Frank Knight and the paradox of uncertainty

Frank Knight e o paradoxo da incerteza

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Abstract

Frank Knight sees a paradox in the attempt to resolve uncertainty. People try to reduce it rationally, but at the same time they do not want life without it, otherwise life would lose its interest. From this perspective, we show that Knight's critique of theoretical and real competition is not necessarily aimed at denying competition tout court, as some claim, nor at accepting laissez-faire as the best system despite its problems, as others claim. On the contrary, we argue that as an alternative to theoretical perfect competition with zero uncertainty and real laissez-faire with its unbalanced uncertainty, Knight imagines the possibility of a different competitive game in which uncertainty is better distributed among the players. This game allows all its players to deal with uncertainty in a way they enjoy. In it, competition is no longer a goad for most people, but a lure for all, not just a few.

Keywords

Knight, uncertainty, competition, ethics.

Códigos JEL: B31, D41, D80.

Resumo

Frank Knight vê um paradoxo na tentativa de resolver a incerteza. Tentamos reduzi-la racionalmente, mas ao mesmo tempo não gostaríamos de viver sem ela, caso contrário, perderíamos interesse na vida. Nessa perspectiva, mostramos que a crítica de Knight à concorrência teórica e real não tem necessariamente o objetivo de negar a competição tout court, como afirmam alguns, nem de aceitar o laissez-faire como o melhor sistema apesar de seus problemas, como afirmam outros. Pelo contrário, argumentamos que, como alternativa à concorrência perfeita teórica com incerteza zero e ao laissez-faire real com sua incerteza desequilibrada, Knight imagina a possibilidade de um jogo competitivo no qual a incerteza é melhor distribuída entre os participantes. Esse jogo permite que todos lidem com a incerteza de uma forma que lhes agrade. Nele, a competição não é mais uma ferroada para a maioria das pessoas, mas uma isca para todos e não apenas para alguns.

Palayras-chave

Knight, incerteza, competição, ética.

Códigos JEL: *B31, D41, D80.*

1 Introduction

Frank Knight (1885-1972) was a central figure of economics at the University of Chicago where he was active from 1927 until well after his retirement in 1952. His 1921 famous early career publication Risk, Uncertainty, and Profit (RUP) stands out as a refinement of theoretical perfect competition and an assessment of the economic consequences of uncertainty. George Stigler said that it was in this book that the concept of perfect competition received "its complete formulation", thus paving the way for the "widespread reaction against it in the 1930s", certainly referring to the research programme based on the idea of imperfect or monopolistic competition (Stigler 1957, 11). However, when Knight specifies the concept of perfect competition in its 'pure' form at the beginning of RUP, it is to highlight the inherent limitations of a system of social organisation based on this pure form in achieving the ideal results. It is this awareness that, as Knight already explains in the introduction to RUP, can lead to conceiving the plausible improvements to such a system, without imagining the pure application of the theoretical model or its rejection because of such limitations (see RUP, viii). Read in this way, Knight appears less like a fully "neoclassical" thinker, i.e. fully adherent to the theoretical model that he himself helped to refine, although he is often regarded as one of the forerunners of the "Chicago School", which is primarily based on this model.1

Knight addresses the inherent limitations of perfect competition by introducing uncertainty into economic discourse. He does this by defining perfect competition in terms of its inverse relationship to uncertainty. In theoretical perfect competition, uncertainty should be regarded as "entirely absent" (RUP, p. 48). This means that all characteristics relevant to utility and cost considerations must be known with certainty (see Emmett 2020, p. 535). Uncertainty should therefore be reduced as far

¹ On Knight's prominent role, together with Jacob Viner and Henry Simons, among the initiators of the so-called Chicago School of economics, later exemplified in the persons and work of Milton Friedman and George Stigler, see Emmett (2009). On the origin of the label "Chicago School", see Medema (2024). Even from a methodological point of view, it is difficult to place Knight solely on the neoclassical side, as he thought that the economy manifested itself in different aspects that required analysis through different theories within aesthetics, ethics, politics, or history (for a categorization of Knight's approaches, see Hands, 1997). This methodological pluralism was in line with interwar economics in the US, where economists debated the oppositions and combinations between "neoclassical" economics and forms of "institutionalism" (Coats, 1992; Morgan and Rutherford, 1998). Knight leaned towards the German form of institutionalism or historicism, particularly that of Max Weber, whose approach to social scientific methodology and his comparative historical sociology influenced Knight in his efforts to create a social science that transcended the terms of the neoclassical-institutionalist debate during the 1920s and 1930s (see Emmett, 2009).

as possible to a measurable risk.² But Knight raises a problem, which he considers insoluble: uncertainty is something completely unmeasurable and cannot be reduced to a risk. Various attempts have been made to overcome this problem, mainly trying to show the practical possibility of drastically reducing uncertainty (see Friedman, 1953; LeRoy and Singell, 1987; Bewley, 2002; see also Emmett, 2018; Zappia, 2023).

