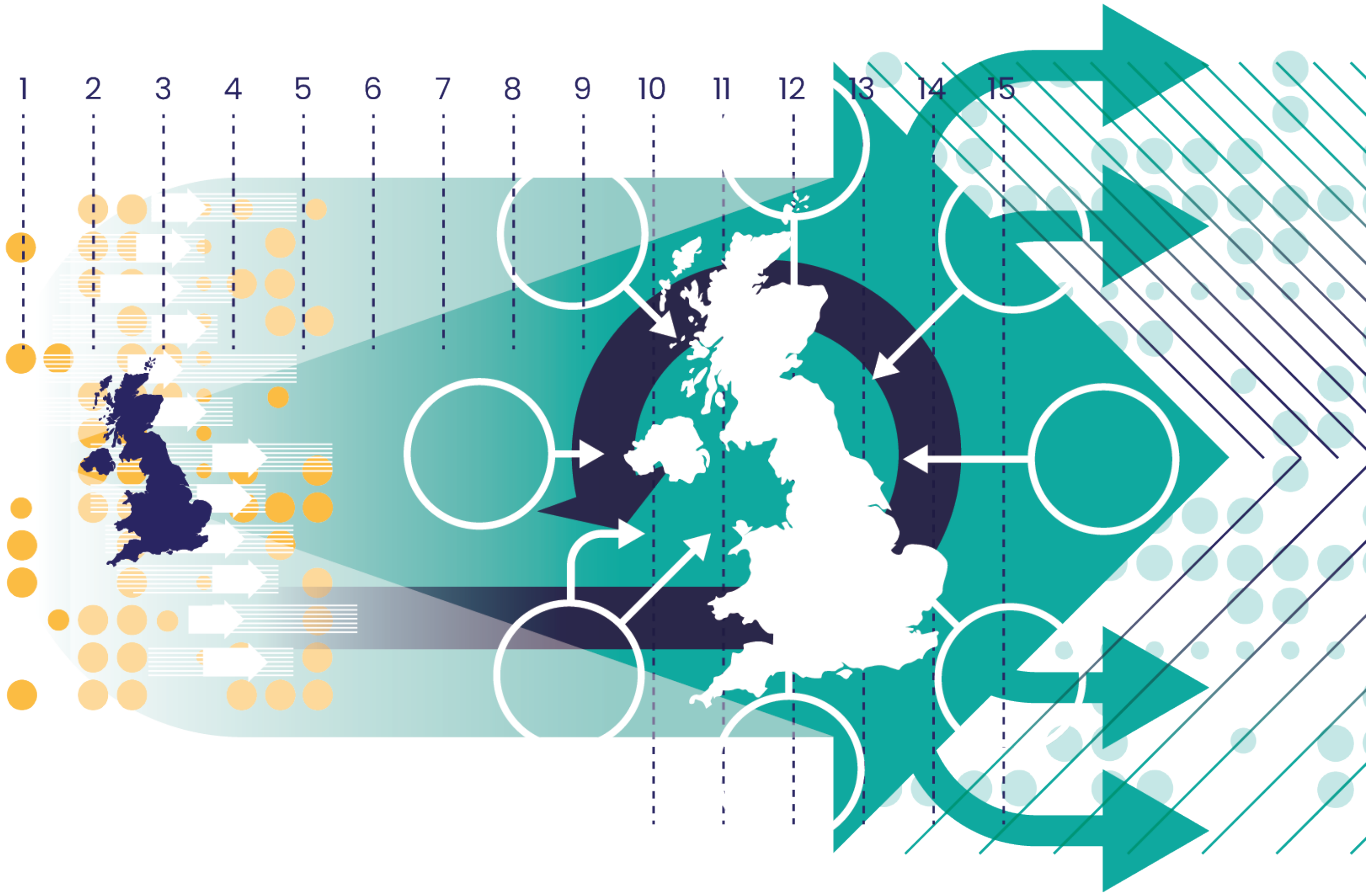
New Capital Consensus
A better investment system for all

Effective Investment

How to stimulate UK productivity and growth



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The Authors would like to thank:

- Chatham House Sustainability Accelerator
- New Capital Consensus generous funders
- The New Capital Consensus Advisory Panel and Chair – all acting in a personal capacity:
  - Sir Keith Skeoch - New Capital Consensus Advisory Panel Chair
  - Katharine Braddick
  - Paul Johnson
  - James Palmer
  - Nigel Peaple
  - Prof. David Pitt-Watson
- The New Capital Consensus team and wider contributors:
  - Francis Bell
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  - Sophie Cheadle
  - Prof. Iain Clacher
  - David Gunn
  - Ben Rich
  - Nick Silver
  - Dr. Sania Wadud
  - Ana Yang
  - Gareth Thomas
- Workshop participants and interviewees
- Our 'fellow travelling' think-tanks for participation in our cross-initiative events

As ever, we acknowledge all faults as the authors' own.

Foreword

Economic growth ultimately depends on gains in productivity—the efficiency with which an economy turns labour, capital, and other resources into goods and services.

When productivity rises, more output is produced from the same resource base, creating the conditions for faster growth. Economists have long recognised that higher productivity underpins profitability, investment, and rising wages, and therefore broad-based prosperity for both labour and capital.

It also strengthens the public finances: with a higher level of output, governments can sustain more spending without increasing the tax burden or adding to the debt-to-GDP ratio. In this way, improved productivity broadens the political choices available, allowing higher spending on welfare, education, defence, or infrastructure, or alternatively lower taxes.

It is in both of these senses that Mario Draghi observed that "productivity growth is the only possible way to achieve prosperity"—and why the UK's weak productivity performance over the past decade lies at the centre of today's economic policy debate.

Economists have also long recognised that growth in productivity cannot be explained simply by changes in the quantity of labour or capital employed. They refer to the residual—the unexplained component—as 'total factor productivity'. The deeper determinants of such total factor productivity lie in long-run developments: the generation and diffusion of knowledge, the pace of technological progress, and the institutional arrangements that shape how economies evolve and adapt over time.

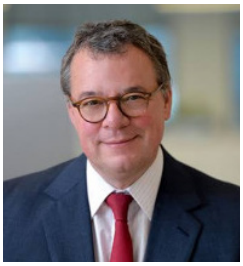
This paper focuses on one important dimension of those institutional arrangements—the investment system.

At the heart of a modern capitalist economy are two core functions: the ability to pool savings; and the capital allocation process that channels those savings into productive investment.

The UK is a global leader in collectivising savings, with around £10 trillion of financial assets under management, including £5 trillion invested on behalf of overseas clients. This gives the UK industry a significant role in the allocation of capital worldwide.

Yet persistent weak productivity and relatively low domestic investment raise difficult questions about the effectiveness of our domestic investment system and the quality of its capital allocation.

This paper is intended as a provocation: while the performance of the investment system is likely to be an important determinant of total factor productivity, the area remains under-examined and its link to long-term prosperity poorly understood. Our aim is to improve that understanding and to help policymakers and market participants identify where and why change is needed—so that the UK's investment system becomes genuinely fit for purpose.



Sir Keith Skeoch
New Capital Consensus Advisory Panel Chair

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Executive summary

There is surely nothing quite so useless as doing with great efficiency what should not be done at all.

- Peter Drucker

UK Economic growth needs UK savers

Economic growth is rightly at the top of the Government's agenda. It's the only way we can improve living standards, public services, and deliver on net zero. But to achieve growth we need the investment system to operate more effectively. The UK has plenty of capital available to drive innovation and growth, but it is too often channelled to the wrong places.

At its core, effective investment involves the allocation of capital to grow the real economy, not through financial engineering, but by supporting firms that innovate, expand, and ultimately enhance the goods and services available to society. It is critical to reconnect savers to the society in which they live, and channel money from UK savers into UK companies that need it. That way companies can innovate and grow, and through the increased productivity that is delivered, savers can be provided with decent returns.

The purpose of this paper is to analyse the investment intermediation process and to make recommendations to reform the system to support the delivery of economic growth.

What's gone wrong?

The global slowdown in productivity has been more pronounced in the UK than in other OECD economies. By the end of 2019 aggregate labour productivity in the UK was about a fifth lower than if the 1990–2007 trend had continued. Productivity derives from labour, capital and other factors (described by economists as Total Factor Productivity – TFP). The decline in UK productivity is driven principally by a reduction in the contribution of TFP, which is where investment mediation effects are captured.

The UK investment system contributes significantly to delivering productivity by channelling capital to innovative UK firms in need of investment to grow. Yet, despite having one of the largest pools of investment capital in the OECD (approximately £5.5 trillion), the UK's financial system doesn't presently drive productivity. Why?

The UK's investment system routinely diverts financial flows away from the real economy. Money travels through an investment chain but at the beginning, the wrong risk appetite is set, and capital is directed to seek short-term yield maximisation rather than the creation of real long-term value. That choice ripples through the system, pushing UK savings into low-return assets or into overseas equities. Meanwhile, foreign investors buy up our most innovative firms. As a result, the expansion of financial services — beyond a certain point — produces lower, not higher, productivity and fails to deliver for the real economy in which we all live.

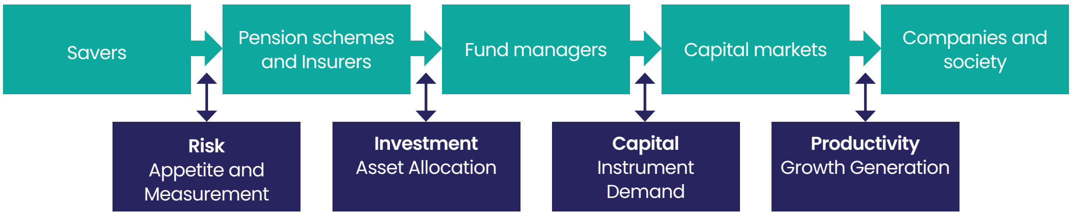
At the heart of the issue are the different perspectives on what productive investment really is. All parts of government agree that productive investment is key, but different priorities and perspectives in different areas leave policy makers without a single coherent view of what good looks like. With competing definitions and confusing terminology – 'return maximisation', 'social return', 'societal impact' and so on - we allow potentially productive money to be misdirected within the system.

A system led approach to reform

New Capital Consensus (NCC) system-led approach means that we believe we must first agree on what constitutes a Productive Investment System before we can reform it.

The Investment Chain

We think of the investment system as a chain of actors linked together. It only operates effectively when we create a dynamic that combines effective risk-bearing with appropriate forms of capital and investment.



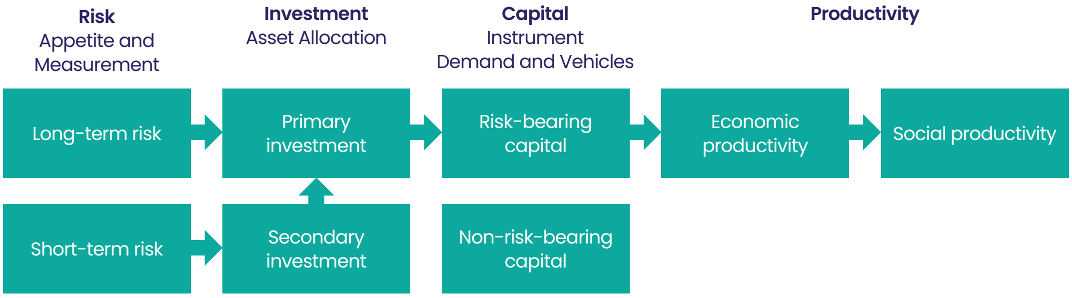
Within this chain, three activities link the actors to determine the contribution to UK productivity:

- **The derivation of risk appetites** - in particular the appetite for long-term versus short-term risk, which in turn prescribes demand for returns, ability to bear losses, demand for liquidity, ability to tolerate volatility and asset liability management (ALM) risks.
- **The asset allocation process**, which not only determines the desire for primary investment compared to secondary investment, but also how diversification is sought through different geographies and financial instruments.
- **The capital allocation process**, which accesses through capital markets the instruments needed to satisfy the demands of the asset allocation process. Imbalances in demand for particular asset types can result in market bubbles, become a source of instability or inhibit funding for innovative UK businesses.

A healthy system:

- Differentiates between long-term risk and short-term risk
- Recognises the primacy of primary investment, with the role of secondary investment being to support primary investment.
- Values risk-bearing capital
- Generates higher returns for purposeful companies that drive social productivity,

How the investment system behaviours should work

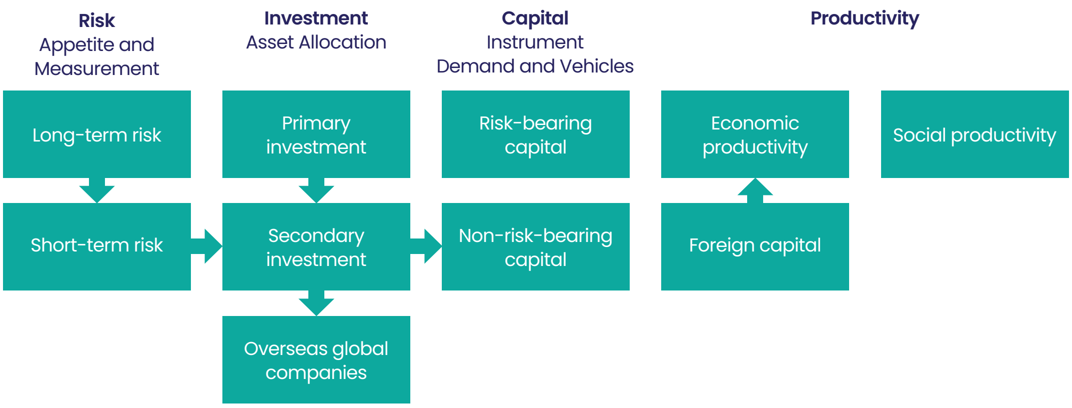


This needs an effective investment chain, in which every actor plays their part. In practice, at present, we find:

- Long-term risk is converted into short-term risk
- Institutional investors are driven towards highly liquid, low-volatility assets
- Primary investment is used to support secondary investment rather than the other way round
- UK asset owners behave like traders rather than long-term investors
- Secondary investment is directed away from UK businesses, and into passive investments and non risk-bearing capital that doesn't support productivity
- UK capital gathers in government debt and defensive equities at the expense of riskier but higher-value investments like infrastructure, technology, and growth businesses
- Markets and investors fail to recognise the greatest sustainability and higher value produced by purposeful companies or value social productivity.
- Gaps in the funding continuum fail to deliver sufficient funding to create UK technological champions
- Productivity ambitions and the reform/regulatory agenda are often in conflict

As a result, the current investment system looks more like this:

How the investment system behaviours work in reality



Fixing the links in the investment chain

How can we restore the broken links in the chain?

- Focus on **social productivity** as well as economic productivity through a productive industrial strategy
- Promote **innovation and the creation of real value,** not just short-term profitability
- Support capital markets and investors to **value risk-bearing capital** appropriately, allowing for duration and illiquidity
- Ensure **valuation systems recognise the value of all forms of investment**
- Build **consensus on the value of risk**, including that which cannot be measured easily using mark-to-market techniques

Why hasn't this happened?

Attempts have been made to improve the investment chain, but they have been hampered by a lack of coherence and alignment in policy thinking. As a result, they have so far proved unsuccessful or inadequate:

- **Solvency UK reforms,** intended to free up insurer capital for UK infrastructure and innovation, were diluted by cautious definitions of eligible assets and residual bias toward "predictable" cash-flows, thus continuing to favour established, low-risk projects over transformative or early stage investments.
- **The Mansion House Accord** pooled around £50 billion of aspirational commitments but this is just a small slice of UK retirement assets while incentives to achieve even this remain weak.
- Complex rules, unfamiliarity, and concerns about daily dealing and redemption inhibit widespread adoption of **Long-Term Asset Funds (LTAFs)** so that their impact to date has been minimal.
- The **legal cap on Defined Contribution (DC) scheme fees**, meant to protect savers, has, inadvertently, blocked access to higher-returning, illiquid productive investments (e.g. infrastructure or venture funds) due to their higher management costs.
- **Regulations** to protect against the failure of financial institutions have ended up destroying risk diversification and, in fact, created systemic risk through herding. In an attempt to eliminate this systemic risk, regulators have sought to squeeze all risk out of the system creating a 'stability of a graveyard'.
- While **risk pooling** is clearly more efficient in that it spreads investment risk, modern products have tended to transfer all risk onto individual savers.

None of this is inevitable. Countries, facing comparable economic uncertainties, such as Canada, Australia, the Netherlands and Denmark, have much healthier attitudes to risk than the UK, resulting in better outcomes for savers. Meanwhile, here in the UK, local authority pension schemes, which have more freedom to invest are better at supporting social productivity.

Recommendations to government, regulators and industry

The range and connectedness of the problems identified above can make policy solutions appear overwhelming. We do not believe this to be the case. By applying leverage in a small number of areas - many of which do not require legislation - we believe the system can be turned around within 5 to 10 years. There are longer-term ambitions that are part of the timeline, although Government can also act now and put in place shorter-term measures that will not only help now, but will also form part of the foundations for a medium-term transformation.

