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# How to Guard Against the Risk of Living Too Long: the Case for Collective Pensions

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**Abstract:** This chapter provides a defense of a type of occupational pension, known as "collective defined contribution" (CDC), which is based on the idea that it is possible to limit the employer's liability to nothing more than a set contribution (a "defined contribution") while retaining many of the benefits of the collectivization (pooling) of risks of a traditional defined benefit (DB) pension. CDC can be defended against a freedom-based objection from the right via an appeal to the following Hobbesian voluntarist justification: CDC constitutes a "Leviathan of Leviathans" into which it is rational for workers to choose to associate in order to tame longevity and investment risks. CDC pensions that arise from and mirror existing income inequalities can also be defended against an egalitarian objection from the left, by demonstration that they can be grounded in Rawlsian principles of reciprocity and property-owning democracy.

I shall defend the realization here and now of a type of occupational pension that is collective rather than individualistic in nature, as it involves the pooling, both pre- and post-retirement, of the individual defined contribution (IDC) pension pots that characterize retirement plans in the US and the UK.* This type of pension, known as "collective defined contribution" (CDC), is based on a simple idea: namely, that it is possible to limit the employer's liability to nothing more than a set contribution (a "defined contribution") while retaining many of the benefits of the collectivization (pooling) of risks of a traditional defined benefit (DB) pension, which are absent in an IDC. Such a collective pension can be defended against a freedom-based objection from the right via an appeal to the following Hobbesian voluntarist justification: CDC constitutes a "Leviathan of Leviathans" into which it is rational for workers to choose to associate in order to tame longevity and investment risks. CDC pensions that arise from and mirror existing income inequalities can also be defended against an egalitarian objection from the left, by demonstration that they can be grounded in Rawlsian principles of reciprocity and property-owning democracy.

## 1. The Risks of Individual Defined Contribution Pension Pots

The familiar and increasingly common individual defined contribution (IDC) retirement savings plan works roughly as follows.[1] A worker, and typically also one's employer, make

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[1] In the US, the most common of these is known as a "401(k)," named after a subsection of the Internal Revenue Code that provides tax relief for such plans.

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monthly contributions into one's "pension pot" during one's working years. The worker decides how to invest that pot. When one retires, one is able to transform these investments into retirement income by exchanging one's pot for an annuity, which provides a specified guaranteed income until death. Alternatively, one can provide oneself with income in retirement by drawing down one's funds, via withdrawals from a continually invested pot until it is depleted.

An IDC gives rise to significant exposure to investment risk. One must choose among multiple opportunities for investment (which therefore carry opportunity costs), ranging from bonds with relatively low variance and low expected monetary value to stocks and other equity with higher variance and higher expected monetary value. Seemingly safe low-variance options typically carry the risk of erosion by inflation, against which it is costly to purchase protection. In order to protect against investment risk, workers are often advised to engage in "life cycle" (aka "lifestyle") de-risking of their pension pots by shifting from equity such as stocks to less volatile assets such as bonds as one nears retirement. The rationale that is offered is that one should protect against a great fall in the value of one's assets, from which it will be difficult to recover, close to the point at which one will need to transform these assets into retirement income.[2] One is advised to do so even though this involves a shift into investments with lower expected monetary value. Historically, however, such de-risking would have been a typically costly and ineffective form of protection against downturns in the stock market for US and UK workers. In the vast majority of years from 1948 to 2007, even those preceded by fairly sharp downturns in the stock market, this sort of de-risking would have made such workers poorer in retirement than a high wire strategy of remaining invested purely in equity throughout one's career. Alternative strategies of investing purely in bonds, or else 50% in equity and 50% in bonds, throughout one's career, fare even worse at the median for US and UK workers than life-cycle de-risking. All of these investment strategies involve a flattening of the market volatility of equity only at the cost of a substantial amount of levelling down into lower-return assets.[3]

An IDC pension pot also exposes an individual to longevity risk. If one knew exactly how long one would live in retirement, one could budget to cover precisely that number of years. But one typically doesn't know the date of one's death. So, with IDC, one must either take out insurance against living a long time, via the purchase of the guaranteed income of an annuity, or else draw down one's pot in retirement. An annuity carries significant upfront costs, which vary unpredictably depending on the moment at which one purchases it.[4] With income drawdown, one runs the risk of one's money running out before one dies. Drawdown is deemed one of the more difficult options for an individual to navigate, since, not only does one not know how long one will live, but one doesn't know how much the investments in one's pot will grow or shrink during retirement.[5]

[2] This rationale is more applicable to those who plan to convert their entire pension pot into an annuity at retirement than to those who plan to remain continually invested in retirement for income drawdown.
[3] See Cannon and Tonks (2013). They also found that the median lifestyle or life-cycle de-risked pension pot across sixteen different OECD countries would have been only 73.4% as large at retirement as the median pot that had been invested in equities throughout.
[4] On the volatility of annuity rates, see Merton (2014).
[5] See Brown and McInnes (2014, 18).

## 2. The Leviathan as the Solution to Longevity and Investment Risks

By joining together as a collective in the manner famously depicted on the frontispiece of Hobbes's *Leviathan*, it is possible to tame the longevity and investment risks we face as individuals each with our own private IDC pot.

First let us consider longevity risk. By the law of large numbers, each generation (cohort) of the same age that retires at the same time has a predictable, "statistically stable" (low variance) post-retirement average longevity which is typically somewhat higher than 20 years. This knowledge facilitates precise budgeting. Our prediction of the average longevity of the cohort might end up missing the mark, but not by much. We can contrast this with the much wider range of live possibilities for which we need to plan and budget in the case of any given individual, who might live anywhere from one to forty years beyond retirement. Though each individual's longevity varies unpredictably, we can solve this problem by risk pooling into a large collective whose average longevity is predictable within a small margin of error. This involves mutual covenants to transfer contributions from those with below average longevity to those with above average longevity. We draw down our collectivized pension pot on these terms to ensure that nobody's payments run out before he dies. Each member of the collective is treated as an individual. There is no involuntary sacrifice of anyone's expected interests for the sake of the greater good.

