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Hayekian Competition Policy:
A Historical Perspective

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Abstract

Friedrich A. Hayek's (1899–1992) work on competition policy has been neglected. He saw competition as a dynamic market process that disseminates knowledge through prices in a world of relative ignorance operating under the rule of law. Hayek proposed several reforms consistent with his evolutionary liberalism which contrasted with the more dirigiste views of fellow liberals including those who later formed the Chicago School. I discuss Hayek's general view of the 'monopoly problem' and his continued advocacy of reforms of corporation and patent laws, reduced government protectionist policies and the role of antitrust. I trace the development of Hayek's views and how they influenced Chicago economists, particularly Aron Director. The discussion is placed in a historical context and compared to the development of Ordoliberalism, Henry Simons' positive liberalism and the evolution of the Chicago School. The relevance of Hayek's thinking to the current debate on the objectives and role of antitrust is drawn out.

Keywords: Hayek, competition, knowledge problem, Chicago School, liberalism, free-market, antitrust, Director, Mon Pelerin, monopoly, Ordoliberalism, Brandies, Stigler, Austrian

JEL Classification: B20, B25, B53, D23, D41, K21, L40, P22

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HAYEKIAN COMPETITION POLICY – A HISTORICAL PERSPECTIVE

Cento Veljanovski*

This year marks the 50th anniversary of Friedrich A. Hayek's (1899–1992) award of the Nobel Prize in Economics Science¹ and the 80th anniversary of the publication of his best-selling book *The Road to Serfdom* (Hayek 1944).²

Hayek received the Nobel Prize for his work during the 1930s and 1940s on monetary economics, business cycles and 'the functional efficiency of economic systems'. The Swedish Academy singled out the last of these as one of Hayek's 'most significant contributions to economic research in the broader sense' for its 'penetrating analysis of the interdependence of economic, social and institutional phenomena' and the conclusion 'that knowledge and information held by various actors can only be utilized in a decentralised market system with free competition and pricing.' In short, his analysis of the competitive market process.

While the award of the Nobel Prize rejuvenated Hayek's intellectual status he had by then abandoned economics to develop a political theory of liberalism starting with the publication of his bestselling book *The Road to Freedom* in 1944 which had already made him a star and which led to two further treatises on liberty - *The Constitution of Liberty* (1960) and *Law, liberty and Legislation* (1973-1978).

This paper has two objectives. The first is to place Hayek's views on competition and industrial policies in their historical context and bring out their relevance to the current debate over the purpose of antitrust laws.³ The general mood today, as it was in the 1940s when Hayek set out his approach, is that capitalism and liberal order are in crisis and being undermined by capitalism's supposed natural tendency toward monopoly and inequality. Some economists claim that the apparent increase in industry concentration and profitability is due to lax antitrust enforcement (e.g. Baker 2019, Philippon 2019, Kwoka 2020), others disagree. This debate is most intensely heard among US antitrust scholars and politicians and has taken on heightened attention by President Biden Administration's appointment of antitrust officials who hark back to the origins of US

¹ Strictly the Sverige's Riksbank Prize in Economic Sciences in Memory of Alfred Nobel.

² In 1944 other great books that have influenced Western political thinking ever since - Karl Polanyi's *The Great Transformation*, Karl Popper's *The Open Society and its Enemies* and economists John von Neumann and Oscar Morgenstern *Theory of Games and Economic Behavior* (1944) closely followed in 1945 by Joseph Schumpeter's *Capitalism, Socialism and Democracy*. Their common feature apart from the date was that all the authors were emigres from Vienna, which before WWII was an intellectual hothouse.

³ Hayek's views on monopoly and antitrust are an under-researched subject with only a handful of articles conserving them in any detail (Paul 2005, Schrepel 2014, Kusunoki 2015).

antitrust legislation which they interpret as protecting small businesses from large corporations. Their views are surprisingly aligned with those of Chicago liberals of the 1930s to early 1950s who proposed vigorous antitrust enforcement, the breakup of monopolies and a cap on firm size. Hayek never took this position, developed the view of competition as a dynamic market process and emphasised the need for a supportive legal framework for a free market to work effectively. What I propose to show is that Hayek's approach, which has been largely ignored by economists, is still valid today.⁴

The second purpose is to contribute to the history of economic thought. Hayek's views on competition policy have been neglected, partly because he believed that the 'monopoly problem' was exaggerated and therefore did not write much on the subject. Nonetheless, his stance foreshadowed, and deeply influenced liberal economists, particularly Aron Director who was influential in forming the Chicago School and who kick-started the law-and-economics movement. I will show that they adopted Hayek's Austrian economics view of competition albeit reframed in neoclassical economics.

HAYEK'S APPROACH TO COMPETITION POLICY

Hayek's vision of a liberal competition policy first appeared in *The Road to Freedom* published in 1944, reiterated in his inaugural address to the Mont Pelerin Society (Hayek 1947), and most extensively set out in *Law, Legislation and Liberty* (Hayek 1979: Ch 15). Here I trace the development of Hayek's position on competition policy through specific articles and books from the 1940s to his last major work completed in 1979.⁵ I use the term competition policy because Hayek saw the legal foundations of a competitive economy more broadly than antitrust laws.⁶

The use of knowledge in society (1945)

Hayek's (1945a) most important contribution to economics was his article *The Use of Knowledge in Society*.⁷ Hayek's central insight was that markets, humans, organisations, government and the legal system must deal with the 'knowledge problem'⁸ and the way they manage it is key to understanding their comparative efficiency and attractiveness. This is much more than the usual claim that individuals are not perfectly informed or the existence of large asymmetric information costs. Knowledge is different from

⁴ This contrasts with the continuing popularity of Hayek among political theorists and the renewed interest in liberalism (Yadav 2023).