Yet, in trying to solve the problem of uncertainty, Knight sees what he calls a "paradox". On the one hand, it is perfectly rational to try to reduce uncertainty in order to make our actions more effective. On the other hand, a life in which everything is known in advance would be of no interest to us. For Knight, the same is true of games, especially economic games: if everything can be determined in advance – as in the case of perfect competition – it is not worth playing.

This paradox of uncertainty has not been clearly stated in the literature. This is probably because, although it is recalled at several points in RUP, Knight does not discuss its possible consequences until the last chapters of the book, where he also refers to economic activity as a competitive game.³ Two years after the publication of RUP, in 1923, however, he published the essay "The Ethics of Competition" (EC), which can be seen as a deepening of the issues only hinted at in the final part of RUP. To link these two texts is to try to use the same key for EC as for RUP, namely that of uncertainty. This key allows us to read into EC not only some unresolved critiques of the market (see Emmett, 1994b), but also some useful pointers for thinking about a different and better form of competition that is not tainted by such criticisms. As we show in this article, this kind of competition can be considered from the ethical point of view that Knight develops throughout EC.

EC has been read as a scathing critique of the business game and the motive of competition (see Noppeney, 1998; Pünkösty, 2018). This view might suggest the organization of economic activity on a non-competitive basis. On the other hand, some have argued that Knight sees laissez-faire competition as the best possible form of cooperation, since it is the most efficient and at the same time based on individual freedom (see, for example, Gordon, 1974; Sally, 1997; Kasper, 2003). The critical aspects of such competition would, in a sense, be the price to be paid for individual freedom (Boyd, 2017). We argue instead that Knight was actually neither a radical critique of competition tout court, nor an apologist of it.

Knight is indeed explicit that purely cooperative forms, as well as statism

² On the distinction in Knight between risk and uncertainty, among others, see Runde (2001), Emmett (2018), Feduzi *et al.* (2014), Zappia (2023).

³ The last chapters of RUP, particularly the last two, have received little attention in general. See Emmett (2021), who however focuses on other aspects of Knight's thought presented in these chapters.

(Farrant, 2004), are very likely to be less efficient than laissez-faire competition in organizing economic activity. At the same time, however, he believes that the latter system is largely flawed from the point of view of the possibility for most people of participating with pleasure in such an economic game (see RUP, pp. 357-369). Referring to the "play movement" associated with the growing interest in playful activities, especially in industrialized societies as US at the time, Knight states that only a few could enjoy the pleasure of play for its own sake, as if it were a sport (EC, p. 607). The social resentment that followed, especially in those years marked by the "great red scare" (Goldstein, 2016, p. xiii), and the resulting "radical opposition to the system", as Knight puts it, had as much to do, in his view, with "the privations of a low scale of living" as with the feeling of always losing in an "unfair contest" (see EC, p. 603-4).

The problem posed by the industrialisation of modern societies, such as the US, was probably one of the factors that drew Knight's attention to the issue of uncertainty. As he explains in the year before the publication of RUP, modern industrial economy was increasingly confronted with it (Knight 1920, p. 81). According to him, this kind of economy was marked by an acceleration of change and a lengthening of the production period, both of which allowed for greater potential for forecasting errors regarding production outputs. Knight also highlighted the interconnectedness of the economic system, both at the domestic and international level, noting that even local disruptions could have widespread and severe effects.

To mitigate the effect of such errors, in the early 20th century firms, especially in the US, embarked on rationalizing their productive process, notably leading to a surge of cartels and highly concentrated markets (see Liefmann [1932] 2018, pp. 6-24). Probably targeting the rise of scientific management at the time – which promoted social control through large-scale, top-down organisation (see Leonard, 2015) – Knight seems to lean towards a better distribution of "control" and thus, inversely, of uncertainty. On the one hand, uncertainty is all the more reduced in an organisation where "control is specialised and concentrated to the last degree"; on the other hand, uncertainty remains open to each individual when each is given "responsibility, freedom of choice, a wider sphere of self-expression" (RUP, p. 369), and thus the economic game does not make "monotonous drudgery of the lives of the masses who do the work" (EC, p. 605). In this sense, uncertainty does not

⁴ For the American case of the "play movement" and the idea of "play" Knight refers to Rainwater (1921), see EC, p. 607.

⁵ As Knight observes in those years, "laboring man" is "at the center of the stage in present problems of practical politics" (1920, p. 67).

exclusively pose a problem of reduction, but also, or perhaps above all, of distribution.

