# Introduction

A civilization that proves incapable of solving the problems it creates is a decadent civilization.

Aimé Césaire, Discourse on Colonialism, 1955

#### What this Book is About

For the last half century, the economic system of most countries has concentrated the benefits of economic growth in the hands of those at the top. In some, living standards have *stagnated*, or even declined, for significant parts of the population. In virtually all, the incomes of the bottom half of the income distribution have grown much less than those of the top ten percent. The result has been economic hardship, often leading to despair, socio-economic polarization, and dysfunctional politics.

An economic system which has already left half of two generations feeling left out, and promises to do the same to half of future generations as well, is not fit for purpose. Some argue that this is a "rough patch," an aberration which we will soon overcome when the system resumes "normal service" and starts to lift all boats again. Leaving aside the question whether a system which can go through rough patches of this length and magnitude is worth having, I do not think there is anything temporary in this malfunction. Ever increasing inequality is a feature, not a bug, of our system. The aberrant period was the brief one when living standards for the bottom half rose in the wake of World War II. Normal service is *now*.

Many social scientists accept the view that our economic system, left to its own devices, will continue to fail – and that something must be done. The vast majority think that the solution lies on *redistribution*, *pre-distribution* and *regulation*. This is where this book departs from conventional wisdom. It is not that I oppose re/pre-distribution and regulation in principle: I am all for asking the rich to pay higher taxes and stronger government action to curb the abuse of market power by employers and firms. The problem is that policies and institutions put in place to correct excess inequality do not stick. Because of the enormous influence of wealth in politics and policy, those who stand to gain from chipping away at redistributive and regulatory policies will gradually remove any correctives to inequality that may temporarily be put in place. We have seen this play out in the last half century, and we will undoubtedly see it play out again should we somehow manage to reintroduce robust redistribution and regulation policies today.

The reason why redistribution and regulation do not stick is that they leave in place a constituency which has a strong incentive to dismantle them, and the political-economic muscle to do so. This is true of any system in which wealth creation and its final distribution are separate processes. It follows that, if we want to *durably* enshrine broad-based inclusion, we need a system in which wealth and its equitable distribution are produced *jointly*.

<sup>&</sup>lt;sup>1</sup> Redistribution is the transfer of resources from high earners to low earners via the tax and social transfer system. Pre-distribution is the provision of education and other enabling services aimed at boosting the earning potential of those from low-earning backgrounds. Regulation plays a role in combating inequality by reducing the power of employers to exploit their dominant position to compress wages and gauge consumers. These concepts are explained in greater detail in Chapter 1.

Worker cooperatives are effective vehicles for creating wealth which is equitably distributed *at source*. Run democratically by their own workers, they exhibit much lower gaps in pay between management and the rank-and-file than in conventional firms. More importantly, they do not have external owners. This means that all of the wealth created by the firm remains with its workers. Crucially, without the option of external ownership, the emergence of super-wealthy elites becomes nearly impossible. There is thus no concentration of political-economic power capable of dismantling the institutions which support inclusive growth.

Economists are rightly taught to obsess about efficiency, and I am a well-trained economist. Establishing that cooperatives divide the cake more equitably is easy, but far from enough to conclude that they are a good idea. If the cake they bake is much smaller, I'd rather have the big cake, even if some people get much bigger slices than others. Hence, in this book, I spend a lot of time worrying about questions of cake size.

The upshot is this: an economic system in which all economic activity resides in *smartly designed* worker cooperatives, competing with each other on *free markets*, can be expected to create at least as much aggregate wealth – to bake as large a cake – as our current system based on conventional firms. Rigorous economic reasoning *and* empirical evidence show that well-designed cooperatives will be managed as capably and imaginatively as conventional firms, if not more. Rigorous economic reasoning *and* empirical evidence show that well-designed cooperatives elicit as much work effort from their workers, if not more. Rigorous economic reasoning *and* empirical evidence show that cooperatives can be designed to ensure that workers support investments which will pay off in the future, so that the economy will continue to grow. This big cake comes with icing, too, as rigorous economic reasoning *and* empirical evidence show that these benefits come with *reduced income risk* for workers, because cooperatives do a much better job at stabilizing employment.

At the cost of overemphasizing this point, I must stress that there is nothing heterodox in the economics of this book. When I say "smartly designed" I mean exactly what any economist with a mainstream training understands by those words, namely designed taking individual economic incentives into account. If the benefits of worker cooperatives depended on individuals acting against their own individual interest, I would not consider them fit for purpose. To capture this idea, I refer to the kind of cooperatives we need as IC-Coops – where IC stands for "Incentive Compatible," the phrase that economists use to refer to a plan or a contract which we can expect individuals to adhere to because it is in their own individual interest to do so. Equally, I am as staunch an advocate of free markets as any economist, and I consider them one of the greatest inventions to benefit our race. My point is that we can get even more out of free markets – a similar overall amount of wealth, but more equitably distributed -- if the firms competing on them were organized as (incentive compatible) worker cooperatives.

# Clearing the Ground

It is hard to build a new house if the ground has not preliminarily been cleared of the debris of previous constructions. Similarly, it is difficult to develop an argument for an audience which harbours prior incorrect notions concerning the topic at hand. The topic of worker cooperatives is particularly cluttered with myths and misconceptions. Hence, before embarking on my argument, I would like to try to ask the reader to set aside as many of these prejudices as possible. Here are some of them.

# Myth 1: It's Communism

The critical economic features of communist systems, at least in their historical incarnation, have been: (i) central planning, and (ii) state ownership of productive assets. Both these features are *completely antithetical* to the system that this book advocates. Rather than by central planners, resources would be allocated through competition of self-governing cooperatives competing on free markets. Rather than belonging to the state, productive assets would belong to the cooperatives themselves. The system is every bit as distant from historical communism, and as protective of economic freedom, as our current system. Indeed, it arguably features *greater* economic freedom because, through democratic management, workers acquire agency and self-determination which they don't enjoy in conventional firms, where they must execute the decisions of employers.

It is true that, at certain times, in certain sectors (particularly agriculture), and in certain countries, communist regimes have occasionally promoted the creation of cooperatives or cooperative-like organizations. But almost universally these were cooperatives in name rather than substance, with sham worker democracy (as management or political commissars were parachuted from above), and no economic freedom (as the coops still had to adhere to the targets of the central plan). The partial exception was Yugoslavia, the only country which made cooperatives the main form of productive organization and, at least for a period, allowed for a degree of market decentralization. Indeed, this may be the reason why Yugoslavia achieved one of the highest living standards among communist-led countries. Nevertheless, even in Yugoslavia the system was shackled by a large degree of political interference in firm decisions and a robust dose of central planning.