Investment risk remains. This risk is tamed by our Leviathan entering into covenants with younger Leviathans (cohorts). The different cohorts are bound together into a multigenerational corporate body. The cohorts whose invested contributions exceed the expected growth rate agree to transfer to cohorts whose investments fall short, thereby smoothing over investment risk and allowing constant investment in high yield, high risk assets.

A collective pension can therefore be justified as a "Leviathan of Leviathans." Each first-order Leviathan is created by a set of covenants that unites the members of a cohort who will retire at the same time. Such covenants are to the mutual benefit of each, as they pool and tame the longevity risk that each faces as an individual. The different cohorts in turn will find it rational to enter into covenants with one another in order to pool and smooth over the investment risk that remains.

In comparison with such a collective pension scheme, an IDC is a pension scheme consisting of a single member. Within at most a few decades, his working life and his life itself will come to an end. This is for the simple reason that the "days of our years *are* threescore years and ten; and if by reason of strength *they be* fourscore years, yet *is* their strength labour and sorrow; for it is soon cut off, and we fly away" (Psalms 90:10). When he retires, an individual's one-person pension fund will stop receiving further contributions into it. If he would like a guaranteed pension income for life, he will need to arrange for the assets of his pension scheme to be "bought out" by an insurance company that provides an annuity in exchange. As noted above, such an individual will feel pressure to de-risk his pension fund from stocks to bonds, in order to provide protection against the risk of a great fall in the value of his assets just before the point of exchange for an annuity.

Things are very different in the case of a collective pension scheme, especially a large multi-employer one that pools the pensions contributions of workers across an entire sector and keeps these assets pooled during the retirements as well as the working lives of each individual. The multigenerational corporate body that arises via a collective pension scheme is "an ongoing entity with a long-time horizon," which can, given realistic assumptions,

remain continually invested in higher risk, higher expected yield assets, in order to provide each of the individuals that constitute this collective a better pension than she could hope to generate through her own personal IDC pension pot: "In a pooled-asset ... plan, ... while the individual worker ages one year per year, the collective group of workers does not age as rapidly as any individual, so that the portfolio can remain invested longer in higher return assets such as equities, infrastructure and private equity." (Brown and McInnes 2014, 23, 17)[6]

Before drawing this section to a close, I would like to propose that we rename this "Leviathan of Leviathans" a "social union of social unions." This more collegial and less forbidding latter phrase from Rawls (1971, §79) is also more accurate than the Hobbesian notion, since we don't need an authoritarian sovereign to secure the collective benefit. We have Rawlsian cooperation rather than mere coordination.[7] Although here he is discussing the complementary nature of different people's realized talents rather than their longevity and investment risk pooling, the following passage from Rawls nevertheless serves as a fairly accurate description of the nature of the intra- and inter-generational unions that constitute a collective pension:

> [I]t is through social union founded upon the needs and potentialities of its members that each person can participate in the total sum of the realized natural assets of the others. ...This community may also be imagined to extend over time, and therefore in the history of a society the joint contributions of successive generations can be similarly conceived. (1971, 523)

In other words that modify Burke's famous description of "society" as "a contract," a collective pension constitutes "a partnership not only between those who are living [working], but between those who are living [working], those who are dead [retired], and those who are to be born [employed]." (Burke 1835, 498)

### 3. From Defined Benefit (DB) to Collective Defined Contribution (CDC)

Traditional defined benefit (DB) pensions are collective in nature. They deliver their benefits via the investment and longevity risk pooling described in the previous section. On account of such risk pooling, they are more efficient than IDC pots at generating pensions income.[8]

In spite of this advantage, DB pensions are an endangered species. They are derided as obsolete, collectivist relics. Public sector and state DB pensions that are "pay as you go" rather than funded are regularly branded Ponzi schemes. Especially in the US and the UK, there has also been a seemingly inexorable decline in funded DB pensions in the private

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[6] The regulation and management of collective occupational schemes in the UK in recent years has involved a failure to recognize the ongoing, corporate, multi-generational existence of multi-employer pension schemes such as the Universities Superannuation Scheme (USS). Funding requirements and practices in the UK are based on the premise that one must have enough assets on hand so that one can wind up one's pension scheme in the relatively near future.

[7] Rawls writes: "Cooperation is distinct from merely socially coordinated activity, for example, from activity coordinated by orders issued by some central authority. Cooperation is guided by publicly recognized rules and procedures that those cooperating accept and regard as properly regulating their conduct." (1993, 16)

[8] It has been estimated that these two factors provide DB with at least a 20% advantage over IDC. See Brown and McInnes (2014, 23-24).

sector. Private sector employers are abandoning DB mainly on account of the risks to them of having to make up for shortfalls in the funding requirements that are imposed by government regulations and the high and volatile liabilities such pensions place on a firm's balance sheets under current international accounting standards.

I shall not argue here for the revival of occupational DB pension schemes in the private sector. Rather, I shall draw attention to and defend a type of pension known as collective defined contribution (CDC). Because, like DB, it is a form of collective pension provision, CDC shares many of the benefits of DB over IDC. CDC is, however, a more viable form of collective pension than DB under current circumstances, since it addresses the aforementioned employers' objections to the latter. CDC would not add any debt to employer balance sheets, since the benefits to workers do not constitute a promise. Rather than making any promises that the employer might have to make good on through an increase in their contribution rates, CDC relies on targets. If the targets turn out over time to have been too optimistic, workers make good the shortfalls via a reduction in their future or current pensions income, which might later be restored if the financial situation improves. CDC should also be attractive to employers because it would make it possible for them to provide better pensions in comparison with IDC without contributing a penny more in contributions.

