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ABSTRACT

Private pension failure for much of the economics mainstream would be regarded as an artefact of markets that are insufficiently regulated, such that suppliers are able to exploit monopoly advantages, and are free to make serious errors of judgement. Market failure analysis is flawed, however, by its own failure to acknowledge salient elements of the institutional context of private pension provision which, while it has been regulated according to approved public interest ends, has been prone to sub-optimal investment performance. Drawing on classical liberal political economy, an alternative account of private pension failure would emphasise the perverse consequences of state intrusion in the market for retirement income protection. The origins of regulation failure can be traced back to a combination of two policy decision dynamics, one of intentional rent-creation, a second of imperfect knowledge and understanding of markets, resulting in flawed regulatory arrangements. By stifling competition, regulation diminishes the capacity of pension markets to serve pension plan participants by means of improved investment performance. The prevalence of private pension failure is an artefact of regulatory intrusiveness. Given this direction of causality, a better approach to policy would rest centrally on the deregulation of pension markets.

JEL CLASSIFICATION

D02 Institutions: Design, Formation, Operations, and Impact; D43 Oligopoly and Other Forms of Market Imperfection; D72 Political Processes: Rent-Seeking, Lobbying, Elections, Legislatures, and Voting Behavior; G11 Portfolio Choice • Investment Decisions; G28 Government Policy and Regulation; J26 Retirement • Retirement Policies

INTRODUCTION

Public policy decision makers have increasingly legislated to replace or supplement state pensions with private sector provision. A wave of privatisation reforms since the early 1980s has converged around a particular design modality, one which came to be referred to widely in the literature as the "World Bank model" (World Bank, 1994; Piñera, 2001). Fuelled by concerns about demographic pressures on state pensions, the creation of compulsory defined contribution (DC)[1] pension arrangements was justified in public interest terms as a means of improving people's retirement prospects, thereby protecting taxpayers in general against the costs of rising dependence on statutory welfare state safety-nets. By investing individual savings in interest bearing securities, private pensions would create financial security and prosperity in old age without burdening others. According to much of the scholarly literature on pension reform, however, such arrangements have failed to deliver on their promises (Borzutzky, 2002; Morris, 2018). For a variety of reasons, but particularly poor investment returns, retirement benefits in many such systems have failed to improve on the state pensions that they replaced, and have fallen short of international standards of retirement income adequacy (Ortiz et al., 2018; Torre and Rudolph, 2018). The question is, how might this discrepancy between policy aims and outcomes be explained?

Although private pension failure would generally be regarded by economists as an artefact of diminished competition in the market for retirement income protection, there is substantial disagreement about the nature of its underlying dynamics. To the extent that they have addressed this issue, economists have drawn predominantly on the repertoire of market failure analysis, an approach which highlights the centrality of perverse dynamics arising from voluntary exchange—that is, association that is unimpeded by coercion. For much of the neoclassical mainstream of private pensions analysis (Baker and Fung, 2001; Barr and Diamond, 2008; Morris, 2018), sub-optimal investment performance in the pension fund management industry is regarded as an artefact of markets that are insufficiently regulated, such that pension fund managers (PFMs) are able to exploit monopoly advantages. Alternatively, behavioural economists have argued that unrestrained investment decision making is impaired by cognitive biases that prevent PFMs from acting in the best interests of plan participants (Thaler and Sunstein, 2009; Kahneman, 2011). Both approaches are clear that welfare may be enhanced by means of governmental action to circumscribe the scope of voluntary exchange. In other words, both believe that the regulation of private pensions is consistent with the public interest. This analysis is problematic in significant ways, however, not least because of its failure to give sufficient weight to salient elements of the institutional context of private pension failure. The World Bank model does not rely exclusively on voluntary exchange to facilitate the accumulation of benefit entitlements, but imposes stringent regulatory measures of the kind that would find favour with market failure analysis. Yet sub-optimal investment performance has been conspicuous and persistent, suggesting that we should look elsewhere for its underlying dynamics.

[1] The defined contribution principle derives individual benefit entitlements from the sum of each participants' accumulated financial assets at the point they cease working. This contrasts with pension schemes based on the defined benefit (DB) principle—benefit entitlements are specified at the initial point of affiliation, and financial resources are subsequently found to make good such promises. Under defined contribution provision, in contrast, participants are entitled only to what they have accumulated by saving and investing (Hyde and Borzutzky, 2016).

Rather than focussing exclusively on imperfections of voluntary exchange, a classical liberal account of the origins and evolution of private pension failure would give particular emphasis to the perverse consequences of coercive state intrusion in pension markets, particularly the imposition of binding regulatory requirements. Regulation failure can arise from veiled political self-interest, manifesting as state intrusion that, while justified in public interest terms, gives market privileges to preferred suppliers (McChesney, 1997; Peltzman, 2021); or it could be regarded as an unintended consequence of defective policy decisions that rest on an imperfect understanding of the market for retirement income protection (Ikeda, 1998; Kirzner, 1985). While the balance of these dynamics may vary according to the particular circumstances of regulatory reform, their consequences are similarly negative for plan participants. Both impair investment performance by stifling market competition, defined for our purposes as rivalrous action among PFMs to capture market shares. Where market failure analysis highlights the origins of private pension failure in the absence of state-imposed constraints on the conduct of PFMs, classical liberals would emphasise the negative impact of such intervention on their engagement with the accumulation process. In theory and in practice, there is a higher probability of sub-optimal investment returns in markets that are subject to extensive regulation. Given this direction of causation, the optimal solution lies in the withdrawal of the state from pension markets.

"MARKET" FAILURE?

According to one highly influential set of perspectives, private pension failure should be attributed to imperfections of voluntary exchange that create welfare-diminishing outcomes for plan participants. The market failure tradition of neoclassical economics[2] maintains that sub-optimal investment performance is one of several negative consequences of non-regulatory barriers to market competition (Barr and Diamond, 2008; Morris, 2018). In the imaginary world of perfectly competitive markets, suppliers are unable to benefit from excessive pricing or the diminished effort of supplying sub-optimal goods and services. But in real markets, including the market for retirement income protection, the absence of robust constraints on self-interest dynamics allows them to exploit monopoly advantages and to capture rents from consumers.[3] To this end, the neoclassical tradition has documented a variety of monopoly practices which, while delivering benefits to suppliers, result in sub-optimal investment outcomes that impair the retirement prospects of plan participants (Morris, 2018). Where neoclassical accounts highlight the role of untrammelled self-interest as a cause of market failure, behavioural economists have looked elsewhere for its underlying dynamics. Conspicuously sub-optimal investment performance in the DC sector—as elsewhere in financial markets—should be regarded as an artefact of flawed decision making

[2] As distinct from the work of free market-friendly neoclassical economists.

[3] "Rent-seeking" refers to the pursuit of unearned benefits through action to rig the market, instead of creating value by satisfying consumer preferences (Hillman and Ursprung, 2016). In this respect, our analysis is concerned specifically with monopoly market failure, where rents are extracted through the exchange process in markets for retirement income protection. Other forms of market failure, such as externalities or public goods problems, have been covered extensively elsewhere in the literature (Thompson, 1998; Baker and Fung, 2001). We should also acknowledge the possibility of forms of political market failure (or "government failure") which, while important, are not part of our focus here. The provision of benefits through the tax/transfer system, for example, may impact negatively on the performance of PFMs, who know that taxpayers will pick up the tab. Our analysis is concerned specifically with regulation failure.

capacities (Thaler and Sunstein, 2009; Kahneman, 2011). This is premised on a particular standard of rationality, where portfolio selection is directed in accordance with the "life-cycle model", assuming decision makers to be rational in the sense implied by neoclassical economics (Mitchell and Utkus, 2004). In poorly regulated pension markets, investment decision making is impaired by "cognitive biases" that ultimately prove to be welfare-diminishing. While much of this work has focussed on lay investors, increasing attention has been given to the flawed investment decisions of institutional investors such as pension funds (Shefrin, 2000). To err is only human, but financial services professionals make the same errors repeatedly, resulting in negative consequences for those who depend on their expertise. Behavioural economists maintain that the cognitive biases of those responsible for managing the accumulation phase in DC pensions are a prominent cause of under-performance, and ultimately, insufficient retirement income (Mitchell and Utkus, 2004).