⁵ Hayek saw one of the key functions of government to provide a stable monetary framework. In later life, Hayek (1976) embraced the idea of competitive currencies. Discussion of this is beyond the scope of the present discussion.

⁶ Hayek (1960: 136, 1967: 176/7, 1973: 9, 1979: 66/7, 71/3, 78, 82/3, 86/7).

⁷ Hayek (1937) foreshadowed this in an earlier article.

⁸ The term was first coined by Lavoie (1985).

information. It is the localised understanding of circumstances by individuals which is only known to each individual and dispersed among individuals or what Hayek (1948: 80) called 'the particular circumstances of time and place'. This knowledge cannot be captured by statistical aggregates or data.

Hayek's understanding of the knowledge problem derives from his earlier work on the theory of the mind, which itself remains a pioneering contribution to cognitive science (Hayek 1952)⁹ and some argue the precursor to behavioural economics.¹⁰ All participants and organisations confront a complex world of radical uncertainty. Hayek (1967: 88) believed 'human intelligence is quite insufficient to comprehend the details of the complex human society, and it is the inadequacy of our reason to arrange in detail which forces us to be content with abstract rules'.

Knowledge emerges and is endogenously created by the market process and is often inarticulate and tacit. Unlike neoclassical economics which assumes that everyone knows everything (perfect information) individuals and firms are ignorant of the circumstances surrounding the supply and demand of the goods and services they buy and sell, and the forces responsible for changing prices. Hayek rejected the rationality assumption, the 'as if' theorising of neoclassical economics and econometrics. He replaced this with an evolutionary approach grounded in the psychology of the mind.

Hayek saw the role of competition, prices and markets in a fundamentally different way. 'We must look at the price system as such a mechanism for communicating information if we want to understand its real function' (526). This is because the core economic issue is not the allocation of resources but the 'problem of the utilization of knowledge not given to anyone in its totality.' (520) He describes the 'price system as a kind of machinery for registering changes, or a system of telecommunications which enables individual producers to watch merely the movement of a few pointers.'

The most significant fact about this system is the economy of knowledge with which it operates, or how little the individual participants need to know in order to be able to take the right action. In abbreviated form, by a kind of symbol, only the most essential information is passed on, and passed on only to those concerned. It is more than a metaphor to describe the price system as a kind of machinery for registering change, or a system of telecommunications which enables individual producers to watch merely the movement of a few pointers, as an engineer might watch the hands of a few dials, in order to adjust their

⁹ Hayek developed his ideas in the 1930s but published them much later (Hayek 1952).

¹⁰ Frantz (2011), Cass (2023) Cf Sugden (2023). Even if correct Hayek's view of cognitive limitations and biases generates very different implications.

activities to changes of which they may never know more than is reflected in the price movement. (526/7)

Hayek criticises the way economists see the price system as a means of allocating resources. Given the assumptions of perfect information and frictionless adjustments, the efficiency of perfect competition is 'purely one of logic' (519). It is a model of competition where no competition takes place and has no function. The economic problem is 'how to secure the best use of resources known to any of the members of society, for ends whose relative importance only these individuals know (520). The way individual knowledge on which an individual plan is communicated is 'the crucial problem for any theory explaining the economic process' (520). The economic problem 'is mainly one of rapid adaptation to changes in the particular circumstances of time and place' and 'the ultimate decisions must be left to the people who are familiar with these circumstances' (524)

The Road to Serfdom (1944)

Hayek's (1944 Ch 4) *The Road to Freedom* briefly addresses the 'monopoly problem' stating that it is 'greatly exaggerated', 'minor' and invariably due to government action arising from the desire to plan the economy and the pressures exerted by organised business and labour. He makes the claim central to the Austrian School of economics of which he was a leading proponent that: 'Private monopoly is scarcely ever complete and even more rarely of long duration or able to disregard potential competition' (203)

Hayek starts his discussion by addressing the then-prevalent claim of the inevitability of monopoly under capitalism. He argues that technology does not make monopoly inevitable, and that planning (industrial policy) is the problem, not the solution. Hayek (1945: 6) lays the cause of monopoly at the feet of government (with some exceptions): 'It is probable, however, that in the field of 'enterprise monopoly' would never have become a serious problem if the government had not assisted its development by tariffs, certain features of the law of corporations and of the law of industrial patents.' This is a constant theme of Hayek.

Hayek also offers an early public choice discussion of the interaction between organised business, organised labour and government peppered by a Hayekian belief that ideas influence politics:

'The recent growth of monopoly is largely the result of a deliberate collaboration of organised capital and organised labour where the privileged groups of labour share in the monopoly profits at the expense of the community and particularly at the expense of the poorest, those employed in the well less organised industries and the unemployed' (204/5)

A paramount concern of Hayek is the control of public and private economic power. But he notes a fundamental difference - private economic power is potentially challengeable whereas public power in the form of planning and the state management of industry is not. The latter is backed by the police powers of the state and inevitably becomes entrenched and expands.¹¹

One area where Hayek appears to diverge from his central theme is the treatment of utility industries such as electricity. Hayek wavers over how to deal with these 'genuine monopolies' or natural monopolies. Surprisingly, he opts for the 'American approach' of 'strong state control over private monopolies' (203) imposing 'stringent price control' arguing that the resultant inefficiencies are a 'small price to pay' (204).

"Free" Enterprise and Competitive Order (1947)

Two years later Hayek (1947) organised the first meeting of the Mont Pelerin Society (MPS) which played an important role in the reformulation of liberalism after the Second World War. *Laissez faire* liberalism was by then dead as a political ideology and basis for a democratic society. The world emerged from a series of convulsions - the hyperinflation of the Weimar Republic; the 1929 stock crash and the depression, Bolshevism, the rise and fall of National Socialism and Fascism, and the Second World War, and the emergence of the Soviet Bloc ushering in the Cold War.