Strictly speaking, CDC is a type of DC pension. Like the more familiar IDC version of DC, and unlike DB, risks are placed on workers rather than employers. But, with CDC, risks are borne by workers collectively rather than individually, in a manner reminiscent of the insurance schemes of friendly and mutual societies tracing back to the 18th century.[9] Longevity risk is pooled and investment risk is smoothed via the methods of a collective pension described in my earlier discussion of the "Leviathan." Under CDC, workers who happen to retire when the stock market is at a peak typically end up doing less well than they would have done under IDC. But workers who retire when the stock market is lower end up doing better. As I shall explain below, the collective investment of pensions contributions post-retirement as well as pre-retirement provides further advantages, the upshot of which is that the median return is higher under CDC than under IDC.[10]

Versions of CDC have been extensively pioneered in the Netherlands and Denmark in recent years.[11] Those in the Netherlands are constructed to deliver pensions that approximate the DB pensions they have replaced. Pension income is typically set as a percentage of career average salary multiplied by the number of years worked. This percentage might be determined as that which could be delivered given the best estimate of the average rate of return on pension fund investments. Unlike a DB pension, this formula for pension income constitutes a target rather than a promise. One's pension might

[9] See Heath (2006, 333-34).

[10] Although risks to workers are mitigated in comparison with IDC because pooled, CDC does not protect workers as fully against longevity and investment risks as DB does, given that the latter entirely shifts most of these risks onto employers.

[11] "[I]n the case of both Denmark and the Netherlands, CDC arrangements are an integral part of pension systems that are recognised world-wide as being high quality. According to the 2012 Melbourne Mercer Global Pension Index, the Danish pension system was ranked number 1 on a list of 18 countries that fully reflect the significant range of different pension systems around the world. The Netherlands was ranked second on this list, which takes into account the adequacy, sustainability and integrity of a pension system." (UK Department of Works and Pensions, 2013, 47.)

be reduced in the light of lower than predicted investment returns and other uncertainties.[12]

There are also versions of CDC that retain many aspects of a DC pension. It would not be difficult to transform IDC pensions into such CDC pensions, thereby providing a pathway to CDC in those countries in which IDC dominates. A simple and elegant form of CDC called "SAFE" mimics individual DC pension pots with notional pots. One's notional pot consists of the actual value of one's employer and employee contributions, plus the investment growth of an actual fund into which all employer and employee contributions are collectively invested.[13] This collective fund remains constantly invested mainly in return seeking assets such as equity. To guard against investment risk, the growth of one's notional pot is smoothed by a "collar": all investment growth over 8% goes, not into one's pot, but rather into a reserve fund that is used to support a 0% floor, so that one's pot remains unchanged in cash terms in years in which the fund's performance is negative. If, as is predicted will happen over time, the money in the reserve fund exceeds the money needed to support the floor, then people are paid bonuses into their notional pots. Upon retirement, these pots are converted into targeted pensions via a commutation factor of 20: $20 from one's pot for every $1 of annual pension income. This commutation factor remains relatively constant over time, even as the market price of annuities goes up and down. This is a further respect, beyond the collar, in which there is smoothing in order to pool investment risk among workers.[14]

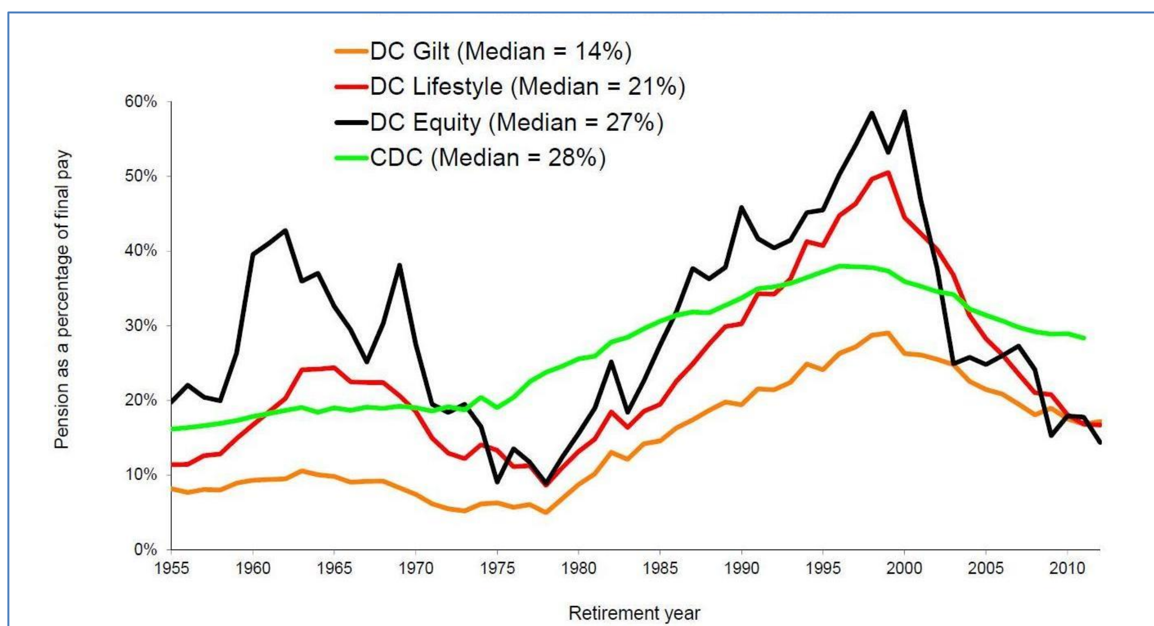


Figure 1: Historic CDC versus IDC performance (Source: Wesbroom et al., 2013, 40)

The pooling of risks via CDC renders pension income in retirement both less unpredictable and higher at the median, relative to IDC. The above graph captures Aon Hewitt's modelling of the pension that would have been generated at retirement via CDC

[12] See Bovenberg et al. (2016).

[13] Insofar as these notional pots are convertible into actual pots for those who leave the scheme, portability to other schemes would be a straightforward matter.

[14] See Davis and Madland (2013, 14-17) for further details regarding the mechanics of SAFE.