If voluntary exchange proves to be problematic, the preferred solution is an expanded role for the state to eliminate private pension failure, or at least to minimise its adverse consequences. This means regulation,[4] imposed and monitored by government, to ensure that plan participants are protected against sub-optimal investment performance. Where such regulation has been pursued, it has manifested in two distinctive ways. "Prudential" regulation is imposed on all DC pension arrangements, and is typically justified as a means of ensuring against, or mitigating, "agency problems" and "systemic risks" (Srinivas and Yermo, 1999). "Draconian" regulation refers to standards and rules imposed on "the structure, conduct, and performance of the pension fund industry, in addition to the minimum standards of prudential regulation" (Srinivas and Yermo, 1999, p. 7). As we shall see, exponents of market failure analysis have converged around a distinctive set of draconian regulatory measures for the accumulation process in DC pensions. For the market failure tradition of neoclassical economics, such regulation aims to eliminate monopoly advantages by ensuring that the supply of goods and services, including pension fund management, emulates a market in competitive equilibrium (Lanza, 2021). Behavioural economists, in contrast, aim to ensure that investment decision making in practice corresponds to the portfolio optimum, as defined by them and the political actors they seek to advise (Rizzo and Whitman, 2020).[5]

While it has been enormously influential in the field of retirement income protection, the market failure tradition is far from convincing. Fundamentally, it relies on a flawed methodology involving comparisons between existing institutions and some taken-for-granted ideal.[6] When considered in terms of private pension failure, this gives rise to three distinctive problems. First, it depends on questionable assumptions about the motivations of public policy decision makers and regulators, and in particular, the belief that they can be and are concerned only to serve the public interest. Any departures from this premise of public-spiritedness in practice would cast a substantial shadow of doubt over the notion that the substance of regulation is insulated against perverse incentives arising from self-interest dynamics. Second, the market failure approach assumes public policy decision makers and regulatory authorities to have sufficient knowledge to comprehend the dynamics that result

[4] "Regulation" may be defined for our purposes as the use of state power to force people to act in ways that they might not prefer, and to refrain from acting in ways that they might prefer (Holcombe, 2022).

[5] While much of this work is intended as advisory, a significant number of behavioural economists endorse coercive state intrusion in the market (Berggren, 2011).

[6] The practice of inferring failure from discrepancies between the performance of existing institutions and a preferred but arguably unachievable ideal has been referred to as the "nirvana approach" (Demsetz, 1969).

in failure, and to determine the policies and regulations that could reliably address it. Naturally any deficits of such awareness would impair the capacity of government regulators to pursue their public interest objectives, no matter how well-intentioned they might be. Third, market failure analysis assumes that the regulatory measures required to bring pension markets closer to its preferred taken-for-granted ideal are costless.[7] A comparative institutions analysis which includes both the public interest-regarding and unregulated alternatives would suggest otherwise, highlighting the negative impact of coercively-imposed regulatory requirements on investment performance.[8]

IMPERFECTIONS OF MOTIVATION

Starting with the first assumption, the market failure approach rests on a bifurcated understanding of human agency which depicts market actors as narrowly self-interested, and the political actors who are responsible for regulation as public interest-regarding. This assumption of public spiritedness has been questioned by exponents of public choice analysis, who maintain that policy decision making is similarly shaped by self-interest. As a field, public choice "assumes man to be a utility maximiser in both his market and his political activity" (Buchanan and Tullock, 1965, p. 23). What distinguishes political markets, inter alia, is the absence of profit and loss dynamics associated with voluntary payment for goods and services, which means that policy decision makers are confronted by a distinctive incentive structure. The public choice appraisal of government has been articulated with reference to the notion of "political rent-seeking", where private actors deploy resources in order to obtain benefits from government. Or, as Gunning puts it, to "change laws or the administration of laws such that one individual and/or group gains at the same or greater expense to another individual or group" (2006, p. 2). Political actors and their enforcement agents in the civil service bureaucracy are, according to this analysis of policy decision making, willing to respond favourably to such requests because they too are able to appropriate rents from doing so, including electoral support, the unearned economic benefits of political office (such as campaign contributions or lucrative employment in the political afterlife), increments of power and authority, as their reach extends into the market, and any associated psychological benefits (or "ego rents") (Hillman and Ursprung, 2016).

Given this understanding of the motivational impetus of policy decision making, public choice theorists would question the sincerity of the declared objectives of political actors. While public interest concerns have figured prominently in publicly-articulated narratives around retirement policy, a substantial body of research has highlighted the prominence of rent-seeking dynamics, focussing predominantly on state pensions (Dilorenzo and Block, 2017; Rothbard, 2017). In this respect, Rothbard (2017) notes how Social Security in the United States was intended to reduce the exposure of large firms to market competition.[9] Others have highlighted the ongoing role of statutory social security as a means of securing

[7] Or as Demsetz puts it, the "fallacy of the free lunch" (1969, p. 3).

[8] Comparative institutions analysis is concerned with the comparative performance of real economic institutions. Given the reality of human imperfections—particularly imperfections of motivation and knowledge—which particular institutional arrangements are most likely to coordinate exchange in ways that are welfare-enhancing? Ideal norms may be relevant here but only insofar as they are used to facilitate such comparison (Demsetz, 1969).

[9] The imposition of state pension financing obligations penalises "the lower cost, 'unprogressive', employer and cripples him by artificially raising costs compared to the larger employer" (p. 359).

popular support.[10] By extension, we should acknowledge the possibility that legislation to privatise and regulate the administration of retirement income protection has given disproportionate emphasis to the interests of preferred market actors, allowing them to appropriate rents. According to the "capture theory of regulation" (CTOR) (Stigler, 1971), the regulation of markets invariably favours suppliers over consumers, reflecting differential incentives and capacities for collective action. Consumers belong to a much larger group with a lower per capita stake in regulatory outcomes, and therefore, fewer incentives to seek information about the regulatory environment. Suppliers have a much bigger stake, and are better motivated to seek relevant information, particularly knowledge of political actors and channels of political influence. When rational, self-interested, political actors are confronted by "ignorant, unorganised consumers on one side and well-informed, organised and politically effective producers on the other, there is little doubt about who wins the competition" (Peltzman, 2021, p. 5). Given such asymmetries, it may not surprise us to learn that "regulation is acquired by the industry and is designed and operated primarily for its benefit" (Stigler, 1971, p. 3). If this analysis is accepted, we might expect the regulation of compulsory DC pension arrangements to favour PFMs over plan participants. While the CTOR provides valuable insights into the political dynamics that shape regulation, however, subsequent revisions also have important implications for our analysis of private pensions.

Some have questioned the assumption that the creation of regulation is always intended to prioritise the interests of suppliers, whatever its impact might ultimately prove to be (Peltzman, 2021). A casual inspection of regulatory reform in the real world would highlight the possibility of divergence in its origins. Some reforms have run counter to the interests of, and been resisted by, suppliers in the regulated industry, reflecting a strong preference for a status quo in which they have already invested substantial financial and organisational resources. Significant "institutional disruption, such as new regulation or substantial change in old regulation (ie., deregulation) would render this investment in knowledge and skills obsolete" (Peltzman, 2021, p. 7). This suggestion of diversity in the origins of regulatory reform may have particular relevance to the DC pensions of the World Bank model, which were introduced predominantly in countries with negligible pension fund management and financial services industries. Most likely, the creation of such arrangements was shaped by a variety of political priorities, including the elimination of growing fiscal pressures from the state pension system, and economic development in other markets.[11] We might also note that subsequent regulatory reforms in some countries have ostensibly been intended to serve plan participants by liberalising entry to the market (Impávido et al., 2010). Such policies are more likely at junctures where the political benefits of electoral support are regarded by political actors as outweighing the benefits of any transfers from suppliers (Booth, 2006). Whatever their particular origins, however, we might ultimately expect the "operation" of regulatory requirements embedded in compulsory DC pension arrangements to give market privileges to PFMs, reflecting the disproportionate weight of their interests in policy decision making and regulatory processes (Peltzman, 2021).