Hayek's aim and that of those attending the MPS meeting was to develop the legal foundations of free enterprise and to replace *laissez faire* with competition as the loadstone of a new liberalism. As Hayek would constantly emphasize 'the precise content of the permanent legal framework, the rules of civil law, are of the greatest importance for the ways in which the competitive market will operate.'¹² This and Hayek's activist role for the state are typically ignored when discussing Hayek's work. This sentence is immediately followed by a reference to competition law or antitrust which Hayek observes can push toward or away from a competitive system arguing paradoxically that the law's historical adherence to freedom of contract pushed markets away from competition.

In *"Free" Enterprise and Competitive Order* Hayek asks liberals to set out the measures necessary for an effective 'competitive order.' Hayek identifies the laws governing contracts, property, corporations, associations, and 'the problem of how to deal with monopolies and quasi-monopolies positions which remain in an otherwise sensibly

¹¹ 'A state which allows such enormous aggregations of power to grow up cannot afford to let this power rest entirely in private control' (201).

¹² Hayek 1973 [1978]:145: 'If the free enterprise system is to work beneficially ... [it] requires in particular rules which favour the preservation of competition and restrain, so far as possible, the development of monopolistic positions.'

drawn-up framework' (my emphasis) This makes clear that the bigger reforms are those of corporation, taxation and patent laws, and the dismantling of protectionist regulation such as tariffs, with competition law picking up any remaining monopoly concerns.

What Hayek means by 'the permanent legal framework' is rather general. At the core of a free market is private property and freedom of contract. But Hayek finds these terms too general to tell us what they would look like in practice and his idealised 'competitive order.' No liberal legal system gives unrestrained rights to the owners of private property or allows complete freedom to enter any type of contract or impose any onerous terms. For effective competition, these must be constrained; and constrained by the state.

Hayek claims that many property and contract laws (at the time of his writing) have artificially extended monopolies. Industrial patents, copyrights and trademarks have created 'undesirable and harmful' privileges which contributed to the growth of monopoly. Corporation law, particularly limited liability and giving 'legal persons' the same status and rights as natural persons had 'assisted the growth of monopoly' and 'pushed' the size of enterprises beyond that 'justified by technological factors.' For Hayek, there is a strong case for 'designing corporation law as to impede the indefinite growth of individual corporations' although he makes no suggestions on how this is to be done.

The slavish adherence to freedom of contract over the preceding fifty years governing the laws on cartels, monopoly, and restraint of trade has in Hayek's view, 'greatly contributed to the decline of competition.' He has here in mind the development of the English common law which at first did not condemn restraints of trade and later enforced them, ignoring the third-party harm from cartel overcharges and lack of innovation.

One can see from Hayek's short discussion of competition policy that he makes no specific recommendations as to antitrust regarding it as a last resort after property, contract, corporation, trade union, tax laws and government protective measures have been set out along liberal principles. Frustratingly Hayek has little to say about what reforms should be made to these laws.

The Constitution of Liberty (1960)

The *Constitution of Liberty* was Hayek's attempt to fully set out his conception of liberalism based on a competitive order. Competitive markets are necessary for and require economic freedom. The striking feature of Hayek's liberalism is that he anchors this to the knowledge problem: 'the case for individual freedom rests chiefly on the

recognition of the inevitable ignorance of all of us concerning a great many of the factors on which the achievement of our ends and welfare depends.'

In the *Constitution of Liberty*, Hayek (1960: 265/6) again treats monopoly as a minor problem on which he makes only passing comments. Nonetheless, he alludes to proposals which he maintains thereafter (as the underlined):

I still feel (as I did fifteen years ago) that it may be a good thing if the monopolist is treated as a sort of whipping boy of economic policy; and I recognize that, in the United States, legislation has succeeded in creating a climate of opinion unfavourable to monopoly. So far as the enforcement of general rules (such as that of non-discrimination) can curb monopolistic powers, such action is all to the good. But what can, be done effectively in this field must take the form of that gradual improvement of our law of corporations, patents, and taxation, on which little that is useful can be said briefly. I have become increasingly sceptical, however, about the beneficial character of any discretionary action of government against particular monopolies) and I am seriously alarmed at the arbitrary nature of all policy aimed at limiting the size of individual enterprises. And when policy creates a state of affairs in which (as is true of some enterprises in the United States, large firms are afraid to compete by lowering prices because this may expose them to antitrust action) it becomes an absurdity.

Current policy fails to recognize that it is not monopoly as such, or bigness, but only obstacles to entry into an industry or trade and certain other monopolistic practices that are harmful. Monopoly is certainly undesirable, but only in the same sense in which scarcity is undesirable; in neither case does this mean that we can avoid it. It is one of the unpleasant facts of life that certain capacities (and also certain advantages and traditions of particular organizations) cannot be duplicated, as it is a fact that certain goods are scarce. It does not make sense to disregard this fact and to attempt to create conditions "as if" competition were effective. The law cannot effectively prohibit states of affairs but only kinds of action. All we can hope for is that, whenever the possibility of competition again appears, nobody will be prevented from taking advantage of it. Where monopoly rests on man-made obstacles to entry into a market, there is every case for removing them. There is also a strong case for prohibiting price discrimination so far as is possible by the application of general rules. But the record of governments in this field is so deplorable that it is astounding that anyone should still expect that giving governments discretionary powers will do anything but increase those obstacles. It has been the experience of all countries that discretionary powers in the treatment of monopoly are soon used to distinguish between, "good" and "bad" monopolies and that authority soon becomes more concerned with protecting the supposedly good than with preventing the bad. I

doubt whether there are any "good" monopolies that deserve protection. But there will always be inevitable monopolies whose transitory and temporary character is often turned into a permanent one by the solicitude of government.