If we set aside communism as realized in practice, and turn to communism in theory, we find no great enthusiasm for cooperatives either. As we will see, for example, Marx said some notably rude things about them. The fundamental difficulty is that communists stress the unity of the proletariat as a class. A system of cooperatives makes them uneasy, because it creates the potential for competition among groups of proletarians. Furthermore, early proponents of cooperatives, even those who considered themselves socialists, always stressed the role of individual economic incentives in the success of these organizations. But Marxists tend to believe that class solidarity, not individual economic incentives, should be the core motivator of workers' effort.

I am of course not denying that worker cooperatives have been a leftist project for much of their 200-year history. Indeed, one of the chapters of this book is devoted to their origins in 19<sup>th</sup> century socialist thought, prior to the emergence of Marxist-communism as the hegemonic strand in that movement. I argue, however, that one does not need to be socialist, or even leftist, to see the benefits which a cooperative-based economy could bring. Believers in free markets and competition will be at home with this book's vision of firms vying with each other, unhindered by a government whose main role is limited to enforce antitrust legislation and consumer protection. Critics of the welfare state, who are often concerned with the associated culture of dependency and loss of self-worth among the recipients of government assistance, should welcome an alternative to redistribution as a remedy to the crisis facing the bottom half – particularly as these alternative puts work at its centre.<sup>2</sup>

<sup>&</sup>lt;sup>2</sup> In his remarkable recent book *The Once and Future Worker*, conservative thinker Oren Cass makes a powerful case for the centrality of *work* to the well-being of individuals, their families, and their

Indeed, worker cooperatives are fairly close cousins with practices which have long been championed by conservatives. In the United States, the idea that workers should be co-owners in firms has been a right-of-centre cause at least since the late 1800s. The legislation introducing the popular *Employee Stock Ownership Plans* (ESOPs), through which employees can become owners of as much as 100% of the firm, has been driven overwhelmingly by exponents of the Republican Party.<sup>3</sup> In the United Kingdom, it was a Conservative-led government which most recently introduced legislation which encourages and facilitates the creation of Employee Ownership Trusts. When they own 100% of the firm shares (which is often the case), these are essentially indistinguishable from worker cooperatives.

# Myth 2: In Cooperatives, Nobody does Anything

This myth is closely related to Myth 1, because much of the stereotype of cooperatives as pits of laziness and lethargy comes from the experience in communist countries. There is particularly abundant lore about so-called cooperatives in the agricultural sector in the Soviet and communist Chinese sphere – such as the Kolkhoz and other incarnations of "collective farming." In these communities, work effort appears to have been pitiful, and some observers have concluded from these experiences that cooperation is synonymous with shirking. But these inferences misdiagnose the cause. As we just saw, in Soviet-style systems participation in collective farms was often coercive, and the farms themselves were squeezed by the state (via quotas and administered prices) both to bolster government revenue and to achieve rapid industrialization. Cooperative size, product and input mix, technologies, and management were imposed from above. Hence, there was no resemblance between these organizations and the self-managed organizations facing freely determined market prices envisaged in this book. For

communities [(2018), Encounter Books]. Work is much more than a means to procure an income. Through it, individuals find an identity, a sense of self-worth, a social role, a structure for daily life, and a community to belong to. Cass fully recognizes the extent to which vast swathes of the population have been badly let down by the workings of the labour market in recent decades – and indeed paints a picture of working-class and lower-middle-class life just as bleak as any one can find in books written by leftist critics of the system. However, he rejects an ever-expanding web of transfers and government programmes, on the ground that these at best replace the income-generating role of meaningful work, and at worst actively discourage labour-force attachment – leading to the loss of the crucial nonpecuniary benefits of a life of work. "We have reached a point where the rich think paying everyone else to go away represents compassionate thinking," as he memorably puts it (p. 27). While Cass develops his own reform proposals, the cooperative-based economy I advocate in this book is consistent with the spirit of his critique. If anything, several of the non-pecuniary benefits attributed by Cass to steady employment, such as self-worth and sense of belonging, can only be even stronger in the context of cooperative life than under salaried employment. Indeed, in Chapter 8 Cass actually does advocate "coops," though admittedly on close reading the organizations he describes do not seem so much labourmanaged firms, as a revamped version of labour unions.

<sup>3</sup> Legislation supporting ESOPS was first passed under the Nixon and Ford administrations. Their tax-privileged status was vastly expanded by Ronald Reagan, whose 1984 legislation is credited with the creation of up to 2000 majority and 100% employee-owned companies. While ESOPs have traditionally been used as retirement vehicles, the Republican-sponsored 2001 Employee Ownership Act expanded them to include non-pension vehicles for tax-advantaged majority ownership by workers. Later legislation made it a tax-advantaged exit vehicle for founding families of small businesses. For a review of legislative developments, see Joseph R. Blasi and Douglas L. Kruse (2006): "The political economy of employee ownership in the United States: From economic democracy to industrial democracy?" *International Review of Sociology* 16(1): 127–147. For a more sweeping history of the political and cultural debate around worker participation in ownership in the United States, going back literally to Washington, Jefferson, and Hamilton, and for a history of its incidence, see Blasi, Richard B. Freeman and Kruse (2013), *The Citizen's Share: Putting Ownership back into Democracy*, Yale University Press.

much of Soviet history, for example, the Kolkhoz faced adverse centrally-planned prices which were bound to discourage production under any form of organization, whether managed by labour or capital.<sup>4</sup> Much of this also goes for non-agricultural collectives in Marxist-Leninist countries, though these were much less prevalent.<sup>5</sup>

Unfortunately, these fake cooperatives have given the concept a bad name - which still lingers. "The communist regimes have compromised many ideas that otherwise could have an appeal [elsewhere]. Worker participation and ownership were used as empty slogans and ploys to reduce workers' income [...]. The term "cooperative" has now a negative connotation among many people, because of its use for the forced collectivization in agriculture, and to describe firms that in reality have little in common with truly cooperative firms."

<sup>4</sup> For a truly comprehensive treatment of collective farming under Marxist regimes (origins, history, institutional development, performance, and reform) the best option is Frederic L. Pryor, *The Red and the Green: The Rise and Fall of Collectivized Agriculture in Marxist Regimes*, Princeton University Press, 1992. For a literary illustration of the failure of Soviet collectivization see also Andrey Platonov's absurdist masterpiece, *The Pit*.