(green line) as compared with various IDC pots. On their modelling, IDC "lifestyle" de-risking (red line) provides a superior pension, in comparison with 100% IDC investment in equity (black line), in only a small minority of the years modelled; moreover, it does so at the cost of a significant lowering of the median performance. By contrast, CDC provides a superior pension to IDC equity across a greater number of years. Furthermore, the median performance of CDC is slightly higher than that of IDC equity. CDC efficiently fills in the valleys of a high-risk, high-return investment in equity via transfers of benefits from the peaks. By comparison, both IDC alternatives to equity – low-risk UK government bonds in the form of "gilt" (gold line) as well as "lifestyle" de-risking – inefficiently reduce high variance by levelling pensions down below the valleys as well as the peaks of equity throughout most of the modelled time period.[15]

It is significant that, under CDC, unlike IDC, and like DB, one's pensions contributions remain collectively invested in the pension fund during one's retirement as well as one's working career. Such collective investment eliminates the pressure that individuals with IDC pots face to de-risk from stocks to bonds as they near retirement and the cost of purchasing an annuity to secure a reliable lifetime pension from retirement until death.[16] As Wesbroom et al. explain, this contrast provides a primary reason for the superior performance of CDC over IDC in providing pension income:

> The fact that pensions are paid from the plan rather than being purchased by way of annuities in the open market means that greater amounts can be held in return seeking assets, thereby leading to superior expected outcomes. Annuities backed by bonds represent poor investment decisions, if expected pension lifetimes are 25 or 30 years or even more. In addition, avoiding an annuity purchase means that the profit margin and cost of capital for an insurer are avoided, and more of the assets are applied to improving members' benefits. (2013, 5)

## 4. The Hobbesian Voluntarist Case for the Freedom to Be Bound by a CDC

In a document entitled "Freedom and Choice in Pensions," the recent Chancellor of the UK Exchequer voices the following appeal to "pension freedoms" that resonates with many on the right:

> This government believes in the principle of freedom. Individuals who have worked hard and saved responsibly throughout their adult life should be trusted to make their own decisions with their pension savings.... [Therefore], individuals from the age of 55 with a defined contribution pension will be able to access their entire pension flexibly if they wish. Annuities will remain the right product for some, but I

[15] See Wesbroom et al. (2013, 40). The UK Department of Works and Pensions (DWP) commissioned the Pensions Policy Institute (PPI) "to seek to independently replicate the approach taken by Aon." The PPI's modelling yielded "a similar [income] replacement rate [in retirement] to Aon Hewitt when similar assumptions are used." The PPI found, however, that "CDC outperforms DC to a lesser extent compared to Aon Hewitt's reported results." For example, "If we compare our CDC result against Aon's reported median DC lifestyle outcome (20%), CDC produces results approximately 48% higher than DC. Aon found this result to be 66%." See Popat et al. (2015, slides 9, 50-51).

[16] Recall the explanation for this in Section 2 above.

> believe that people should be free to make their own choice about how to use their savings. ...I want as many people as possible to be able to access their pension flexibly. (Osborne 2014, 3)

Is there a good case, based on the values of freedom and flexibility of choice, for employers to provide their employees with options beyond enrolment in a CDC (or otherwise collective) pension scheme? In particular, should they provide workers with the options to invest in an IDC instead of, or as well as, a CDC pension pot, along with all of the former Chancellor's pension freedoms to convert or cash in one's pension pot? The answer is "no" if these options encompass an inalienable and unconditional liberty to withdraw from the CDC collective by, for example, cashing in and withdrawing the monetary value of one's notional pension pot at point of retirement. Such an inalienable right is really a *restriction* on the freedom of workers to bind themselves on terms of their own choosing that will make them better off collectively. It is, in fact, contrary to the free market values that champions of pension freedoms profess, as it prevent workers from making primarily self-regarding choices more effectively. CDC pensions are not collectivist rather than individualistic. They're both: a mutual society into which each individual voluntarily associates and thereby binds himself.

There are at least two reasons why the gains of CDC risk pooling would be threatened by what economists call "adverse selection" if people were allowed to withdraw their pension pots from the collective fund at retirement.[17] First, the effectiveness of CDC in pooling longevity risk would be undermined. By the time they retire, people will have a better idea of their life expectancy than they did when they entered the pension scheme as young adults, since they will know how healthy they have managed to remain over the past several decades of their working life. Those who know at that point that they are likely to live longer than average will have more of an incentive to receive a CDC pension than those who know that they are likely to live shorter on average, the latter of whom will have more reason to draw down their pension pot individually, if they are able to do so. The long-lived might not, however, have enough to generate sufficient pension income if they pool only among themselves. A second reason why an inalienable right to withdraw and cash in one's DC pot at retirement would undermine a CDC scheme is that it would render it less effective in pooling investment risk. People who reach the age at which they would like to retire when the stock market is high or when annuities on the insurance market are a good deal will have an incentive to withdraw their pension pots from the CDC scheme at that point. That will make it more difficult to smooth investment risk between lucky and unlucky cohorts.

Without undermining risk pooling, employers could provide workers with pension freedoms on the following terms. They could provide each with the choice of entering into the CDC risk pooling option when and only when they *join* the pension scheme, typically at the outset of their career in the case of a sector-wide multi-employer occupational scheme. Having signed up, they would need to remain collectively invested from that point onward, or else pay a heavy penalty for withdrawing.[18] At the outset, but *only* at the outset, they

[17] A classic text on adverse selection is Arrow (1963).

[18] Members could, however, be provided with the option of moving from one to another collective fund, within the CDC pension scheme, where these different collective funds would involve different ethical

would also have the choice to invest in traditional IDC, which provides them with complete freedom to cash in, or draw down, etc., when they retire. All this would be consistent with pension freedoms, assuming, as one should, that freedom encompasses the right to bind oneself. In the case of Ulysses, such binding was necessary to protect himself against the indulgence of his imprudent impulses. Here, the binding would not be for the purpose of protecting individuals against such weakness of will. Rather, its point would be to prevent rational defections from a pension scheme that would destroy the cooperative benefit of risk pooling for the reasons sketched in the preceding paragraph.[19]