By exploring Knight's paradox of uncertainty, we show in this article that Knight was trying to think through the elements necessary to achieve a balance between maximum organisational efficiency and the general enjoyment of participating in the economic game. This balance is found in an economic game that is neither the mechanical and zero-uncertainty game of theoretical perfect competition, nor the real game of laissez-faire (more like gambling) that gives pleasure only to the winning few while relegating everyone else to a mechanical and near-zero-uncertainty life.

2 An Interesting Life

In the penultimate chapter of RUP, Knight explains uncertainty in temporal terms. The prerequisite for the existence of uncertainty is that there is some change in the world. Only in an "absolutely unchanging world" could the future be accurately predicted (RUP, p. 313). This would be possible because the world "would be exactly like the past" (RUP, p. 313). Since in the real world the future is not exactly like the past, there is a problem of knowledge (see Clarke, 2021). According to Knight, we live in a world "full of contradiction and paradox", where the very existence of a knowledge problem depends on the future being different from the past, while the possibility of solving it "depends on the future being like the past" (RUP, p. 313). But when Knight explains uncertainty in terms of a relationship between the future and the past, he is not just saying that it poses a more or less solvable problem of knowledge. He is highlighting a paradox related to the desirability of solving this problem. This "paradox in conduct which is not to be ignored" is explained in the last chapter of RUP as follows: on the one hand, "the very idea of intelligent conduct implies an effort to reduce uncertainty", but on the other hand, we also realise that "a life with uncertainty eliminated or perhaps even very greatly reduced would not appeal to us" (RUP, p. 348).

Knight's explanation of uncertainty in temporal terms allows us to understand the reason for this paradoxical behaviour, whereby we may not want uncertainty to be eliminated from our lives, nor much reduced, even though we always try to reduce it: we rationally try to reduce uncertainty in order to make our actions more effective, but we are not very interested in living in a world where there is no change between the past and the future.

In RUP, Knight emphasises what is implicit in the very name "enterprise" (RUP, p. 232). If the enterprise is an organisation designed to reduce uncertainty, it is because

it is first and foremost an adventure dealing with "true uncertainty" (ibid.). But if for Knight the entrepreneur's profit comes primarily from the adventurous character of the enterprise, it is clear that for Knight life itself is an adventure, since in the real world it is impossible to reduce true uncertainty to zero. There would be no real temporality in the world if the future were identical to the past. A world known entirely on the basis of past events, Knight argues, would be like an "unchanging world" (RUP, p. 313). It would be a static world in which all change would occur according to a known law, with no room for any uncertainty. And although such uncertainty is ineradicable (and it is undesirable that it should be completely so), the challenge it presents is what makes life interesting. "Perhaps", says Knight, "it is the manifest impossibility of reaching the end which makes it interesting to strive after it" (RUP, p. 238).

Everyone's life is like an adventure in which each person proceeds by intelligently trying to predict the future as well as possible on the basis of what has already been experienced. But if this true uncertainty were always and from the outset reduced to zero, life would cease to be this daily adventure worth living.

In Chapter VIII of Part III of RUP, entitled "Structures and methods for meeting uncertainty", Knight refers to this paradoxical aspect of conduct immediately before discussing the conditions on which the possibility of reducing uncertainty depends. Knight puts it this way: "we do strive to reduce uncertainty", while at the same time "we should not want it eliminated from our lives" (RUP, p. 238). In particular, he argues that: "we find ourselves compelled to strive after things which in a 'calm, cool hour' we admit we do not want, at least not in fullness and perfection" (RUP, p. 238). A world that was perfectly knowable and predictable, i.e. without any uncertainty, such as that of perfect competition by definition, would be a world in which it might be of no interest to live.

By questioning the desirability of a world modelled on the basis of perfect competition, Knight is also questioning the desirability of a human being modelled entirely on the classical idea of homo oeconomicus, concerned with adapting means to ends. In this perfectly knowable world, there would be no knowledge problems and all conduct would be perfectly rational, as assumed in the perfect competition model. "It goes without saying", writes Knight, "that rational conduct strives to reduce to a minimum the uncertainties involved in adapting means to ends" (RUP, p. 238). This does not mean, however – "be it empathised", Knight adds in passing

⁶ For this definition of homo oeconomicus and the history of the concept, see Bee and Desmarais-Tremblay (2023). Knight also attacks theories that make human action result mechanically from physical phenomena, such as behaviourism (see Asso and Fiorito, 2003).

– that uncertainty as such is "abhorrent to the human species" (RUP, p. 238). On the contrary: "We should not really prefer to live in a world where everything was 'cut and dried,' which is merely to say that we should not want our activity to be all perfectly rational" (RUP, p. 238).