In the medium term, **Government** needs to:

- **Build consensus on what constitutes productive behaviour** along the investment chain.
- **Build a roadmap** to support an increase in the UK investment system's contribution to a productive UK economy.
- **Use tax incentives**, to promote both primary and secondary investment in purposeful UK companies and remove 'perverse' incentives that promote debt over equity and discourage risk-taking.
- Enable and encourage socially beneficial strategic asset allocation by **reforming regulatory, accounting and actuarial practices** to accommodate more healthier risk-bearing in valuation methodology and practices.

Industry needs to:

- **Reduce market demands for daily pricing** and immediate liquidity at all times.
- Promote **active long-term investing**, as opposed to slavishly following passive indices, to generate greater investment in purposeful companies and activities that can generate social productivity.
- Ensure – by **significant consolidation of UK pension funds** and the freeing up of UK life insurers to compete on a global stage - that asset owners have sufficient scale and competency to undertake investment in long-term risk-bearing investments, and particularly illiquid investments.
- Produce **UK indices to rival MSCI Global allocation** and include greater UK weightings in default funds.
- Regenerate UK stock markets by incentivising long-term, high-quality **risk capital** and broadening the focus beyond the London Stock Exchange Group.

While the **regulatory system** needs to:

- Enable and encourage socially beneficial strategic asset allocation by **reforming regulatory, accounting and actuarial practices** to accommodate more healthier risk-bearing in valuation methodology and practices.
- **Be rewired to mitigate trading risks for short-term investors and mitigate investment risks for long-term investors**, rather than treating all investment risk as short-term. This will require a discussion with industry about the management of risk and liquidity and a change to industry and regulatory practices on these.

In the **short-term**, we encourage **Government** to

1. Set up a **Commission to report within a year** on the changes to industry risk and liquidity management required to improve the effectiveness of the UK investment system. This Commission will need to be comprised of individuals that each individually understand the entire chain and operation of actors across the system and have a strong understanding of system dynamics.
2. **The Treasury, DWP, HMT and other policymakers should develop and implement an Effectivity Screening process** across key points in the investment system. In particular, asset allocators should be required to apply this screen to the development of their strategies and publish a statement indicating how their strategy rates against the Effectivity Screen. This will inform Government as to the strength of productive behaviours within the system and help to develop subsequent policy to achieve the changes described above. Regulators can use the same screen in supervising and nudging policy.

We stand ready to work in partnership with Government, regulators and industry to explore and build on these ideas. We encourage and welcome all and any views via Input@newcapitalconsensus.org

1 What is financial productivity?

Economic productivity is the foundation of a society's standard of living as Paul Krugman famously observed. "Productivity isn't everything, but in the long run it is almost everything. A country's ability to improve its standard of living over time depends almost entirely on its ability to raise its output per worker."

Opinion leaders, from Bart van Ark to Mark Carney, have stressed that the proper goal of finance is not merely "doing more with less," but enabling outcomes valuable to firms, workers, and society at large.

Defining productivity

For an economist, productivity can be split into three critical components, with the first two being:

- **Labour productivity** -the organisation and work practices deployed by labour to generate output growth; at its simplest level Adam Smith's specialisation. Labour productivity rises as less labour per hour is used to produce output; and
- **Capital productivity** - the efficiency of physical (or these days intangible) capital deployed to produce output. If more or the same output is produced with less capital this is referred to as capital deepening.

However, it has long been recognised that these two alone do not explain long-run productivity trends. Economists refer to a third aspect, which captures the unexplained element as:

- **Total or Multi Factor Productivity (TFP/MFT)**. Its key determinants are long-run phenomena e.g., the creation and transmission of knowledge or technology, which influences not just the quality of labour and capital, but the way they organised.

These in turn are influenced by even deeper determinants e.g., an economy's institutions, its competitive environment, including the capital allocation mechanism.

While labour and capital productivity are non-financial, TFP is clearly influenced by the availability of external finance to the corporate sector.

While the capital allocation mechanism is only one element of the above, a well-functioning capital allocation process underpinned by a regulatory framework that incentivises appropriate long-run risk-bearing should boost TFP, while the opposite constrains the availability of external finance acting as a drag on TFP and economic growth.

Talking about productivity

Productive finance is not complicated: it is money used well. But the productivity debate has become confused and confusing, not least because of inconsistent terminology. We currently have a babble of 'productive' terminology – reflecting both the breadth of debate and the passage of time.

All of the initiatives shown on the following page (Table 1) are worthy in themselves. But taken together, they illustrate how UK policy debate has very little consensus on what we are saying when we talk about productivity.

This babble of terminology has detrimental effects:

- **Conflicting Priorities** - One group stresses national output and job creation, another prioritises high saver returns, and another mandates alignment with green transition;
- **Asset Class Disputes** - Is public equity productive, or only private? Is infrastructure always productive, or does it depend on the project?
- **Measurement Problems** - Are we measuring economic growth, social benefit, risk-adjusted return, or ESG alignment as the main criterion?; and
- **Regulatory Uncertainty - Different UK regulators a**nd working groups use different interpretations, making it difficult for practitioners to know what qualifies.

Table 1: The Babble of 'productive' terminology

Definition reference	Main Focus / scope	Key inclusions / assets	Explicit exclusions / disputes	Indicative source(s)
Long-term illiquids	Investments in longer-term illiquid assets to deliver returns over extended horizons	Private equity, venture capital infrastructure, property	Often excludes listed equities/debt	PFWG, FCA, BoE, sector reports
Expanding productive capacity	Investment that directly enlarges the economy's productivity base	Real assets, plant infrastructure, R&D, technology	Consumption, secondary trading	TPR, PPF, regulatory docs
Domestic growth & multiplier	Investment in UK business/ infrastructure with knock-on economic effect	UK infrastructure, SMEs, innovation	Overseas assets not always counted	Hymans Robertson
Social return	Investment with a positive expected social return after risk/discounting	Any asset passing social ROI test	Socially "neutral"/ harmful assets	BoE, academic
Private markets only	Long-term private market assets as core productive finance	Illiquids, growth equity, private infrastructure	Public listed assets	CIO Club, industry
Net Zero / transition Lens	Finance that accelerates the green transition and decarbonisation	Green, transition, climate/energy	"Brown" assets, unsuitable debt	PFWG, roadmaps
Primary capital flows only	Capital going into primary issuance, R&D, formation, and projects – not just trading of existing	IPOs, private placements, origination	Secondary market buys/sells	Kay Review, OECD
Return maximisation	Assets promising higher risk-adjusted return, diversification, improved saver outcomes	Alternatives, illiquids, infrastructure	Low-yield bonds, cash, passive-only	BoE, industry
Broad / flexible	Productive if it supports growth and innovation – context matters	Can include public/ private, Europe/UK	No clear asset exclusion	TPR, government
Multiplier / social impact	Preference for investment supporting jobs, resilience, welfare, national objectives	New/emerging sectors, STEM, diversity	"Rentier"/ extractive/ non-productive	Thinktanks, PPI

NCC's effective finance hypothesis

Much of what is sold as "investment" is, in fact, mediation—secondary market trading, risk transfer, and arbitrage.

The overwhelming trend is for capital to chase liquid secondary markets, passive index strategies, or debt securities—allocations increasingly disconnected from UK business expansion, innovation funding, and job creation.

This paper therefore makes a deliberate shift from "productive investment" towards "effective investment" or "effectual investment" —that is, capital deployment that generates demonstrable real-world social and economic effects along the entire investment chain. In this report we use the words "effective investment" and "effectual investment" synonymously.

We need effective investment to support our social ambition

The failure to understand the contribution made by the investment system to wider social productivity - at the level of form or structure - has now become a political problem.

If the current Government does not start to put in place the foundations that are needed to support systemic transformation, delivering productivity will remain elusive. Further political procyclicality (especially if it delivers populist or hung administrations) will in turn depress attempts at productivity further, as well as stoking social unrest now bordering on 'despair')

It is in everyone's interest to grasp the nettle of the investment system's role in the UK's wider productivity agenda. This requires long-term change across the investment system.

Our ineffective investment system may be contributing to the productivity problem

Work done by Diane Coyle and others at LSE highlights the decline in UK productivity and that this is driven principally by a reduction in the contribution of TFP. They found that:

- By the end of 2019, nearly eleven years after the financial crisis, aggregate labour productivity in the UK was about a fifth lower than if the 1990–2007 trend had continued (Office for National Statistics (ONS) 2023); and that
- The slowdown has been more pronounced in the UK than in other OECD economies.

Their research provided new measures of firm-level total factor productivity (TFP) for two sectors—manufacturing and ICT—that have been found to be disproportionate contributors to the UK's productivity slowdown.

Effective reform can begin with where the investment system is counter-effective

Lord Turner's 2009 critique of much modern finance as "socially useless", and the persistent academic critique of high-frequency trading and speculative asset churn, highlights a core structural issue.

In the last two decades, empirical studies have found that the expansion of financial services — beyond a certain point — correlates with lower, not higher, productivity.

Modern asset allocation and investment behaviours are in many cases "extractive," focused on rent-seeking and yield maximisation within secondary markets, rather than the creation of new value.

Secondary market trading dwarfs primary market issuance; much public equity investment is not a source of productive capital, as it rarely involves new capital entering firms but instead redistributes ownership claims.

The proliferation of "socially useless" or even destructive financial activity is not merely the result of regulatory oversight, but systemic incentives.

The investment system will continue to deliver counter-effects until it is changed

NCC takes a systems approach to its analysis. This identifies that what is productive for the financial services sector is often non-productive for investors, economies, and societies.

Many systems thinkers argue that, unmanaged, 'The Purpose of any System is What It Does' and all systems will continue to do what they do until directed otherwise from outside. If the system is not delivering what is desired, it needs to be realigned.

Clarity of definition of what effects UK society wants the investment system to have is essential to avoid the system simply suiting itself.

Effective asset allocation is the investment system's heart but not its driver

NCC believes capital instruments / techniques need to be created organically not summoned into being by *fiat*. The supply of risk capital needs to be shaped by demand from allocators looking for instruments / techniques to match their strategic investment agenda. More effective capital allocation, in turn, needs to be shaped by a more productive risk mindset amongst the asset owners who employ and direct asset managers.

Fundamentally, until the risk mindset of asset owners is pivoted (or *allowed* to pivot) towards more risk-taking / reward-making, UK asset allocation will remain conservative and non-productive and the UK capital stock will remain in its current unproductive state.

Given that asset allocators drive demand for investment funds and capital instruments, we believe fund managers and capital markets will react to any changes in any change to asset owner risk appetites.

Policymakers need to view their reform agenda as mitigating the risk of the investment system failing to support or, worse, actively undermining the UK's productivity agenda.

In NCC's view, this risk is fast crystallising for UK society - the gap between what the investment system should be delivering to UK society and what it *is* delivering is widening.

In the meantime, policymakers and regulators remain fixated on 'systemic risk' as their only motivating metric for systems analysis and optimisation. The risk of poor investment returns to UK pensioners was found to be absent in NCC's analysis of the drivers that motivate the investment system.

Fundamentally, financial services policymakers need to widen their concern out from risks to the system (systemic risk) to the riskiness of the system (or to risks arising from the system) for the UK's productivity aspirations (productivity risk).

The system's risk-off behaviours need challenging and changing, not to be accepted as the status quo and accommodated by a reform agenda.

Effective finance is delivered by the behaviour of system actors not a taxonomy of assets

We question whether there are such things as 'productive assets' – rather than the more or less productive behaviour of the complete range of actors within the investment system and with regard to the complete range of capital assets.

This report operates on the basis that we need to stimulate behaviours that drive productivity within the system rather than seek to identify the system's *sui generis* productive assets.

Notwithstanding this, the report does return to the idea of an Effectivity Screen that might be laid over the investment system, and asset allocation in particular, to identify more behaviours that improve productivity. Such an Effectivity Screen could be used to help steer the investment system and its policy back towards a more productive centre of gravity.

Scope, objectives and approach of this report

The aim of this report is not to add to the growing jungle of new definitions but to clarify and standardise. This report will:

- Diagnose where and why the current system fails to deliver either economic or social productivity, with detailed reference to the chain of actors and key leverage points;
- Present a robust taxonomy of the key risks (distinguishing duration, transformation, liquidity, systemic, and primary/secondary risks);
- Introduce and operationalise the Effectivity Screen as a diagnostic and reporting tool, rooting it at the asset owner level;
- Emphasise the complementarity of primary and secondary markets, and the value of effective stewardship; and
- Place realistic recommendations for policymakers, asset owners, and market participants in both immediate and long-term contexts, flagged with pragmatic caveats on change pace, capabilities, and political terrain.

This "reframing" aspires to move the debate forward - seeking to foster a new consensus and collective ambition for capital, risk, and productivity.

2 NCC's effective investment chain

The aim of NCC is to identify the leverage points in the investment system to encourage long-term investment. As such it is part of a growing body of research, advocacy and practice which begins by looking at the purpose of the investment system, and elements of that system.

NCC then assesses how well that purpose is being fulfilled and tries to identify practices to improve outcomes.

We think this contrasts with the starting point for much of the academic and other analysis which has proved influential in how today's investment system has emerged. This tends to focus on individual elements, interpreting through the lens of microeconomic and statistical perspectives.

While such approaches can yield insights, they have the danger of committing the 'fallacy of composition', focusing on individual elements, and how they might best be optimised, rather than on the purpose of the system itself, and how that can be improved.

As we shall see, this has been an issue for the way finance is regulated and practised. We believe that our systemic perspective can deliver insight, and considerable improvement in the overall efficacy of the system.

We do this in what follows by way of an I nvestment Chain.

From investment mediation to social effect

Or how buying stocks and shares delivers happier societies

The UK investment system should facilitate the flow of savings into productive business growth, innovation, and societal wellbeing.

However, much capital now circulates through complex chains of asset owners, managers, market-makers, and intermediaries primarily focused on liquidity, risk arbitrage, and compliance.

This means the system increasingly mediates rather than materially invests.

The effectual investment ecosystem

Conceptually, an effectual investment system is one that empowers rather than hinders the social aspirations of its users when playing its role as intermediator or 'tokeniser' of those aspirations.

Effectual investment derives from the supply of the right balance of capital, which in turn requires providers of capital to be able to bear the right balance of risk.

The financial markets simply translate all of this into tangible exchangeable tokens (money, securities) that investors can use to manage their exposure to risk, reward and productivity.

In this respect the investment system plays a role similar to the one played earlier in the capital formation process (and formation of capitalism) by the law – it tokenises the social interests of investors and corporations once the law has previously brought 'the investor' and 'the corporation' into existence as legal beings with interests to assert in the first instance.

Both the law and the financial markets are instrumental in what Katharina Pistor calls 'the code of capital':

- At the level of theory, they both exist within capitalism to enable rather than dictate social outcomes.
- However, at the level of practice, they both often dictate rather than enable social outcomes – and they do so unwittingly.

Financial markets and legal structures do not oppose the social outcomes that UK people want to effect (they cannot have an opinion on such things as non-human concepts). They are simply supremely structurally oblivious to them.

The markets and the law are also ultimately 'systems 'and all systems are more concerned with effecting their own self-satisfying outcomes than with helping effect those of the system users. POSIWID – the Purpose of a System is What it Does – until you tell it to do something different.

An effectual investment ecosystem should rather empower UK citizens by effecting good returns on investment. It should empower the UK economy by effecting a stable funding environment. And it should do all this in every one of its day-to-day transactions.

An effectual investment ecosystem should also affect appropriate maturity transformation (duration) so that timescales of both UK investors (long-, mid- and short-term investment) and the UK economy (long-term funding) are respected and matched in intermediation.

The effectual financial ecosystem then falls into three key channels:

- The banking or deposit channel;
- The investment channel; and
- The insurance channel (not relevant for this discussion but included for completeness)

Banking and investment channels

Very broadly speaking, the UK banking channel is effectively a declining power as an intermediator between depositors and the UK economy. It drags its feet on the interest rates it pays its depositors at the same time as its loans to especially SME UK firms have dried up.

Conversely, the UK investment channel has always been the home of more effective intermediation at a fundamental / structural level (capital allocation, stewardship, engagement and re-allocation simply have more power to direct than loan covenants).

But the current investment channel has lost its efficacy to serve the investors and economy at either end of its intermediation chain.

In particular, it is failing in its duty to transform maturity. Rather than matching the UK's ultimately long-term investment pot to the UK's need for long-term finance, the UK system is bizarrely translating long-term pots into short-term and foreign investment.

It is this counter-effectivity (worse than non-effectivity) that this report seeks to redress.

Occupational and retail investment sub-systems

Finally, within the Investment (as distinct from the banking) Channel there are two sub-systems.

This report explicitly focuses on the effectivity of the **occupational investment system**—that is, the UK's chain of institutional capital including pension funds, insurers, and workplace-based asset owners.