For the following reason, provision of such a limited choice to opt out of CDC and go it alone would not threaten the viability of the collective scheme. At typical point of entry at the beginning of one's career in a given occupation, each will be choosing under a fairly thick natural veil of ignorance regarding his or her own prospects for a long life and for a retirement when the stock market is bullish rather than bearish. Although people's known longevity risks differ at point of retirement, at this much earlier point each person's known longevity as well as investment risks will be roughly the same as any other person's of a comparable age. This will be generally true so long as we restrict ourselves to the sort of pension scheme that is occupation-specific, the upshot of which is that the physical demands of work and the socio-economic circumstances of the different members of the scheme will not vary significantly. In large part because of the fact that known longevity and investment risks are both significant and roughly equal at early point of entry into the scheme, most will have compelling reasons of self-interest to damp down these risks, via their collective pooling into the CDC scheme at this point, rather than going it alone via IDC. Risk pooling can be effective even if we partition people into different occupational sectors whose members have different known life expectancies and average retirement ages, so long as there remains a sufficient number of individuals within each sector to benefit from the law of large numbers.[20] Those who have lower retirement ages and life expectancies because their jobs are physically demanding or less well paid would not want to collectively annuitize, in undifferentiated fashion, with others who are longer lived and able to retire later. But in an occupation-specific pension scheme, they would be able to reap the advantages of pooling just among themselves.[21]

Recall that entry into an occupation will be the only point at which a person will be able to choose to join with others in pooling risks. If a person instead opts, at point of entry, to go it alone via investment in his own IDC pot, he will not have any future opportunity to collectivize his risks in this scheme. Most will therefore find it rational to enter into CDC at the outset, even though the cost of exit is high. This will be in their ex ante rational self-interest. Hence, there will be a sufficient number of people enrolled in the CDC scheme to facilitate effective risk pooling and to sustain it over time.

It will be useful to draw some parallels here with health insurance.

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investment values. I mention the possibility of ethical investment in Section 6 below on Property-Owning Democracy.

[19] This is not, however, a classic many-person prisoners' dilemma, since it would not be rational for every single person to defect.

[20] See Heath (2014b).

[21] Even if we limit ourselves to occupation-specific schemes, the natural veil will not be complete, as one will be able to infer statistical differences in longevity on the basis of gender and race. But partitioned risk pooling would be problematic if it involved segregation by gender or race.

The requirement that one can enter CDC only at the outset, conjoined with a high exit penalty, is in order to prevent behavior along the lines of refraining from purchasing medical insurance while one is young and healthy and purchasing it only when one is older and in less good health. The Obamacare mandate to purchase insurance when young and healthy is justified as a means of making possible a ban on excluding, or charging higher premiums to, those with pre-existing medical conditions. If there were not something along the lines of such a mandate, such a ban would give rise to a serious problem of adverse selection, whereby people purchase insurance only after they discover that they have an illness or disability that requires expensive medical care. Were that to happen, risks would not be spread sufficiently thinly across a large enough pool, and premiums would skyrocket, thereby defeating the purpose of purchasing insurance.

Unlike the Obamacare insurance mandate, workers are not required to enroll in CDC on my proposal. They have the alternative of IDC from the outset. Obamacare could be transformed in this direction, so that there is no longer a requirement to purchase medical insurance when young and healthy. Dropping this requirement would silence the objection against the insurance mandate that it is an unjustifiable restriction on freedom. Nevertheless, the purchase of insurance from the beginning of, and throughout, one's adult life could be made a necessary condition of protection from exclusion or higher premium on the basis of pre-existing condition.[22] There would be no liberty-based argument for barring insurance companies from charging actuarial premiums in the case of those who have chosen not to take out health insurance at the beginning of their adult lives. The risk of not being able to take out affordable insurance later would provide each with a rational incentive to purchase health insurance from the outset.

In this section I have shown how a case for CDC can be made that overcomes a freedom-based objection shared by many on the right. In the next section I shall turn to a demonstration of how the realization of CDC even in existing conditions of inequality can be defended against objection from the egalitarian left.

## 5. CDC as Rawlsian Fair Terms of Social Cooperation for Mutual Advantage

In the actual world of unequal income, CDC pensions proportionate to earned income would be an improvement over a status quo characterized by IDC pensions proportionate to similarly unequal incomes. On account of the benefits of risk pooling and the transfer from those who would otherwise be richer to those who would otherwise be poorer that this involves, CDC pensions would often be more egalitarian in comparison with the pensions that IDC would yield under the same employer and employee contributions.[23] CDC would tend to be worse than IDC for some of the unlucky who will die prematurely. They would lose out on the opportunity to bequeath their pension pot that IDC allows. But egalitarianism speaks against bequests. CDC would also tend to be worse than IDC for those whose investments would fare best under the latter, since their high returns would be transferred to the less fortunate under CDC smoothing. But egalitarians should welcome such transfers. The move from IDC to CDC would also promote equality via a modest

[22] As in the case of Obamacare, this could be accompanied by state subsidies for those who could not otherwise afford insurance.

[23] Given the declining marginal utility of money, the egalitarian effects of these transfers would be more pronounced when measured in terms of welfare rather than money.

increase in the ratio of the income of the "bottom 99 percent" to that of the "top one percent." This is because the average level of those in the bottom 99 percent, whose income is mainly earned, would rise under CDC via an improvement in the delivery of their pensions, but better pensions would make less of a proportional difference to the more largely unearned incomes of the top one percent.

Though it would generally constitute an improvement over IDC in the dimension of equality, the introduction of CDC pensions proportionate to income here and now would nevertheless fall short of the realization of egalitarian justice. In particular, it would fail to realize a "luck egalitarian" principle of pensions proportionate to incomes that are unequal if and only if these inequalities are traceable to people's responsible choices rather than circumstances beyond their control. On this principle, differences in people's income should, in Ronald Dworkin's terminology, be ambition-sensitive but endowment-insensitive.[24] Actually existing inequalities in incomes satisfy neither criterion to a substantial degree. Insofar, therefore, as pensions are proportionate to existing earnings, their efficient delivery via the risk pooling advantages of CDC over IDC would at least mirror, even if not magnify, any injustices in the actual distribution of earned income.