This questioning of the perfect rationality of the agent in the perfect competition model goes hand in hand with Knight's critique of the idea that the chief interest of human beings is to consume the maximum amount of wealth. "Man's chief interest in life is after all to find life interesting", Knight writes in the penultimate chapter of RUP, "which is a very different thing from merely consuming a maximum amount of wealth" (RUP, p. 369). This means that "change, novelty, and surprise" must be taken "as values per se" (RUP, p. 369).

On the one hand, there is the economic need to produce wealth efficiently in order to improve conditions for everyone. But on the other hand, says Knight, since most of us spend more time producing that wealth than consuming it, it is necessary to consider that in the economic game of production the element of uncertainty that makes life interesting "must be weighed against the element of efficiency" (RUP, p. 369).

This balance between the need to reduce uncertainty and the need to be open to it is an economic problem that Knight addresses in RUP. On the one hand, uncertainty is all the more reduced in an organisation where "control is specialised and concentrated to the last degree"; on the other hand, uncertainty remains open to each individual when each is given "responsibility, freedom of choice, a wider sphere of self-expression" (RUP, p. 369). This balance has to do with the problem of the "distribution" of control and thus of uncertainty (RUP, p. 369). If there is too little uncertainty in most people's lives, then there is not only a problem of reduction but also a problem of distribution of uncertainty.

If the theoretical world of uncertainty reduced to zero is unrealistic and in any case uninteresting (not to say unliveable), the real temporal world poses the problem of how to allow everyone, and not just a few, to satisfy what seems to be their chief interest: to find their lives interesting. This perspective gained by Knight at the end of RUP allows us to understand his critique of real-world laissez-faire competition, set out two years later in EC. In EC, Knight states that even if the competitive system was shown to be better than any available substitute, a clear view of its flaws "must be of the highest value in making it better than it is" (EC, p. 584). Each of his criticisms involves a problem of uncertainty distribution. Viewed positively, these critiques make it possible to identify some criteria for considering a form of competition

^{7 &}quot;Poverty of interests", Knight says in a lecture of 1924, is "worse than of goods" (Knight, 1924a).

that is neither the theoretical, zero-uncertainty form of perfect competition, nor the laissez-faire form with its excesses and defects of uncertainty.

3 The Pleasure of Playing the Game

For Knight, many of the assumptions of economic theory do not fully apply to the real competitive order, especially the description of human nature. The first part of EC is largely devoted to exposing this discrepancy. The second and third parts provide critical elements that can help us identify possible improvements to the real competitive order as conceived by Knight.

In the framework of human nature outlined by economic theory, "contracting units know what they want and are driven by their desires, i.e. they are 'perfectly rational', which is equivalent to saying that they are accurate mechanisms of desire satisfaction" (EC, p. 590). This description stems from an attempt to reduce human nature to a scientifically tractable description. To this end, human beings are described as a set of determined and stable desires and mechanisms for achieving them.

In a text that takes up one of his lectures from 1934 and is entitled "Economic Theory and Nationalism" (ETN), Knight takes up his critique of "the unreality of economic theory" and specifies it further. In this text, he criticises the individualist approach of economic theory, which thinks of social organisation "as a number of Crusoes" (ETN, p. 274; see also 1935, p. 216). Unlike real competition, Knight argues, theoretical competition "implies no feeling of rivalry or emulation": "The economic man feels no such emotions, and does not 'compete,' in the ordinary sense of the word, at all" (ETN, p. 274). For the economic agent of theoretical competition, other individuals are irrelevant.

Knight points out that real human beings, on the other hand, do not act mechanically or without regard for others, but are social beings (see RUP, p. 182). Notably, human beings generally have a tendency to compete with others.⁸ This means that they often act according to the competitive motive, which is related to others and is therefore a social motive. This is why he compares the economic order to a competitive game or sport (EC, p. 603; see also Emmett, 1994b).⁹ In the economic

⁸ See also Knight (1936, pp. 233-234) stating that there are old and "general, if not universal, human tendencies" leading to "the competitiveness of play" (see also Fiorito, 2011).

⁹ Knight was not alone in referring to the propensity for play in the field of economics. In EC (p. 607), Knight refers to John Ruskin's lecture on Work (1866). The latter describes business, as well as war, as play. More contemporaneously, William Thomas (1901), a Chicago sociologist whose work Knight admired (RUP, p. 333; 1924b, p. 129), linked the need to play to a taste for uncertainty and conflict. Knight, who had written much of RUP during the First World War, thought that business had a superior

game, competition plays an important role as a "source of interest" (EC, p. 613). Knight emphasises that the desire to participate in a game derives primarily from the pleasure of playing it (see also Kern, 1997; Boyd 2017). However, he also argues that the problem with competition in the real economic order is that the game may not always be interesting to everyone. The intrinsic interest of playing the game for the sake of playing the game may be lost.