[10] Such provision has arguably been premised on an "implicit contract" whereby "voters agreed to satisfy the policy-maker's request to run the rent-seeking game by means of an overgrown welfare state. In return, the median voter asked for a disposable income over his lifetime higher than the value justified by his productivity" (Colombatto, 1996, p. 99).

[11] Governments have, for example, required or encouraged PFMs to invest a substantial proportion of their member's assets in government debt. In Chile, PFMs were also encouraged to invest in the shares of newly privatised government industries (Rodriguez, 1999).

Still others have rejected the assumption that preferential regulation is always acquired by and operated for the benefit of an entire industry, as the CTOR appears to suggest (McChesney, 1997; Peltzman, 2021). Retaining an overall emphasis on political rent-seeking, they acknowledge that regulation can be acquired by a sub-group of suppliers and operated in ways that disadvantage other suppliers. In this respect, Peltzman notes how large incumbent suppliers may seek regulation that eliminates competition by imposing a substantial financial burden on rivals. The potential entrant now "needs to overcome those biases as it builds its own influence capital. There is also a fixed cost element to such investments that works against small scale entry and […] induces exit and merger of smaller competitors" (Peltzman, 2021, p. 17). If this analysis is accepted, we should anticipate the possibility of such asymmetries in regulated DC pensions, favouring PFMs with a bigger share of the market. In many such arrangements, the regulatory environment has directed disproportionate advantages to the largest PFMs, resulting in a striking degree of exit or merger for the rest (Hyde and Borzutzky, 2016).

It has been argued elsewhere that the COTR failed to take sufficient account of the specific interests of political actors, resulting in a flawed understanding of their engagement with the regulatory process. In its initial form, the substance of public policy decision making, and regulatory requirements, were treated as if they could be "read-off" from the interests of suppliers, even where they too had a stake in such exchanges. The politician's role was "subsumed, with little explicit consideration given to the ways in which the politician himself benefits from creating rents for private parties" (McChesney, 1997, p. 18). In contrast, the "rent-extraction model" regards politicians not as mere brokers adjudicating external demands, but as "independent actors making their own demands to which private actors respond" (McChesney, 1997, p. 19). According to this analysis, "rent extraction—receiving payments not to destroy private wealth—is 'money for nothing' […] Money is paid in exchange for politicians doing nothing, when they could do something" (McChesney, 1997, p. 3). While the rent extraction model focussed initially on the threat of punitive taxation, it was subsequently developed to encompass government involvement in regulatory activity, on which suppliers become increasingly dependent. At any future point in time, political actors can threaten to withdraw any or all regulatory protections in the event of non-compliance with demands for payment, suggesting that it is they who capture the regulated firms. The notion of capture by the state may be relevant to many compulsory DC pension arrangements, which could not have developed in their present form without substantial governmental action. In many such arrangements, the state has been responsible for the creation of the DC pension market, the legally-defined entities charged with the responsibility for supplying retirement income protection, and the rules shaping their engagement with the accumulation process—a process of "reverse regulatory capture", where the regulated industry is created by the regulator (Peltzman, 2021). Whether this has been exploited by political actors to extort PFMs is, of course, an empirical question. Given the public choice assumption of narrow self-interest, however, this would not be surprising.

The public choice account of regulation failure, then, is distinctive in its emphasis on the negative consequences of political self-interest. Regarded in terms of our focus on compulsory DC pensions, this means regulation that gives market privileges to preferred suppliers, either because their political influence is sufficient to direct policy decision making, or because political actors see an opportunity for rent extraction. As we shall see, such benefits are realised at substantial cost to plan participants.

IMPERFECTIONS OF KNOWLEDGE AND UNDERSTANDING

While public choice analysis has provided a coherent account of regulation failure, its tendency to assume the primacy of self-interest among political actors overlooks an integral element of the public policy decision making process. Drawing on insights from Austrian political economy, an alternative account of such failure would emphasise the role of defective knowledge and understanding, such that policy decisions will result in the creation of flawed regulation that proves to be welfare-diminishing. The Austrian account of "interventionism" starts from the premise that the public interest regarding statements of political actors are genuine guide to their beneficent intentions (Ikeda, 1997; Kirzner, 1985). The origins and persistence of regulation failure are explained, not in terms of rent-seeking dynamics, but by emphasising the errors that arise from poorly informed policy decisions.

Perhaps the most significant barrier to policy "success" is represented by the "knowledge problem"—that is, limitations on the ability of political actors to utilise the information that is necessary to ensure that policy can realise its stated objectives. The knowledge of circumstances of which "we must make use never exists in concentrated or integrated form but solely as dispersed bits of incomplete and frequently contradictory knowledge which all the separate individuals possess" (Hayek, 1984, p. 77).[12] Such knowledge is often implicit and cannot be conveyed to political actors in any meaningful form. At the same time, the sheer amount and complexity of information in markets render it resistant to central synthesis and coordination. Given the reality of such dynamics, the most rational of political actors would "be strained far beyond the powers of human cognition in the attempt to track the unintended (and perhaps even intended) consequences of a particular programme or command" (Ikeda, 1997, p. 52). Even where public policy decision making is not hampered by cognitive biases, we should not be surprised to learn that political actors lack the knowledge and understanding required to realise their regulatory aims, at least not without creating unanticipated costs.

While it is an ongoing and ubiquitous feature of public policy decision making, the knowledge problem has particular relevance to complex markets, including the market for retirement income protection. We might in this regard be tempted to question the public narrative around retirement, particularly assumptions about its universality. Understood in its commonly used sense as the cessation of economic activity at a predetermined age, retirement as a social institution has been actively created by the successive policy choices of political actors, often for reasons that have little relevance to the particular circumstances or preferences of older workers (Bresiger, 2002).[13] Without such diktats, we could not rule out the possibility of substantial variation in individual preferences regarding the balance of work and retirement. Some might prefer to remain at work, or at least, to remain so until infirmity prevents them from working. Others might place a higher value on discretionary time and seek to exit the labour force at the earliest opportunity. Such preferences may also be subject to substantial revision, as time goes by. Unlike many other goods and services, retirement income protection is ultimately delivered after an extended period of savings effort during which people's circumstances may evolve in unanticipated ways. The possibility of such

[12] As distinct from the "general rules" of abstract scientific knowledge (Hayek, 1945).

[13] In this respect, Bresiger (2002) notes how compulsory retirement and state pension programmes in the United States were concerned primarily to reduce macroeconomic instability and to expand employment opportunities for younger workers by expelling older workers from the labour force.

variation, in turn, has important implications for the supply of retirement income protection, particularly the management of accumulation (Blake, 2006; Mayer, 2018). Those who prefer an "early" retirement may be likely to select investment options that, while involving greater risk, have the potential to deliver higher returns over a shorter period. Longer term investment horizons may result in portfolio decisions that prioritise security over returns, or some evolving balance of risk and security. In responding to variation in the investment goal, financial services professionals rely on different sources of knowledge including "an objective part in the form of the basic mathematics needed for their trade, and a subjective part in the form of intuition gained from observing the masters and developing experience through trial and error" (Mayer, 2018, p. 161). Political actors would presume to outperform the free market by reducing such complexity to a narrow set of parameters, as represented by universal and binding regulatory requirements. Given their limited knowledge and understanding of the market for retirement income protection, however, what are their chances of coordinating the supply of pension fund management in accordance with consumer preferences?

The knowledge problem is compounded by the role of ideology in the policy decision making process, predisposing political actors to distinctive perceptions of policy problems and solutions.[14] Writing during the mid-Twentieth Century, Mises noted the growing prominence of a collectivist, "anti-capitalist mentality" which:

> objects to big business and great riches. It advocates various measures to stunt the growth of individual enterprises and to bring about more equality by confiscatory taxation of income and estates. And it appeals to the envy of the injudicious masses (1966, p. 844).