In contrast to a typical occupational pension, some basic state pensions are largely sensitive to number of years worked rather than the amount of money earned. A pension whose level were sensitive to nothing other than number of years worked would perfectly capture the luck egalitarian principle of endowment-insensitivity under the idealized assumptions that the number of years one works is completely under one's control and the utility of labor per unit of time is the same across different people. These assumptions do not hold in the real world: some people lack a choice regarding years worked on account of involuntary unemployment or disability, and the disutility of low-paid jobs tends to be greater than that of high paid jobs. A pension whose level is based only on years worked would, however, capture the ambition-sensitivity and endowment-insensitivity of luck egalitarianism better than occupational pensions such as CDC that are highly proportionate to earnings.

Insofar, therefore, as the imperative of equality is concerned, it will be difficult to make the case for CDC proportionate to existing income as opposed to occupational pensions that are sensitive only to numbers of years worked. Alternatively, CDC pensions proportionate to income might be defensible only after one has realized policies that redistribute the underlying income itself, perhaps via a complex system of progressive taxation, so that this income is ambition- but not endowment-sensitive.

In this section, I shall argue that an important element of justice is nevertheless captured by CDC pensions proportionate to income, even when the distribution of income itself is not in accord with egalitarian principles. There is a justice-based case for collective pensions, because justice should be conceived of, not as entirely a matter of the elimination of the unfairness of unchosen, brute bad luck, but rather as also involving Rawlsian fair

[24] See Dworkin (2000, ch. 2). Dworkin (2002, 107) disowns the name "luck egalitarianism," since he notes that his version of egalitarianism "does not aim to eliminate gambles ... from people's lives". Alive to this defect with the term "luck egalitarianism," Peter Vallentyne (2002) calls the view "brute luck egalitarianism," where "brute luck" is Dworkin's term for unchosen bad luck. "Option luck" is Dworkin's contrasting term for bad luck that traces to choice under known risk or uncertainty (e.g., gambles in a casino). I shall employ the term "luck egalitarianism" as an abbreviation of the more accurate and informative term "brute luck egalitarianism."

terms of social cooperation for mutual advantage in the division of the fruits of the labor of workers.[25]

At its most fundamental level, the principle that constitutes Rawlsian justice is one of reciprocity. In particular, we do things to reciprocal advantage, on fair terms, where such terms are egalitarian. Rawls writes that

> the idea of reciprocity lies between the idea of impartiality, which is altruistic (being moved by the general good), and the idea of mutual advantage understood as everyone's being advantaged with respect to each person's present or expected future situation as things are. As understood in justice as fairness, reciprocity is a relation between citizens expressed by principles of justice that regulate a social world in which everyone benefits judged with respect to an appropriate benchmark of equality.... (1993, 16-17)

In rejecting the "idea of mutual advantage," Rawls maintains that justice might call for the transformation of a present-day "society in which property, in good part as a result of fortune and luck, is very unequal into a well-ordered society regulated by [his] two principles of justice." Justice might call for such a transformation even if, as is likely, not all will gain from it, relative to the inegalitarian status quo. Those, for example, "owning large properties" may lose "greatly." (1993, 17)

We can agree with Rawls that it is not a necessary condition of justice that all must benefit, relative to an unequal status quo. But this does not rule out the possibility of mutually beneficial moves from an unjustly unequal status quo that promote justice.

In the quoted passage, Rawls analyzes reciprocity as fair terms of social cooperation for mutual advantage, as measured against a benchmark of equality. Both mutual advantage and equality figure in Rawls's idea of reciprocity. Each element has a role.

The very fact that Rawls describes equality in the distribution of goods as a benchmark implies that such equality does not exhaust justice. If, for example, there were no cooperation in a world where, as nature would have it, there were no unchosen inequalities among different individuals, we would have perfect luck-egalitarian justice. But an element of Rawlsian justice would be missing: fair terms of cooperation that make all parties better off, when measured against a benchmark of equality. There would also be no social justice in such luck egalitarian circumstances. Only natural justice would obtain.

Cohen's (2008, 315-23) luck egalitarian case against the justice of strong Pareto improvements that do not promote equality might plausibly apply to benefits to all that are the result of brute natural forces – e.g., manna that falls from heaven. But when the question is one of how to distribute the fruits of the labor of socially cooperating individuals, considerations of justice might apply, which are absent in the natural case. A principle of "to

[25] Elsewhere, I have proposed that

> justice is by no means exhausted by the call to minimize unfairness. The promotion of the general welfare is also an element of justice, one which might come into conflict with and outweigh the minimization of unfairness. The sacrifice of the general welfare in the … leveling-down case is sufficiently great that it outweighs the call to minimize unfairness. On this approach, justice broadly conceived consists of the proper balancing of a plurality of distinct and potentially conflicting values or principles such as distributive equality, utility, liberty, and the right not to be sacrificed for the greater good. (Otsuka 2002, 47-48)

each according to his contribution," where what a worker receives is proportionate to the value of his labor contribution, has plausibility when applied to the distribution of the fruits of social cooperation from an equal baseline. Such a principle isn't, however, applicable, at least not in any obvious way, to the distribution of manna from heaven.

In addition to mutual advantage that arises from an equal baseline, there is another way in which equality might combine with mutual advantage to constitute fair terms of cooperation: mutual advantage might be realized among parties who regard one another as equals. Rawls refers to the benchmark of an equal division in the passage I have quoted. But elsewhere he often speaks of "fair terms of social cooperation between citizens *regarded as free and equal.*" (2001, 79 [emphasis added]) These two conceptions of equality can come apart, in ways that bring out the importance of the latter, as I shall now illustrate.

It is plausible to maintain that a benchmark of equality should be choice sensitive – one involving equality of opportunity for goods rather than equality of outcome when the two come apart. Rawls (1993, 181-2 n. 9) himself is sympathetic to the idea that a Malibu surfer who has chosen not to work has received all the primary goods to which he is entitled in the form of leisure, even though he lacks enough material resources to sustain himself. From a baseline of equality of opportunity, such a surfer might seek earnings from employment when his hunger becomes too great. It would, however, be unjust because exploitative for a capitalist to take advantage of the surfer's vulnerability by offering him sweatshop terms even if the transaction is mutually advantageous. The capitalist would not be showing regard for the surfer as an equal, but rather regarding him as someone to be taken advantage of, even though the exploitative transaction arises from a justly equal baseline.