Knight relates the growing interest of economists of his time in economic incentives to the idea that interest in the game must be maintained: "Economists and publicists are coming to realise how largely the efficiency of business and industry is the result of this appeal to intrinsic interest in action; how feeble, in spite of the old economics, is the motivation of mere appetite or cupidity; and how much the driving power of our economic life depends on *making and keeping the game interesting*" (EC, pp. 604-5; emphasis added). The difficulty of the real competitive system in making and keeping the game interesting also has, according to Knight, repercussions for the growing critics to "the rush of life and the movement toward guilds and medievalism" with their consequent proposals for other organisational and non-competitive forms, which he addresses also in a couple of reviews (EC, pp. 59-60). The loss of interest in the economic game is clearly relevant to him: the economic game occupies a large part of our lives, so a loss of interest in playing it means a loss of interest in living one's life.

Furthermore, there is also a backlash on efficiency of the loss of interest. Indeed, "the efficiency of business and industry is the result of this appeal to intrinsic interest in action" and the loss of interest arouses a "spirit of rebellion which spoils the game for the leaders themselves, not to mention the effect on the output of products upon which people have become dependent" (EC, p. 604).

According to him, the possible loss of interest in playing the economic game for most people is due to several elements. These elements are relevant to understanding the direction in which Knight thought that the possibility of improving real competition might come from "a clear view of its shortcomings" (EC, p. 584).

In contrast to perfect competition, there is both an excess of uncertainty and a deficiency of uncertainty in the real economic game. This can be seen when one considers

power of attraction: "The real motive [of our rich and powerful business men] is the desire to excel, to win at a game, the biggest and most fascinating game yet invented, not excepting even statecraft and war" (RUP, p. 360).

¹⁰ He published two reviews on books dealing with the subject: Russell's *Proposed Roads to Freedom: Socialism, Anarchism and Syndicalism* (Russell, 1919) and Woolf's *Co-operation and the Future of Industry* (Woolf, 1919), see Knight (1919a; 1919b).

that the economic game has become "very interesting indeed to a small number of 'captains of industry' and 'Napoleons of finance", but that this result is ensured "by making monotonous drudgery of the lives of the masses who do the work" (EC, p. 605).

In the competitive game criticised by Knight, fate, especially inheritance, weighs too heavily against the possibility of success through one's own effort and skill. The same is true of luck, which "works cumulatively, as in gambling generally" (EC, p. 609). This excess of uncertainty, due to inheritance and luck, is accompanied by a deficiency of uncertainty on the other side, that of a monotonous life.¹¹

A monotonous life is a kind of mechanical life, akin to that of the theoretical agent of perfect competition. Although there are profound differences between the mass of real workers and such an abstract agent, in both cases everything seems to be predetermined. The abstract agent is perfectly rational in a perfectly known world. A monotonous life is one in which tomorrow is like yesterday because there is no relevant change, and one wonders how interesting it can be to live it. A monotonous life lacks those values per se which are "change, novelty, and surprise", i.e. what essentially excites the few who profit from the economic game: uncertainty. It makes economic production "a fascinating sport for the leaders", but at the same time it does so "by reducing it to mechanical drudgery for the rank and file" (EC, p. 613). In the real economic game that Knight criticises, therefore, most people cannot really deal with uncertainty, unlike the few who can instead enjoy the pure pleasure of playing it as if it were a sport. ¹²

Moreover, such a game makes most people lose their taste for participating in it, because in it the competition is "continuous, unquestioning, and almost deadly" (EC, pp. 613-614). "To 'play the game' is the current version of accepting the universe, and protest is blasphemy;" – writes Knight – "the Good Man has given place to the 'good sport'" (EC, p. 612). In other words, everyone has to play along, even if they don't like it. But a game is a game if one enjoys playing it for its own sake; otherwise, it is not a good game.

¹¹ Referring to Plato, Knight goes so far as to say that as long as there is a social system based on the 'private family', this problem will always be present in some form (see RUP, p. 374).

¹² Knight's arguments echo two important social issues of the time: the democratization of games and sports and the "radical opposition to the system" that was very present since the USA industrialized in the end of the 19th century. On the first issue, Knight (EC, p. 607) cites the work of Rainwater (1921) on the development of the "play movement", which made games and sports for children and adults a social issue involving a public policy of providing play and sports facilities. On the second issue, the years 1919-2020 have even been characterized as a "great red scare" (Goldstein, 2016, p. xiii). Connecting those two trends, Knight suggests that the protests could "perhaps" be as much due to the "unfair" dimension of economic competition as to the "physical" stakes of material gains from economic activity (EC, pp. 603-4).