Hayek's (1960: 136) solution was to impose on monopolists a general duty not to price discriminate:

'... whenever there is a danger of monopolist's acquiring coercive power, the most expedient and effective method of preventing this is probably to require him to treat all customers alike, i.e., to insist that his prices be the same for all and prohibit all discrimination on his part. This is the same principle by which we have learned to curb the coercive power of the state.'

Hayek was hostile to associations, whether capitalist or workers. He condemns the legal privileges given to trade unions including their exemption from antitrust laws in the USA. He has little to say about the market power of employers and their monopsonistic hiring practices. Hayek (1960: 272) considered trade unions as 'economically harmful and politically exceedingly dangerous'. Their actions made the market ineffective and controlled the direction of the economy by their influence on relative wages and 'constant upward pressure on the level of money wages, with its inevitable inflationary consequences.'

Law, Liberty and Legislation (1979)

Nearly two decades later in *Law, Legislation and Liberty* Hayek (1979: Ch 15)¹³ restates his views on competition policy.¹⁴ The discussion is short, discursive, difficult to follow at times and to the economist lacks rigour.

Hayek begins by addressing what he means by competition. It is a discovery procedure in a world of ignorance. The perfectly competition model and rationality assumptions are criticised as 'a wholly unrealistic, over-high standard of what competition should achieve and thus often leads to an erroneously low estimate of what in fact it does achieve' (65). 'The test ... should be whether the results of a given policy exceed or fall short of the results of other available procedures' (67).

¹³ Hayek says views on antitrust was influenced by Rothbart (1970), McGee (1971), Kirzner (1973), Armentano (1972) and Hoppmann (1976 a b).

¹⁴ Hayek (1979: 108 n.1) states: 'This chapter, written in the present form about ten years ago and partly published, after having been used for public lectures at Chicago and Kiel published in Germany in 1969 as *Der Wettbewerb als Entdeckungsverfahren*. KielerVortrage No. 56 (Kiel: Institut für Weltwirtschaft). However, the English translation published as 'Competition as a Discovery Process' (Hayek 1968) bears little relationship to the book chapter.'

Hayek (85) restates that a monopolist's ability to price discriminate 'clearly ought to be curbed by appropriate rules of conduct.' But he now qualifies this: 'it would not be desirable to make all discrimination illegal, aimed discrimination intended to enforce certain market conduct should be prohibited.' Now Hayek accepts that there can be 'good' and 'bad' price discrimination. Bad price discrimination is where a monopolist 'use[s] his power to keep out a potential competitor by offering especially favorable terms to customers only in the limited region in which the newcomer at first will be able to compete' (84). For Hayek 'market power consists in a power to prevent others from serving customers better' (72).¹⁵

Hayek (1979: 81) puts his concern over 'bad' price discrimination in a broader political context: 'it is not only the power of the monopolist to discriminate, together with the influence he may exercise on government possessing similar powers, which is truly harmful and ought to be curbed'. Private economic power and public power tend to join forces to subvert the market and liberty. I return to Hayek's focus on price discrimination later.

On cartels, Hayek (86) proposed that restraints of trade be unenforceable in law:

The same applies largely to the case where not a single monopolist but small groups of firms acting in concert to control the market are concerned. It is generally thought necessary to prohibit such monopolistic combinations or cartels by prohibiting them under penalties. The example set in the USA by Section One of the Sherman Act 1890 has been widely imitated. It seems also that this provision of the Act has been remarkably successful in creating in the business world a climate of opinion which regards as improper such explicit agreements to restrict competition. I have no doubt that such a general prohibition of all cartels, if it were consistently carried through, would be preferable to any discretionary power given to authorities for the purpose of merely preventing 'abuses'. The latter leads to a distinction between good and bad monopolies and usually to governments becoming more concerned with protecting the good monopolies than with combating the bad ones. There is no reason to believe that any monopolistic organization deserves protection against threatening competition, and much reason to believe that some wholly voluntary organizations of firms that do not rely on compulsion are not only not harmful but actually beneficial. It would seem that prohibition under penalties cannot be carried out without a discretionary power of granting exemptions, or of imposing upon courts the difficult task of deciding whether a particular agreement is, or is not, in the public interest. Even in the USA, under the Sherman Act and its various amendments and supplements, a situation has in

¹⁵ In line with standard price theory Hayek also treated monopoly as reducing output.

consequence arisen of which it could be said that 'the law tells some businessmen that they must not cut prices, others that they must not raise prices, and still others that there is something evil in similar prices'. It seems to me; therefore, that a third possibility, less far-reaching than prohibition under penalties, but more general than discretionary surveillance to prevent abuses, would be both more effective and more in conformity with the rule of law than either. This would be to declare invalid and legally unenforceable all agreements in restraint of trade, without any exceptions, and to prevent all attempts to enforce them by aimed discrimination or the like by giving those upon whom such pressures were brought a claim for multiple damages as suggested above.

Hayek (88) widens the ambit to note that 'anti-cartel or anti-trust legislation has mostly been aimed at the combination of a few big firms and has rarely effectively touched the restrictive practices of the large groups of smaller firms organized in trade associations and the like.'

Hayek (1979:85) rejected the public enforcement of antitrust which is the standard approach for most antitrust laws. He doubted whether such government agencies would be able to successfully identify monopoly abuses and would inevitably exercise their discretion to apply the law in a discriminatory way. He did not believe that public officials would be able to acquire the knowledge, picking up the theme in *The Road to Serfdom* and the heated 1930s debates over the socialist calculation: 'The knowledge required here in order to prosecute successfully is not the kind of knowledge that any authority is likely to possess.'