I have just argued that mutual advantage from the surfer-capitalist baseline of equal opportunity for goods needn't be just because it might involve failure to treat people as equals. I shall now argue that mutual advantage from an *unequal* baseline needn't be *unjust* because it might involve a regard of one another as equals in a manner that vindicates the transaction.

Among mutually advantageous moves from an unjustly unequal baseline, we should distinguish the following types of case:

1. The mutually advantageous move is *coerced via violation of negative rights*, as in the case of a gunman's money or life threat.

2. The mutually advantageous move involves an *exploitative offer that takes advantage of the vulnerability of the weaker party*. An exploitative sweatshop work contract in which the vulnerability of the worker is not chosen in Malibu-surfer fashion is one such example. Wage bargaining by the talented, of the sort that Cohen (2008, ch. 1) condemns in his discussion of the incentives argument for inequality, would also qualify.

3. The mutually advantageous move involves neither of the above defects. It is *voluntary rather than coerced*, and *the stronger party does not take advantage of the weaker party*.

The move from IDC to CDC is of this third type. It therefore counts as a case of genuine reciprocity even though it falls short of an ideal case of justice because it arises from an unjustly unequal baseline. Under CDC, each party voluntarily brings his pension contributions to the collective, risk-pools these resources with the resources of others, and

then gets back in proportion to what he puts in. How much one is able to put in might be a reflection of an unjustly unequal baseline distribution of income. But the unjustly rich do not take advantage of, or otherwise benefit from, the fact that others are poor. Rather, insofar as their agreement is concerned, the positions of the different parties are symmetrical.[26]

Consider an analogous case in which a wealthy carpenter has constructed a sailboat without a sail and a poor weaver has weaved sails. They would each like to sell what they have produced. Suppose that the value of each sold separately does not add up to the value of the two together, given the synergy of their combination. If the poor weaver were desperate for the extra proceeds from the synergistic sale, perhaps the wealthy carpenter could drive a hard bargain for a disproportionately great share of these proceeds. That would be to take advantage of unequal bargaining power. By contrast, an agreement analogous to CDC is one in which they voluntarily split the extra proceeds in a manner that is proportional to the market value of each when sold separately. As in the sailboat case, the baseline in CDC is the value of what each owns when it is not joined together with what another owns – i.e., the market value of the assets in one's non-risk-pooled IDC pension pot.[27]

Here I am endorsing a principle which calls for each to receive according to his labor contribution. Marx famously rejected such a principle according to which "the individual producer receives back from society ...exactly what he gives to it [and the] right of the producers is *proportional* to the labour they supply." He dismissed this as a bourgeois notion that would be superseded: "In a higher phase of communist society, ...after ... all the springs of co-operative wealth flow more abundantly -- only then can the narrow horizon of bourgeois right be crossed in its entirety and society inscribe on its banners: From each according to his ability, to each according to his needs!" (1970, 17-19) Leaving aside surfers and others who are in need by purely voluntary choice, we might acknowledge duties on the part of the better off to transfer resources to those in need, even when such transfers are not mutually advantageous. But when everyone has enough so that nobody is in need, the demands of equality needn't always trump the strong Pareto improvements of mutual

[26] Rawls speaks of "fair terms of social cooperation between citizens regarded as free and equal, and as fully cooperating members of society over a complete life, *from one generation to the next*" (1993, 3 [emphasis added]). CDC's investment risk pooling is sometimes characterized as designed to subsidize older pensioners by younger workers. That is a mischaracterization. Rather, CDC is designed so that those who enjoy more favorable returns on the stock market during their lifetimes subsidize those who enjoy less favorable returns. The smoothing favors the unlucky over the lucky, irrespective of their age or the generation to which they belong. Such a bias is fair both to different generations and to the young versus the old.

[27] Joseph Heath suggests a different interpretation of Rawls as judging occupational pension schemes just simply insofar as they have been voluntarily entered into in accordance with the law, on grounds that such schemes are not part of the basic structure. Heath notes that Rawls claims that his principles of social justice do not apply to voluntary associations such as universities and business firms, which lie outside of the basic structure. (See Heath 2014a, 160-3.) But the questions of whether CDC should be permitted by the state rather than regulated out of existence, and, if permitted, whether tax relief should be extended to CDC pensions contributions, seem clearly to be questions regarding the basic structure. Moreover, for reasons G. A. Cohen has offered, I would maintain that Rawlsian principles of justice ought to apply, far more extensively than Rawls thought they should, to the private choices of employers and employees. (See Cohen 2008, esp. ch. 3.) Discussions among USS members regarding recent pension reforms reflect the conviction that considerations of equality, fairness (equity), and progressivity of effect are highly relevant to the justification of reforms to the pension scheme. Typically, however, the scope of these concerns is limited to the membership and doesn't extend to those outside the scheme who are worse off. Perhaps this reflects the belief that there is a special requirement for terms of cooperation to be fair.

advantage when the two come into conflict. In these circumstances beyond the realm of needs, these two elements of justice – equality and mutual advantage – stand in a more equal relation to one another. A state pension should be sufficient to meet our basic needs for income in retirement. Above that floor, there is a sound case for the mutually beneficial risk-pooling of CDC even if it arises from a baseline of unequal income.[28]

**6. Property-Owning Democracy**

Unfunded "pay-as-you-go" DB pensions conform to the model of a redistributive welfare state that is characterized by transfers of income from one group of people in society to another – in this case, from those who are working to those who are retired. A funded pension scheme such as CDC, by contrast, fits the model of a "property-owning democracy," which Rawls endorses in preference to "welfare state capitalism."[29] Rawls maintains that

> the background institutions of property-owning democracy work to disperse the ownership of wealth and capital ... not by the redistribution of income to those with less at the end of each period, so to speak, but rather by ensuring the widespread ownership of productive assets and human capital (that is, education and trained skills) at the beginning of each period.... The intent is not simply to assist those who lose out through accident and misfortune ..., but rather to put all citizens in a position to manage their own affairs on a footing of a suitable degree of social and economic equality. (2001, 139)