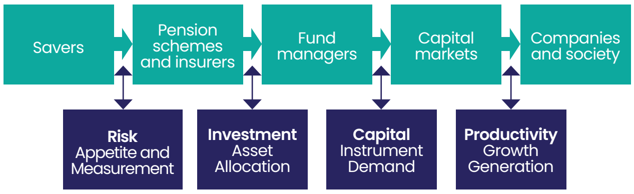
The analytical core, metrics, and proposed reforms address the structures, incentives, and behaviours shaping how pooled savings are allocated and governed for long-term societal benefit through the occupational sector.

NCC recognises that the **retail investment system** (ISAs, direct platforms, wealth managers, and individual saving solutions) constitutes a distinct and critical channel, equally deserving of separate scrutiny and reform. We are currently researching a dedicated follow-on report on retail channel effectivity – which is already widely acknowledged as being in the same ineffective state as the pensions channel.

Effecting change down an occupational investment chain

NCC conceptualises effective investment as a chain of actors linked together.

Table 2: The Investment Chain



Each link in the chain reflects the outcome of interactions between actors regarding a particular activity. In total these actors are responsible for playing their part in supporting an agenda that is bigger than all of them. The chain cannot operate with missing links. And if one link breaks, the whole chain fails to be effective.

Fundamentally, effective investment derives from the supply of the right balance of capital, which in turn requires providers of capital to be able to bear the right balance of risk.

Solutions must therefore incorporate all three components of investment, capital and risk. Simply put, successful risk-taking enables efficient capital allocation that drives investment returns that in turn drives economic and social productivity.

Links 1 and 2: Economic and social productivity

Our first step towards an effective investment chain starts by distinguishing between economic and social effectivity – that is, between what the investment system can help deliver ('crowding in') and what the State must deliver.

It is important to remember the limits to the investment system's agency for social change in this respect. For instance, the investment system can very rarely have direct social effect outside its Corporate Social Responsibility (CSR) and philanthropic activities. Its role is rather in accommodating society's aspirations within a matching set of system actions, behaviours, tools and, of course, its tokens (money, securities).

Academically stated:

- Economic productivity is what economists typically refer to as Total Factor Productivity and is typically measured using GDP, while
    - Social productivity is what the government and population require. Better jobs, better wages and a supply of goods and services that meet the needs of the population, geographical regions, different sectors of society and the environment, e.g. a transport system or affordable housing.

NCC maintains that investment system effectivity is a separate measure altogether. It is more akin to an engineering or business efficiency measure. It needs to ask:

- What friction does the system bring to the free flow of social aspirations – as in hydraulic modelling; or
    - What return on reform can policy expect by applying more political / regulatory capital at point A in the system – as in a business modelling Return on Investment (ROI).

We also maintain that political / regulatory **effectivity** is radically different from political / regulatory **efficiency**. The rule-cutting the government is currently undertaking in the name of productivity can all too easily deliver operational efficiencies (fewer rules...) that have no fundamental effect (... the system still does not work).

Defining social productivity

Defining what constitutes social productivity – signposting where in the UK 'society' wants the investment system to crowd in with its effects – cannot be left to the investment system itself. Instead, this part of the agenda needs to be determined by government and wider civil society.

Only once civil society has defined its idea of social productivity can the investment system respond to suggest how it might best support (effect) these social aspirations.

With which effective actions (from asset owners through capital market actors) can the investment system 'crowd in' to deliver on the nation's socio-economic goals? With which types of capital? With which types of risk attitude? And at which points along a 'Lifecycle of Finance and Investment' are different types of effectivity called for?

These are precisely the questions being asked of Sustainable or Green Finance – that is, finance geared towards effecting environmental change.

Agreeing on social productivity

The links between the UK's social aspirations and the investment system's capacity to effect change are complex and not always clear in policymakers' minds. Some simple rules of thumb here should be:

- **Productivity Is multi-dimensional** - Economic productivity underpins prosperity but must be complemented by social outcomes—jobs, public goods, and sustainability—for effectivity;
- **Social productivity Is a democratic choice** - social outcomes must be defined and updated through public and civic engagement alongside technical input;
- **Mind the divergence** - Economic growth and social good may diverge; balance and manage trade-offs transparently;
- **Duration, risk-bearing, and additionality are essential** - Long-term investing with appropriate risk tolerance and additionality underpins the transformative effect;
- **Balanced market structure** - Secondary markets are needed but must support, not displace, primary investment;
- **Stewardship is the system feedback loop** - Active engagement linking investments to social and economic KPIs closes the system feedback; and
- **Adaptation and transparency drive progress** - Metrics and priorities evolve through learning and open reporting.

Agreeing on shared action

Another way of approaching the investment system's effectiveness is to begin with whatever effects it was designed to deliver (or has come to be seen as having been *designed* to deliver). The textbooks teach that the investment system exists to:

- Pool investment capital so it can be allocated more effectively – via pension funds, life companies, and retail investment funds;

- Issue and market securities offering different levels of risk exposure for investors to take in UK firms – via 'sell-side' capital market activities;
- Allocate UK investment pools to those securities that best support the UK's socially productive agenda – via fund and portfolio managers' strategic asset allocation strategies; and
- Undertake risk-bearing in the long run, with an appreciation of the myriad forms of risk.

Fundamentally and simply, an effective investment system is one in which all the activities above support and enhance the needs and aspirations of society. It:

- Contains investment pools that are not only large but have the capabilities and freedom to bear risk collectively and invest in some of the less liquid, less mainstream securities that savers would be unable to access individually;
- Contains a full range of financial securities, is innovative and focused, in particular, on longer-term time horizons and risk-sharing in security design; and
- Contains high-quality asset allocators who are skilled at delivering insightful strategic asset allocation and are forward-looking.

Link 3: Capital - instruments and vehicles

John Kay, in his recent book 'The Corporation in the 21st Century', supports the view that the only form of meaningful investment is primary investment, i.e. investment in Capex, R&D and in expanding businesses. Primary investment requires equity capital, by which we mean long-term capital capable of absorbing losses. The lack of large UK technology businesses does raise the question of whether we are applying sufficient primary investment at scale and over sufficiently long horizons.

Debt capital, whilst helpful, is predominantly used to balance risk and often to gear up equity capital, inflating returns to equity investors. We do not consider this as having the same level of utility as equity capital, as it has limited term and is not loss-absorbing.

Changing a company's equity and debt composition changes the risk profile of its balance sheet and if debt levels become excessive this can lead to socialisation of risk.

Government bond issuance supports both economic productivity through investment and social productivity through providing services needed by the population. It is unclear how much effective investment has derived from bond issuance in recent years.

Recent discussions on the need for more risk-taking within the UK investment system are appropriate but to date have failed to distinguish between the sort of risks which the system should be attempting to encourage and the sort of risks we should be attempting to mitigate.

Link 4: Investment – asset allocation

The link between primary investment and secondary investment for UK listed companies is currently not working efficiently. To quote John Kay:

"UK equity markets are no longer a significant source of funding for new investment by UK companies. Most publicly traded UK companies generate sufficient cash from their day-to-day operations to fund their own corporate projects. The relatively small number of UK companies which access the new issue market often use it as a means to achieve liquidity for early stage investors, rather to raise funds for new investment."

Secondary investment is important. It is very difficult to have an effective primary market without a well-functioning secondary market that supports efficiently priced capital raisings and indeed reaps the rewards from investing in previous primary capital raisings. Also, an effective valuation mechanism is critical for one of equities' key attributes, loss absorbing capacity. A well-functioning secondary market plays an important role in improving the resilience of corporate balance sheets and absent them economic downturns would be much deeper with more significant impacts on jobs and wealth.

But it is questionable whether the current balance between primary and secondary markets is right and whether UK secondary markets are functioning effectively and driving sufficient primary investment for UK listed companies.

Companies can only contribute to economic and social productivity if they are operating sustainably and profitably at the right times in their life cycles . Unprofitable mature companies are more focused on existence than expansion, with capital being spent on Opex not CapEx or investment in intangibles. Asset allocation only leads to productivity when it directs savings and capital to enterprises capable of generating additional value for the economy—through job creation, innovation, infrastructure development, and the provision of new goods or services.

This said, the rise of companies with specifically intangible value (so-called 'capitalism without capital') has certainly made a deeper understanding of the social impacts of Opex and Capex (the dynamics of corporate *investment* after systemic intermediation) more urgent.

Where Diane Coyle has most recently questioned the value of GDP as a social metric, the True Cost Accounting (TCA) or Normative Accounting (NA) movement (www.rethinking-capital.org) is calling for a form of accountancy that incorporates rather than 'accounts away' social externalities.

Core principles for more rather than less effective allocation, distilled from academic and practitioner literature, include:

- **Additionality**: Invested capital should yield clear, incremental benefit—funding new or growing businesses, infrastructure, or innovation, not just enabling trading of existing claims;
- **Long-Term Orientation:** Effective asset allocation favours patience, with duration allowing capital to be used for expansion, R&D, and transformation rather than quick profit-taking or portfolio churn; and
- **Risk-sharing and Acceptance:** Effective systems enable allocation to riskier or less liquid assets (such as start-ups, infrastructure, or green energy) that deliver higher productivity over time but may not offer immediate liquidity or returns.

Link 5: Risk-appetite and measurement

The ability to undertake risk is the final and perhaps most fundamental link in the chain.

Asset-owning institutions invest savers' money within a defined set of risk parameters (referred to as their risk appetite). These parameters reflect both the savers' objectives and the need to ensure that institutions are sufficiently resilient to be able to pay out proceeds to savers when required by the contract between them.

The parameters defining risk appetites and measurement of risk are heavily regulated both by prudential regulation and accounting standards e.g. the requirements for capital for both life insurers and defined benefit pension schemes (and their sponsors).

Crucially, the providers of capital to both insurers and pension schemes will only permit their institutions to provide products that use their capital in what they consider to be an appropriate way – in the case of life insurers they will require an adequate return on capital; in the case of pension scheme sponsors they will typically require the pension scheme to be managed in a way which does not undermine or detract from the underlying business of the sponsoring company.

This dynamic creates a three-way relationship between asset owning institutions, savers and regulators, each with a different objective regarding risk. Savers are buying investment risk services; they wish to undertake investment risk to achieve returns whilst not losing their capital. Asset owning institutions seek to sell a product to the saver (or the savers' representative), but only if this meets regulatory requirements and generates returns to their shareholders. The regulator has a desire to minimise any risk that could impact the regulator's reputation.

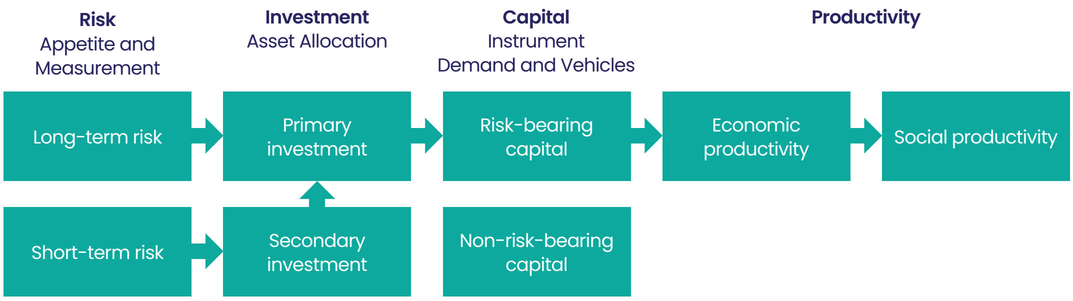
Game theory maintains that within any three-party game, there is potential for two parties to ally against the third. If the two parties that form the alliance become the institution and regulator, the end result can be that they both achieve their objectives at the cost of delivery of the right outcomes for savers (and potentially wider society).

Preventing such a situation requires skilful development of regulatory mandates, constructed to ensure that not only are savers desired outcomes achieved (as the primary objective), but that the country's investment capital is invested to achieve a productive economy, and also that institutions operate prudently and safely over the short and long-term.

Whilst the UK investment system delivers many vital benefits, NCC believes that in any system where three parties are operating more cooperation is needed.

3 What an effective system should look like

Table 3: How the investment system behaviours should work



What effective system flow looks like

The 'flow' of an effective investment system can be illustrated as above (Table 3).

In this ideal scenario:

- Duration is a key driver of asset allocation;
- Long-term risk and short-term risk are differentiated;
- The priority of primary investment is recognised, as is the role of secondary investment in supporting primary investment and a well-functioning investment system;
- The need for risk-bearing capital is also recognised and valued;
- The system operates to align better the contributions from long-term risk, primary investment and risk-bearing capital in driving economic productivity; and
- Higher returns are generated from effective corporates that drive social productivity.

In terms of system actors:

- Asset owners set risk appetites and investment mandates focused on both returns over the appropriate term and effect.
- Asset managers and allocators design portfolios that diversify intelligently—not just globally, but into relevant sectors, business stages, and geographies that align with UK priorities.
- Markets enable access to the full funding continuum from venture and scale-up to listed equity and project finance.
- Stewardship is not mere monitoring but guides company strategy, innovation, and societal impact.
- Government incentivises the desired behaviours through regulation and targeting of tax reliefs.

The desired flow is characterised by:

- Greater allocation to long-term, illiquid assets (infrastructure, green energy, innovation);
- Dynamic balancing of portfolio liquid vs. productive assets, with robust, transparent reporting on usefulness and impact; and
- UK capital markets as catalysts, not bottlenecks, for business growth and social delivery.

What effective system stock looks like

The outcome of a well-functioning system is visible not just in flows but in the 'stock'—the standing pool of capital anchored in productive and socially purposeful assets:

- Higher proportion of pension, insurer, and corporate capital held in purpose-driven investments, not just gilts and safe equities.
- Widespread use of performance metrics that reward both financial and societal outcomes—impact KPIs, job creation, reduction in carbon intensity, regional and SME funding.
- Institutions—asset owners and managers—valued as stewards of social capital, with governance focused not only on solvency and compliance but also on public purpose and effectivity.

In this scenario, regulatory and governance frameworks serve as enablers of healthy risk-bearing and innovation, not solely as guardians of system solvency. (See Table 4 below)

Table 4: Attributes of a Productive Finance Roadmap

	Requires...	**Chief players**	**Productive finance roadmap WE NEED**
Social productivity	Direct Investment from Government [Public Sphere] + Profitable and purposeful UK firms	• Government • Civil Society	• National vision • Productive Industrial Strategy • Political consensus on the drivers of social productivity • Targeting of tax reliefs to create the desired incentives
Economic Productivity	UK firms spending profits on expansion (R&D, tech, upskilling, expansion) = Firms that are both profitable, innovative and expansionary = Productive Firms = Expansionary, Strategic + Intangible CapEx	UK Business	• Goal 1: Corporate Profitability • Goal 2: Productive application of corporate profit (R&D, expansion, new products / services, new / better jobs) • Goal 3: Supportive shareholders
Capital	The appropriate allocation of UK money to long-term, risk-bearing Capital = Productive Capital	• Capital Markets • Asset managers • Regulators • Standard setters	Capital markets and Investors that value risk-bearing capital appropriately, allowing for duration and illiquidity
Investment	Asset allocators that value both primary and secondary investment	• Asset Owners • Regulators • Standard setters	• Duration is a key factor in allocation and should be considered part of its 'value' • Valuation systems that recognise the value of all types of investment
Risk	Long–term risk bearing capacity	• Regulators, • Asset Owners • Accountants, actuaries and economists	Consensus on the value of risk, including than which cannot be measured easily using mark-to-market techniques

Principles for effectivity

An effective investment system is a dynamic engine for national prosperity, directly connecting the UK's vast savings with real economic and social outcomes.

In this envisioned system, effective investment drives innovation, regional renewal, and social improvement—not merely financial activity for its own sake.

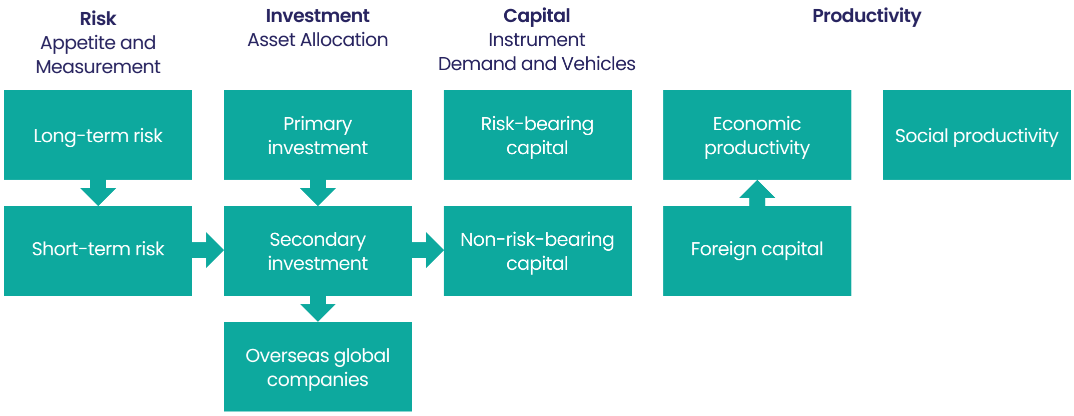
Key attributes of such a healthy system must include:

- **Duration as a driver:** Asset allocation is underpinned by an embrace of long-term risk and patient commitment, supporting projects needing multi-year or multi-decade capital to achieve transformational change;
- **Primary and secondary synergy:** Both primary investment (new funding for enterprise) and robust secondary markets (liquidity, flexible risk-sharing) work in genuine partnership—secondary supports value creation, not just rent extraction;
- **Properly priced risk-bearing:** Illiquidity and productive risk attract the recognition and reward they deserve; regulators, policymakers, and trustees avoid defaulting only to safe assets or global index-hugging.