To square the circle Hayek (85) proposes the private enforcement of antitrust laws incentivised by 'multiple damages' and contingency legal fees paid to lawyers:

It would seem more promising to give potential competitors a claim to equal treatment where discrimination cannot be justified on grounds other than the desire to enforce a particular market conduct and ward multiple damages. (85)

Thus, to set potential competitors as watchdogs over the monopolist and to give them a remedy against the use of price discrimination would seem a more promising check on such practices than to place enforcement in the hands of a supervising authority. Particularly if the law explicitly authorized that a part of the damages awarded might be collected by the lawyers conducting such cases, in lieu of fees and expenses, highly specialized legal consultants would probably soon grow up who, since they would owe the whole of their business to such suits, would not be inhibited through fear of offending the big corporations.

Hayek said nothing about merger regulation other than to limit cross-ownership by manufacturing corporations. This is strange because the Sherman Act of 1890 (which is the only antitrust legislation he addressed in any detail) was primarily concerned with the formation of trusts and concentration by acquisitions and mergers which is a major area of competition policy.

THE SPECIFICS OF HAYEK'S ANTITRUST PROPOSALS

Here I elaborate on Hayek's view on competition, large corporations ('bigness'), patents and price discrimination both in their historical and present-day context.

Competition as a Discovery Procedure

Hayek turned the concept of competition on its head – a competitive market is a social organisation that efficiently deals with 'irremediable ignorance.' This is the opposite of standard economics which claims that if consumers and producers are ignorant, markets fail. For Hayek, the efficiency of markets does not rely on the assumption of perfect knowledge and economic rationality; it is free competition that creates the conditions for effective competition.

Hayek deftly reversed causality in the way markets work, turning standard neoclassical assumptions of economic theory into outcomes of the competitive process. In the section 'Competition and Rationality' Hayek (1979: 75) states 'rational behaviour is not a premise of economic theory' (1979: 75) but 'competition will make it necessary for people to act rationally to maintain themselves.'¹⁶ As Hayek puts 'competition breeds certain types of behaviour' - to work harder, attentively and with regularity – which most 'do not like' and see it as 'always a nuisance that prevents a quiet life.' Similarly, firms may not set out to maximise profits and make mistakes, but it is only those that maximise profits that survive under competition.

Many will be very surprised to learn that Hayek's (2013: 836) intellectual case for the market, liberalism and economic freedom is not based on ideology or 'ethical presuppositions' but ignorance:

... the awareness of our irremediable ignorance of most of what is known to somebody is the chief basis of the argument for liberty. This is especially true in the economic field. If it appears that the market mechanism leads to the

¹⁶ See Becker (1962) for a model of how irrational behaviour can lead to market rationality and Alchian (1950) on the survivorship under conditions of uncertainty.

effective utilization of more knowledge than any directing agency can possess, this is the chief foundation of the case for economic freedom.

The market is an efficient way of matching individual information and knowledge in an ignorant world, and competitive markets do this best. Thus, it is competition that generates information and knowledge, creates a way of thinking among individuals and leads to market rationality. Hayek's differences may seem superficial since the conclusions are the same as neoclassical economic theory – competitive markets are efficient.

Hayek's (1948) distinctive view of competition grew out of the 1920s debate over the impossibility of socialist calculation (Hayek, 1940) and the Austrian economics view of the relationship between knowledge and the market process. Hayek rejected the perfectly competitive market as an abstract and misleading benchmark that never existed nor could ever be created. For Hayek (1960: 68): 'Competition is ... first and foremost a discovery procedure' ... 'in which people acquire and communicate knowledge'. Competitively determined prices convey the necessary information on which consumers, producers, distributors, managers and other decision-makers can rely to plan their actions. They are informationally efficient in the comparative sense as the best available means for economising on and disseminating the dispersed knowledge and information on local conditions known only by those in the market. Planners, public officials and the government cannot replicate the informational efficiency of markets.¹⁷

Competition is a dynamic and evolutionary process in a world in constant flux and adaptation to changing technological, economic and myriad other factors. As Hayek (1984: 325) later said: '[A]ll *economic* problems are caused by *unforeseen* events.' The focus must be on long-term tendencies, developments, experimentation and adaptations. The short run is misleading as it fails to incorporate the unpredictable effects that arise from changing market conditions and technological progress. Impatience can lead to actions and policies that while they appear grounded on a static understanding of economic processes frequently offer remedies that harm the self-correcting forces of competition which only reveal themselves over time.

In the tradition of Bernard Mandeville (1714) and Adam Smith (1776) competitive forces generate a spontaneous order (as if by a 'hidden hand') to guide market participants to efficient outcomes and evolve market-supportive laws, institutions, cultural values, morality and ethics. One implication of tacit knowledge is that the institutions of

¹⁷ As Lavoie (1985: 54) put it: 'The function that prices play in a market is a cognitive one. It is to reduce for each decisionmaker the otherwise overwhelming number of *technologically* feasible ways of producing things to the relatively much smaller number that appear *economic*—that is, appear to more than repay their costs.'

Western society, including the market system, are “the result of human action but not the result of human design.” Hayek adopted a survivorship view – what survives are arrangements that better serve individuals.

There are two other aspects of the Hayekian market process model. The first is that markets are typically in disequilibrium. Demand and supply are not easily reduced to deterministic schedules as in standard textbooks (although this may be useful to understand market behaviour at any one time). Entrepreneurship exploits the profit opportunities created by disequilibrium situations. Secondly, market behaviour cannot be predicted based on market structure. Monopolies, oligopolies and cartels are constantly under attack from the corrosive forces of competition both within the market and outside from potential competitors. Firms that acquire a monopoly position by competing on the merits are consistent with a competitive market; their monopoly profits are the engine that creates incessant competitive pressures and technological progress. For Hayek (1979:71): [C]ompetitive improvement of productive techniques rests largely on the endeavour of each to gain temporary monopolistic profits.’