Knight therefore asks whether, in the real economic game, the competitive urge is a "lure" or rather a "goad" (EC, p. 613). Since everything is at stake, even the possibility of a "decent life" (EC, p. 619), the question is rhetorical. From this point of view, competition is a highly efficient system, not because people enjoy participating in it, but because they have no choice. At the same time, however, leading to a general loss of interest, this competitive game also undermines the level of productivity (see EC, p. 605).

4 From Goad to Lure

Knight's critique of the competitive system can be seen as definitive and also as an advocacy of non-competitive economic systems (see Noppeney, 1998). Or it can be seen as a critique without solutions, since he does not seem to explicitly propose any. In the latter sense, he would suggest that the market game would ultimately "undermine its own existence" (Emmett 1994b, p. 97). However, in the way Knight exposes the shortcomings of real competition, it is also possible to glimpse how he thinks they can be overcome in order to improve it. This improvement means that competition is no longer a lure for the few, but for the most; which also means that it is no longer a goad for the latter. This improvement, which can allow everyone to enjoy the game, comes from the fact that the game is not marred by an excess or defect of uncertainty in the sense that: 1) inequalities due to luck or chance do not determine the winners in advance, 2) participation in the game does not imply a monotonous life, and 3) one is not forced to participate in the game.¹³

Knight seems to propose a solution to the first problem by means of a sporting example. He imagines a foot race organised "among a thousand men taken at random from the general population" (EC, p. 610). And he suggests two extreme cases: "At one extreme they might be lined up on a mark and made to race for a single first prize; at the other, the prize money might be distributed equally, irrespective of the results of the race" (EC, p. 610). Both cases seem "absurd" from a sporting point of view (EC, p. 610). In the first case, starting differences are not taken into account, such as some possible handicaps (starting from the same line does not include having

¹³ In EC, Knight poses the question of improvement in ethical terms, not in terms of economic or social policy. Yet he mentioned the importance of rules of the game: "At a minimum, rules must be made and enforced by some agency representing the whole market collectively" (1951, p. 16). In Knight's view, the minimum role of this agency regarding the economic game is to make and enforce the rules of the game.

the same starting conditions); in the second case, no account is taken of different abilities and efforts (all receiving the same prize regardless of who arrives first or later). While the first case closely resembles that of the real competitive system, according to Knight, the second case belongs to the critics of competition tout court who tend to make "a fetish of equality" (EC, p. 610).

But between the two extreme cases, there is the possibility of taking initial differences into account, without disregarding skill and effort in the results. However, as often in the economic game, "the inequalities are not well enough determined to permit the classifications of the players or an equalisation of chances by means of handicaps" (EC, p. 610). However, in the case where it is not possible to level the odds beforehand because the inequalities are "not well enough determined", Knight argues that there is a solution, and it has to do with a question of prize distribution: "it is possible to sustain interest by offering a larger number of prizes less unequal in value" (EC, p. 610). The large number of different prizes means that it is not just a few (advantaged at the start) who win, but many. The wider range of prizes means that everyone can receive a prize more or less in line with their effort and skill, without the huge differences that mostly reflect just luck. The fact that the prizes are of "less unequal" value means that the initial disadvantages are reduced. In this way, most participants can find some interest in taking part in the game. Firstly, they find themselves in competition with other people with whom they run a closer race. Secondly, they can easily win something, and what's more, a fair enough reward.

For Knight, this is not just a theoretical solution. Just before giving this example, he gave a historical description. This race of a thousand people is in fact very similar to the conquest of the West, to which he refers in order to explain how the competitive conditions in America have deteriorated. With the end of the conquest of the West and the establishment of a "more settled state of society", according to Knight, American society limited opportunities for success for most people, leading to a deterioration in the conditions of competition (EC, p. 605).

At the time of the frontier in America, on the other hand, the conditions of competition seemed better than at the beginning of the 20th century: "As long as we had the frontier and there was not only 'room at the top' but an open road upward, the problem was not serious" (ibid.). Competition that is not degraded leaves not only a little room at the top for the winners, but also an "open road upward", like the road to the West and its gold rush. This open road implies a competitive game that is not decided at the outset and leaves a lot of room for uncertainty, with many

prizes of all kinds for the participants. This uncertainty can act as a lure for many participants.¹⁴

Knight often refers to Adam Smith and the human tendency to be attracted by uncertainty (see, for example, RUP, p. 365). In one of his notes, he is even more explicit: "Smith right, uncertainty a lure, not a cost" (see Knight, [undated, mid 1920s], p. 355). If uncertainty were equated with a measurable risk, it would only be a calculable and predictable cost. Instead, it is a lure. According to Knight, this is certainly the case for entrepreneurs (cf. also Emmett, 1999, p. 31); but for him, it would be preferable for it to be the case for all those who participate in the economic game, so that everyone could find it interesting. When uncertainty is a lure for all participants in the game, then also competition is no longer a goad for them but a lure. If uncertainty is not absent for most participants in the game (without being excessive), their lives cannot be monotonous. In the world of production, a monotonous life is given by production control concentrated to the last degree (see RUP, p. 369).