<sup>5</sup> Having said that, it is possible that self-management and cooperation are more challenging in agriculture than in other sectors, and that some of the solutions which I stress in this book may work less well against the unique technological characteristics of farming. For example, the physical distance among workers, coupled with the myriad environmental factors which affect output, could reduce the efficacy of peer monitoring. Furthermore, members of collective farms typically face competing demand on their time from their family plot, and indeed there is much anecdotal evidence that labor-input per unit of land tended to be considerably higher in individual holdings than in collective ones. Also, given the exceptionally long temporal horizon over which investments in land and land improvement (e.g. irrigation systems) pay back the initial outlie, my proposal to give distribution rights to former workers may be insufficient to give workers the necessary inducement to support such expenditures. Most importantly, given the unique role of food in the consumption basket, the unique importance of agriculture in shaping the landscape and affecting the environment, and the emotional and political impact of control over land, the agricultural sector nearly everywhere is intensely regulated and often profoundly distorted by government intervention. It is unlikely that switching to a system with a predominance of worker cooperatives would make the system any less political or induce governments to intervene less heavily. Hence, the picture of cooperatives competing on free (or lightly regulated) markets I paint in the book might be unrealistic if applied to the agricultural sector.

It is also the case that, in agriculture, many of the benefits which worker cooperatives could bring are also available, and very often realized, through other forms of cooperation. In many countries credit cooperatives among individual farmers help combat monopsony by local lenders as well as assuage lenders' concern with moral hazard via joint liability; independent farmers also form producer cooperatives to source specific inputs such as lumpy equipment or irrigation projects; most famously and successfully, they form marketing cooperatives in order to wrest rents away from middlemen and marketing firms. The existence of these options, and their undoubted success, does not prevent the emergence of inequality in wealth and power, particularly because the tradability of land allows the build-up of very large holdings. However, to the extent that it allows individual family farms to withstand the market and political power of input suppliers, buyers, and competitors, it can help preserve a modicum of equality in the farming sector. This is particularly the case as modern technology allows for the achievement of optimal scale at a level of employment only slightly larger than the traditional family farm (except for plantation crops).

For these reasons, the arguments I deploy, the evidence I cite, and the recommendations I make in this book are mostly based on theory and data from, and apply more directly to, cooperatives operating in manufacturing and services, rather than agriculture. In terms of addressing the problems of the bottom half in high income countries little is lost in this, as manufacturing and services take up more than 95% (often much more) of economic activity and employment there.

<sup>&</sup>lt;sup>6</sup> Avner Ben-Ner (1993) Organizational reforms in Central and Eastern Europe: a comparative perspective," Annals of Cooperative and Political Economy, 64, 3, 329-365, 357.

It may also be the case that cooperatives operating in Marxisit-Leninist ideological contexts have further been hampered by an "anti-incentive" bias arising, as already seen, from reliance on class solidarity as workers' sole source of motivation. In such environments, for example, taking co-workers to task for effort avoidance can make one ideologically suspect. In market economies, a similar problem has affected a certain strand of worker cooperatives descending from the anarchist tradition. Indeed, these have tended to double up on their disadvantages by adding "anti-hierarchism" to "anti-incentivism." Their consequent struggles have contributed to the tarring of the reputation of cooperatives and provided fodder to their critics.

For cooperatives operating in market systems, and not beholden to an ideological refusal to acknowledge the need to protect the organization from shirking, there is absolutely zero evidence that shirking by members is an issue. To the contrary, as far as it is possible to tell from the available data, worker cooperatives appear to elicit effort levels that are at least as high as in conventional firms, and at lower overall monitoring cost. This is not in the least surprising. As we will see, it is exactly what rigorous economic reasoning predicts should happen.

# Myth 3: Cooperatives Have a Record of Failure

Thys myth is just a more general case of Myth 2 and, like Myth 2, is related to Myth 1, because it is largely based on a misreading of the experience of so-called cooperatives in the former Soviet bloc. I need not repeat why those experiences are not relevant to evaluate the prospect of a system of free cooperatives on free markets. Instead, what *is* relevant is the historical record of cooperatives operating in market economies. As we will see, this is a record of success. Cooperatives post financial and productivity performance indicators that are as good or better than conventional firms; accumulate assets and invest in training at similar if not better rates; and last longer. Once again, entirely conventional economic reasoning can explain why this is the case.<sup>8</sup>

<sup>&</sup>lt;sup>7</sup> See, e.g., Louis Putterman, "Extrinsic Versus Intrinsic Problems of Agricultural Cooperation: `Anti-Incentivism' in Tanzania and China," *Journal of Development Studies*, 1985, 21:175-204. Putterman is also highly insightful on how this anti-incentivism has unwittingly reinforced the "liberal" critique of cooperatives.

<sup>&</sup>lt;sup>8</sup> The rise and (partial) decline of the Kibbutz experience in Israel sometimes comes up in conversations with coop-sceptic colleagues. Kibbutzim, however, are not mere worker cooperatives, but fully fledged communes. The original Kibbutz featured communal dining, communal entertainment, communal saving (all pay was in kind), communal decisions on who was allowed to study what, children raised in communal dorms, and a complete loss of privacy. Even seen as worker cooperatives, Kibbutzim failed to adhere to several of the principles of IC-coops, as developed in the following pages. For example, there was an excessive degree of direct democracy; pay was strictly equalitarian; and there were no formal provisions for removal of shirkers from the kibbutz (the only sanctions being social sanctions). Finally, economic activity was largely focused on agriculture, that, as we have seen, may be less conducive to successful operation as a worker cooperative. Given all these disadvantages, it is, if anything, pretty amazing that the Kibbutz movement, which began in the 1910s, continues to this day. Indeed, the number of kibbutzim has remained fairly stable since reaching its peak of about 250 in the mid-1980s. The sense of decline, therefore, comes less from a numerical retrenchment, but from the fact that the majority of Kibbutzim have abandoned many of their most extreme ideological features, such as communal living and raising of children, communal saving, and extreme equalitarian pay (none of which would be features of IC-coops). For a rigorous but highly accessible economic analysis of the Kibbutz experience, enlivened by personal reminiscences, see Ran Abramitzky (2018), The Mystery of the Kibbutz, Egalitarian Principles in a Capitalist World, Princeton University Press. For more discussion of the difference between communes and cooperatives, see Chapter 3.

# Myth 4: Cooperatives are for Angels, not Fallible Human Beings

There is a famous saying that "communism was not designed for men, but for angels," which may very well be true. Perhaps because they are simultaneously swayed by Myth 1, some commentators seem to think that the same dictum applies to worker cooperatives. They assert that cooperative success depends on workers having feelings of altruism towards each other, and/or being capable of refraining from taking actions that are in their own personal interest – or to take actions that are costly to themselves –for the sake of some greater good, or to stay true to some moral principle or commitment. Humans being fallible, this means that worker cooperatives have no chance on this earth.