Despite the developments in economics the modern meaning of competition both in economics and antitrust remains shrouded in ambiguity. It is still based on perfect competition and market failure the latter defined as any departure from the assumption underlying the textbook model of perfect competition. This is despite that perfect competition is based on ‘unrealistic’ assumptions and is unattainable. It also offers a misleading structural view of competition as consisting of many firms and many consumers (an infinite number) even though the economists’ concept of ‘many’ is a behavioural one where no one or group of individuals can directly or indirectly influence prices i.e. market participants lack economic power. The approach then turns the model on its head by treating the violation of the ‘unrealistic assumptions’ necessary for perfection as evidence of monopoly and market failure. John M. Clark’s (1940) concept of ‘workable competition’ which held sway for many decades epitomised this approach as does the concept of ‘market failure’.

This ambiguity infects the definition of competition I antitrust laws. Remarkably the US Sherman Act does not mention the word competition adopting the common law wording by outlawing combinations and conspiracies in restraint of trade and monopolisation. European antitrust does better because it was influenced by Ordoliberal thinking. The competition provisions of the European Treaty refer to ‘competition’ and ‘consumers’ and ‘competitive disadvantage.’ But the meaning of competition has been and remains ill-defined changing since the 1950s depending on the prevailing ideology, the area of antitrust and the institutions dealing with a specific

matter.¹⁸ Even the Chicago School prefers economic efficiency to competition. Robert Bork (1978: 109) rejected the goal of protecting competition because US ‘judges ... have used the word to mean very different things have resulted in the fruitless discourse of men talking past each other.’ Much the same can be said of economic efficiency and consumer welfare.

Table 1: Hayekian Principles of a ‘Competitive Order’

- Knowledge is local, tacit, and only known to individuals.
- Individuals are ignorant and make decisions in a complex world.
- Competition is a ‘discovery procedure’ in a world of ignorance.
- Competitive prices transmit information and are informationally efficient in the comparative sense of being the best means available.
- The economic problem is adaptation to uncertainty and change.
- Competition is a dynamic evolutionary process that takes place over the long run.
- Competition requires the rule of law and a permanent legal framework.
- Competition policy should protect the competitive process.
- Potential competition is key to the competitive process.
- Antitrust should target discriminatory actions designed to exclude potential competitors.
- The government should not interfere with the price system.

Business Bigness

Business ‘bigness’ is a major concern as it has been since the late 1800s (Kahn 1971, Wu 2018). US antitrust scholars, politicians and antitrust enforcers have become preoccupied with the growth and dominance of Big Tech advocating the reform of antitrust or its replacement with ex ante regulation. European legislators have moved to bring in a raft of competition law prosecutions and new ex-ante regulations to control what they regard as Big Tech’s economic power.

¹⁸ Brook (2022: 833) ‘Ordoliberalism has profoundly inspired EU competition law’. Textual analysis of European Commission’s decisions, official publications and European Court judgments show that the concept of competition has changed since 1971 and differs by institution and type of publication being described variedly as freedom, ‘workable’, ‘fair’, ‘normal’ and increasingly since the mid-2000s as promoting ‘consumer welfare’ (Brook 2022, Stylianou and Iacovides 2022). In the earlier decades there was less commitment to competition and allowance for offsetting factors such supporting small enterprises and public benefits.

Hayek unlike many fellow economic liberals in the 1940s and 1950s did not subscribe to the big is bad mantra, did not advocate strong antitrust laws¹⁹ and never proposed the breakup of large corporations.²⁰ He regarded monopoly as largely transient and monopoly profits as the inducement to the self-regulatory forces of competition in the absence of anti-competitive government interference. Otherwise ‘monopoly based on superior performance is unobjectionable’ (Hayek 1979: 83) For Hayek, there was nothing immoral or unjust about monopoly profits. Indeed, the opposite - the attempt to regulate and tax such profits ran the serious risk of impairing the dynamic forces of competition. A special emphasis is placed on potential competition, something that is only being rediscovered in current antitrust thinking.

When Hayek wrote his initial articles in the 1940s there was, as today, a general concern over the rise of large industrial and managerial corporations. Berle and Means (1933: 357) in their influential work at the time warned that “[t]he rise of the modern corporation has brought a concentration of economic power which can compete on equal terms with the modern state.” Many saw the large corporation as a threat to competition, freedom, and the market, if not democracy.

Economists, such as Edward Mason (1959) and his student Joe Bain (1960), reacted to the growth of large industrial corporations and developed the structure-conduct-performance (SCP) paradigm (known as the Harvard School) that sought to capture the influence of market structure on competition. This approach is exemplified in Frederic M. Scherer’s (1970) textbook *Industry Market Structure and Economic Performance*. This structural approach, which dominated Industrial Organisation economics up to the late 1980s, saw a causal link between market concentration and profitability and economic performance. It inevitably led to the view that big corporations charged excessive prices and earned monopoly profits. A view that was effectively debunked by the Chicago School.²¹

¹⁹ Paul (2005) claims that Hayek (1979) ‘is both less consistent and less vehement in his cautions about invoking government to remedy the perceived problems.’ I see little difference between Hayek’s position in 1960 compared to 1979 apart from relaxing the total ban on price discrimination.

²⁰ In the *Readers Digest* (Hayek 1945b [2010]) condensed version of *The Road to Serfdom* the text proposes the break-up of monopolies to make competition more effective as ‘a wide and unquestioned field for state activity.’ This proposal was never made by Hayek in *The Road to Serfdom* or elsewhere.