The investment chain must reflect not only financial prudence but also ambition - enabling the UK to finance the sectors, firms, and infrastructure needed for its future. At root level, any policy geared towards this goal should constitute 'productive policy reform'.

4 What the UK system looks like

Table 5: How the investment system behaviours work in reality



What UK system flow looks like

Despite the promise and theoretical strengths of the UK's institutional capital, the system falls short at nearly every crucial link. Large capital pools circulate predominantly in liquid, defensive, secondary-market assets, with limited allocation to the UK's own real economy, innovation or infrastructure. (See Table 5 above).

In this unhealthy scenario:

- Appropriate duration (i.e. appropriate to pensioner outcomes and/or growth timeframe) is undermined;
- Long-term risk is currently converted into short-term risk;
- Primary investment is used to support secondary investment rather than the opposite;
- A high proportion of secondary investment is directed away from the UK and UK businesses;
- Much of the remainder of secondary investment is directed into non-risk-bearing capital that does not support productivity;
- Poor utilisation of bond finance and public spending has yielded poor social productivity outcomes;
- As a result, foreign capital is now required to drive UK economic productivity because the UK investment system delivers little risk-bearing capital; and
- Markets and investors fail to recognise the greatest sustainability and higher value produced by purposeful companies.

In terms of system actors there are key weaknesses in each link of the investment chain:

- **Incoherence between productivity goals and reform/regulation:** Economic and social productivity goals are not integrated into regulatory objectives. Policy interventions are piecemeal and usually fail to align capital flows with national missions.
- **Lack of risk-bearing and risk-sharing capital:** The system under-rewards risk-bearers; capital markets remain focused on debt, defensive equities, and "safe" assets. There are too few instruments for pooling and sharing risk that can improve productivity.
- **Trader mentality among allocators:** Many asset owners, originally designed for stewardship and long-term investing, increasingly behave like traders -prioritising short-term volatility and index competition, rather than supporting transformative investment.
- **Misaligned systemic risk mindset:** Regulation is still overwhelmingly focused on preventing short-term systemic risks, not on preventing the long-term risk of underinvesting in national growth, productivity, and resilience.

The UK's system flow is therefore characterised by:

- **Short-termism dominance:** Long-term risk is often converted into the language and behaviour of short-term risk - liquidity and mark-to-market become overriding values. Asset owners and managers are incentivised to avoid duration risk, illiquidity, or transformative projects, in part by regulatory regimes and legacy accounting practices.
- **Primary vs. secondary imbalance:** Primary investment (new Capital issued to business or projects) is often subordinate to trading in existing securities. Raising new UK equity or debt for innovation, infrastructure, or growth is a marginal activity compared to the volume of secondary market activity.
- **Asset allocation drift:** Asset owners, especially in Defined Contribution (DC) schemes, default to global passive indices, allocating disproportionately overseas, especially into mega-cap equities, at the expense of UK-centred and smaller growth capital.
- **Missed opportunity for risk capital:** Markets and policies fail to prioritise risk-bearing or illiquid capital for sectors needing patience (venture, infrastructure). Institutional and retail barriers - cost caps, liquidity assumptions - reinforce this drift.

What UK system stock looks like

The 'stock' of a productive investment system can be illustrated as shown in Table 6.

Principles for change

The UK's investment chain needs not just technical, but behavioural transformation. We need to:

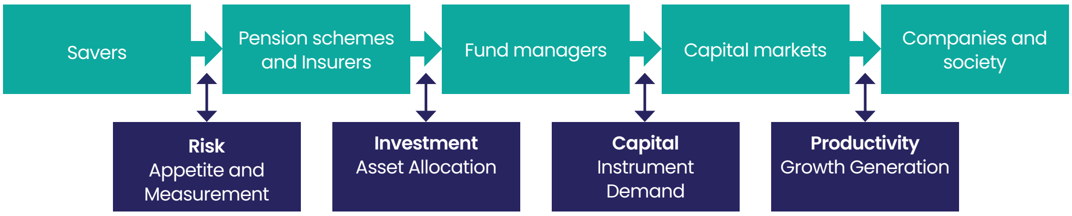
- Renew duration and risk appetite, starting with asset owners and trustees.
- Incentivise primary and risk-bearing investment.
- Build allocative competence through scale and governance reforms.
- Embed Effectivity Screens and regular reporting to realign incentives and transparency.

Table 6: Key challenges today

	Chief players	WE NEED	WHAT WE HAVE
Social productivity	• Government • Civil society	• National vision • Productive Industrial Strategy • Political consensus on the drivers of social productivity	• No national vision; • Limited political discussion on the drivers of social productivity
Economic Productivity	UK firms	• Goal 1: Corporate Profitability • Goal 2: Productive application of corporate profit (R&D, expansion, new products / services, new / better jobs) • Goal 3: Supportive shareholders	• Economic views of productivity are limited to debates around GDP, without being linked to social productivity, capital, investment and risk; • Foreign capital that is viewed as the route to greater UK economic productivity
Capital	• Capital markets • Asset managers • Regulators • Standard setters	Capital markets and Investors that value risk-bearing capital appropriately, allowing for duration and illiquidity	• Capital markets and Investors that value capital based only upon market practices and that prioritise debt over equity; • UK capital that is invested overseas disadvantaging UK companies.
Investment	• Asset owners • Regulators • Standard setters	Valuation systems that recognise the value of all types of investment	Valuation systems that value only market-priced investment and penalise illiquid and primary investment
Risk	• Regulators, • Asset owners • Accountants, actuaries and economists	Consensus on the value of risk, including that which cannot be measured easily using mark-to-market techniques	Dominant regulators and accounting standard setters, with an embedded neoclassical economic mindset that fails to understand value of risk taking

5 What we are doing wrong

Table 7: The investment system chain



We have weaknesses all along the investment chain

These weaknesses persist both along and within the individual links of NCC's investment chain:

- There is incoherence between productivity ambitions and the reform and regulatory agendas.
- UK capital markets lack adequate risk-bearing capital and risk-sharing products.
- Many UK asset owners and allocators behave like traders, not long-term investors.
- Our risk mindset is out of kilter with our productive ambitions.

In brief, our environmental and social challenges require right-brain policy creativity and vision, but our policymaking is stuck in left-brain business-as-usual. *(See Table 7 above).*

Weak Links 1 and 2: UK regulation and policy are major drivers of non-productive system behaviours

The UK's prevailing regulatory approaches are based on strict mark-to-market accounting and one-year risk measurement. These naturally push institutional investors towards highly liquid, low-volatility assets.

This, in turn, anchors massive capital pools in government debt and secondary equities at the expense of riskier, potentially illiquid but higher-value investments like infrastructure, technology, and growth businesses.

UK reforms lack ambition and commitment

The UK lags behind international leaders in creating regulatory environments that consistently channel capital into genuinely productive assets.

Canadian, Dutch, and Australian pension and public funds routinely allocate 10–20% or more of portfolios to private equity, infrastructure, and direct growth investments. UK pension funds invest only a small fraction in these asset classes—often under 5%.

UK funds, by contrast, are too fragmented, often lack the capacity to originate or manage illiquid, productive assets at scale, and remain encumbered by legacy regulation focused on liquidity and mark-to-market safetyism.

UK regulators have only recently adopted a secondary growth objective, and this cultural shift is yet to show substantive results in capital allocation or real-economy growth. As a result, regulatory barriers and weak consolidation mechanisms combine to limit meaningful exposure of UK savings stock to UK growth opportunities.

UK reforms lack cohesion and oversight

The UK's reform journey is also characterised by repeated "near misses" and unintended consequences that reinforce the cycle of underinvestment in productive assets:

- Solvency UK Reforms intended to free up insurer capital for UK infrastructure and innovation were diluted in practice by cautious definitions of eligible assets and residual bias toward "predictable" cash-flows, thus continuing to favour established, low-risk projects over transformative or early-stage investments;
- The Mansion House Accord pools just over £50 billion of aspirational commitments (a small slice of UK retirement assets); incentives to achieve this remain weak;
- Long-Term Asset Funds (LTAFs) represent a start, but investment flows remain minimal. Complex rules, unfamiliarity, and concerns about daily dealing and redemption inhibit widespread adoption;
- The government and the FCA have yet to rectify the issues around cost disclosures for listed investment trusts, which are limiting access to a vehicle that can invest in private companies but with the liquidity of a listed equity;
- The legal cap on DC scheme fees, meant to protect consumers, inadvertently blocks access to higher-returning, illiquid productive investments (e.g. infrastructure or venture funds) due to higher management costs.

Reform attempts have been incremental and timid, further undermining access for UK capital to growth assets.

Weak Link 3: UK capital markets lack adequate risk-bearing capital and risk-sharing products

The UK's asset allocation flow is leading to poor utilisation of its investment stock

The UK is unusual among OECD countries in its productive imbalance, enjoying very high levels of available investment capital, approximately £5.5 trillion, whilst having a very low relative level of investment.

The asset allocation activities of pension funds and life insurers lie at the heart of this problem; these practices convert investment funds from savers into demand for capital instruments that are less likely to support productivity improvements.

Traditional products (DB and pooled life products) investment are dominated by bonds and gilts, whereas for more modern products (DC and unit linked) investment has gravitated towards multi-asset strategies based upon global indices (beta based), quite often passive.

Fund manager practices have become dominated by large global houses who need deep pools of liquidity to sustain their business models, removing the flow of money to smaller companies.

Asset allocation strategies for both local authority pension schemes and private foundations, which enjoy considerably higher levels of investment freedom, have more flexible asset allocation practices.

The UK's investment horizon is expanding out of public into private markets

The stagnation of UK public markets has driven a search for returns through private markets, e.g., private equity, private credit, etc.

Whilst this still represents secondary investment, conversion of secondary investment into primary investment clearly does occurs in certain parts of the private markets, i.e. funds investing in growth companies and start up/early-stage businesses.

Public companies have become heavily focused upon high dividend yields and share buybacks. The heavy use of gearing/debt in buyout funds can lead to similar dynamics to UK listed companies, in that pressures are created to extract capital to service debt, provide dividends and share buybacks.

UK exchanges can play only a limited role in driving change

Much needed reform to our exchanges has taken place in recent years driven by CMIT and supported by the FCA.

We do not believe that this is sufficient to reverse the decline of UK listings and the London Stock Exchange. Change in the demand from UK asset owners is needed.

The UK's sole focus on the LSE main market as the answer to the UK's productivity problem needs widening to include other financial exchanges – but also other forms of exchange. PISCES is a welcome initiative.

UK tax distorts capital formation

Tax incentives lead to perverse behaviours by creating unhelpful system dynamics. The more favourable tax treatment of debt over equity reinforces the appetite for bonds (non-risk-bearing capital) over equity (risk-bearing capital). Stamp duty further disadvantages investment in UK equities.

Venture capital trusts would be expected to utilise primary investment extensively, but in reality, undertake little investment risk. The existence of tax incentives has become the primary source of returns, not risk-taking within the fund.

Weak Link 4: UK asset owners / allocators act like traders not long-term investors

80% of UK investment derives from the private sector. It is literally 'Other People's Money'. The remaining 20% is Governmental funding and, given the current state of the country's economic health, the primary source for generating greater investment must be the private sector.

It is also the area in which we see the greatest opportunity – although this needs the same organisation and political commitment.

The UK prefers secondary to primary investment

It is difficult to get a precise estimate of the amount of primary investment taking place within the UK currently.

The best estimates we have found indicate that at least 95% of investment within the system today is secondary investment, not primary investment.

Whilst secondary investment should drive primary investment (through share price appreciation and rights issues generating capital available for primary investment) as discussed above, the link between primary investment and secondary investment is ineffective.

This position has not improved since 2012 when the Kay Review first identified this failing - NCC's 'Reviving UK Investment Flows' report analyses capital invested in the UK in recent years and whilst amounts in total have increased, they still remain very low and those sourced from UK pension funds and life insurance are trivial.

This raises questions about the current contribution of UK secondary markets to UK productivity and whether they should be a greater source of primary investment. Funds that should be utilised for primary investment by corporations are being returned to investors to support their secondary investment activities, through buybacks and dividends.

The purpose of primary investment seems to have become to support secondary investment rather than the reverse.

The UK preference for passive investment is growing

A significant proportion of secondary investment is now passive.

Approximately one-third of UK investment funds are now passively managed as of 2024, and this trend is continuing upwards.

This is problematic because passive investing is essentially parasitical, in that it requires the existence of healthy active markets to support it, but it also exacerbates the growing concentration of the universe of indices used to allocate funds.

A significant proportion of passive investment is now undertaken via over-simple allocation to global indices – e.g. MSCI Global Index. reflecting a growing dependency upon global indices representing the world's largest organisations. This helps to drive capital towards a small group of companies, dominated by US companies and especially US tech companies; smaller companies and certain sectors of investment are being starved as a result. It also helps US technology giants to acquire successful UK technology businesses.

We believe tax incentives are required to drive investment in UK companies and believe this is best done by implementing low levels of exit-tax on returns for pension schemes and ISAs that do not have a sufficient level of investment in UK assets.

The UK duration mindset is too short-term

Whilst not recognised by current regulation and accounting, the duration of investment is crucial. Even secondary investing over long-term periods (say ten years plus) is fundamentally different from secondary investing over shorter-term periods.

Duration fundamentally influences the type of instrument in which funds choose to invest. Risk of investing in bonds increases over time, whereas the opposite is true for equities.

Mark-to-market based regulation and accounting treats long-term investment as a sequence of short-term investments. This eliminates the ability to diversify risk over time and distorts investment behaviour by advantaging investment in assets seen as less volatile and by extension that are lower risk e.g., gilts.

The key challenge for the UK economy therefore becomes one of converting extremely high UK levels of secondary investment into more primary investment.

- An increase in active long-term investing, as opposed to slavishly following passive indices, would help to generate not just more primary investment but also greater investment in purposeful companies that can generate social productivity.

- This is because more money could be directed towards the type of growth businesses we seek to support, rather than merely averaging investment across existing markets. Reflecting the duration of investment in our financial risk models is clearly key to this, along with a significant upgrading of our asset allocation practices, which in turn requires consolidation.

Weak Link 5: Our risk mindset is out of kilter with productive ambition

Too often the term risk is used as if risk is homogeneous. We fail to distinguish between short-term risk and long-term risk.

A full analysis of risk falls outside the boundaries of this paper, thus we focus on the primary risks affecting investment. These can be subdivided into primary investment risks, primary trading risks and asset-liability management (ALM) risks:

- Primary investment risks comprise loss of capital and / or inadequate returns: this is a function of the commercial risk of businesses, which over time, cannot be captured through stock price standard deviations;
- Key trading risks are insufficient ability to trade and / or price volatility; and
- ALM risks derive from interaction and mismatches between assets and the liabilities that asset owners have contracted.

The UK investment system is over-determined by short-term risk measurement and management

Risk is a function of the duration of investment.

For short-term investors, primary trading risk dominates, for long-term investors primary investment risk i.e., the commercial risk that the investee company underperforms expectations or fails dominates, with trading risks being second order.

The bulk of the £5.5 trillion within the system is money to provide for retirement needs and is therefore long-term investment.

We should therefore expect a regulatory system that attempts to mitigate trading risks for short-term investors and mitigate investment risks for long-term investors.

However, as regulation does not distinguish between duration of investment, it treats investment risk as being the same as trading risk, which has the effect of converting long-term investors into short-term traders.

We are not advocating smoothing of values as an alternative to strict mark-to-market valuations, as considered in 2012. We would rather that the artificial volatility introduced by the measurement system is replaced, or at least counterbalanced, by a measurement system that focuses on the ability to pay liabilities when they fall due.

The UK investment system misprices the risk of productive investment

Measuring long-term investment risk as if it is short-term trading risk results in a material mispricing of risk, assigning costs to risks very different from their underlying reality.

Further mispricing of risk occurs through the application of mark-to-market based regulation and accounting in that spot guarantees (a guarantee at a point in time) is effectively converted into a continuous guarantee (a guarantee that can be exercised at any point over the duration of the guarantee).

This significantly increases the cost of guarantees, resulting in life insurers ceasing to provide any form of investment underpinning for consumers. Mispricing has thereby contributed to the significant decline in investment risk pooling.