In this book, I show that well-designed cooperatives are foolproof against human fallibility. In order to do so, I generally stick to the traditional economic assumption on human motivation: individuals are self-interested and take a transactional approach to their dealings with others. Just as Adam Smith argued that self-interested behaviour on markets leads to mutually beneficial transactions, I conclude that self-interested cooperative members can give rise to thriving organizations which collectively benefit them – and society at large.

I should stress that I don't focus on purely self-interested agents because I believe that this is the most realistic assumption about human beings. To the contrary, I am completely persuaded by a vast literature in psychology and sociology, and now increasingly in economics, that the portrait of *homo economicus*, which has dominated mainstream economic models for decades, misses out on critical attitudes which have relevance for *economic* behaviour. These include altruism, a desire to behave reciprocally, a desire to be well thought of, and a desire of being able to think well of oneself.<sup>9</sup> Nor do I take the *homo economicus* perspective because I fear the fulminations of my more orthodox colleagues. There can be no such fear, as the orthodoxy has already changed: for at least twenty years even mainstream economists have been incorporating altruism, reciprocity, and other pro-social behaviours and attitudes (sometimes known as "other-regarding preferences") in their analyses.

Instead, the main reason why I have chosen to build my arguments (largely) on assumptions of self-interest is because this is the *worst-case scenario* for the success of cooperatives. The logic is that, if I can make a compelling case that a cooperative-based economic model can be successful when everyone is self-interested, then that case is all the more compelling when we start acknowledging the non-selfish motivations that also contribute to people's behaviour towards others. Put another way, the thought experiment of populating cooperatives with purely selfish workers is the best "*stress test* for evaluating the likely weak points of a cooperative organization, even when workers ... are not just selfish." Indeed, I make this logic explicit: when discussing the risk of shirking, for example, I start with purely self-interested individuals and show how well-designed cooperatives can leverage incentives to contain it. Then I strengthen that argument by reviewing the evidence on other-regarding attitudes which would further reinforce those selfish incentives.

Advancing the Sustainability of Worker Cooperatives', *Journal of Entrepreneurial and Organizational Diversity*, 2(1): 75–100.

<sup>&</sup>lt;sup>9</sup> For an overview of how social preferences can fundamentally impact the response of economic agents to economic incentives see, for example, Ernst Fehr and Armin Falk (2002): "Psychological foundations of incentives," *European Economic Review*, 46 (2002) 687 – 724. For a survey of the empirical evidence of how "social incentives" affect the behaviour of workers in organizations see, e.g., Nava Ashraf and Oriana Bandiera (2018): "Social Incentives in Organizations," *Annual Review of Economics*, 10, 439-463. <sup>10</sup> Ben-Ner, A. and M. Ellman (2013), 'The Contributions of Behavioural Economics to Understanding and

Furthermore, to agree that *homo economicus* paints an unduly reductionist portrait of *most* participants in economic activity is not the same thing as to say that *nobody ever* behaves in a solely self-interested and transactional manner. The problem with a system that depends on pro-social behaviour is not that most people are not pro-social, but that an even relatively small number of purely selfish participants could severely damage the system's success - and that very few of us are immune from lapsing into self-interest on occasion. Those who have played (or watched) team sports will know how much team performance is affected by even only a couple of show-off prima-donnas. They also know that they must and can be reined in by a tough coach willing to bench them. In the same way, cooperatives need to be resilient in the face of possible members who are solely self-interested.<sup>11</sup> To conduct the analysis of a cooperative economy under the assumption of self-interested behaviour provides us with the needed reassurance that they will be.<sup>12</sup>

None of this means that attitudes and behaviours are fixed and immutable. Both pro-social and self-interested tendencies can be learned. Nothing is more depressing to me than the evidence that economics students used to become *more self-interested* (compared to non-economics ones) after being exposed to the discipline – a finding which I hope will begin to hold less and less now that economics has embraced a richer picture of human motivation. By the same token, I do think it is highly plausible that worker cooperatives can foster and nurture attitudes of altruism and reciprocity in their workers. Indeed, as we will see, some of the early proponents of cooperation were partially motivated by the belief that women and men are perfectible, and that the cooperative system would encourage the development of more lofty ways of being in the world.<sup>13</sup>

While I concur with this view, I also think that a pre-condition for cooperatives' role in fostering an evolution in moral sentiments is their initial success. If cooperatives fail at birth because some not-yet-socialized members act selfishly, it will only encourage others to make negative inferences about how other people behave. Instead of reinforcing their pro-social inclinations, it will make them cynical and prone to respond with self-regarding behaviour of their own.<sup>14</sup>

<sup>&</sup>lt;sup>11</sup> Citing clear evidence that individuals vary significantly by attitudes to self and others from experimental evidence in behaviour economics, Avner Ben-Ner develops the related point that a firm should design its organizational structure and principles to fit the prevailing "type" in its workforce. See Ben-Ner, Avner (2013): "Preferences and Organization Structure: Toward Behavioral Economics Micro-Foundations of Organizational Analysis," *Journal of Socio-Economics*, 46(C): 87–96.

<sup>&</sup>lt;sup>12</sup> An additional reason why so much of the argument in the book is based on the self-interested paradigm is that the economic theory of worker cooperatives was largely developed at a time (the 1970s and 1980s) when that paradigm was completely dominant. The newly acceptable assumptions of behavioural economics and other-regarding preferences have not yet spurred a revival of theorizing on cooperatives. For more on this, see Louis Putterman (2006): "Reciprocity, Altruism, and Cooperative Production," in S. Kolm, and J. M. Ythier (eds), *Handbook on the Economics of Giving, Reciprocity and Altruism*, Amsterdam: North Holland, pp. 1409–1435.

<sup>&</sup>lt;sup>13</sup> For an economic theory of how working in a cooperative can make people more altruistic (while working in a conventional firm does not) see Julio J. Rotemberg (1994): "Human Relations in the Workplace," *Journal of Political Economy*, 102(4), 1994, 684–717. For suggestive evidence that being part of a cooperative fosters more pro-social attitudes see J. Carpenter and E. Seki (2011): "Do Social Preferences Increase Productivity? Field Experimental Evidence From Fishermen in Toyama Bay," *Economic Inquiry*, 49(2): 612–630. For the concept of "altruistic capital," where organizations which reward altruism foster the development of true altruism in their workers, see Nava Ashraf and Oriana Bandiera (2017): "Altruistic Capital," *American Economic* Review, 107, 5, 70-75.