²¹ Hayek did not develop a theory of the firm or corporation which dealt with the reality of managerial corporation, public corporation or other types of firms. Hayek ignored the transaction cost approach pioneered by Ronald Coase (1937) who was a colleague of Hayek at the LSE and Chicago. Coase argued that the boundary between the market and the non-market, and particularly the firm, was determined by the costs of using the price system to

Hayek's primary concern was the rise and exercise of economic power, whether by the state, private monopolies or organised associations. It was not size but 'the capacity to withhold services' (1979: 81) and to prevent people ... from trying to do better than others (1979: 73). In line with modern antitrust Hayek (1979: 830) said that it is 'not monopoly as such but only the prevention of competition which is harmful' 'if it produces more cheaply than others'.

In *The Road to Serfdom* Hayek rejected the claim that modern technology - essentially economies of scale - would inevitably lead to monopoly. Decades later Hayek (1979:77) showed the same permissive attitude to firm size: 'there is no possible measure or standard by which we can decide whether a particular enterprise is too large.' He (78) continued: 'There can be no general rule about the desirable size since this will depend on the ever-changing technological and economic conditions, and there will always be many changes which will give advantages to enterprises which may appear by past standards an excessive size.' Concluding that the most 'effective size of the firm is 'one of the unknowns to be discovered by the market process' and determined by technological and economic factors. And just to nail the point Hayek (77), perhaps as an admonition to past fellow liberals (such as Henry Simons and Aron Director of the 1940s), declares that the attack on corporate bigness 'produces essentially antiliberal conclusions drawn from liberal premises':

The misleading emphasis on the influence of the individual firm on prices, in combination with the popular prejudice against bigness as such, with various 'social' considerations supposed to make it desirable to preserve the middle class, the independent entrepreneur, the small craftsman or shopkeeper, or quite generally the existing structure of society, has acted against changes caused by economic and technological development. The 'power' which large corporations can exercise is represented as in itself dangerous and as making necessary special governmental measures to restrict it. This concern about size and power of individual corporations more often than perhaps any other consideration produces essentially antiliberal conclusions drawn from liberal premises.

Hayek (1979: 79) goes on the claim that:

organise production. The firm arose because using the price system was too costly. Hayek on the other hand saw the firm, or at least firm size, as determined by technological economies of scale in the absence of the separate effects of corporate laws. Arguably if Hayek had accepted Coase's analysis it would have taken away some force of his argument about the efficiency of the price system even though firms operated in markets.²¹ As one wag quipped the firm is an 'island of socialism' which substitutes the administrative planning of production for prices.

Size has thus become the most effective antidote to the power of size: what will control the power of large aggregations of capital are other large aggregations of capital, and such control will be much more effective than any supervision by government, whose permission of an act carries its authorization, if not outright protection. As I cannot repeat too often, government-supervised monopoly always tends to become government-protected monopoly; and the fight against bigness only too often results in preventing those very developments through which size becomes the antidote of size.

Hayek (1979: 78) maintains that government is often the real culprit because of policies that favour large corporations:

...they will often be determined by institutional arrangements which happen to give an advantage to size which is artificial in the sense that it does not secure smaller social costs of the unit of output. In so far as tax legislation, the law of corporations, or the greater influence on the administrative machinery of government, give to the larger unit differential advantages which are not based on genuine superiority of performance, there is indeed every reason for so altering the framework as to remove such artificial advantages of bigness. But there is as little justification for discrimination by policy against large size as such as there is for assisting it.

Hayek is particularly concerned about treating corporations as legal persons with the same rights as natural persons. Like most liberals at the time, he saw limited liability as weakening individual responsibility and the separation of management from ownership as creating perverse incentives (recall Adam Smith's attack on the 'negligence' and 'profusion' of the joint stock company). He would ban interlocking directorship and cross-shareholding by manufacturing corporations, something in line with other economists at the time and which is still hotly debated.

Hayek (1979: 82) rejected the proposition a big corporation should take on social responsibilities mirroring Milton Friedman's (1962: Ch 8) position:

But once the management of a big enterprise is regarded as not only entitled but even obliged to consider in its decisions whatever is regarded as the public or social interest, or to support good causes and generally to act for the public benefit, it gains indeed an uncontrollable power—a power which could not long be left in the hands of private managers but would inevitably be made the subject of increasing public control.

It would however be wrong to say that Hayek was unconcerned about big business. He expressed wider concerns over corporate size. The first was the propensity of large corporations to lobby and achieve favourable regulation and privileges. They not only operated within the 'rules of the game' but tried through the political and legislative processes to gain favourable changes to the law and public policies. Behind this was Hayek's view that planning and the cartelisation and monopolisation of the German economy were a major contributing factor to the rise of national socialism and Adolf Hitler (Crane 2020). Secondly, a corporation could grow 'too big to fail' eliciting government action. Thirdly, the rise of the corporation insulated workers from market and entrepreneurial activity to breed anti-market and anti-competition sentiments leading to political support for greater government intervention which would undermine the competitive order and liberalism.

Patents and IPRs

Hayek saw patents as intellectual monopolies. In *The Road to Serfdom*, Hayek (1944: 39) claimed that patents had "led to the destruction of competition in many spheres". He (1947 [1948]: 113–14) repeated this claim in his inaugural address to the Mont Pelerin Society in 1947:

The problem of the prevention of monopoly and the preservation of competition is raised much more acutely in certain other fields to which the concept of property has been extended only in recent times. I am thinking here of the extension of the concept of property to such rights and privileges as patents for inventions, copyright, trademarks, and the like. It seems to me beyond doubt that in these fields a slavish application of the concept of property as it has been developed for material things has done a great deal to foster the growth of monopoly and that here drastic reforms may be required if competition is to be made to work. In the field of industrial patents in particular we shall have seriously to examine whether the award of a monopoly privilege is really the most appropriate and effective form of reward for the kind of risk-bearing which investment in scientific research involves.