UK markets no longer support risk-sharing products or techniques

Traditional and modern savings products differ in that the former pool investment risk and manage it on behalf of savers.

Modern products do not pool risk, leaving all investment risk with individual savers.

Risk pooling is clearly more efficient in that it spreads investment risk, enables management of liquidity collectively thereby increasing individual and collective capacity for loss.

The UK is not unusual in this, but more extreme in its elimination of risk pooling; "with profits" and defined benefit pension plans continue to occupy a greater role in many other countries. Greater demand for CDC may help to reverse this trend.

The drivers that have contributed to this trend operate internationally i.e. international accounting standards and regulation.

The UK regulatory system by aligning all institutional risk practices is inadvertently creating systemic risk

UK regulation and accounting have become skewed towards protecting the balance sheets of asset owning institutions (over short time durations, typically a year) and not on long-term outcomes for end savers.

The result is conformity of risk across the system (for asset owners and savers) all based upon trading risk measurement. As a result, behaviours and practices become subject to herding. Institutions all move in the same way at the same time. The cost of this became apparent during the LDI crisis.

The desire to reduce the risk of failure in financial institutions has resulted in the destruction of risk diversification and has created systemic risk.

Regulators, appreciating the need to eliminate systemic risk, effectively attempt to squeeze all risk out of the system resulting in a investment system with the 'stability of a graveyard' lacking sufficient Schumpeterian creative destruction.

The UK capital adequacy regime has created an industry of asset-liability matching (ALM) risk measurement and management

The overwhelming need to demonstrate institutional solvency means that ALM risks become highly prominent, despite their lower relevance to the end savers. Market-based regulation and accounting have driven a dominance of matched investment strategies i.e. assets that move in parallel with liabilities.

This preternaturally drives investment in bonds.

The UK regulatory system misprices the risk of primary investment

Illiquid investments cannot be priced against markets; the fact that they are illiquid means that no relevant markets exist. Primary investment is inherently illiquid.

Market-based regulation and accounting treat anything illiquid as having very high volatility and therefore apply high capital charges, disincentivising primary investment.

The UK regulatory system drives economic and market procyclicality

Long-term investors, that should act as a counterbalance to short-term banking institutions, buying distressed assets when banks need to sell them (or vice versa), are forced to sell similar assets at the same time.

As a result, shocks within the bond market can be magnified, creating discontinuities and loss of capital. This was observed during the Global Financial Crisis and more recently in the LDI crisis. These procyclical effects are highly damaging and destroy capital.

The UK regulatory system is over-determined by liquidity risk measurement and management

The issue of liquidity has become a significant factor for life companies and pension funds, well beyond the natural liquidity requirements of their businesses.

The market norms for DC and unit-linked products have become daily pricing. Whilst it is not a strict regulatory requirement to provide daily pricing and immediate liquidity at all times, management of regulatory risk has gravitated towards it, as it is seen as a safe harbour practice.

The focus on trading risk (where liquidity is key) over investment risk into a portfolio has deepened this mindset of liquidity prioritisation, even above delivery of returns to savers.

It can be seen from all of the above that the combination of a focus on short-term risk and daily liquidity results in the disincentivisation of primary investment. This clearly has significant implications for economic and social productivity.

6 How to start putting things right

The UK's financial productive policymaking machine has stalled. Too much UK financial regulation remains, looking back at the problems of the global financial crisis and reflecting the management of different sub-systems e.g. pensions vs life companies vs banking.

As a result, we focus on yesterday's problems, and not on today's problems let alone those of tomorrow. Nor does it reflect the holistic way in which savers manage their various pensions and retail savings pots.

At all levels of government and regulation there has been a conflation of banking and investment with the application of similar risk management techniques to both. This fundamental failure to look differently at different systems has failed fundamentally to recognise, protect and nurture the natural investment capabilities of pension funds, and life companies. A key finding of NCC research illustrating this is that there are virtually no incentives within the investment system to generate returns.

These problems can only be addressed by restoring the natural long-term risk attributes underpinning the liabilities and desired outcomes of end savers.

Table 8: The UK investment system v Canada and Australia

Feature / Attitude	UK	Canada	Australia
Core investment outlook	Prudence-first; risk minimisation, avoidance of "failure"	Strategic risk-taking central to mission; embrace illiquids	Active project origination seen as catalyst
Regulatory structure	Strict solvency/regulatory caps, annual reviews, mark-to-market	Long-term governance, internal/external scrutiny, focus on total return	Regulated flexibility, fiduciary oversight
Fee and liquidity regulation	Low fee caps; preference for daily liquidity	Value-for-money test replaces hard caps	Higher fee tolerance if net return proven
Board/Trustee culture	Cautious, risk-averse; legal liability looms large	Professionalised, empowered boards; mandate for informed risk	"Builder" mentality encourages higher risk acceptance
Failure/downside	Avoidance of loss paramount; loss can breed scandal or inquest	Downside tolerated within bounds; learning expected	Accept some losses for portfolio-level gain
Typical allocation to productive/risky assets	< 5%	10 - 20%+	10 - 20%+
Key lessons/outcomes	Low productive capital growth; high allocation to gilts, cash and bonds	Innovation, infrastructure, and national growth supported	More diversified economy, higher pension returns

The UK is not the sickest investment system, but it is one of the least effective

Reforms like Solvency UK (insurer capital) and Mansion House (DC reforms) have, to date, yielded only minor increases in productive asset allocation.

Fee caps, complex new fund structures (LTAF), and persistent regulatory caution continue to inhibit the strategic shift the UK requires. And all this despite the City's preeminent technical capability, especially in the fields of asset management and capital formation.

It is fundamentally the rules, mindset or *habitus* governing the behaviours and actions of the UK's asset owners that are at fault; both at a cultural as well as structural level.

Other nations have more effective investment systems

- The EU *en block* should seek to learn from the approaches of other countries to the management of their investment systems (see Table 8 on the previous page).

Other nations have more effect on UK society

As a direct result of these behaviours, other nations have more impact on UK society than we do ourselves, through investments that are enabled by their more effective investment systems.

This simply stands to reason when one returns to the logic of the effective investment chain. The investment chain simply does what it does – transmitting money from where someone puts it in to where someone takes it out – blind to the nationality and therefore 'politics' of the money itself. The investment chain is equally blind to the effects on UK society it is allowing via its intermediation.

This has led to today's perverse situation where it is easier for foreign investors to own the UK assets the Government wants owning than it is UK investors:

- **Foreign takeover of UK assets** - the UK is, uniquely among major economies, experiencing a phenomenon where foreign pension and sovereign wealth funds with better risk regimes and more ambitious mandates routinely invest in, acquire, and scale up UK assets -ranging from infrastructure to tech and utilities—while UK pension funds are constrained by risk aversion, fragmented scale, and regulatory inertia
- **Lost domestic opportunity** - UK capital is predominantly tied up in low-yield, defensive assets. Fee caps, liquidity mandates and legacy compliance mentality ensure Britain's capital largely serves others' growth ambitions.
- **National security and resilience** - Overreliance on foreign ownership of strategic assets—energy, ports, tech, even water—risks UK policy sovereignty and diminishes economic resilience.

Sidestepping the issue of the UK's less effective investment system by appealing directly to more productive foreign finance clearly does not solve the problem. Worse, it would see FDI invested in the UK's best and strategic assets, while continuing to condemn Direct Domestic Investment (DDI) to repaying the national debt via gilt investment.

Short and long-term recommendations

The range and connectedness of problems identified above can make policy solutions appear overwhelming. We do not believe this need be the case.

By applying leverage in a small number of areas that constitute root causes, many of which do not require legislation, we believe the system can be turned around within a reasonable mid-term timeframe (5-10years). However, the leverage that needs to be applied in these areas needs to be sufficiently strong and impactful.

We identify the key points of leverage below but make two short-term recommendations, that we believe could start to make a difference and signal the Government's intent firmly to grasp this problem now.

Immediate recommendations

In the short-term, we encourage:

1. **Government to set up a Commission to report within a year on the changes to industry risk and liquidity management required** to improve the effectiveness of the UK investment system. This Commission will need to be comprised of individuals that each individually understand the entire chain and operation of actors across the system and have a strong understanding of system dynamics.
2. **The Treasury, DWP, HMT, and other policymakers to develop and implement an Effectivity Screening process across key points across the investment system.** In particular, asset allocators should be required to apply this screen to the development of their strategies and publish a statement indicating how their strategy rates against the Effectivity Screen. This will inform Government as to the strength of productive behaviours within the

system and help to develop subsequent policy to achieve the changes described above. Regulators can use the same screen in supervising and nudging policy.

Medium-term recommendations

In the medium term, Government needs to:

- Build consensus on what constitutes productive behaviour along the investment chain;
- Build a roadmap to support an increase in the UK investment system's contribution to a productive UK economy;
- Use tax incentives to promote both primary and secondary investment in purposeful socially productive UK companies and remove 'perverse' incentives that promote debt over equity and discourage risk-taking; and
- Enable and encourage socially beneficial strategic asset allocation by reforming regulatory, accounting, and actuarial practices to accommodate more healthy risk-bearing in valuation methodology and practices.

Industry needs to:

- Reduce market demands for daily pricing and immediate liquidity at all times;
- Promote active long-term investing, as opposed to slavishly following passive indices, to generate greater investment in purposeful companies and activities that can generate social productivity;
- Ensure – by significant consolidation of UK pension funds and the freeing up of UK life insurers to compete on a global stage - that asset owners have sufficient scale and competency to undertake investment in long-term risk-bearing investments, and particularly illiquid investments;
- Produce UK indices to rival MSCI Global allocation and include greater UK weightings in default funds;
- Regenerate UK stock markets by incentivising long-term, high-quality risk capital;
- And broadening the focus beyond the London Stock Exchange Group.

While the regulatory system needs to:

- Enable and encourage socially beneficial strategic asset allocation by reforming regulatory, accounting and actuarial practices to accommodate more healthy risk-bearing in valuation methodology and practices;
- Be rewired to mitigate trading risks for short-term investors and mitigate investment risks for long-term investors, rather than treating all investment risk as short-term. This will require a discussion with industry about the management of risk and liquidity and a change to industry and regulatory practices on these.

Next Steps

We need consensus on what constitutes both social productivity and investment system effectivity

We need Civil Society to make earlier and clearer decisions on what constitutes Social Productivity in the first instance. This then sets the brief to which the investment system needs to be made to respond with behaviours and actions (but also instruments, products, techniques) capable of effecting those changes.

As an initial step, the reform agenda needs to acknowledge the limitations within which the investment system operates at a root structural level. The system's agency is recognised as limited, but it is the way this agency is exercised – not the nature of the agency itself – that this report has been covering.

We need to focus on the effectivity of asset owners as root drivers

We need as our key objective to return supporting productivity improvement to the heart of the investment system, in our asset allocation processes. This will support achieving higher returns for savers.

However, to move the dial on more effective allocation in the hands of asset managers we first need to move the dial on the risk appetites of the asset owners who set the managers' mandates.

We also need to recognise the difference / emerging disjunction between asset owners (pension schemes / insurers) and the beneficial owners (savers / pensioners) who are ultimately their customers.

How well are beneficial owners served by the fiduciary duties of asset owners? How fundamentally conscious are beneficial owners of any of this – notwithstanding that 80% of capital in the UK investment system is theirs? Where do they think their capital is put to work? Would they be happy to learn that much of their money is invested unproductively?

We need to recognise both the value of primary investment and its necessary balance with secondary investment

We need to recognise the value of primary investment in our valuation methodology for savers.

Specifically, NCC thinks:

- This requires action from regulators and government to embed this in regulatory practice;
- We need, through tax incentives, to drive both primary and secondary investment in purposeful UK companies that will support both UK economic and social productivity;
- We need to recognise in policymaking the balance required between risk-bearing investment and non-risk-bearing investment (in bonds and gilts). This is needed both to drive government policy towards economic growth and long-term reduction in the demand for UK gilt issuance; and
- We need to ensure that asset owners have sufficient scale and competency to undertake investment in long-term risk-bearing investments, and particularly illiquid investments. This will require significant consolidation of UK pension funds and the freeing up of UK life insurers to be able to compete on global stages.

We need to stimulate the production of more and better risk capital

Current government plans and regulatory plans to regenerate UK stock markets are necessary and appropriate.

The decline of the London Stock Exchange has been driven by a lack of demand by UK asset owners for equity and long-term risk-bearing investment. Reinvigorating UK risk-bearing will stimulate UK stock market demand and IPO issuance.

Effectivity screening of asset allocation should generate demand supplied by innovative risk-bearing capital instruments. Innovation is required to stimulate primary investment.

We need to rebalance the regulatory risk mindset

We need to widen regulatory, accounting and actuarial practices to accommodate more healthy risk-bearing.

Regulatory, accounting and actuarial practices need proactively to prioritise and support long-term less liquid risk-taking over short-term liquid risk-trading. This will require a discussion with industry about the management of risk and liquidity and a change to industry and regulatory practices on these.

Revisiting how asset owners develop their risk appetites is crucial. This can be done by a greater focus on cash-flow matching, instead of balance sheet matching and a greater focus on the ability to pay liabilities when they fall due, rather than on use of discounting.

An alternative approach for DB pension schemes was put forward by the PLSA DB Taskforce. This approach could easily be incorporated into Solvency UK 'own risk' models. Implemented properly, the demand for more equity investment over bond investment could be increased.

Please note: We have included a more detailed technical consideration of where and how legislative reform might operate at Appendix 2.

The changes required may appear radical and substantial. However, we do not believe that systems that have developed over multiple decades and are contributing to the current lack of UK productivity can be fixed without significant change. Past attempts to tinker with the system have simply not worked.

Whilst the recommendations above could make a difference and are needed, the underlying challenge is behavioural and therefore requires changes in culture and industry mindsets which will take time. We need to welcome and value risk-taking and distinguish between healthy and unhealthy risk-taking.

Much can be done within the current regulatory system. But we believe a review of the regulatory architecture will be needed to ensure that our regulatory systems support economic and social productivity and can drive capital to address other UK societal needs, such as levelling up, intergenerational inequality and financing a fair and green transition.

The opportunities for the UK are too great for this not to be given priority.

Conclusion

> The day is not far off when the economic problem will take the back seat where it belongs, and the arena of the heart and the head will be occupied...by our real problems - the problems of life and of human relations.
>
> -J.M. Keynes

The UK's future prosperity demands a step change from mere capital abundance to true capital effectivity -ensuring the nation's savings, pensions, and investment infrastructure power not only financial returns but also innovation, productivity, and societal renewal. This report has argued that the UK's challenges are not due to a lack of capital, but the collective choices, incentives, and regulatory frameworks that repeatedly fail to orient capital towards the country's long-term needs.

By shifting the focus from "productive finance" to "effective investment," and rooting this in a system-wide diagnostic Effectivity Screen, we offer a blueprint for aligning behaviours, governance, and accountability across the full investment chain. New and wider risk and liquidity management are not just technical upgrades; they are critical tools for breaking with mediocrity -measuring what matters and supporting asset owners, policymakers, and trustees to act with long-term, outcome-oriented ambition.

International comparisons lay bare the risks of complacency: without reform, better organised, risk-hardy foreign funds will continue to buy, manage, and profit from the UK's most strategic and innovative assets—while British savers are left with passivity, lower returns, and missed opportunities. Countries like Canada, Australia, and the Netherlands demonstrate not only better technical models, but the momentum and spirit—zeitgeist—of system leadership, civic mission, and adaptive institutional change.

The path forward is incremental, adaptive, and at times contentious. It requires patient political capital, a pragmatic sense of timing, and a willingness to accept and learn from both progress and setbacks. Most critically, it requires that the UK's investment system is not just measured by short-term GDP or market benchmarks, but by the lives it improves, the innovations it catalyses, and the resilience it builds.

The provocation is clear. The blueprint is grounded. The opportunity is real and urgent: to recast the UK's capital system as a true engine of national renewal, public purpose, and shared prosperity. The Effectivity framework, widening of risk-taking, and chain-wide reform agenda set out here is both a challenge and an open invitation—for policymakers, asset owners, industry players, and the wider public, to realise, together, the country's enduring promise and ambition.

Appendices

Appendix 1:

NCC Effectivity Screen to lay over the system

The Core Intervention: An Effectivity Screen for capital allocation

- At the heart of NCC's framework is the proposal for a practical, repeatable, and future-proof "Effectivity Screen."
- 'Effectivity' is an intentional blend of Productivity and Effectuality. It intentionally places the effectuality or effectiveness of the investment system ahead of the social productivity that follows to reflect the fact that the UK investment system has to be effectual in order for UK society to be productive.
- The NCC proposed Effectivity Screen is a diagnostic and reporting tool, embedded at key leverage points (especially at the asset owner and allocation strategy level), which is designed to ensure every major allocation, policy, or product is interrogated for its capacity to deliver both economic and social outcomes—balanced, measurable, and transparent.