<sup>&</sup>lt;sup>14</sup> For a review of experimental evidence – in lab games which replicate some of the key features of worker cooperatives – showing that the degree of selfishness initially displayed by other experiment participants

Hence, if we want to realize cooperatives' potential to turn us into the best version of ourselves, we must first make sure that they are proof against the worst.

# Myth 5: In a Cooperative, you have to let Other People Sleep with your Spouse

You are probably thinking of a hippie commune in the 1970s. And no, you don't have to let other people raise your children, either.

# What is a worker cooperative?

# Worker Management

With the ground hopefully less cluttered by unwarranted preconceptions, let's begin from the beginning: what do I mean by the phrase "worker cooperative"? In this book, I will take the defining feature of a worker cooperative to be *worker management*. "A worker-managed firm is an enterprise in which ultimate discretion over *all* matters ... is in the hands of the firm's personnel, with each member of the workforce having an equal vote". <sup>15</sup> So if you see oneworker-one-vote firm governance, you are looking at a worker cooperative.

Worker management, however, is only a *minimal* definition. It leaves open a huge range of organizational options. Does this democratic principle have to be applied directly (with workers involved in all decisions, all the time) or is it OK to implement it indirectly (with workers electing management who can exercise discretionary powers in between elections)? What are the rules and limits for acceptance in (a.k.a. hiring) and expulsion from (a.k.a. firing) the firm? Can cooperatives hire (non-voting) employees? Can cooperatives have outside shareholders? Can members sell ownership shares in the firm? What are the rights of former workers who have left the organization? Etc.

A fundamental theme of this book is that how we answer the questions I just listed, and other questions having to do with the organizational details of the cooperative-based economy, makes all the difference between cooperative failure and cooperative success – and all the difference between a cooperative-based economy which perpetuates the failures of our current system and one which ushers in an epoch of shared prosperity. In other words, the minimal definition of worker cooperative is insufficient, and the proposition that worker cooperatives could be a big part of the solution to our problems needs to be qualified by a detailed enumeration of the organizational principles that these cooperatives must adopt – as well as of the necessary features of the broader ecosystem.

The discussion of organizational features which are required for cooperative success leads to a much more specialized definition of worker cooperative, which goes well beyond the minimal

influences the subsequent behavior of subjects, see again Putterman (2006): "Reciprocity, Altruism, and Cooperative Production."

<sup>15</sup> Louis Putterman (1982): "Some Behavioural Perspectives on the Dominance of Hierarchical over Democratic Forms of Enterprise," *Journal of Economic Behaviour and Organization*, 3, 139-160, p. 140. There are many definitions of what constitutes a worker cooperative, with many authors adding additional features beyond worker management (e.g. that the workers are entitled to receive any residual income after costs). However, in my view, most of the additional features are consequences of worker management, so they do not need to be included in the definition.

requirement of worker management. IC-Coops are worker cooperatives which meet these organizational requirements.

# Other Types of Cooperatives

Worker cooperatives are just one of many types of cooperatives, and it is important to clarify the difference between them. The most common types of cooperatives other than worker cooperatives are consumer cooperatives, mutuals or saving cooperatives (of which building societies are a special case), and producer cooperatives. In recent years the legislative systems of several countries have also added specific provisions for "social cooperatives."

Consumer cooperatives are the most frequently encountered type of cooperative. The Co-op chain of grocery stores in the UK, or the independent neighbourhood Co-op store in the United States, are consumer cooperatives. They are associations of consumers who band together to purchase food and other consumer goods at wholesale prices, so as to be able to save on retailers' profit margins. Mutuals are associations of savers who pool their savings, essentially lending to each other according to each participant's lifetime stages and/or occasional need to borrow. Producer cooperatives are associations of individual producers or firms which pool particular assets (say a piece of equipment which is too expensive to buy by a single producer) or services (say the marketing of their products). They are particularly frequent in agriculture. Social cooperatives exist mainly to provide social services and assist in the work integration of vulnerable individuals. Unlike the other types of coop, this is not mutually exclusive: many social cooperatives are organized as worker cooperatives.

All these types of cooperatives share with worker cooperatives two basic features: they pursue an economic goal for their members, and they have a democratic ethos. <sup>16</sup> This book, however, focuses *solely* on worker cooperatives. This is in part because a book covering the economics of all types of cooperatives would vastly exceed my capacities – and the reader's patience. But it is also because worker cooperatives have a unique role to play in addressing the crisis affecting our societies. As I explain, our system's failure to provide for the bottom half originates at the very point at which wealth is created: the firm. While other forms of cooperation can certainly play an important role in *alleviating* the problems caused by unequal creation of wealth, only worker cooperatives can remove the cause.

# Choosing my Words

## Alternatives to the Phrase "Worker Cooperative"

We have seen above that the phrase "worker cooperative" has some negative associations, particularly arising from misuse of it in central planning experiments. This is one of the reasons why some authors have tended to use different words to refer to these organizations. These alternatives include "labor-managed firm," "worker-managed firm," "self-managed firm," and other variations on this theme. Other options replace the word "managed" with the word "owned."

While recognizing the potential benefits of using a phrase less contaminated with undeserved associations, in the end I decided to mostly stick with the word cooperative – and its

<sup>&</sup>lt;sup>16</sup> The International Co-operative Alliance (ICA), the umbrella global advocacy organization for cooperatives of all types, defines a cooperative as an 'autonomous association of persons united voluntarily to meet their common economic, social, and cultural needs and aspirations through a jointly-owned and democratically-controlled enterprise' (ICA web page).

abbreviated form "coop." While worker-managed firm and some of the other variants may occasionally appear to break the monotony, they belong to a scholarly and academic tradition and are not, like the word cooperative, in popular usage. Rather than trying to force non-academic readers to engage with new terminology, I opted for an attempt to ask them to see a familiar concept in a more positive light.

Furthermore, academics have sometimes specialized some of these phrases to draw subtler distinctions – for example, between coops financed by retained earnings and those which borrow from the financial sector. My discussion encompasses all firms managed on one-worker-one-vote principles, and so I prefer to minimize the use of terminology that, for some, excludes some categories of these firms (and I do think that coops should use *both* retained earnings *and* external finance).

# The Trouble with (the Word) Capitalism

Some readers may already have picked up on the fact that, so far, I have avoided using the words "capitalism" and "capitalist". Where others would have used the noun, I have referred to "our economic system," or phrases of a similar import. When others would have referred to "capitalist firms," I said "conventional." Of course, there is no denying that, to borrow from the title of an early book diagnosing the mounting failures of the system, these pages are very much motivated by the *Trouble with Capitalism*: how it failed us and will only fail us more. Dut there are also some big problems with *the word* "Capitalism," which make me wish to use it sparingly.