An examination of state pension systems would suggest that they have been permeated by such values. The design of some has been informed by the belief that poverty is a "structural" problem, morally indefensible, and attributable to the dynamics of market competition, giving expression to the firm conviction that state power should be deployed to engineer a more equal and solidaristic society (Esping-Andersen, 1990). At the very least, those systems that have not formally embraced such transformative ends have been informed by the belief that markets are unable to optimise the supply of retirement income protection, which should assign greater priority to the needs of the least advantaged. Naturally the state is regarded as the sole legitimate arbiter of such redistributive dynamics (Hyde et al., 2003).

The stultifying impact of such "ideological blindness" on policy learning has substantial but perhaps not immediately obvious relevance to our own particular concerns with private pension failure. Collectivist scholars of social policy have been adamant that the transfer of responsibility for the management of retirement schemes from public to private agencies must be understood in terms of a wider shift away from collective towards individual responsibility, and self-provisioning, reflecting an increasingly influential and now dominant presumption in favour of free markets (Blackburn, 2001; Minns, 2001). This analysis represents an over-simplification of policy developments, since it is clear that the design and delivery of retirement systems that rely substantially on the World Bank model of

[14] We are concerned here, in particular, with ideology as ideational orientation "towards the proper scope and magnitude of government" (Ikeda, 1997, p. 24).

privatisation have been anchored in collectivist principles, particularly the protection of the least advantaged (Hyde et al., 2004; Hyde and Dixon, 2009). As such systems have evolved, it has become apparent that privatisation has involved a shift in means of delivery rather than underlying value premises. Egalitarian objectives have been pursued by means of regulation to direct the conduct and performance of suppliers, not by focussing exclusively on the distribution of burdens and benefits through the tax/transfer system.[15] The possibility of such continuity has been addressed more generally in the social sciences with reference to the notion of "path dependency"—the argument that policy design and implementation in the present are shaped by the institutional arrangements of the past, particularly their ideational foundations (Arza and Kohli, 2008). Even where they are given apparent opportunities to institute arrangements that could harness the dynamism of free markets, political actors may be ideologically prone to repeat the collectivist errors of previous generations.

The Austrian account of interventionism is conspicuous, then, by its focus on the unintended consequences of regulatory intrusion that is flawed by an incomplete understanding of markets. Considered in terms of our focus on compulsory DC pensions, this means political actors with an imperfect knowledge and understanding of the market for retirement income protection. Even with the best of intentions, their regulatory decisions could be unintentionally welfare-diminishing by impacting adversely on pension fund performance.

A CLASSICAL LIBERAL ACCOUNT OF PRIVATE PENSION FAILURE

Public choice analysis and Austrian political economy have each offered a compelling account of the policy decision making process, but neither exhausts the dynamics that shape private pension failure. While the notion of beneficent policy intent should never be discounted, it is difficult to square with the suspicion of consistent biases in the real world of regulatory reform. Yet, given the reality of imperfect knowledge, it is hard to imagine a world where policy decisions could translate seamlessly into intended outcomes. Given their distinctive but penetrating insights, we believe that both accounts are relevant to an understanding of private pension failure.

There has been growing attention among scholars of classical liberalism to the particular ways in which their respective analyses of the evolution of regulatory reform are complementary. Several of those who characteristically give primacy to the perverse consequences of impaired knowledge and understanding have, for example, accepted the importance of political self-interest (Kirzner, 1985; Ikeda, 1997). Consistent with the assumption of public benevolence, "simple self-interest" centres on the political action that is deemed necessary to make a "success" of policy (Ikeda, 1997). Policy decision makers may depend substantially on suppliers for information about markets, as we have noted, and this could foster a shared understanding of policy problems that is biased in favour of producer interests. In such circumstances, it would not be not be surprising to learn that regulation has given them market privileges. The implementation of regulatory arrangements depends on the compliance of the regulated, which may require the inducement of economic benefits. Who would expect them to endorse regulations that would only be experienced as

[15] This has led at least one observer to suggest that egalitarians should be wildly enthusiastic about compulsory DC pensions (Shapiro, 2007).

burdensome? In these ways, policy design and implementation may result in the creation of rents, though this was never the primary intent. Such expedience contrasts sharply with "narrow self-interest" which manifests only as self-serving action, and is therefore incompatible with the assumption of public beneficence. While public choice analysis has arguably given too much weight to such dynamics, its insistence that regulation owes some of its substance to political self-interest would appear to be highly relevant to our particular concerns.

In a similar way, those who generally regard the insights of public choice analysis with some approval have increasingly accepted the argument that policy decision makers are unable to pursue their ends without serious errors of judgement. Exponents of "behavioural public choice" have observed how policy decisions and regulatory outcomes are shaped by the very same cognitive biases that they purport to address (Lucas and Tasic, 2015). This suggestion of impaired rationality is echoed by Caplan (2007), who maintains that voters elect "representatives" who share their biases, or at least who give the appearance of doing so for popular support, giving rise to poorly designed regulation. Echoing a standard public choice argument, however, such accounts argue that the welfare-diminishing impact of regulation is amplified by the absence of market incentives in the political process, which means that political actors are less likely to curb their biases. Any analysis of the role of self-interest in policy decision making that failed to take account of impaired rationality would thus be incomplete. While the origins of private pension failure in defective policy decision making can generally be traced back to both dynamics, their substance in practice will vary according to the particular economic and political circumstances in which regulation is introduced.

This convergence on the evolution of regulatory reform is echoed by overlapping agreement on the assumption that unregulated markets outperform the regulated by a conspicuous and sustained margin. The virtuous dynamics of free markets have been well-rehearsed in the literature, and are twofold. The first is competition, defined as "the rivalrous activities of market participants trying to win profits by offering the market better opportunities than are currently available" (Ikeda, 1997, p. 130). Suppliers must take action to outperform their rivals, either by exploiting known efficiencies, or by discovering new opportunities for profit seeking. Free market competition differs from "perfect" competition in ways that have important implications for our understanding of performance in the DC pension sector. First, classical liberal economists generally accept the proposition that the absence of coercive intrusion is a sufficient condition for competitive markets. Where there are no barriers to entry, for example, each supplier must respond not only to variation in consumer preferences, but "to the prospective decisions of others whose decisions to sell or buy may compete with his own" (Kirzner, 1973, p. 12).[16] A competitive market in retirement income protection requires nothing more than the absence of coercively-imposed regulation, particularly barriers to entry and exit.[17] Second, the benefits of free market competition for consumers manifest in diverse ways, including price reductions, but also more desirable goods and services (Holcombe, 2009). If the introduction of a new product is successful in gaining a share of the market, "it will tend to attract others to do even better in this regard.

[16] The contestable markets hypothesis maintains that the absence of such barriers is sufficient to incentivise competition (Baumol, 1982). The presence of "shadow entrants will force competition-like behaviour by the incumbent suppliers" (Brock, 1983, p. 1055), even where there is a monopoly. Unlike the ideal of perfectly competitive markets, contestable markets can have any number of suppliers, and they are not required to be price-takers.

[17] Assuming, of course, that coercive means are available to protect property rights (Holcombe, 2020).

If it proves to have been a mistake, this entrepreneur himself will be under market pressure to abandon this line of production" (Kirzner, 1973, p. 25). Competition in a free market for retirement income protection centres on the quality of pension fund management, as indicated by investment performance, as well as reductions in the level of charging. Third, market failure analysis overlooks the role of asymmetric information in enervating entrepreneurial discovery, and driving improvements in the quality of goods and services. Market ignorance signals the existence of opportunities for profit seeking and thus incentivises suppliers to experiment with "new sources of resources, new technological opportunities, new possible combinations of product specifications […] and new consumer tastes" (Kirzner, 1973, p. 222). Rather than fixating on problems caused by differentials of access to information, we should be concerned with the capacity of free pension markets to deliver benefits to plan participants. Fourth, the suggestion that above-equilibrium prices should be regarded only as an adverse consequence of monopoly advantage ignores the role of opportunities for pure entrepreneurial profit in incentivising innovation. What counts here is the long-run, for such action sets in train a process of imitative learning that leads other suppliers to enter the market and bid down prices, or offer better goods and services. While conspicuous economic rents are possible in a free market for retirement income protection, they are unlikely to persist when confronted by the ongoing reality of competition. In these ways, free market competition inches the supply of pension fund management—including the management of accumulation—into ever greater alignment with consumer preferences.