Rawls expresses the hope that, in a property-owning democracy, "most things can be left to citizens and associations themselves, provided they are put in a position to take charge of their own affairs and are able to make fair agreements with one another under social conditions ensuring a suitable degree of equality." (2001, 159)

In DB pension schemes, where employers bear most of the risks, it is inevitable that management will also insist upon extensive rights of governance of the pension scheme. Under CDC, by contrast, there will be a stronger case, and more scope, for workers to "take charge of" and "manage their own affairs." In this regard, CDC is analogous to traditional IDC pension schemes, where management leaves workers on their own to bear all the risks. Management doesn't claim control over IDC pension pots, in spite of the fact that they typically make substantial contributions into these pots. They value the fact that their responsibility extends no farther than the depositing of the promised sum into the pot each month. Just as management does not interfere with the investment decisions of individuals with IDC pots, but washes their hands of this and leaves it to workers (often outsourcing the pension fund to some outside organization), they shouldn't feel the need to interfere with

[28] There is also the following pragmatic argument that we should not hold the aspect of justice involving mutual advantage hostage to the egalitarian aspect: the latter will be more difficult to achieve, since it involves a sacrifice of the interests of some, relative to the status quo, whereas the former does not. There is a case for not making the ideally just the enemy of the good.

[29] In a "pay-as-you-go" scheme, the pensions of retired workers are paid for by the contemporaneous pensions contributions of current workers. In a funded pension, by contrast, the pensions of retired workers are paid for by their own previous pensions contributions when in employment, along with subsequent investment returns. Whereas not all DB pensions are "pay as you go," since some of them are funded, by definition all DC pensions are funded.

CDC investments. The decision of workers, under CDC, to "make fair agreements with one another" to pool their funds among themselves does not transform the DC pension pot into a concern of management.

Workers should also be left free to run their CDC pension schemes as non-profit mutual societies with no external shareholders. In this way, they would not, as under a traditional IDC, be forced, upon retirement, to enter into a contract for an annuity or financial services with a for-profit corporation whose shareholders are other than the workers in the collective. Rather, they would remain invested members of their own mutual society, with pension income paid out of the pooled resources of the collective throughout their retirement. There would also be no need to attract outside investors to start and sustain their pension fund. Scheme members could instead draw upon the steady stream of small monthly pensions contributions from workers and their employers.[30]

The fact that CDC funds are under the autonomous control of workers, rather than management or external shareholders, might give rise to practices of ethical investment. Rather than everyone being bound by a majority decision of all members of the CDC collective regarding the ethical investment of a single fund, the arrangement could involve unanimous consent, whereby each person chooses from a range of different funds, each invested in accordance with a different set of ethical principles – including the null set, which would presumably be ordinary nihilistic investment, with no concern for anything other than financial returns. Apart from the constraint that one would require the company of enough like-minded others to gain the benefits of risk pooling and economies of scale, there needn't be any limit to the number, or the ideological orientation, of the funds.[31]

In arguing that Rawlsian property-owning democracy unjustifiably minimizes the role of welfare state provision involving taxation and transfer, Ben Jackson writes:

> if the major forms of individual property ownership that could plausibly be equalized in contemporary capitalist societies are home ownership and shares in private companies, then, as the financial crisis of 2008 has made clear, this will inevitably involve the exposure of individuals to significant financial risk. It is therefore crucial to secure individuals against such risks through collective social welfare provision if the property-owning democracy strategy is to be pursued. (2012, 48)

One of the main themes of this chapter, however, is that the mutual association of workers, and the pooling of their pensions contributions, is a means, beyond state transfers to the unfortunate, of protecting people against financial risk. Such risk-pooling can provide a fairly high level of financial security even when pensions contributions are invested primarily in stocks and shares, thereby allowing workers to share in the proceeds of the growth of the economy. James Meade himself, from whom Rawls borrowed the very term "property-

[30] It would be a virtue to some, such as R. H. Tawney, who are associated with the idea of property-owning democracy, that the income-bearing assets in the pension fund derive, via such contributions, from labour income and in this respect are "related to genuine productive effort." See Jackson (2012, 41).

[31] The funds would not necessarily have to possess the familiar leftist tilt into green and socially responsible investment. There is, for example, a Catholic Values Fund that restricts its investments to companies that are not at odds with the teachings of the Church. And there is a once-infamously-named Vice fund (since rebranded), which purchases stock in firms devoted to armaments, tobacco, gambling, alcohol, and pornography.

owning democracy," called for something closely resembling the investment approach of a CDC pension fund when he advocated "the encouragement of financial intermediaries in which small savings can be pooled for investment in high-earning risk bearing securities" (Meade 1964, 59).

Large, occupational, collective, funded pension schemes can give rise to the voluntary provision of primary goods that the state would otherwise need to step in to deliver, via tax and transfer. Especially where there are political constraints on the raising of such taxes, we should attend to the full range of instruments at our disposal for securing such goods through the private firms and voluntary associations that form civil society.[32] We should facilitate those voluntary collective schemes that most efficiently convert the pensions contributions of workers into income in retirement, without excessive profit-taking by the wealthy through management charges and shareholder earnings. The less of his wage or salary a worker needs to set aside in order to generate a good pension, the more income from labor will be available for taxation for purposes of redistribution to the least advantaged, who thereby also benefit from the well-designed collective occupational pensions of others.

[32] There is a default tendency of some on the left to appeal too exclusively to the state to bring about social justice via public sector institutions funded out of general taxation. Obama's Affordable Care Act, for example, was strongly opposed by some on the left who wanted to hold out for a single payer system in which the state acts as the sole provider of health insurance on the model of Canadian Medicare. The British National Health Service is regarded by some on the left as better still, insofar as health care itself in the form of state run hospitals and public sector physicians – and not merely insurance for it – is provided by the state. But the provision of health care via private insurance and multiple payers in, for example, France has given rise to care in that country that the World Health Organization has deemed superior to the more complete state provision in the neighboring UK.

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