To begin with, the word "capitalism" is an anachronism. It originates in a system of production relations in which (i) economic activity was heavily based on physical capital, namely factories, warehouses, heavy machinery, etc., and (ii) the owners of the firm, i.e. the employers of labour, were also owners of the physical capital. Hence, the word evokes a system in which (physical) capital hires labour. Over the last several decades, both (i) and (ii) have become much less descriptive of our economic system. First, as the relative size of the service sector has expanded and that of manufacturing correspondingly shrunk, physical capital has become less and less prominent among the productive assets of firms – with a corresponding expansion of new concepts such as intangible and digital capital, human capital, organizational capital, etc. Second, there is a strong trend towards a separation of firm ownership from ownership of the productive assets which the firm employs. Rather than owning the factories, warehouses and machines where their products are made, firms rent them or lease them from other firms. The same often happens for intangible assets such as software, which is increasingly licensed rather than proprietary. Human capital refers to knowledge and skills embodied in the workers, etc. While it is still true that, in the typical firm, firm owners employ labour, calling these firm owners "capitalists" is somewhat misleading. The true "capitalist," say the owner of the physical building where production takes place, is actually not the employer. If we had to come

<sup>&</sup>lt;sup>17</sup> Harry Schutt (1988), *The Trouble with Capitalism: An Enquiry into the Causes of Global Economic Failure*, Zed Books. For other books presenting cogent critiques of capitalism in its present incarnation see, for example, Paul Collier (2019): *The Future of Capitalism*, Blackwell's; and Fred Block (2018): *Capitalism: The Future of an Illusion*, University of California Press. Several others will be cited in Chapter 1. I should mention that cooperatives and cooperation often make appearances in the "remedies" sections of these books. In a way my book picks up where they left and fleshes out the solution which they typically only hint at.

up with a name for the prevailing form of industrial relations today, we would probably not choose "Capitalism." <sup>18</sup>

Second, and perhaps more importantly, capitalism and capitalist come with a bundle of conscious and subconscious associations which I fear would complicate or obscure a dispassionate engagement with my argument. Of particular concern to me is the implicit association which many make between capitalism and free markets – as also witnessed by the popularity of the phrase "free-market capitalism." I am a passionate defender of free markets and I do not believe that we can reap the benefits of worker cooperatives if these operate on anything other than free markets. Hence, the last thing I want to appear to advocate for is throwing out the baby of free markets with the bath water of employer-employee conflict in conventional firms. Calling these "capitalist," I fear, might have precisely that effect. On a very similar note, some people tend to associate capitalism with democracy (think of the phrase "capitalist democracy"). It would be highly ironic if a proposal to make our lives *more* democratic (by introducing democracy to the place where we spend most of our lives) ended up being perceived as a threat to democratic governance because of a choice of word that for some is emotionally (albeit semantically incorrectly) associated with it.<sup>19</sup>

### The Science behind the Book

This book is informed by a deep engagement with the writings of scores of economists who have thought about, or collected data on, worker cooperatives – and related topics. Indeed, there is relatively little in the book that will strike those who are familiar with this scholarship as new. Rather than breaking new ground, my main intent is to make a broader audience aware of this body of thought, and to organize it into a proposal for the solution to our pressing problems. At the same time, this is not a comprehensive overview of the history of economic thought on worker cooperatives. My approach is selective, practical and thematic: I try to distil the lessons that are relevant today. This means that some lines of inquiry which no longer appear fruitful are at most glanced at in passing, even though at the time of their development they had received considerable attention by scholars.

Another implication of the practical focus of the book is that I concentrate the main text on the logic of the key arguments and the main messages from the empirical or historical evidence. The "scholarly" writing, which traces the intellectual genesis and development of these ideas, and the more detailed assessment of the sources of evidence, is reserved for the notes – which are punctuated by comprehensive references to the literature. I also sometimes use the notes to recast the intuitive arguments presented in the text in the more formal language of

<sup>&</sup>lt;sup>18</sup> For the trend away from physical capital see, e.g., Jonathan Haskell and Stian Westlake, *Capitalism without Capital* (Princeton University Press, 2017). For the increasing separation between ownership of productive assets and ownership of firms, see, e.g., John Kay, *The Corporation in the 21<sup>st</sup> Century* (Profile Books, 2024).

<sup>&</sup>lt;sup>19</sup> Returning to the theme of book titles with the word *Capitalism* in them, Raghuram Rajan and Luigi Zingales's *Saving Capitalism from the Capitalists* cleverly illustrates the ambiguities I seek to avoid. They argue that large corporations (the "capitalists") use their political-economic muscle to protect and increase their market power, thereby undermining the working of free markets ("capitalism"). This kind of logic is central to my own argument in this book, and indeed my intellectual debt to the writings of Rajan and (especially) Zingales is vast. See Raghuram Rajan and Luigi Zingales (2003): *Saving Capitalism from the Capitalists, Unleashing the Power of Financial Markets to Create Wealth and Spread Opportunity*, Crown.

economics, provide further details or qualifications, or acknowledge scholarly debates which I cannot cover in the main text.

Having made it clear that this is not a book about the history of economists' thinking about worker cooperatives, I do think it useful to provide the reader here with an impressionistic account of its main phases. Systematic writing about worker cooperatives begun in the first half of the 19th century, as writers from different traditions sought solutions to the social challenges brought about by the Industrial Revolution. Fascinatingly, many of the central questions about worker cooperatives, which would occupy economists one-and-one-half century later, were already at the forefront of this literature. The culmination of this phase is the proposal by John Stuart Mill in his *Principles of Political Economy* of an economy in which worker cooperatives compete on free markets – just the same proposal which this book advances. Mill is of course one of the founding fathers of Economics. The fact that this book is, in effect, all about bringing his vision into fruition underscores just how mainstream is the economic thinking which supports the cooperative model of growth.

The emergence of the Soviet system in the 20<sup>th</sup> century induced those economists who were interested in alternatives to corporation-based capitalism to focus primarily on centrally planned economies with state ownership of the means of production. As a result, worker cooperatives became a niche topic and, aside from the occasional case study, little significant conceptual progress was made in the first half of the century. In the 1950s, however, Yugoslavia begun experimenting with a more decentralized model based on self-managed firms. While always acknowledging that Yugoslav cooperatives fell well short of the Millsian model of truly free cooperatives competing on truly free markets, economists felt encouraged by this development to undertake the application of modern analytical tools to the investigation of the properties of such a system. There followed a true "golden age" of research on the theoretical properties of worker cooperatives, with scores of books and hundreds of papers published in mainstream economic journals in the 1960s, 1970s, and 1980s. As I said, some of the strands of this research may have led into *culs de sac*. However, many others have produced brilliant scholarship which retains all its cogency and practical relevance. It is on this work that much of this book is built on.