The second virtuous dynamic of voluntary exchange is, of course, the role of prices in diffusing information about markets. The price system is a "kind of machinery for registering change, or a system of telecommunications which enables individual producers to watch merely the movement of a few pointers […] in order to adjust their activities" (Hayek, 1945, p. 527). Suppliers respond to competition and act on opportunities in terms of expected costs and benefits, as indicated by their awareness of market prices. The signals generated by the price system are what enable "agents to utilise their entrepreneurial talents to discover profitable instances of inefficiency and error owing to the dispersed and incomplete nature of relevant information" (Ikeda, 1997, p. 74). This is not to suggest that market prices translate seamlessly into efficient outcomes, as in perfectly competitive markets. The search for prices may be impeded by transaction costs, which can result in price rigidities and under-utilised resources (Stigler, 1961). Free pension markets cannot be perfectly competitive markets, which are implausible. Neither is it to suggest that market prices are the sole source of information used by producers to make adjustments to the supply of goods and services. Prices do not "act as 'marching orders' telling people how to act, but they do provide a valuable prompt to decision-makers and reduce the amount of detail required in formulating their plans" (Pennington, 2011, p. 37). Pension fund managers typically supplement their awareness of market prices with non-price information such as corporate earnings statements, press reports, indicators of movements in investment returns, reputation, and wisdom and foresight gained from the experience of supplying markets (Baker and Fung, 2001; Mayer, 2018). Market prices in this context play an important role in anchoring the individual calculations of profit and loss that bring the supply of pension fund management into greater alignment with consumer preferences.[18] Naturally the sum of knowledge thus

[18] According to one reading of classical liberal political economy, however, this very success means that free markets are informationally inefficient (Grossman and Stiglitz, 1980). Suppliers lack incentives to invest in acquiring information when its benefits are appropriated by others. Market prices have "collective goods attributes which allow people to 'free-ride' on the efforts of others by observing prices and obtaining for nothing

exchanged exceeds that of each participant by an inestimable margin. Prices are important to free pension markets, then, because they "are a fast and effective conveyor of information through a vast society in which fragmented knowledge must be coordinated" (Sowell, 1980, p. 80).

Given the substance of these dynamics, it is not difficult to see how a free market in retirement provision would cater for the diverse circumstances and preferences of those who elect to save for their own retirement. For plan participants who prefer not to think too much about the risk probabilities of equities, bonds, and derivatives, or the respective merits of active and passive styles of investment management, there would be reliable opportunities to delegate the responsibility for such calculations to financial intermediaries, and to accept responsibility for the costs. The ever-present reality of competition means that their fund managers are likely to select portfolio options that are closely aligned with consumer preferences, particularly variation in investment and retirement horizons. There would likely be substantial emphasis on "active" approaches to pension fund management, as PFMs are incentivised to experiment with new or better ways of outperforming the market. As we shall see, "passive" fund management has been the default option in the regulated DC pensions of the World Bank model.[19] But there would also be opportunities for self-directed investment for those who are confident about navigating its challenges. At this point, exponents of market failure analysis will object that people's decision making is inherently flawed by cognitive biases that can only create welfare-diminishing outcomes (Mitchell and Utkus, 2004). Such alarmism rests on a static conception of human action that fails to acknowledge individual capacities to acquire knowledge and understanding, as well as confidence with new roles and responsibilities (Rizzo and Whitman, 2020). Where plan participants require further protection against private pension failure, we should note the argument that voluntary exchange is not devoid of appropriate oversight and regulation (Stringham, 2015). Freed from the demands of government regulation, we might expect PFMs to contract into voluntary self-governance up to the point where marginal benefit is equivalent to marginal cost. Such rules are best developed by means of trial, error and consensus, not coercively imposed standards of conduct.

By inhibiting competition, coercive intrusion in the market results in fundamentally different outcomes. Its welfare-diminishing consequences are, according to the public choice account of regulation failure, a direct consequence of political rent-creation. To obtain its benefits, suppliers must direct benefits to political actors, and such expenditures "represent resources diverted from the production of new wealth to the transfer of existing wealth from purchasers to sellers" (McChesney, 1997, p. 13). The Austrian critique of interventionism augments this analysis by emphasising its tendency to stifle innovation, for nothing within the "regulatory process seems able to simulate, even remotely well, the discovery process that is so integral to unregulated markets" (Kirzner, 1985, p. 141). As well as impeding the discovery of new opportunities to satisfy consumer preferences, regulation fosters the discovery of opportunities that would be superfluous in free markets. By stifling competition, the

what they would otherwise have had to search for " (Pennington, 2011, p. 28). Without corrective state intervention, the price system tends to inhibit entrepreneurial discovery. While it is important to acknowledge the possibility of undiscovered opportunities for profit-seeking, however, it is difficult to have confidence in the proposed alternative—that is, policy decision and regulatory processes that are flawed by imperfections of motivation and knowledge.

[19] Involving the selection of some pre-determined mix of equities and bonds that is able to track the average performance of the market (Mayer, 2018).

imposition of binding regulatory requirements results in "a pattern of consequences different from, and most plausibly, less desirable than would have occurred in an unregulated market" (Kirzner, 1985, p. 145).

Its reliance on draconian regulation suggests that this negative appraisal of intervention has considerable relevance to the World Bank model. The imposition by government of regulatory requirements has stifled the market for pension fund management in at least two distinctive ways. Conspicuously, regulation has circumscribed the possibility of external competition by placing tight limits on entry to the market for retirement income protection. By means of licensing, *industry structure regulation* enforces barriers to entry that are biased in favour of large suppliers, including net-worth and capitalisation requirements (Srinivas and Yermo, 1999). Such regulation is most draconian where the state mandates "sole purpose management"—pension fund management entities are defined and created by law, and are prohibited from integrating their responsibilities under pension legislation with other business activities. Justified in public interest terms as a means of preventing mis- or malfeasant management of the accumulation process—arising perhaps because of "inadequate" organisational and financial capacities—these restrictions loosen the grip of incentives to deliver benefits to plan participants by curtailing the emergence of rival suppliers. Compulsory DC pension arrangements have been remarkably concentrated, with many delivered by a handful of state-approved PFMs (Impávido et al., 2010). The regulation of DC pensions has also diminished competition among licenced PFMs by inducing the standardisation of investment decision making. The most prevalent form of *industry conduct regulation* has involved the imposition of binding limits on the range of permissible financial instruments for portfolio selection—such as prohibitions on investing in foreign stocks, derivatives, or digital currencies—or the requirement to invest in government debt (Srinivas et al., 2000). Justified in public interest terms as a means of protecting plan participants against excessive risk-taking, such restrictions impair competition by artificially limiting the supply of investment options, reducing the range of opportunities for suppliers to improve performance on behalf of plan participants. Most commonly, *performance regulation* has manifested as the imposition of binding performance minima with financial penalties for under-performance (Srinivas and Yermo, 1997). Justified publicly as a means of protecting plan participants against the possibility of below-average returns, performance regulation limits competition by incentivising portfolio selection that clusters around the industry average, as PFMs seek to evade the costs of conspicuous under-performance. Taken together, these measures result in remarkably similar investment choices across PFMs, as well as near-identical investment performance (Srinivas and Yermo, 1997, 1999). Draconian regulation has ensured that plan participants have little meaningful choice among licensed PFMs, as would be indicated by conspicuous variation in their conduct and performance. By means of coercive intrusion in the market, then, the supply of pension fund management is "partially cartelised to the very same extent that would have happened had all the firms […] agreed to stop competing" (Carson, 2007, p. 215). Sub-optimal investment performance, in turn, translates into diminished retirement income.