The solution to this second problem, that of the monotonous life, is therefore a question of "the distribution of economic power, opportunity and prestige" (EC, p. 604). When economic power is distributed rather than concentrated, it means that responsibility is in the hands not only of managers, but of all (or most) participants in the production process. 15 This means that this solution is related to the distribution of responsibilities, which in RUP Knight sees as a value in itself and as a possible counterbalance to centralised control (see RUP, p. 369). Responsibility as a value in itself means that participation in the economic game can have an intrinsic interest: those who assume responsibility are faced with uncertainty and thus, like any entrepreneur, with decisions that have to be made outside the routine, i.e. without being able to know the future perfectly (see RUP, p. 268). If workers also face uncertainty by taking on responsibility, their tomorrow is not the same as their yesterday. They live a life that is no longer necessarily monotonous and that can give rise to that other value in itself, which is self-expression (RUP, p. 369). This self-expression comes from the fact that their lives are not entirely determined by (bad)

¹⁴ Even Keynes in his *General Theory* will refer to the frontier to explain how uncertainty can generate enthusiasm, see Bee and Fèvre (2023).

¹⁵ Our argument implies that the entrepreneur should not be the only one to face uncertainty and assume responsibility. It is true that Knight stresses that the entrepreneur assumes this function (McKinney, 1967, p. 1), which gives him the opportunity to create a game and make a profit (Emmett, 1999, p. 31). However, this emphasis on the entrepreneur should not lead to the conclusion that, for Knight, the entrepreneur should be *the only one* who faces uncertainty and takes responsibility in economic activity.

luck and fortune, but also by their ability to play the game and the effort they put into it.¹⁶

The solution to the third problem (given by the compulsory nature of the game) has to do with the other intrinsic value affirmed by Knight in RUP: "freedom of choice" (RUP, p. 369). If there is no possible alternative to constant, unquestioned and almost deadly competition, this value cannot be considered respected. It is respected as long as everyone has the opportunity to opt out of the economic game without this leading to their (physical or social) death. However, in the real economic game, says Knight, there seem to be two kinds of virtue: the greater virtue is to win at all costs and by all means; the lesser virtue is "to go out and die gracefully after having lost" (EC, p. 613). Particularly in America, where "competitive business, and its concomitant, the sporting view of life, have reached their fullest development" (EC, p. 613), participation in the competitive game seems to have become compulsory. This is due to the "dominance of the business game over life", which Knight describes as "unfortunate" (EC, p. 612). Moreover, the fact that "modern society does accept and honour the claim of the entirely helpless to a tolerable human existence" is, in his view, evidence that in it "differences in degree of competence" do not constitute a "valid basis for discriminatory treatment in distribution" (EC, p. 600).¹⁷

Similarly, he finds it "very illiberal" not to allow others to dislike the business game and to find a "more intrinsic appeal" in other competitive or non-competitive activities (EC, pp. 611-2). ¹⁸ According to this view, a liberal social system should regard this freedom of choice as fundamental. As he will say in a later 1939 text on the ethics of liberalism, "liberalism allows any collection of individuals to organize economic life in any way they may choose. [...] They may practice any type of co-operation" (Knight 1939, p. 10). Freedom of choice as a solution to the third

¹⁶ This is not to say that luck should not continue to play its part in keeping the game unpredictable and interesting; if everything were based on the simple calculation of results based on given abilities and efforts, we would be in the mechanical world of perfect competition.

^{17 &}quot;But, after all", Knight adds, still talking about modern society, "does anyone really contend that 'competence,' as measured by the price system, corresponds to ethical merit?" (EC, p. 600). On this point Knight says in RUP: "If we are to have organized society and maintain human standards of life, we must either radically eliminate weakness or impose upon strength the burdens which weakness cannot bear." (RUP, p. 129). If the game were to remain this way, this would probably at least imply a kind of social security for providing at least "physical comfort", which, as he would later say, "is hardly at issue in civilized life under ordinary conditions. It is a right, both recognized and provided for through charity, public and private, and even for incarcerated criminals" (Knight 1946, p. 89).