Following those three decades of intense development of the conceptual foundations, the balance of the scholarship on worker cooperatives shifted in the direction of data collection and empirical analysis. Since then, much statistical evidence has been brought to bear on the theoretical propositions of the 1960-1990 period - most of it supportive of those propositions' positive conclusions about the potential of worker cooperatives. As we will discuss, however, empirical work on worker cooperatives has lagged somewhat other areas of economics in the application of techniques which permit confident statements about causation. Hence, the evidentiary basis is still work in progress.

Having discussed the scholarship this book is built upon, I should also acknowledge the wealth of important scholarship the book largely overlooks. As I rely almost exclusively on the work of economists, I fail to do justice to enormously valuable insights about worker cooperatives coming from a variety of other disciplines, including sociology, social psychology, management science, political science, anthropology, and several others. I do occasionally sample these literatures to provide some flavour of how they enrich and shed important light on certain debates, but I fear that these forays only serve to underscore the incompleteness of the "economics only" approach. Unfortunately, a truly interdisciplinary approach is beyond the scope of my current expertise.

I should also make it clear that I am not the first to present a general overview of the economics of worker cooperatives in book form. Gregory Dow's landmark The Labor-Managed Firm (2018) masterfully brings together in a coherent formal framework half a century of theoretical work on worker cooperatives, much of it originating with Dow himself. Its influence on the book in your hands will be apparent to everyone who follows up the footnotes. From a substantive point of view, the distance between the two books is not huge, though inevitably I disagree with some of the things Dow says and he would undoubtedly disagree with some I say. There are also significant differences in the emphasis different topics receive; a couple of new ideas; and obviously a slightly more up to date coverage of the literature. Perhaps the most important difference, however, is stylistic, as Dow's book is aimed at an academic audience, while this book attempts to reach a broader one – largely using everyday language and leaving the technical jargon for the footnotes. In this sense, it is closer to Dow's prior Governing the Firm (2003), which is also still full of brilliant insight. The older Economics of Cooperation and the Labor-Managed Economy (1987), by John Bonin and Louis Putterman, written at the peak of the field's ferment, is also a must-read classic by two scholars responsible for major advances in the economics of worker democracy, and so is The Economics of Worker Cooperatives a collection of many of the most important articles in the history of the field selected by John Pencavel, another major scholar of worker cooperation.<sup>20</sup>

## Outline of the Book

The rest of the book is divided into three parts.

Part I is where I put forward the main outlines of my argument. It is made of two chapters: Chapter 1 is the diagnosis; Chapter 2 is the cure.

I begin Chapter 1 by reviewing the historical experience of economic growth, and the distribution of its benefits, in so-called Western high-income countries. Like Thomas Piketty and many others before me, I find a record of failure: over the last 50 years the living standards of the bottom half have improved too little relative to reasonable aspirations, and relative to those of the top ten percent.<sup>21</sup> I then trace this failure to the unequal power relationships which characterize these societies. Rich elites have outsize influence on our institutions and policies. They can intervene directly in the political arena by promoting certain politicians and by conditioning the behaviour of others, as well as the behaviour of civil servants. And they can intervene indirectly by controlling the media (whether traditional or social) and thus influencing public opinion. I show how this influence has been successfully applied not only against policies of (and consensus for) redistribution, but also against regulations which limit corporations' monopolistic power vis-à-vis their customers and their workers – resulting in a bigger and bigger share of the economic pie going to employers instead of employees. I argue that these developments are an inevitable consequence of an economic system in which wealth is distributed unequally at its creation, because those who have more of it have both the power and the incentive to make it even more unequal. This is why redistribution and reregulation are not the answer. Even if, by some herculean effort, advocates for a more inclusive

<sup>&</sup>lt;sup>20</sup> Gregory K. Dow (2018), *The Labour Managed Firm: Theoretical Foundations*, Cambridge University Press; Dow (2003), *Governing the Firm: Workers' Control in Theory and Practice*, Cambridge University Press; John Bonin and Louis G. Putterman (1986), *Economics of Cooperation and the Labor-Managed Economy*, Harwood Academic Publishers; John H. Pencavel (2013), ed., *The Economics of Worker Cooperatives*, Elgar.

<sup>&</sup>lt;sup>21</sup> Thomas Piketty, *Capital in the Twenty-First Century*, 2014, Harvard University Press.

society succeeded in making up some of the lost ground with these levers, those efforts won't stick. What is needed is a new productive system which is inclusive at source.

In Chapter 2 I describe such a system. After providing a bit more discussion of the definition of a worker cooperative, I explain why these organizations are intrinsically more equalitarian than conventional firms: they tend to feature less gigantic gaps between the pay of top management and rank-and-file workers, and they do not feature the distributional conflict between employers and employees - which typically results in pay compression for the latter, and the accumulation of large fortunes for the former. I then develop the concept of the IC-coop. I explain why IC-coops should be managed strictly as representative (rather than direct) democracies; why management should be empowered to discipline workers (including the right to fire them); why former workers should continue to have participation rights to the distribution of the cooperative's income; and other organizational features that ensure that IC-coops can deliver their inclusion benefits without sacrificing efficiency in wealth creation. I also discuss how the broader institutional and macro-economic environment should be designed to maximize the inclusive benefits of an economic system which replaces conventional firm with IC-coops, as well as its capacity to generate growth. I reiterate the case for free and competitive product and labour markets. I also discuss some institutional innovations which could further enhance the wealth-creation capabilities of the cooperative-based economy. Particularly impactful could be cooperative incubators, which provide financial and technical support to would-be cooperative founders as they develop their business plans.

Part II is about the ideas and science which underpin the concept of IC-coops. This is the more "scholarly" part of the book – though as I said it is written in non-technical, everyday language (aside from the notes, some of which are directed to my fellow academic economists). Over four chapters, I take up the central questions which have preoccupied economists studying worker cooperatives: how to apply the principle of worker management, and its consequences on the governance structure of the worker-managed firm (Chapter 3); how to deter shirking, and ensure that workers exert adequate effort and diligence (Chapter 4); how to enable cooperatives to undertake investments which will pay off in the future (Chapter 5); and what are the consequences of the cooperative form for the amount of risk borne by workers (Chapter 6).