Naturally this comparison could never imply that unregulated pension markets are absent economic dis-welfares arising from under-performance. Even where they are not constrained by the arbitrary diktats of officialdom pension fund managers can make errors of judgement that result in failed investments and costs for plan participants. Those who struggle with free market competition may be forced into liquidation, some with pension liabilities that cannot be fulfilled. The question is, which particular model of regulation is best

able to address such issues, even though none can eliminate them entirely? One which relies on the defective decisions of imperfectly motivated and informed political actors and regulators? Or one that relies on the sovereign decisions of economic actors, allowing suppliers to take responsibility for the challenges of a competitive market which incentivises the satisfaction of consumer preferences? Even were it well-intentioned, any attempt to "correct" the market by means of regulation will stifle its capacity to deliver benefits to plan participants, and will be welfare-diminishing.

This brings us back to the third assumption of market failure analysis, the notion that state intervention in the market is or can be costless (Demsetz, 1969). According to one assessment, "every 'something for nothing' scheme and most 'get rich quick' plans have some element of this fallacy in them" (Leonard Read, cited in Anderson, 2009, p. 1). But it can be sustained only by considering regulated pensions in isolation from alternative arrangements for supplying retirement income protection. A comparative institutions analysis, including both free market and regulated arrangements, highlights how and why the latter are welfare-diminishing. Such outcomes can ultimately be traced back to some combination of two policy decision dynamics, one of intentional rent-creation, and a second of public beneficence that is flawed by an incomplete understanding of the market for retirement income protection. As well as resulting in diminished benefits for plan participants, the absence of competition means that conspicuous and persistent economic rents are likely to figure prominently in the systems of the World Bank model (Impávido et al., 2010).

EMPIRICAL ILLUSTRATIONS OF FAILURE

The perverse consequences of state intrusion in the market can be highlighted further by considering empirical research on the comparative investment performance of World Bank systems and those with less intrusive regulatory regimes (Srinivas and Yermo, 1997, 1999; Srinivas et al., 2000; Hyde and Borzutzky, 2016). If the market failure emphasis on insufficient regulation had credibility as an account of private pension failure, we would anticipate consistent empirical evidence of diminished investment returns in the least regulated systems. In reality, previous empirical research on regulatory intrusiveness and the prevalence of failure in DC pensions points towards consistent under-performance in the most regulated, particularly those systems of the World Bank model, where regulation has been framed in accordance with approved public interest ends. This has been highlighted in at least three ways.

One approach has been to evaluate each DC pension arrangement against performance benchmarks in less regulated areas of domestic financial markets. In pursuing this, Srinivas and Yermo (1997) looked at three countries—Chile, Peru and Argentina—comparing the average gross investment returns[20] of each PFM with those that could have been realised by passively investing in a balanced portfolio of equites and bonds.[21] In Chile, the average returns of PFMs were substantially less than the balanced portfolio during two periods: the previous five years (1992 to 1997), demonstrating a discrepancy of 6.2 percent; and the previous ten years (1987 to 1997), with a discrepancy of 7.2 percent. Srinivas and Yermo estimate a loss of 52 percent to plan participants over the ten-year horizon after management charges have

[20] While returns net of management charges are more important to plan participants, gross returns are a better indicator of PFM investment performance (Blake, 2006).

[21] The balanced portfolio was comprised of 60 percent investment in equities, and 40 percent in bonds.,

been deducted. Similarly, the average returns realised by Peru's PFMs were substantially less than balanced portfolio performance during the period 1993 to 1997, with a discrepancy of 6.9 percent. In other words, PFMs could have increased their investment performance substantially had they not been subject to draconian regulation. Argentina's PFMs were able to match balanced portfolio performance during the period 1994 to 1997, though this should be treated with caution.[22] The authors conclude that sub-optimal investment performance in the highly regulated systems of the World Bank model create significant differences between their expected replacement rates, and the replacement rates that "could have been expected under a more liberal investment regime" (Srinivas and Yermo, 1999, p. 2).

A second approach has been to draw on evidence of longitudinal research, focussing on the experiences of individual private pension arrangements, and tracking investment performance as the regulatory environment evolves. In pursing this, Hyde and Borzutzky (2016) focussed on Chile's fully-funded pension arrangement, evaluating the claim that competition among PFMs to achieve the best returns on behalf of plan participants is undermined by market concentration, which they regard as an artefact of regulatory intrusiveness. Looking only at the investment performance of the six largest PFMs, their analysis highlighted evidence of significant association between the intensity of concentration and differentials of performance. During the "expansion phase" (1990-1994), when the number of PFMs grew substantially,[23] monthly returns for the six ranged from -1.8 to 8.6 percent, and negative returns were uncommon (thus a period marked by *more pension fund managers and better returns*). But during the earlier part of the "consolidation phase" (1995-2000), when concentration started to gather pace,[24] investment returns ranged between -6.4 and 6.6 percent, and negative returns were common (a period marked by *growing concentration and diminishing returns*). And, during the latter part of the consolidation phase (2001-2004), when concentration became most pronounced,[25] investment returns ranged from -1.6 to 2.5 percent, and the incidence of negative returns was high (a period marked by *intense concentration and conspicuously low returns*). This suggestion of association between regulatory intrusiveness and underperformance is reinforced by the evidence of more recent longitudinal research on investment performance in Chile. BalbontÃn and Blanch (2016) have highlighted a dramatic fall in average returns on foreign equities[26] in the pension fund management industry between 2010 and 2014, a period in which intense levels of concentration were sustained; for fund A,[27] 22 to 1.5 percent; for fund B, 26.5 to 2.1 percent; for fund C, 24.9 to -1.8 percent; and for fund D, 3.3 to 3 percent. While this approach has generated evidence that is consistent with our thesis, however, it is also limited by a failure to consider a wider range of fully-funded pension arrangements, reducing the scope of generalisations to the sector as a whole.

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[22] Around 25 percent of Argentine pension fund assets were allocated to an "investment account" to avoid marking to market fixed income securities that had lost value following the Mexican peso devaluation in 1994. Investment returns during this period are therefore likely to be overstated.

[23] Encouraged by the Aylwin government's continuing support of the private pension system, including its declaration of intent to liberalise entry to the market, and remarkably high profits in the sector, the number of PFMs operating in the industry peaked at 22 (Hyde and Borzutzky, 2016, pp. 37-38).

[24] In 1996, there were 15 PFMs operating in the market.

[25] By the end of 2004, there were just six PFMs.

[26] Mean annualised returns as a percentage.

[27] This research followed a change in regulation that allowed PFMs to invest their member's assets in four funds ranging from high to low risk.

A third approach has addressed this by comparing DC pension arrangements in different countries. In the same way that performance in one system can fluctuate as the regulatory environment evolves, it can vary across systems with distinctive regulatory regimes. In pursuing the approach of cross-national comparative data analysis, Srinivas, Whitehouse and Yermo (2000) compared average gross returns for the period 1984 to 1996 in two clusters of DC provision—systems subject only to prudential regulation, and systems where portfolio selection is constrained by statutory portfolio limits, but which are otherwise prudentially regulated (see column 3a in Table 1). Echoing the author's analysis, the significant difference between their respective means—9.5 percent for the prudentially-regulated and 6.8 for the portfolio limits cluster—suggested that the imposition of just one layer of draconian regulation can have a substantially negative impact on investment performance. While these findings are consistent with the thesis of association between regulatory intrusiveness and the prevalence of failure, however, the research from which they were derived has nothing to say about the impact of additional layers of draconian regulation, or indeed, the performance of the systems of the World Bank model relative to less-regulated systems. This can be addressed by supplementing it with performance data from cross-national research which, while saying little about the impact of regulatory intrusion, has included a wider range of DC pension arrangements (OECD, 2022). Our particular concerns can be highlighted by comparing the investment performance of two clusters of funded pension provision,[28] the "substantially-regulated", corresponding to the World Bank model, and the "lightly-regulated" (see column 3b in Table 1).[29] Their respective means—4.1 percent for the former, 5.1 percent for the latter—suggest a degree of association between the degree of regulatory intrusiveness and under-performance.

The negative consequences of government intervention in the accumulation process should not be surprising. Even if such regulations were able to satisfy their declared public interest objectives, they negate many of the standard arguments that are advanced in favour of privatisation. By impairing market competition, regulation results in diminished investment performance, and ultimately, a less prosperous retirement.