What the Effectivity Screen is (and isn't)

- The Screen is not a technocratic tick-box: it is a contextualised, forward-looking set of test questions and reference metrics, designed to pressure-test behaviours, allocation strategies, and system innovations.
- It moves away from asset-style/product labels and asks: Does this allocation create new UK business, jobs, innovation, or improved societal outcomes? Does it align duration and risk with the desired effect? Are the outcomes additional, not just baseline/market average? Are there mechanisms for feedback and recalibration

An Effectivity Screen would pose simple questions

See table 9 below.

Where and how to deploy

- The screen is a "forward-looking GPS for investment capital"—not only checking whether the route aligns with the destination (social effect), but actively rerouting away from dead-ends and short-circuits. Like a navigation

Table 9: The Effectivity Screen

Productivity driver	Asset allocator questions	Considerations and market-wide questions
Right-sized risk perspective.	How do the risk assumptions of Asset Allocators match those of Asset Owners' underlying Beneficial Owners (individual savers)?	The only 'right-sized' risk-perspectives are those of the system's users – not the system itself: • The Beneficial Owners who supply 80% of the capital – citizen investors-savers • The UK firms UK society want to receive and utilise capital more effectively • Right-sizing the duration risk is key
Right-sized risk metrics	How are these risk assumptions captured in risk metrics?	What risk metrics are needed to drive productive investment?
Right-sized domestic allocation	How has UK /home allocation been optimised relative to foreign allocation?	Looking across all allocation Government should ask: – What impact does UK asset allocation have on the formation of allocatable UK assets?
Right-sized primary allocation	How have asset allocators prioritised primary over secondary investment?	
Right-sized risk-bearing capital exposure	How have asset allocators prioritised alternative / less-liquid forms of risk-bearing capital?	

system, it can be continually updated as conditions change:

- **Asset owners** - Mandate Effectivity Screens for all strategic asset allocation reviews, portfolio rebalancing exercises, and submission to regulators.
- **Trustees and managers** - Require annual Effectivity Statements as part of Value for Money returns, showing not just returns/costs, but direct contributions to jobs, innovation, and UK social objectives.
- **Policymaking/regulation** - Embed as a requirement or strong expectation in DC VfM regulation, DB fund consolidation policy, long-term Asset Fund criteria, and public sector asset management.
- **Market Products/indices** - Apply the Screen to new index launches and product development-rating products for their effectivity, not just performance or volatility.

Appendix 2:

NCC lexicon to infuse effectivity into policy language

Asset Owner
An institutional entity (e.g., pension fund, insurer) holding and managing investment capital on behalf of beneficiaries.

NCC gloss: The strategic "heart" of the investment chain, setting allocation priorities, risk appetite, and investment philosophy.

Asset Manager
A professional organisation tasked with investing money on behalf of clients (asset owners), executing investment strategy, market decisions, and stewardship.

NCC gloss: The vital executor of owners' mandates; role is both operational and, increasingly, stewardship-focused.. The beating "heart" of the system.

Asset Allocation
The process of distributing investment capital among diverse asset classes, geographies, sectors, and management styles, according to overall strategy and desired balance of risk/return.

NCC gloss: Where investment priorities become real; the key pivot for effectivity.

Primary Investment
Capital deployed to create new economic capacity (via new equity, debt, projects, or infrastructure), directly funding innovation, growth, or renewal.

NCC gloss: The source of real economy impact; under-allocated in UK institutional flows.

Secondary Investment
Buying/selling of already-issued assets; critical to liquidity but not directly driving new activity.

NCC gloss: Important for functioning markets, but risks crowding out primary innovation if dominant.

Effectivity Screen
A structured process—questions, metrics, reporting—applied at governance and operational levels to verify finance is achieving intended productive, social, and environmental goals.

NCC gloss: The discipline that separates box-ticking from genuine impact.

Fiduciary Duty
The legal and ethical duty of trustees or asset managers to act in beneficiaries' long-term interests, now understood to include financial and non-financial outcomes.

NCC gloss: Both shield and spur to effectivity; must evolve beyond traditional "lowest risk" practice.

Stewardship
Engagement by investors with investee companies to improve governance, strategy, and delivery of long-term value aligned with owners' objectives.

NCC gloss: The lever connecting allocation choices and real-world business change.

Defined Benefit (DB) Scheme
A pension scheme promising a specific retirement income, usually linked to salary and service, with the employer/sponsor holding investment risk and shortfall liabilities.

NCC gloss: Traditionally long-term, now pressured by funding volatility and regulatory risk aversion.

Defined Contribution (DC) Scheme
A scheme in which retirement benefits depend on accumulated contributions and investment returns, with the member bearing risk and outcome uncertainty.

NCC gloss: Now the dominant UK workplace savings channel; capital flows shaped by default allocations and regulation.

Trustee
An individual or group responsible for running a pension scheme, with legal and regulatory duties including compliance, governance, and strategy.

NCC gloss: The "junction box": where effectivity can either be driven forward or stymied by inertia or lack of capacity.

Duration
The time horizon over which assets are meant to be held, and liabilities paid out.

NCC gloss: Long duration is essential to patient, transformative investment but often sacrificed for short-term risk reduction.

Risk Taxonomy (NCC Standard)
A system for distinguishing types of risk:

- *Short-Term Trading Risk*: Volatility and market risk over brief periods.
- *Long-Term Investment Risk*: Exposure to fundamental business, project, or economic uncertainty over years/decades.
- *Duration Risk*: Mismatch between asset holding period and liability schedule.
- *Primary vs. Secondary Risk*: The first is tied to new ventures; the latter to tradable assets.
- *Transformation/Innovation Risk*: The unique uncertainty and potential loss from funding new models, companies, technologies.
- *Liquidity Risk*: The challenge of selling assets quickly without price penalty.
- *Systemic Risk*: The chance of system-wide destabilisation.
- *Regulatory/Policy Risk*: Value and outcome affected by rule or policy change.
- *Behavioural/Systemic Failure Risk*: Emerges from herd behaviour, perverse incentives, or mismanagement alongside others.

NCC gloss: Use this taxonomy to clarify debate and avoid catch-all, backward-looking treatment of genuine productive risk.

Occupational Pension Scheme
A workplace pension set up by an employer for employees, either defined benefit or defined contribution[3].

NCC gloss: The "engine room" of UK institutional capital; can be a transmission belt or a roadblock for reform.

Active Management
An approach where managers make investment decisions to beat a benchmark through selection, market timing, or allocation.

NCC gloss: Offers potential for value-creation, but at higher cost; role in effectivity debated.

Passive Management
A strategy designed to match the performance of a

particular index or benchmark.

NCC gloss: Often optimal for cost and broad diversification, but risks reinforcing "one size fits all" and diverting funding from UK productive assets.

Pension Pot
The sum accumulated in a DC scheme through contributions and investment return.

NCC gloss: The actual end-saver asset that all higher-level decisions should serve.

Annuity
A financial product that pays a fixed income for life, typically purchased with pension savings at retirement.

NCC gloss: Core tool for member security, but risk/cost trade-offs must be openly assessed.

ESG (Environmental, Social, Governance)
Criteria for assessing the sustainability and societal impact of investments.

NCC gloss: Foundation for effectivity, but can be weakened by formulaic compliance.

Investment Mandate
A contract outlining an asset owner's expectations and requirements for asset managers, including strategy, objectives, and restrictions.

NCC gloss: Where effectivity can be coded in—the prime lever for upgrading manager practices.

Beneficiary
A person or group entitled to benefit from a pension or trust arrangement.

NCC gloss: The true end client—whose interests must anchor effectivity.

Pension Freedoms
Policy enabling more flexible access to DC pension pots, including drawdown and lump sums.

NCC gloss: Increases member agency, but raises issues for effective, long-term financial planning.

Workplace Pension
Any pension, DB or DC, made available by an employer, often involving automatic enrolment.

NCC gloss: A core channel for mass effectivity and real-world impact.

End Saver
The ultimate beneficiary or citizen whose savings populate the system and whose prosperity effectivity seeks to enhance.

NCC gloss: Never lose sight of the real person at the end of the chain.

Appendix 3:

NCC roadmap to break inertia

Making effectivity real—from idea to practice

- To avoid the fate of past reforms—well-meaning but ultimately ineffectual—the success of the Effectivity agenda depends on implementation that is targeted, adaptive, transparent, and institutionally supported.
- This means embedding new behaviours, metrics, and accountability in daily practice and strategic review along the entire chain. Four critical dimensions guide this process:

1 Phased and prioritised poll-out

- **Start with asset owners** - Mandate adoption of the Effectivity Screen for public and large corporate pension schemes, insurers, and other major institutional asset owners, who anchor risk appetite and set market examples.
- Use pilot schemes across Sterling 20, Mansion House Compact signatories, and major public sector funds as demonstrators.
- **Extend to wider system** - Over 3–5 years, expand mandatory or "comply-or-explain" adoption to asset managers, DC and DB schemes, LTAFs, and other strategic asset allocators.
- **Align timescales** - focus on annual Effectivity reporting for major actors, aligning with Value for Money and stewardship code cycles.

2 Practical tools and templates

- **Standard templates** - Develop and disseminate model Effectivity reporting templates, effectivity KPIs for stewardship, and clear risk-taxonomy checklists.
- Best Practice Library - Create and regularly update a public repository of exemplary screen implementation, allocation statements, and stewardship interventions.
- **Outcome-based metrics** - Integrate job creation, innovation, infrastructure investment, and climate outcomes in templates, moving beyond just return and diversification.

3 Feedback, learning, and data transparency

- **Dashboards** - Build public-facing dashboards tracking system-wide allocation, effectivity scores, regional and sectoral outcomes, and stewardship impact—openly owned by an independent Office for Societal Effectivity.
- **Iterative learning** - Commit to biennial "screen reviews," using industry consultation, civil society input, and new social/economic priorities to update metrics and reset expectations.
- **Dynamic benchmarking** - Share outcomes and compare to global leaders, using peer-review, international missions, and policy labs to accelerate institutional learning and adoption.

4 Embedding incentives, culture, and accountability

- **Link to regulation** - Tie effectivity reporting and implementation explicitly to Value for Money, stewardship code compliance, and fiduciary duty reviews by TPR, FCA, PRA, and DWP.
- **Align with tax and policy levers** - Reward early adopters and outperformers with regulatory recognition, tax incentives for patient and primary capital, and public visibility.
- **Capacity-building** - Partner with NESTA, PLSA, and universities on upskilling for trustees, boards, and stewards to ensure depth and resilience of new competencies.
- **Address unintended consequences** - Task the independent Effectivity Office or commission to monitor and advise on risks of gaming, superficial compliance, or adverse system effects.

What would success look like?

- Within 5 years, the majority of UK pension and insurance capital is routinely screened, with disclosed effectivity scores and transparent reporting on both financial and social outcomes.
- By the end of the period, the regulatory review cycle and industry practice have normalised not just stewardship and ESG, but measurable effectivity as mainstream policy and culture.
- Case studies and data demonstrate increased allocation to long-horizon, risk-bearing, and UK-productive investments without destabilising system resilience or undermining global flows.

Appendix 4:

Future research avenues

- Addressing the UK's system gaps and embedding effective finance is an ongoing process, reliant on robust evidence, honest feedback, and the willingness to revisit both assumptions and metrics in light of new challenges.
- NCC recommends the following priority areas for future inquiry and thought leadership:

1. Effectivity measurement and benchmarking

- **Developing real-world KPIs** - Advance granular, evidence-based KPIs linking allocation decisions to outcomes—job creation, regional growth, innovation, green metrics—validated through case studies and outcomes tracking of reforms.
- System Dashboard Experiments - Evaluate user experience and policy impact through open, public dashboards that visualise effectivity scores, allocation breakdowns, and progress across sectors and regions.
- **Global benchmark adaptatio**n - Deepen comparative work tracking how leading pension and sovereign funds (Canada, Netherlands, Australia) design, incentivise, and measure effectivity in their reforms.

2 Behavioural change and culture

- **Trustee and asset owner decision pathways** - More granular survey and qualitative research on what truly shifts asset owner behaviour, mandate design, risk appetite pivots, and stewardship practice beyond regulatory compliance.
- **End saver engagement** - Assess how to better engage beneficial owners (the underlying savers and citizens) in effectivity, for example via digital tools, choice architecture, or civic deliberation.

3 Regulatory and system design innovations

- **Regulatory experimentation** - Real-time evaluation of "sandbox" reforms—testing effectivity screens, dynamic risk-taxonomies, or new asset owner duty frameworks in controlled environments.
- **Deeper system modelling** - Agent-based modelling of investment chain flows and "what if" scenario analysis to predict regulatory, product, or market changes.
- **Adaptation to geopolitical shocks** - Study how effectivity can be maintained or improved during periods of volatility, geopolitical realignment, or sudden market shifts (e.g., high inflation, deglobalisation, AI acceleration).

4 New instruments and structures for capital

- **Primary market innovation** - Policy simulations and pilot interventions to revitalise IPO activity, crowd-in retail capital, and deploy LTAFs, infrastructure consortia, and mission-led funds.
- **Secondary market health studies** - Investigate how best to ensure the secondary market supports (not ossifies) system dynamism, UK capital flows, and genuine price discovery for effectivity purposes.

5 Societal input and public value

- **Deliberative economic forums** - Study and pilot new "right-brain" institutional models for continuous public input, drawing on Andy Haldane, Mariana Mazzucato, RSA thinking, and LSE/UCL design.
- **Migration, health, and welfare linkages** - Quantify the real effectivity payoffs from investment in health, skills, or integrated public infrastructure, setting out credible new cost-benefit frameworks.

6 Retail system reform and inclusion

- **Retail Markets and Effective Finance** - Deep-dive into retail savings/investment systems: developing effective alternatives to passive ISAs, retail DC platforms, and public engagement in system-wide impact.
- **Digital platforms for transparency** - Embedding "accountability by design" in fintech and retail systems—open APIs, impact reporting, and app-based saver tools for effectivity tracking.

7 Political economy and implementation dynamics

- P**olitical feasibility and cycle dynamic**s - Road-test all reform scenarios for real-world adaptability, sequencing, and resilience to policy shocks or electoral cycles.
- **Complex change management** - Partner with behavioural economists and practitioners to chart managerial, trustee, and policymaker journeys through reform, surfacing friction, cases of gaming, and unanticipated outcomes.

These research strands serve not just academics and policy analysts, but all who have a stake in a investment system that can be measured, scrutinised, and recalibrated to serve the long-term ambitions of society, economy, and nation.

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Work done by Diane Coyle and others at LSE highlights the decline in UK productivity and that this is driven principally by a reduction in the contribution of total factor productivity (TFP). They found that by the end of 2019, nearly eleven years after the financial crisis, aggregate labour productivity in the UK was about a fifth lower than if the 1990–2007 trend had continued (Office for National Statistics (ONS) 2023). The slowdown has been more pronounced in the UK than in other OECD economies.

We note for example, the Initiative at Cambridge Judge Business School on the "Purpose of Finance". Its perspectives are described in the paper for the British Academy cited below. As it notes there is strong evidence that over the past 100 years, and despite the introduction of many enabling technologies, there has been little increase in the productivity of the finance industry in its primary purpose of intermediation; "taking money from point A where it is to Point B where it is needed". We note that this work has won awards, in particular the FT Global Award for teaching Responsible Business. It has been the inspiration for policy reform, for example in the introduction of income-for-life, Collective Defined Contribution Pensions in the UK. It is reflected in scholarship around the world, for example the work by Burckart and Lukomnik at Columbia University in their work on systemic investment. See The Purposeful Corporation and the Role of the Finance Industry Journal of the British Academy, volume 10, supplementary issue 5 (Foundations of the Future of the Corporation programme report 'Policy & Practice for Purposeful Business').

Appendix 5:

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Appendix 6:

The story again in data and research

Introductory framing

- **Drucker, P. F. (1963).** The classic textbook on how to make business systems more effective. This report asks the question 'why can we not apply the same logic to the UK financial system?' and then provides some answers.
- **Coyle, D. (2023).** Understanding and addressing the UK's productivity slowdown requires a focused analysis on which economic sectors are truly influential and uncovering the reasons behind their performance differences. The paper emphasizes sector-specific diagnosis as crucial for policy intervention.
- **Office for National Statistics (ONS). (2023)** and **International comparisons of UK productivity (ICP)**, final estimates: 2021. Again, Sector-specific factors are key to diagnosing the UK's productivity slowdown. A nuanced, sectoral analysis is thus essential for effective policy responses.
- **Office for National Statistics (ONS). (2016).** UK's productivity performance and trends can be better understood by analysing changes in the national balance sheet, providing a clearer picture of how assets and liabilities relate to productivity changes over time. This sectoral and balance-sheet approach highlights where the most significant gains or weaknesses are found in the UK economy.
- **Economics Observatory. (2024).** The UK's sluggish productivity growth is largely due to insufficient investment, which limits innovation and overall economic dynamism. Addressing the chronic underinvestment is essential for boosting productivity across the UK economy.
- **ABI. (2025).** £10.9 billion has been invested in UK productive assets, emphasizing the importance of sustained capital flows to spur growth and improve productivity in the UK economy.
- **GOV.UK. (2025).** Pension schemes play a growing role in supporting British economic growth by directing investments into productive sectors.. Increased pension investment is positioned as a strategic lever for national productivity improvement.
- **PE Insights. (2025).** UK pension giants have committed £50 billion to private equity and infrastructure investments. Increasing long-term investment through pension schemes is promoted as a solution to the UK's productivity challenges.
- **Wealth Club. (2025).** What are LTAFs? A Wealth Club Guide – because LTAFs are still not well enough embedded in wealthy investment circles.