¹⁸ Knight suggests that for some especially "in a higher social class, resentment is aroused in the hearts of persons who do not like the game at all." Knight thinks that these people could devote "to a truly cooperative quest of the right or 'best' solutions for problems", and "the politicians might find it good politics both to allow them to live and to take their work seriously" (ETN, p. 350).

problem – that of the compulsory game – is also essential because it opens up the possibility of ethical behaviour, which is central to solving the previous two problems.

5 Opening the Door to Ethics

In ETN, Knight criticises the individualism of economic theory, arguing that other human beings are irrelevant to its Crusoe-like agents. For this reason, he adds, their relationship "is neither one of cooperation nor one of mutual exploitation, but is completely non-moral, non-human" (ETN, p. 274). Economic theory is therefore incapable of fully describing the real world because of its non-morality. But again, its shortcomings can be found in real laissez-faire competition. When this competition is imposed as the only way of life, there is no possibility of ethics.

In the third part of EC, Knight states that ethics "deals with the problem of choosing between different kinds of life, and assumes that there is real choice between different kinds, or else there is no such thing as ethics" (EC, p. 618). In his view, therefore, there is no possibility of ethical behaviour without that value in itself, which is the freedom to choose between different kinds of life. This also means not being forced to play one game all the time on pain of death. On the contrary, having this freedom means being able to choose between different kinds of life and thus being able to act ethically

To describe ethical behaviour, Knight refers to three moral theories in the last section of EC. The relevance of this section and its ethics is often neglected, not least because Knight seems to use these theories merely to condemn competition as such. However, by this reasoning, he is also pointing out ways to improve it. The first is what he calls 'true ethical hedonism or eudemonism', which he distinguishes from the hedonism of nineteenth-century utilitarianism (EC, p. 618). The latter, Knight argues, uses pleasure as a synonym for motive in general. It should not be considered a true ethic, since it is in fact no more than an efficiency argument between means and ends; it is a mechanical theory that reduces human action to the pursuit of pleasure, understood as of one's own ends. True hedonism, on the other hand, is concerned with the place of pleasure in human life, such as that derived from participating in a good game. The second moral theory is what he considers to be "Greek ethics", with its striving for perfection as an end and thus recognition of someone's "superior merit" (EC, p. 620). The third is what he considers to be Christian or Kantian ethics, which, unlike Greek ethics, privileges the awareness of one's own efforts over the search for the recognition of others.

It has to do with "conscientious effort", which for Knight is "more in accord with common-sense ideas of desert" (EC, p. 599).¹⁹

When the competitive game is not compulsory, incessant and almost deadly, but on the contrary the participants enjoy taking part in it, not least because it allows them to gain recognition from others and from themselves (for having faced the uncertainty of life with skill and effort, being able to make decisions and thus taking responsibility), then its participants can be regarded as moral agents according to the three forms of ethics identified by Knight. The competition between them is not merely based on greater production, and hence efficiency. Rather, it is based on the recognition of respective conscientious effort, skills and achievements on the quest for perfection, and its concomitant pleasure. This competition can therefore be considered from an ethical point of view, in contrast both to the "non-human" competition of economic theory and to real laissez-faire competition without alternatives.

6 Concluding Remarks

According to Knight, not only can uncertainty not be eliminated, it is not even desirable to do so. Together with the problem of reducing uncertainty, he opens up another and little explored problem, that of its better distribution. While many scholars focus on the first problem, the second deserves to be explored. It allows us to see that Knight's criticism of theoretical and real competition is not necessarily aimed at denying competition tout court, nor at accepting laissez-faire as the best system despite its problems. With the problem of the distribution of uncertainty in mind, it is possible to see in Knight's criticism an attempt to imagine an alternative competition to that of theoretical perfect competition or real laissez-faire competition. It is a competitive game that does not impose itself as the only possible game, and that distributes among all its participants the possibility of dealing with uncertainty without it being excessive or lacking. It is a game in which those who participate do

¹⁹ Knight's long and complex relationship with religion (see Emmett, 1994a; Nelson, 2001), and reference to Christian ethics, make it plausible that Knight also interpreted the creation of an ethical competition as part of "creating such a [moral] universe ourselves, 'co-operating with God,' perhaps" (undated, circa 1923, p. 144). This issue, however, goes beyond the scope of this article.

²⁰ The question of mutual recognition of merit may recall what Adam Smith said in his *Theory of Moral Sentiments* (for more on this, see Bee 2021 on Smith's third kind of self-love). Knight discusses this text several times in his various works, which we know he was familiar enough with to comment on publicly (see, for example, his 1958 review of Cropsey's book on Smith), as well as *The Wealth of Nations*. The investigation of this possible influence will be the subject of a later article.

so only because they enjoy it. It is a competition that, unlike perfect competition or real laissez-faire, opens up the possibility of ethical behaviour.

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