Chapter 3 discusses a variety of issues relating both to the consequences and to the practical application of the principle of worker management. I argue that cooperatives should be run as representative democracies, and that managers should have robust executive powers in between elections. This is crucial not only for efficient, competent, and timely decision-making, but also to address an influential critique about cooperatives based on the dangers of disagreement among workers. I then turn to comparing the relative performance of cooperative workers and conventinal-firm owners in selecting and monitoring managers. Economic reasoning points to strong advantages by cooperatives in both identifying the most effective managers and holding them to account, largely because workers have a stronger information base for these tasks than outside investors, who rely primarily on noisy signals from financial markets. I also explain that worker management changes the incentive structure in the relationship between workers and managers in a way that allows for greater information flows (in both directions) as well as greater flexibility in the choice of technology and operating procedures. A check on these advantages, however, is provided by the fact that conventional firms tend to pay their top managers higher salaries. This threatens the ability of cooperatives to retain their best executives. When I review the evidence, however, I find that worker cooperatives post productivity and financial indicators which are at least as strong, if not

stronger, than conventional firms – suggesting that their advantages in selecting and monitoring managers and facilitating information flows and operational flexibility outweigh the disadvantage in managerial compensation. This conclusion is reinforced by evidence from conventional firms which adopt forms of worker participation in management: the more closely workers are engaged in decision-making, the better the performance of the firm.

Chapter 4 shifts the focus from the managers to the workers. It explores workers' attitudes towards effort and diligence - not only their own but also, and perhaps especially, those of their peers. A firm is a team of producers. The key economic consideration relating to the exertion of effort in team production is that the benefit of shirking is experienced by the shirker only, while the cost is shared by the whole team. This means that work effort in firms must be monitored. I consider many aspects of monitoring in cooperatives and in conventional firms, but perhaps the most salient distinction is between horizontal/peer monitoring, which is particularly relied upon in the former, and vertical/supervisory monitoring, which dominates in the latter. I argue that peer monitoring is typically produced at lower overall cost to the organization, and that ICcoops have well-aligned incentives to ensure disciplinary follow through. Supervisory monitoring is not only more expensive, but faces an adverse incentive structure in conventional firms, where the problem of "who monitors the monitors" looms large. The discussion of shirking and monitoring also offers an opportunity for a break from the relentless selfishness of homo economicus: I review some of the scholarship on natural human impulses which align with the more naked calculus of self-interest to generate greater worker diligence and dedication in worker cooperatives. Once again, the conceptual considerations developed in the chapter find support in case studies showing, for example, significant declines in monitoring costs, at no loss in performance, after transition from conventional to cooperative form. This evidence is strengthened by findings of increased effort and peer monitoring in conventional firms which adopt forms of firm-wide profit sharing, as well as by lab-experiments reproducing the incentives for peer monitoring that exist in worker cooperatives.

In Chapter 5 I turn to decisions involving trade-offs between the present and the future. In order to prosper, and also to act as engines of growth for the economy, firms must sustain current expenses which will only pay off in the future - sometimes many years removed. We call these expenses "investment," though they are not limited to physical equipment and structures, but also include intangible assets such as software, patents and licenses, brand and product development, and worker training. I explain that some of these investments can and should be financed through debt, and that there are no intrinsic differences in the economics of lending to conventional firms and worker cooperatives. However, there are powerful reasons why not all investment can be financed externally, so a firm's long-run success depends on its being able to retain earnings and plough them back onto the business. In a conventional firm, this means convincing shareholders to accept lower current dividends. In a cooperative, it is the workers who need to acquiesce to have less money distributed to them today. Theoretical reasoning suggests that the former should be easier, so there is in principle a worry that worker cooperatives may not manage to sustain the kind of investment rates that society needs. To address this potential challenge, I recommend that IC-coops extend the right to participate in the distribution of cash flows to anyone who has worked in the cooperative at any point in the past. I show that, with the right attention to accounting detail, this can lengthen the planning horizon of current workers and make them supportive of long-term investments. In this chapter I also discuss some specific challenges which conventional firms are well-known to face in the area of worker training and skill development – a form of investment whose importance for the success of the economy is only expected to grow in the decades ahead. I show that, consistent

with evidence, worker cooperatives are expected to have the edge over conventional firms on this score.

In Chapter 6 I review theory and evidence on exposure to risk by cooperative workers – as always using conventional firms as the point of comparison. For workers, especially those in the bottom half, the greatest source of uncertainty comes from the threat of unemployment – which can have devastating consequences for them and their families. Economic reasoning leads to the conclusion that employees of conventional firms face significantly higher unemployment risks than members of worker cooperatives, and this prediction is resoundingly supported by the evidence. The reason is that conventional firms primarily use redundancies in order to protect profits during downturns or other rough patches. Instead, worker cooperatives prefer to temporarily reduce income payments, or temporarily dip into reserves, to protect employment and long-run firm survival. In this chapter I also address a classic critique of worker cooperatives, which asserts that they impede the diversification of risk by workers through the investment of their savings into a composite portfolio of firms (other than the one they are employed with). I explain several reasons why this theoretical argument has little realworld relevance. One of these reasons is simply that bottom-half workers – arguably the ones who most need hedging income from employment – do not participate in stock markets anyway, and so the diversification benefits offered by these markets are essentially irrelevant to them.

If Part I described the ideal for a cooperative-based economy, and Part II provided the scholarship which supports that vision, the chapter which constitutes the last part of the book, Chapter 7/Part III, spells out the plan of action for getting there. It begins with a brief stock taking of the current landscape. Across the world there are large numbers of healthy cooperatives competing successfully with conventional firms. But, as a percentage of all firms, worker cooperatives are few and far between. Returning to the landscape metaphor, cooperatives are like trees that, once planted, grow healthy and tall – but very few of them are planted. As many students of cooperation have noticed, this is a puzzle: given that worker cooperatives tend to be successful, why so few of them are founded? Many of these reasons are environmental: the cultural, legal, educational, financial, and professional infrastructure supporting firm creation in high-income countries is entirely designed to serve the needs of conventional firms. Most would-be founders of worker cooperatives are not even aware of this as a potential option, and those who do are faced (in most countries) with an underdeveloped body of laws defining and regulating cooperatives, lack of specific management training, and lack of requisite knowledge and protocols in financial and professional services providers. There are also some intrinsic (as opposed to environmental) obstacles to cooperative firm formation, chief among them that potential cooperative founders stand to lose the personal investments they have made in conceiving and developing the business plan. On the basis of these diagnoses the chapter assigns "homework" to a variety of actors who, jointly and individually, can do much to remove these obstacles to cooperative-firm creation. These include individual cooperatives themselves, organizations representing the cooperative movement, universities, financial organizations, associations setting standards for professional service providers (legal, accountancy, management consulting, etc.) and, most important, governments.