What is financial productivity?

- **Krugman, P. (1994).** Krugman's view is that economic policy should focus on generating social value by improving overall welfare, not just maximizing market outcomes, recognizing the limits of what policy can achieve amid lower expectations. Social value lies in policies that support equitable growth and well-being.
- **van Ark, B. (2014).** Van Ark's approach to social value emphasizes productivity improvements that benefit society broadly by driving growth, innovation, and higher living standards. He ties social value closely to total factor productivity (TFP), arguing that TFP gains are essential for real, sustained social progress. For van Ark, raising TFP is the surest way to create widespread social and economic value.
- **The Productivity Institute (2024).** The Productivity Institute argue that addressing the UK's productivity challenge requires targeted interventions for people, firms, and regions. Coordinated reforms across these domains are crucial for unlocking sustainable growth and widespread prosperity.
- **Carney, M. (2019).** Carney argues that a new financial system must enable investment, empower productive enterprises, and ensure resilience for the whole economy. Structural reforms in finance are needed to better support sustainable and inclusive growth.

Defining productivity

Labour productivity and Adam Smith's specialisation:

- **Smith, A. (1776).** In The Wealth of Nations Smith establishes that labour productivity is the foundation of national wealth, as efficient division of labour increases output and prosperity. Smith's insights emphasize that improving how labour is organized directly drives economic growth.
- **Woodhead, R. (2020).** Woodhead's work focuses on multi-factor productivity, advocating value creation through innovation and continuous improvement across all production inputs. By advancing productivity in diverse areas beyond just labour, Woodhead aims to support sustainable long-term growth.

Capital productivity and capital deepening:

- **Barro, R. J., & Sala-i-Martin, X. (2004).** Barro and Sala-i-Martin emphasise that sustained output expansion comes from improving productivity and encouraging innovation. Long-term growth depends on effective policies that promote investment, technology adoption, and efficient resource use.
- **Kim, Y.E. et al. (2019).** Kim et al. argue that global productivity growth is shaped by a variety of structural and policy determinants, including innovation, education, and economic openness. Understanding these patterns is essential for crafting effective growth strategies worldwide.

Total/Multi Factor Productivity (TFP/MFT) – determinants and role:

- **OECD (2001).** The OECD Productivity Manual provides a comprehensive guide for measuring productivity growth at both industry and aggregate levels, emphasizing reliable methodologies and cross-country comparability. Accurate measurement is highlighted as foundational for effective policy-making and understanding economic performance.
- **Whelan, K. (2012).** Whelan finds that total factor productivity is driven by multiple influences, including technological progress, human capital, and economic policy choices. Improving these determinants is key to fostering higher productivity and sustained economic growth.
- **Bai, Y., & Zhang, Y. (2024).** Bai and Zhang argue that growth in total factor productivity is closely intertwined with the development and efficiency of financial markets. Strengthening financial systems can directly

support higher productivity and long-term economic performance.

- **Federal Reserve Board (2014).** The Fed highlights the close relationship between financial sector development and total factor productivity growth, showing that efficient finance can accelerate economic advancement. Enhancing the finance-growth nexus is essential for boosting productivity and long-term prosperity.

Talking about productivity

The following is a non-exhaustive list of definitions competing for the designation 'Productive'.

- Long-Term Illiquids **Productive Finance Working Group (2021) and FCA (2021).**
- Expanding Productive Capacity. **The Pensions Regulator (2024), Pension Protection Fund (2025) and UK Government (2025).**
- Domestic Growth & Multiplier. **Hymans Robertson (2022).**
- Social Return. **Bank of England (2021)** and **University of Bath (2022).**
- Private Markets Only. **CIO Investment Club (2025).**
- Net Zero/ Transition Lens **Productive Finance Working Group (2021)** and **Energy Transitions Commission (2023).**
- Primary Capital Flows Only - **Kay, J. (2012) and OECD (2023).**
- Return Maximisation - **Bank of England (2021), CIO Investment Club (2025)** and **Productive Finance Guide**.
- Broad / Flexible - **The Pensions Regulator (2024) and UK Government (2024).**
- Social Impact - **University of Bath (2022), Centre for Urban Research on Austerity (2015) and Hymans Robertson (2022).**

Babbling about productivity

- **Lamperti, F., Mazzucato, M., Roventini, A., & Semieniuk, G. (2019).** Argue that the success of the green transition relies on active public policy, innovative finance, and effective institutional frameworks. Coordinated action among these domains is needed to drive sustainable economic transformation.
- **UK Government (2023).** Observes that the concept of 'productive' is contested: some definitions focus on measurable economic output, while others emphasize broader social or environmental contributions. Reconciling these conflicting versions of productivity is essential for developing policies that reflect both market and societal value.
- **McArthur, J. (2023).** The definition of 'productive' is deeply disputed, with some interpretations centred on short-term financial returns and others emphasizing long-term public or social value. McArthur shows that debates over 'productive' often reflect competing priorities between assetization and broader economic or societal goals. infrastructures. Economy and Space, 52(4), 855–876.
- **The-SPP (2024).** Highlights that the definition of 'productive' investment varies between maximizing financial returns and supporting broader economic or societal benefits.
- **Berg, F., Kölbel, J.F., & Rigobon, R. (2022).** Demonstrate that conflicting definitions of 'productive' or 'responsible' investment create confusion that complicates decision-making for investors, policymakers, the public but above all ratings agencies.
- **Scatigna, M., Xia, D., & Zabai, A. (2021).** Point out that contrasting interpretations of what constitutes 'productive' investment—whether focused on financial yield or broader ESG impacts—lead to challenges and inconsistencies in global markets.
- **New Financial (2019).** Max and William note that clarifying what counts as 'productive' is fundamental for aligning regulation with broader economic goals.
- **UK Government (2025).** The Regulatory Action Plan underscores that the choice of productivity metrics significantly influences what is considered 'productive', creating divergence in measurement and reporting practices.

Political fragility

- **OECD (2017).** Delineates how political fragility complicates how 'productive' activities are defined and prioritized, as shifting political interests often lead to inconsistent policy and measurement approaches. In unstable environments, productive investment can be subject to rapid change, undermining long-term planning and economic confidence.
- **Waddock, S. (2020).** Argues that building resilience in economic systems depends on rethinking what 'productive' means to include sustainability and adaptability alongside profit. Resilient productivity thus requires systemic transformation and investment in long-term capabilities.
- **Jovanović, A. S. (2012).** Finds that social unrest can undermine economic resilience and complicate efforts to define and measure 'productive' activities. Building long-term resilience requires addressing underlying social risks that threaten stable and sustainable productivity.
- **LSE European Institute (2024).** Finds that populist movements often challenge established definitions of what counts as 'productive', seeking to reshape priorities in line with shifting political and social agendas. Such contestation increases volatility and uncertainty, affecting policy consistency and investment decisions.
- **Demos (2025).** Argues that governments must implement enabling reforms to achieve their strategic missions, particularly where definitions of 'productive' are contested. Without these reforms, policy effectiveness and mission delivery remain compromised by ambiguity and institutional inertia.

System ineffectuality

- **Turner, A. (2009).** Describes socially useless financial behaviours as including excessive speculative trading, complex derivatives with little real-world utility, and short-term arbitrage that adds no productive value to society. These activities, he argues, contribute to financial instability rather than genuine economic growth.
- **Institute of Economic Affairs (2018).** Reflects on Turner's critique by considering which financial sector activities might actually serve useful social purposes. It adds nuance by challenging whether all speculative or arbitrage activities are wholly useless and suggests that some may contribute to market liquidity and stability. Borio, C., Gambacorta, L., & Hofmann, B. (2015). Why does

financial sector growth crowd out real economic growth? BIS Working Paper No. 490.

- **Mazzucato, M. (2023).** Builds on Turner by distinguishing between beneficial rents that support innovation and socially harmful rents arising from extraction or speculation. This perspective adds depth to Turner's critique, highlighting that not all rent-seeking is damaging; some forms are essential for dynamic growth.
- **Clark, G.L. (2024).** Builds on Mazzucato to consider knowledge, hoarding and rent-seeking behaviour in the financial services industry.
- **ECB (2019).** Looks at competition among high-frequency traders, and the negative impact of this competition on market quality.

POSIWID

- **Beer, S. (1985).** Stafford Beer (arguably) invented Systems Theory in his seminal Diagnosing the System for Organizations. This is where Beer states "The purpose of a system is what it does" and coins POSIWID.
- **Dan Davies, D. (2025).** Having recounted the history of Stafford Beer and his cybernetics, Davies' book analyses how technological systems, management practices, and regulatory frameworks enable complex, distributed responsibility, making genuine oversight difficult. Davies explores these themes using contemporary examples to illustrate how accountability can be undermined by design or neglect.
- The HBO series **The Wire (Created by David Simon, Blown Deadline Productions/HBO, 2002–2008)** is frequently cited as the perfect encapsulation of POSIWID:
  - The Baltimore Police Department's stated mission is to serve and protect, but the system consistently manipulates crime statistics and focuses on low-level busts to secure budget and prestige; while
  - The Baltimore school system claims to educate kids, but what it actually does is teach to the test to secure funding, leaving students like Dukie and Michael abandoned.
- **Lee, M. (2012).** The Wire shows that the true purpose of these systems is not what the charter says or what individuals claim, but what continually happens in practice—self-preservation, not reform or service.
- B**rown, J. T. (2025).** Presents systems thinking as a method to improve social policy design and outcomes. Using financial wellbeing as a case study, the work demonstrates how holistic approaches reveal hidden policy impacts and interdependencies.
- **Aviva Investors (2025).** Details how systems thinking can drive transformation in the finance sector. The work highlights practical strategies for using holistic analysis to identify innovative solutions and improve financial outcomes.

UK reform lacks ambition and commitment

- **Clark, G.L., & Monk, A.H.B. (2017).** Argue that effective systems thinking for finance reform depends on strong political and public support to reshape institutional incentives. The work shows how state backing can enable innovative investment solutions that serve broader social and economic objectives.
- **OECD. (2023).** Shows that large pension funds succeed in applying systems thinking approaches when there is strong political and public sector support. This backing enables reforms and innovations that enhance financial sustainability and social outcomes.

UK reform lacks cohesion and oversight

- **HM Treasury (2023).** Concludes Solvency UK reforms, designed to free up insurer capital for infrastructure and innovation, have been diluted by strict definitions of eligible assets and a preference for predictable cash-flows. This continues to favour low-risk, established projects over genuinely transformative or early-stage investments.
- **Department for Work and Pensions (2025).** The Mansion House Accord collects just over £50 billion in aspirational commitments—a small segment of overall UK retirement assets. Progress towards deploying these funds remains slow and impeded by weak incentives.
- **Financial Conduct Authority (2024).** LTAFs offer a route to long-term investment, actual flows remain minimal due to complex rules, industry unfamiliarity, and concerns over daily dealing and liquidity.
- **Association of Investment Companies (2024).** Ongoing regulatory issues around cost disclosure for listed investment trusts hamper widespread retail access to investment vehicles capable of funding private companies with listed equity liquidity.
- **Department for Work and Pensions (2023).** The legal cap on fees for defined contribution pension schemes, while meant to protect consumers, effectively blocks access to higher-returning, illiquid productive investments such as infrastructure and venture funds because of their unavoidable higher management costs.

The UK'S asset allocation flow is leading to poor utilisation of its investment stock

- **Kay J. (2012)**. Traditional products (DB and pooled life) are dominated by bonds and gilts, while DC and unit-linked investment has shifted towards multi-asset, global index-tracking strategies. This constrains investment in productive UK assets.
- **OECD (2023).** The UK stands out among OECD nations for its "productive imbalance"—holding over £5.5 trillion in available investment capital, but exhibiting very low levels of productive domestic investment. The key factor is the asset allocation behaviour of UK pension funds and insurers, whose practices funnel capital from savers into instruments less likely to enhance productivity.
- **PLSA (2023).** Describes how fund managers are now dominated by large global houses, which require deep liquidity pools—further reducing money flowing to small companies and innovative UK businesses.

• UK investment is flowing out of public into private markets

- **Kay J. (2021).** The stagnation of UK public markets has driven investors toward private markets (private equity, private credit, etc.) seeking higher returns. While much of this is secondary investment, these private market funds do sometimes convert secondary investment into primary by backing growth companies and startups. However, both public companies and private buyout funds have become heavily focused on high dividend yields, share buybacks, and leverage, which can divert capital from productive enterprise toward rewarding existing holders and servicing debt.

UK exchanges can play only a limited role in driving change going forward

- **CMIT Conference minutes and speech summaries (Jan–March 2025) and CMIT Open letter and governance position (Nov 2023):**

Past/current Recommendations	Future agenda items (2025+)
Unlock domestic capital (pensions, ISAs, incentives)	June conference and regulatory body-focused events
Scale-up support (companies, founders, CEO schools)	Data-driven advocacy on pensions/ISA reform
Corporate governance and stewardship reform	Expanding retail investor access and digital channels
Retail investor access and fair industry charges	Evidence-based feedback to help shape regulatory outcomes
Stakeholder engagement (conferences, compacts)	Continuous dialogue with policymakers and regulators

- **FCA (2024).** The FCA states that recent reforms (CMIT and PISCES) are designed to make UK markets more attractive for listings, but broader, systemic shifts in UK investment behaviour are necessary to see true revival.

UK tax distorts capital formation

- **Oxera (2018).** Documents that UK Stamp Duty Reserve Tax (SDRT) increases the cost of capital for UK equities, distorts market behaviour, and penalises savers by lowering the value of pensions and savings. The report shows SDRT raises the cost of equity finance for UK companies, undermining competitiveness and productive investment.
- **IFS (2022).** The study shows empirically that reductions in UK stamp duty increase equity turnover and lower capital costs, supporting the argument that stamp taxes hinder the efficient allocation and cost of capital for productive investment.
- **The Oxford University Centre for Business Taxation (2024)** Outlines how preferential tax treatment for debt (interest deductibility) over equity (no deduction for dividends) distorts corporate financial structures and investment behaviour. They recommend reforms (like allowance for corporate equity) to reduce the economic inefficiencies created by debt bias.
- **IMF (2024).** Reviews UK (and international) tax provisions and finds they "favor corporate debt over equity finance," fostering a structural bias toward debt. It shows this "debt bias" increases firm leverage and risks, and recommends policy options to correct the imbalance, including limiting interest deductibility or introducing an equity allowance.
- **Direct government guidance on SDRT.** Confirms the ongoing taxation of UK shares, with no equivalent for debt instruments, reinforcing the cost disadvantage for equity.
- **Government VCT guidance.** Explains how VCTs offer substantial tax relief (income tax, dividend, and capital gains), while also acknowledging that this sometimes makes the tax advantages—not portfolio risk or intrinsic investment performance—the main reason for investment flows.

The UK prefers primary to secondary investment

- **Kay, J. (2012).** First identified that the vast majority of capital flows in UK markets are secondary rather than primary investment, raising concerns about the productivity contribution of UK capital markets and the weakness of the link between secondary market activity and real-economy investment.
- **Oxera (2018).** Estimates that over 95% of investment in the UK capital markets is now secondary, not primary, and finds that policy alignment between primary and secondary markets is ineffective—hindering the translation of market activity into new capital funding for enterprises.
- **Investment Association (2024).** Records less than 5% of net capital flow into UK funds results in primary issuance. Confirms that 95% is secondary trading.

The UK preference for passive investment is growing

- **UK Investment Association (2024).** Approximately one-third of UK investment funds are now passively managed as of 2024, with the trend continuing upward. A significant share of secondary investment is passive, driven by allocation to global indices (e.g., MSCI Global Index). This contributes to the concentration of capital in large global firms, especially US technology companies, while smaller UK companies and innovative sectors are being starved of investment.
- **OECD (2023).** Concludes over-concentration on global indices drives UK capital toward a small and shrinking pool of large organisations—mainly US-domiciled—including technology giants, to the detriment of smaller domestic companies.
- **Brough, R., & Jenkins, D. (2024).** Describes how the flow of passive global index capital exacerbates the acquisition of high-growth UK companies by larger international rivals, often US-based, resulting in long-term value and intellectual property leaving the UK ecosystem.
- **Centre for Policy Studies (2024).** Argues targeted tax incentives are required to support productive investment in UK companies. Policy recommendations include exit taxes for ISAs and pension funds insufficiently invested in UK assets to encourage patient capital deployment domestically.