CONCLUSION

Market failure accounts of sub-optimal investment performance in compulsory DC pensions are flawed by their own failure to take sufficient account of salient elements of its institutional context. The compulsory DC pension arrangements of the World Bank model have been regulated in accordance with approved public interest-regarding ends, and yet failure as sub-optimal investment performance has been conspicuous and persistent.

[28] These systems were selected for comparison in accordance with two criteria. First, that the funded pillar of the retirement system was delivered exclusively, or at least predominantly, by the DC sector, to ensure comparability of performance data. Second, where there was sufficient information to determine the degree of regulatory intrusiveness, unambiguously.

[29] Following the discussion of draconian pension regulation in previous sections, three indicators of regulatory intrusiveness were used to classify each system: a) sole purpose management; b) statutory portfolio limits; and c) minimum performance requirements. Those arrangements with two or more were assigned to the "substantially-regulated" cluster; those with less than two to the "lightly-regulated".

TABLE 1. THE COMPARATIVE INVESTMENT PERFORMANCE OF FUNDED PENSION SYSTEMS

1. Country	2. Degree of regulatory intrusiveness			3. Investment performance	
	Sole purpose management	Statutory portfolio limits	Minimum performance requirements	3a. 84-96[1]	3b. 2020[2]
Lightly-regulated					
Australia					-0.1
Belgium		•		9.0	
Denmark		•		6.0	8.7
Germany		•		7.0	
Iceland		•			8.7
Ireland				11.0	6.0
Italy					3.0
Japan		•		6.5	
Liechtenstein					4.0
Netherlands				8.0	
Sweden		•		8.1	
Switzerland		•		4.0	
United Kingdom				10.0	
United States				9.0	
Mean					5.1
Substantially-regulated					
Bulgaria		•	•		2.3
Chile	•	•	•		2.7
Columbia	•	•			7.2
Costa Rica	•	•			8.1
Croatia	•	•	•		1.6
Dominican R.	•	•			4.0
El Salvador	•	•			4.3
Estonia	•	•			4.8
Kazakhstan	•[3]		•		2.7
Macedonia, N.	•	•	•		1.6
Mexico	•	•			9.3
Peru	•	•			6.5
Slovak R.	•	•	•		1.1
Uruguay	•	•			0.5
Mean					4.1
Sample mean				7.9	4.4

[1] Annual average real investment rate of return (Srinivas et al., 2000, pp. 38-40).

[2] Average real investment rate of return weighted by assets under management (OECD, 2022, pp. 28-30).

[3] In 2011, 11 pension fund managers were merged into a single state-sponsored pension fund manager.

Drawing on insights from classical liberal political economy, an alternative account of private pension failure would emphasise the perverse consequences of regulation. It would argue that regulation failure can ultimately be traced back to some combination of two policy decision dynamics. Defective regulation can arise where political actors are concerned primarily with the pursuit of their own interests, and those of their preferred constituents, who may exercise a disproportionate influence in the policy decision process. But it might also result from imperfections of knowledge and understanding which impact on their ability to determine and respond adequately to perceived policy problems. While the substance of these dynamics may vary according to the particular configuration of economic and political circumstances, their consequences are remarkably similar. By stifling competition, regulation diminishes the capacity of private pension markets to serve pension plan participants by delivering improved investment performance. The imposition of barriers to market entry, and measures to standardise investment decision making, ensure that there is little meaningful choice among PFMs, at least not with regard to the conduct and performance of portfolio selection. This means that, far from being a prevalent feature of laissez faire, economic rents are conspicuous and persistent in the systems of the World Bank model. In view of this, we believe that plan participants would be better served by a free market in retirement income protection, which means, of course, measures to de-regulate the pension fund management industry.

REFERENCES

Anderson, William L. 2009. “Fallacy of the Free Lunch.” Foundation for Economic Education Commentary, February 10, Atlanta, Ga., https://fee.org/resources/fallacy-of-the-free-lunch/.

Arza, Camila, and Martin Kohli. 2008. *Pension Reform in Europe: Politics, Policies and Outcomes*. London, U.K.: Routledge.

Baker, Dean, and Archon Fung. 2001. “Collateral damage: Do pension fund investments hurt workers?.” In *Working Capital: The Power of Labor’s Pensions*, edited by Archon Fung, Tessa Hebb and Joel Rogers, 13-43. Ithaca, N.Y.: Cornell University Press.

BalbontÃn, Renato. and Rodrigo Blanch. 2016. “Performance of Chilean Pension Funds’ Investments Abroad 2010-2014.” *The International Journal of Business and Finance Research* 10, no 1: 53-67. https://econpapers.repec.org/article/ibfijbfre/v_3a10_3ay_3a2016_3ai_3a1_3ap_3a53-67.htm.

Barr, Nicholas, and Peter Diamond. 2008. *Reforming Pensions: Principles and Policy Choices*. Oxford, U.K.: Oxford University Press.

Baumol, William J. 1982. “Contestable Markets: An Uprising in the Theory of Industry Structure.” *American Economic Review* 72, no. 1, 1-15. https://www.jstor.org/stable/1831204.

Berggren, Niclas. 2012. “Time for behavioural political economy? An analysis of articles in behavioural economics.” *The Review of Austrian Economics* 25, no. 3: 199-221. https://doi.org/10.1007/s11138-011-0159-z.

Blackburn, Robin. 2001. *Banking on Death or Investing in Life. The History and Future of Pensions*. London, U.K.: Verso.

Blake, David. 2006. *Pension Finance*. Chichester, U.K.: John Wiley & Sons.

Booth, Philip. 2006. “The Impossibility of Progress—A Public Choice Analysis of State Pension Provision.” In *Pension Provision: Government Failure Around the World*, edited Philip Booth, Oskari Juurikkala, and Nick Silver, 95-125. London, U.K.: Institute of Economic Affairs.

Borzutzky, Sylvia. 2002. *Vital Connections: Politics, Social Security, and Inequality in Chile*. Notre Dame, Ind.: University of Notre Dame Press.

Bresiger, Gregory. 2002. *The Revolution of 1935: The Secret History of Social Security*. Auburn, Ala.: Ludwig Von Mises Institute.

Brock, William A. 1983. “Contestable Markets and the Theory of Industry Structure: A Review Article.” *Journal of Political Economy* 91, no. 6, 1055-1066. https://doi.org/10.1086/261200.

Buchanan, James M. and Gordon Tullock. 1965. *The Calculus of Consent: Logical Foundations of Constitutional Democracy*. Michigan, Ill.: The University of Michigan Press.

Caplan, Bryan. 2007. *The Myth of the Rational Voter: Why Democracies Choose Bad Policies*. Princeton, N.J.: Princeton University Press.

Carson, Kevin A. 2007. *Studies in Mutualist Political Economy*. New York, N.Y.: Booksurge.

Colombatto, Enrico. 1996. “A Rent-Seeking View of the Ageing Problem in Developed Countries.” *Journal of Public Finance and Public Choice* 14, no. 2: 91-112. https://doi.org/10.1332/251569298X15668907540309.

Demsetz, Harold. 1969. “Information and Efficiency: Another Viewpoint.” *The Journal of Law & Economics* 12, no. 1: 1-22. https://doi.org/10.1086/466657.

Dilorenzo, Thomas .J., and Walter E. Block. 2017. *An Austro-Libertarian Critique of Public Choice*. Auburn, Ala.: Ludwig Von Mises Institute.

Esping-Andersen, Gøsta. 1990. *The Three Worlds of Welfare Capitalism*. Cambridge, U.K.: Polity Press.

Grossman, Sanford J. and Joseph E. Stiglitz. 1980. "On the Impossibility of Informationally Efficient Markets." *American Economic Review* 70, no. 3: 393-408. https://www.aeaweb.org/aer/top20/70.3.393-408.pdf.

Gunning, Patrick. 2006. *Understanding Democracy: An Introduction to Public Choice*. Taipei, Taiwan: Nomad Press.

Hayek, Friedrich A. 1945. "The Use of Knowledge in Society." *American Economic Review* XXXV, no. 4: 519-530. https://www.jstor.org/stable/1809376.