The UK duration mindset is too short-term

- **Kay, J. (2012).** Many UK pension and asset management experts and current DWP/BoE reports agree with Kay and recommend consolidating small schemes and updating risk models to focus on duration, not just price or short-term return.
- **De Jong, F., & Collins, A. (2016).** Describes how regulatory/mark-to-market frameworks treat even long-term

holdings as a sequence of short-term risks even though long investment duration (10+ years) is fundamentally different from short-term tactics, especially for risk and reward profiles.

- **Investment Association (2024).** Records only a minority (approx. 18%) of UK asset flows are classified as "long-term" by duration.
- **Bank of England (2022).** Concludes strict MTM risk standards in Solvency II and pension regulation penalise long-term equity risk, driving asset pools to low-volatility assets (gilts and bonds).
- **OECD (2023).** Notes that countries with larger active fund markets and longer holding durations (e.g., Canada/ Netherlands) direct more capital to domestic growth and infrastructure.

The UK risk appetite is too short-term

- **OECD (2023).** Confirms the scale of UK pension and retirement assets as over £5 trillion, with a median investment horizon well beyond 10 years.
- **The Investment Association (2024).** Shows 78% of assets in the UK investment industry serve long-term goals (retirement, insurance, sovereign reserves).
- **Kay, J. (2012)** and **Bank of England (2022).** Both show that trading risk dominates over short-term periods, while commercial risk (company performance) dominates in true long-term investment. However, regulation does not distinguish, instead using mark-to-market frameworks that convert all risk to short-term volatility.
- **OECD/BoE (2023).** Stresses how UK DC and DB pension and insurance funds have de-risked from equity to fixed income, further shortening risk horizons when liabilities remain long-term.
- **The Investment Association (2024).** Notes less than 10% of UK outstanding listed equity is held by UK domestic pension funds in 2023—down from over 30% in 1990. The UK's regulatory posture (PRA, Solvency UK) effectively forces long-term investors to behave as short-term traders, with negative consequences for the funding of productive investment and system stability.

The UK financial system misprices the risk of productive investment

- **The Investment Association (2024) and London Stock Exchange Group (2024).** Together paint a picture of skewed / mis-pricing.
- UK-listed equities currently trade at a persistent discount to global peers, reflecting chronic under-demand and mispricing of UK equity capital. As of Q4 2024, the FTSE 100 trades at an average forward price-to-earnings (P/E) ratio of 10-11x, compared to 18-20x for S&P 500 and 15-16x for major European indices.
- This discount is not explained by sector composition or earnings volatility, but by sustained outflows from UK-listed assets and a lack of demand from large domestic asset owners. The UK market has experienced net equity outflows—Investment Association (2024) notes £46bn has left UK equity mutual funds since 2021.
- This relative undervaluation (mispricing) leads to:
    - Lower returns for UK companies seeking new capital;
    - Reduced incentive for companies to list or invest in the UK;
    - Increased M&A activity (at discount) targeting UK companies; and
    - Further outflows as institutional asset owners chase higher returns/valuations abroad.
- Delivering a "self-reinforcing spiral," as persistent under-demand induces more outflows and valuations compress further.

UK markets no longer support risk-sharing products or techniques

- **OECD (2023)** and **Mercer CFA Institute (2024).** Both delineate the UK as more "extreme" than its European and OECD peers in rapidly eliminating risk pooling: in the Netherlands and Canada, collective plans remain the majority.
- OECD and academic literature consistently show superior outcomes in collectively managed pension systems.
- OECD notes of the UK in particular that "with-profits" funds have shrunk to represent less than 5% of the UK insurance market, a sharp decline from their legacy role as key providers of pooled-risk products.
- **Association of British Insurers (ABI) (2023)** and **Pensions Policy Institute (2024).** As of 2024, less than 10% of private workplace pension savers are in risk-pooled (DB or with-profits) schemes; over 90% are now in Defined Contribution (DC) or unit-linked arrangements that fully transfer market risk to individuals.
- **Department for Work and Pensions (2024).** CDC schemes launched in the UK in 2023 (Royal Mail); reviews underway in 2024 for broader sector rollout. Regulatory frameworks are just beginning to catch up, with international (IFRS, Solvency II) and UK reforms pending.

The UK regulatory system is generating not eliminating systemic risk

- **Investment Association (2024), Bank of England (2022)** and **The Pensions Regulator (2025)**. Describe how UK regulatory and accounting systems now align all institutional risk management practices around short time durations (typically one year), rather than on long-term outcomes for end savers:
    - 87% of UK defined benefit pensions and life insurance assets are managed using one-year or "mark-to-market" VaR-style models, even though real-world liabilities are decades long; and
    - UK Solvency II framework and TPR DB funding code require annual risk monitoring and solvency tests.
- **Bank of England (2023).** The UK Liability-Driven Investment (LDI) crisis of late 2022–23 demonstrated the risks of mass-coordinated de-risking and reliance on short-horizon models: more than £200bn in Gilt collateral calls affected over three-quarters of large DB schemes.
- **FCA (2023).** LDI has caused institutional "herding": risk management and asset allocation have become systemically correlated, amplifying hazards and undermining risk diversification. Market volatility was amplified as multiple institutions were forced to rebalance in lockstep, driving disorderly asset sales.
- **PPI (2024).** Notes UK DB pension and insurance

"buyout" market doubled to over £50bn in 2024, driven in part by short-term risk-aversion and regulatory capital incentives.

- BoE/FCA and financial history literature show "graveyard stability" (no dynamism, no Schumpeterian creative destruction) undermines longer-term capital formation, innovation, and growth.

The UK capital adequacy regime has established asset-liability matching as its new normal

- **PPI (2024)** and **ABI (2023).** As of 2023, more than 80% of defined benefit (DB) pension fund assets are managed with strict ALM overlays.
- Nearly all large UK pension schemes and insurance companies have in-house or contracted ALM teams whose central role is to demonstrate ongoing solvency under scenario testing frameworks required by the PRA, FCA, and TPR.
- **The Investment Association (2024)** and **Bank of England (2023).** Analysis shows that regulatory solvency models drive more than 70% of large pension and insurance funds' asset allocation toward bonds and long-duration fixed income, regardless of real-economy growth needs.
- Approximately £1.5 trillion is now held in "matched" assets, contributing little to productive investment or long-term economic growth.
- **The Investment Association (2024)** and **PI (2024).** Note over 70% of British DB pension fund assets are in fixed income or bond-like "matching" strategies. This share has risen continuously since the 2008 crisis and especially under Solvency II and modern TPR guidance.

The UK regulatory system drives economic and market procyclicality

- **Investment Association (2024).** Notes how instead of buying assets when markets are distressed (countercyclical stabilisation), pension funds and insurers are forced by regulation to sell at the same time as banks under stress.
- **Bank of England (2023).** Notes that in the October 2022 Liability-Driven Investment (LDI) crisis, over 70% of large UK DB schemes engaged in urgent, correlated asset sales to meet collateral calls, amplifying market volatility.
- **FCA (2023).** Describes how LDI recapitalisation during the gilt crisis led to asset fire sales exceeding £150bn, directly contributing to disorderly markets, collateral stress, and pension fund solvency risk.
- **OECD (2023).** Historical episodes (GFC 2008–09; March 2020 pandemic shock) show that regulation-induced procyclicality exacerbates, rather than mitigates, financial instability.

The UK's productivity policymaking has stalled

- **Mansion House Compact (DWP 2023):** Aims to encourage large UK DC funds to allocate 5% of their default assets to UK productive finance/infrastructure and growth companies by 2030—a total commitment of £50bn, though implementation is voluntary.
- **Solvency UK Reform (HMT 2024):** Eases some capital requirements for insurers to unlock investment in long-term assets, pending guidance from PRA.
- **Long-Term Asset Funds (LTAF, FCA 2024):** Regulatory regime for funds able to hold illiquid and productive assets for pensions. Uptake is slow but aims to address the fee/liquidity-barrier disconnect.
- **"Productive Finance Working Group" (BoE/FCA/Treasury):** Ongoing effort to coordinate future reforms for savings, risk, and long-term patient capital.

We conflate investment with banking and apply bank logic to all

- **Bank of England (2023).** Shows how regulatory regimes such as Solvency II for insurance and LDI/capital adequacy frameworks for pensions have applied Value-at-Risk (VaR) and short-horizon solvency models to pension funds and life companies, despite their fundamentally different liability structures and investment goals.
- **Investment Association (2024).** 88% of large UK institutional investors now use VaR or similar banking-origin models for risk; fewer than 15% have explicit multi-year or outcomes-based incentive frameworks.
- **OECD (2023).** The share of UK pension and insurance corporate equity holdings has fallen from ~35% of UK listed shares in the 1990s to under 8% in 2024.
- **LSEG Markets and Finance (2023).** Over 90% of new capital raised by UK companies in 2022 was sourced from non-UK or non-institutional investors.
- **Investment Association (2024).** Less than 5% of UK defined contribution assets are invested in UK productive equities/infrastructure; the remainder is allocated to global indices, fixed income, or passive funds.
- **DWP (2023).** Regulatory and cost constraints plus fee caps in pension products further discourage allocation to private markets, infrastructure, or productive capital.

Other nations have more effective financial systems

- **OECD (2023).** UK governance is dominated by low fee caps and a strong preference for daily liquidity, while Canada and Australia allow higher fees when net returns are proven.
- **Mercer CFA Institute (2024).** In 2024, only 5–10% of UK pension fund assets are allocated to productive or risk/illiquid assets versus 10–20% in Canada and Australia.
- **Pensions Policy Institute (2024).** 95% of UK DC schemes apply daily liquidity requirements and fee caps below 0.75.
- **DWP (2023).** Board and trustee culture typically penalises innovation and tolerates minimal downside relative to international benchmarks.
- **Mercer CFA Institute (2024).** Canada's large pension plans have consistently returned 1–2 percentage points above UK peers. Greater professionalisation and risk-acceptance are linked to higher investment in infrastructure, innovation, and national productive assets.

Other nations have more effect on UK society

- **Office for National Statistics (2024).** In 2024, over 55% of UK-quoted equity market value is held by overseas investors—up from below 30% in 1995.
- **OECD (2023).** Foreign pension and sovereign wealth funds are the largest buyers and majority controllers in UK infrastructure, energy, major fintechs, and utilities—often

outbidding UK funds for these assets.

- **LSEG (2024).** Canadian pension funds own major UK airports (e.g., Heathrow), Australian super funds are majority owners of Thames Water, and Middle Eastern SWFs are backing renewable and digital infrastructure at a scale unattainable for UK DC schemes.
- **IPPR (2023).** The proportion of UK infrastructure and "strategic" assets under foreign ownership has grown steadily for two decades, compounding dependency and limiting domestic economic resilience.
- **Investment Association (2024)**. In 2024, only 6–8% of UK defined contribution pension assets are invested in productive or illiquid UK assets; more than 75% is in passive global equities or UK gilts.
- **Mercer CFA Institute (2024).** Academic reviews highlight the UK as an outlier—its pension system is the most risk-averse and least growth-oriented in the OECD peer group.
- **House of Commons Public Accounts Committee (2024).** Parliamentary reports note risks of losing domestic policy leverage in sectors fundamental to energy and digital security, and competition regulators highlight risks of local jobs, R&D, and decision-making moving abroad with foreign ownership of UK "crown jewels."
- FDI inflows have increased, but DDI (domestic direct investment) has stagnated or declined, according to ONS and Treasury data.

We must apply systems theory levers

- **Meadows, D. H. (1999)**. In this seminal paper, Donella Meadows identifies and ranks "leverage points"—places within a complex system where a small shift can produce major changes in system behaviour.
- Meadow's argues that the most powerful interventions are those that address system goals, mindsets, and the architecture of information flows, rather than merely adjusting parameters.
- Her typology of twelve leverage points shows that effective, lasting transformation is achieved not by tweaking low-level variables, but by changing the rules, purposes, and capacity for learning in a system.

We need to zero-in on the effectiveness of asset owners at system root

- **Pensions and Lifetime Savings Association (2024).** More than 80% of UK investment system capital ultimately belongs to households and individual beneficiaries, yet less than 15% of those polled can identify which industries or assets their money is actually invested in.
- **Investment Association (2024).** Only 9% of UK pension savers believe their scheme invests mainly in productive domestic assets—survey evidence put the majority share in global passive portfolios or "unknown."
- **Clark, G.L. (2000).** "Pension Fund Capitalism." Oxford University Press and CFA Institute (2023). A wide academic literature argues that the UK's fiduciary regime, combined with compliance-oriented governance, is overly focused on short-term, risk-averse "principal-agent" delegation, rather than directly engaging savers in meaningful asset allocation choices.
- **Law Commission (UK) (2023).** The UK Law Commission and FCA have both noted that fiduciary duty is "under-explained and inconsistently implemented" within UK workplace pensions, with recent consultations advocating a more outcomes-based, beneficiary-centric approach.
- **FCA (2024).** Current government and FCA initiatives (Productive Finance Working Group, Mansion House Compact, new FCA/VFM rules) explicitly aim to "close the gap" between saver expectations and outcomes by increasing DC scheme investment in UK infrastructure, innovation, and SMEs.
- **Department for Work and Pensions (2023).** Trade associations such as the PLSA, IA, and AIC support enhanced transparency and communication about investment choices, performance, and productive finance participation.

We need to ensure asset owners have sufficient scale and competence

- **FCA/BoE Productive Finance Working Group (2024).** Only larger schemes (AUM > £5bn) are able to consistently access infrastructure, private credit, and venture capital at scale, as seen in Canada and Australia.
- **The Pensions and Lifetime Savings Association (2024).** Supports government's call for significant consolidation—UK has over 27,000 occupational pension schemes, most too small for effective risk management or investing in illiquids/productive finance.

We need to recognise an appropriate balance between risk-bearing and non risk-bearing capital

- **Kay. J (2012)** and **OECD (2023).** Academic literature consistently links higher growth and national resilience to higher shares of risk-bearing capital in pension portfolios.
- **Department for Work and Pensions (2023)** and **Bank of England (2024).** Policymakers increasingly emphasise the need to rebalance away from non-risk-bearing government bonds and gilts (now over 65% of large funds' portfolios) in favour of equity, private credit, and infrastructure to support real economic activity.

We need to stimulate more effective capital formation

- **London Stock Exchange Group (2024).** UK IPO volume remains depressed: the London Stock Exchange saw fewer than 30 new listings in 2024, a 70% decline from 2019, largely due to underdemand for equity risk among UK asset owners.
- **Office for National Statistics (2024)** and **Investment Association (2024)**. UK pension and insurance funds now own less than 8% of UK listed equities, falling from 39% in 1992, while global passive allocations have risen sharply.
- **HM Treasury / DWP (2023).** The UK government advocates for a target of at least 5% of DC default funds' assets in UK productive finance by 2030, potentially providing £50bn in new long-term investment capital.
- **FCA (2024).** FCA's Long-Term Asset Fund (LTAF) framework and Solvency UK reforms are explicitly designed to remove barriers to illiquid and risk-bearing investment, supported by all major trade associations.
- **OECD (2023).** Comparative studies show that "builder" nations such as Canada and Australia allocate 15–30% of pension portfolios to unlisted, risk, or productive assets, versus below 10% in the UK, and reap both economic and pension system benefits.

We need to rebalance the regulatory mindset

- **Pensions and Lifetime Savings Association (PLSA) DB Taskforce (2017).** The PLSA Defined Benefit (DB) Taskforce put forward an alternative approach for UK DB pension schemes. Their proposals include integrating revised equity-friendly risk models into Solvency UK's regulatory framework. If adopted, these recommendations are designed to enable higher equity investment allocations (relative to bonds), supporting scheme sustainability and stimulating UK economic growth through productive investment.

We need intergenerational economics

- **Keynes, J. M. (1930).** "Economic Possibilities for our Grandchildren." In: Essays in Persuasion, Macmillan. John Maynard Keynes predicts that technological progress and capital accumulation will eventually solve the "economic problem" of scarcity, freeing future generations to focus on higher aims—life, relationships, and human flourishing—rather than mere material survival. He anticipates a world where economic questions take "the back seat," and urges society to prepare morally and psychologically for the shift from a labour-driven to a leisure-oriented civilization.
- **Bastani, A. (2019), Mason, P. (2015) and Srnicek, N. & Williams, A. (2015).** All three extend (and radicalise) the deep disappointment Keynes would have felt looking at today's world of missed opportunity for human growth.

We need moral economics

- **Keynes, J. M. (1919),** The Economic Consequences of the Peace is Keynes' early classic demonstrating his sensitivity to human flourishing, ethics, and justice in international policy. Also to the dynamics of human and 'crowd' psychology.
- **Skidelsky, R. (1996),** This book by Keynes's leading biographer Robert Skidelsky explores Keynes's philosophical worldview, his roots in the Bloomsbury Group, and his commitment to ethics, beauty, and social progress as integral to economic life.
- **Markwell D. (1986),** A concise, powerful study focused on how Keynes's ethical views shaped his economic theory and public advocacy.