Hayek, Friedrich A. 1984. *Money, Capital and Fluctuations: Early Essays*. Chicago, Ill.: The University of Chicago Press.

Hillman, Arye L. and Heinrich W. Ursprung. 2016. "Where are the rent-seekers?." *Constitutional Political Economy* 27, no. 2: 124-141. https://doi.org/10.1007/s10602-016-9211-0.

Holcombe, Randall G. 2009. "Product Differentiation and Economic Progress." *The Quarterly Journal of Austrian Economics*, 12, 1, pp. 17-35. https://cdn.mises.org/qjae12_1_2.pdf.

Holcombe, Randall G. 2020. *Advanced Introduction to the Austrian School of Economics*. Cheltenham, U.K.: Edward Elgar.

Holcombe, Randall G. 2022. "Rethinking Regulatory Capture." *The Journal of Private Enterprise* 37, no 1: 33-45. https://doi.org/10.1007/s10602-016-9211-0.

Hyde, Mark, and John Dixon. 2009. "Individual and Collective Responsibility: Mandated Private Pensions in Comparative Perspective." *Journal of Comparative Social Welfare* 25, no. 2: 119-128. https://doi.org/10.1080/17486830902789749.

Hyde, Mark, and Sylvia Borzutzky. 2016. *Rent-Seeking in Private Pensions: Concentration, Pricing and Performance*. London, U.K.: Palgrave Macmillan.

Hyde, Mark, John Dixon, and Glenn Drover 2004. "Western European Pensions Privatisation: A Response to Jay Gin." *Social Policy and Society* 3, no. 2: 135-142. https://doi.org/10.1017/S1474746403001593.

Hyde, Mark, John Dixon, and Glenn Drover. 2003. "Welfare Retrenchment or Collective Responsibility? The Privatisation of Public Pensions in Western Europe." *Social Policy and Society* 2, no. 3: 189-197. https://doi.org/10.1017/S1474746403001234.

Ikeda, Sanford. 1997. *Dynamics of the Mixed Economy: Toward a Theory of Interventionism*. London, U.K.: Routledge.

Impávido, Gregorio, Esperanza Lasagabaster, and Manuel García-Huitron. 2010. *New Policies for Mandatory Defined Contribution Pensions: Industrial Organisation Models and Investment Products*. Washington, D.C.: The World Bank.

Kahneman, D. 2011. *Thinking, Fast and Slow*. London, U.K.: Allen Lane.

Kirzner, Israel M. 1973. *Competition & Entrepreneurship*. Chicago, Ill.: The University of Chicago Press.

Kirzner, Israel M. 1985. *Discovery and the Capitalist Process*. Chicago, Ill.: The University of Chicago Press.

Lanza, Joao. 2021. "The Myth of Natural Monopoly: The Case of Railroads." *The Quarterly Journal of Austrian Economics* 24, no. 4: 566-590. https://doi.org/10.35297/qjae.010115.

Lucas, Gary M., and Slavisa Tasic. 2015. “Behavioral Public Choice and the Law.” *West Virginia Law Review* 118, no. 1: 199-264. https://researchrepository.wvu.edu/wvlr/vol118/iss1/12.

Mayer, Thomas. 2018. *Austrian Economics, Money and Finance*. London, U.K.: Routledge.

McChesney, Fred .S. 1997. *Money for Nothing: Rent Extraction and Political Extortion*. Cambridge, Mass.: Harvard University Press.

Minns, Richard. 2001. *The Cold War In Welfare: Stock Markets versus Pensions*. London, U.K.: Verso.

Mises, Ludwig von. 1966. *Human Action: A Treatise on Economics*. New York, N.Y.: Oxford University Press. Original published in 1949.

Mitchell, Olivia S., and Stephen P. Utkus. 2004. *Pension Design and Structure: New Lessons From Behavioural Finance*. Oxford, U.K.: Oxford University Press.

Morris, Nicholas. 2018. *Management and Regulation of Pension Schemes*. London, U.K.: Routledge.

OECD. 2022. *Pension Markets in Focus*. Paris, France.: Organization for Economic Cooperation and Development.

Ortiz, Isabel, Fabio Duran-Valverde, Stefan Urban, Veronika Wodsak and Zhiming Yu. 2018. *Reversing Pension Privatization: Rebuilding Public Pension Systems in Eastern European and Latin American Countries (2000-18)*. Geneva, Switzerland.: International Labour Office.

Peltzman, Sam. 2021. “Stigler’s Theory of Regulation After Fifty Years.” University of Chicago Coase-Sandor Institute for Law & Economics Research Paper No. 925, Chicago, Ill., August. https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3785342.

Pennington, Mark. 2011. *Robust Political Economy: Classical Liberalism and the Future of Public Policy*. Cheltenham, U.K.: Edward Elgar.

Piñera, José. 2001. “Liberating Workers: The World Pension Revolution.” Cato Letter No 15, Washington, D.C., https://www.cato.org/sites/cato.org/files/pubs/pdf/cl-15.pdf.

Rizzo, Mario J. and Glen Whitman. 2020. *Escaping Paternalism: Rationality, Behavioural Economics, and Public Policy*. New York, N.Y.: Cambridge University Press.

Rodriguez, Jacobo L. 1999. “Chile’s Private Pension System at 18: Its Current State and Future Challenges.” Cato Institute Social Security Privatization no. 17, Washington, D.C., https://www.cato.org/sites/cato.org/files/pubs/pdf/ssp17.pdf.

Rothbard, Murray N. 2017. *The Progressive Era*. Auburn, Ala.: Ludwig Von Mises Institute.

Shapiro, Daniel. 2007. *Is the Welfare State Justified?*. New York, N.Y.: Cambridge University Press.

Shefrin, Hersh. 2000. *Beyond Greed and Fear: Understanding Behavioral Finance and the Psychology of Investing*. Boston, Mass.: Harvard Business School Press.

Sowell, Thomas. 1980. *Knowledge and Decisions*. New York, N.Y.: Basic Books.

Srinivas, Pulle S. and Juan Yermo. 1997. “Do Investment Regulations Compromise Pension Fund Performance? Evidence from Latin America.” *Revista de Analísis Económico* 14, no. 1: 67-120. https://www.rae-ear.org/index.php/rae/article/view/106.

Srinivas, Pulle S. and Juan Yermo. 1999. *Do Investment Regulations Compromise Pension Fund Performance?*. Washington, D.C.: The World Bank.

Srinivas, Pulle S., Edward Whitehouse, and Juan Yermo. 2000. “Regulating Private Pension Funds’ Structure, Performance and Investments: Cross-country Evidence.” World Bank Social Protection Discussion Paper Series 0113, Washington, D.C., July.

https://documents1.worldbank.org/curated/en/858431468766246453/text/multi0page.txt.

Stigler, George J. 1961. "The Economics of Information." *The Journal of Political Economy* LXIV, no. 3, 213-235. https://cdn.mises.org/qjae12_1_2.pdf.

Stigler, George J. 1971. "The Theory of Economic Regulation." *The Bell Journal of Economics and Management Science* 2, no. 1: 3-21. https://doi.org/10.2307/3003160.

Stringham, Peter E. 2015. *Private Governance: Creating Order in Economic and Social Life*. Oxford, U.K.: Oxford University Press.

Thaler, Richard H., and Cass R. Sunstein. 2009. *Nudge: Improving decisions about health, wealth and happiness*. London, U.K.: Penguin Books.

Thompson, Lawrence. 1998. *Older & Wiser: The Economics of Public Pensions*. Washington, D.C.: The Urban Institute Press.

Torre, Augusto de la, and Heinz P. Rudolph. 2018. "The Troubled State of Pension Systems in Latin America." Global Economy & Development Working Paper 112, Washington, D.C., March. https://www.brookings.edu/wp-content/uploads/2018/03/torre_rudolph_working_paper_pension_systems_latin_america1.pdf.

World Bank. 1994. *Averting the Old Age Crisis: Policies to Protect the Old and Promote Growth*. Washington, D.C.: The World Bank.