In his last major work Hayek (1988: 36/7) reiterates this view:

The slow selection by trial and error of a system of rules delimiting individual ranges of control over different resources has created a curious position. Those very intellectuals who are generally inclined to question those forms of material property which are indispensable for the efficient organisation of the material means of production have become the most enthusiastic supporters of certain immaterial property rights invented only relatively recently, having to do, for

example, with literary productions and technological inventions (i.e., copyrights and patents). The difference between these and other kinds of property rights is this: while ownership of material goods guides the use of scarce means to their most important uses, in the case of immaterial goods such as literary productions and technological inventions the ability to produce them is also limited, yet once they have come into existence, they can be indefinitely multiplied and can be made scarce only by law in order to create an inducement to produce such ideas. Yet it is not obvious that such forced scarcity is the most effective way to stimulate the human creative process. I doubt whether there exists a single great work of literature which we would not possess had the author been unable to obtain an exclusive copyright for it; it seems to me that the case for copyright must rest almost entirely on the circumstance that such exceedingly useful works as encyclopaedias, dictionaries, textbooks and other works of reference could not be produced if, once they existed, they could freely be reproduced.

Similarly, recurrent re-examinations of the problem have not demonstrated that the obtainability of patents of invention actually enhances the flow of new technical knowledge rather than leading to wasteful concentration of research on problems whose solution in the near future can be foreseen and where, in consequence of the law, anyone who hits upon a solution a moment before the next gains the right to its exclusive use for a prolonged period (Machlup, 1962).

Hayek (1947 [1948]: 114–15) also felt that trademarks ‘helped to create monopolistic conditions because trademarks have come to be used as a description of the kind of commodity, which then of course only the owner of the trademark could produce ("Kodak," "Coca-Cola").’ He proposed that ‘[T]his difficulty might be solved, for example, if the use of trademarks were protected only in connection with descriptive names which would be free for all to use.’

Hayek's attack on patents was not uncommon in the 1930s and 1940s as many including classical liberals saw patents as monopoly privileges that artificially extended monopoly (Horn and Kleas 2011). Henry Simons (1934 [1948]), Frank Knight (1933), Aron Director, Michael Polyani (1944), Arnold Plant (1934) and Fritz Machlup (1958) among other liberals were all hostile to patents. Arnold Plant (1934) claimed that: ‘the modern patent system has developed into a weapon of the big against the small.’ Henry Simons condemned the patents for creating monopolies and proposed a drastic reduction in the length of patents. Aron Director agreed: ‘A study of American antitrust cases discloses the crucial importance which patents on inventions have played in creating and maintaining industrial monopoly’ (Horne 2009 n. 19). Ordoliberalists such as Walter Eucken and Alexander Rüstow shared Hayek's view (Lenel 1986) and continue to advocate shorter patent protection, controls over the misuse of patent laws and

compulsory licensing (Oliver 1960). Even Schumpeter (1942) did not make much of patent protection as a driving force underpinning his 'gales of creative destruction'.²² These critics took the position that secrecy and first-mover advantages were sufficient to spur inventive activity so that there was no real risk of the under-provision of innovation and R&D.²³

It is understandable why Hayek took this approach given his view of the market as an information system. As he wrote (Hayek 1960: 97): "Knowledge, once achieved, becomes gratuitously available for the benefit of all. It is through this free gift of the knowledge acquired by the experiments of some members of society that general progress is made possible, that the achievements of those who have gone before facilitating the advance of those who follow."

While Hayek maintained his anti-patent position Chicago liberals who had shared his view up to the late 1950s, such as Friedman, Director, Stigler and others, did an about-face endorsing the idea that patents encouraged innovation and, in any case, any market power they conferred would be eroded by competition. In particular, they rejected the then-prevalent claim that patent holders could leverage their market power into adjacent markets. They applied the static price theory to show that there was only one monopoly profit from the exploitation of a patent that would be sacrificed by leveraging through tie-in sales (Bowman 1957). Hence predation and leveraging were unprofitable, and therefore unlikely.

Today the claim that patents encourage invention and innovation is asserted but unsupported by any hard evidence.²⁴ William Landes and Richard Posner (2003), the principal proponents of the Chicago economic analysis of law movement, in their treatise on intellectual property laws start by acknowledging: 'That belief cannot be defended confidently based on current knowledge.'²⁵ Studies have found that, apart

²² While Schumpeter (1942:102) contended that '[E]very successful corner may spell monopoly for the moment' he had very little to say about patents. In *Capitalism, Socialism and Democracy* Schumpeter (1942: 88) merely observes 'that the protection afforded by patents and so on is, in the condition of a profit economy, on balance a propelling and not an inhibiting factor.' Hardly a ringing endorsement indicating that Schumpeter saw other factors as more important as discussed by Gurcharan and Julien (2019).

²³ The classic standard article is Arrow (1962).

²⁴ As an example, Aghion, et al (2020) claim that patent protection was an essential condition for innovation during the Industrial Revolution but give no evidence that it was then or is now even in relation to their empirical work. Interestingly the view is no longer held by economic historians like Douglass North (1981), who initially claimed that the Industrial Revolution was spurred by patents, but subsequently watered down this claim (North 2005).

²⁵ The inefficiency view of patents persists e.g. Boldrin and Levine (2002, 2008, 2013) and Kinsella (2008). Jaffe and Lerner (2004) show that changes to US patent law in the 1980s led to an explosion in the number of patents and patent litigation threatening the innovation

from the chemical and pharmaceutical sectors, patents are rarely the principal means of appropriating the returns from R&D (Cohen, Nelson and Walsh 2000). Moser's (2013: 40) review of the historical evidence suggests that patents had, if anything, a detrimental effect:

Overall, the weight of the existing historical evidence suggests that patent policies, which grant strong intellectual property rights to early generations of inventors, may discourage innovation. On the contrary, policies that encourage the diffusion of ideas and modify patent laws to facilitate entry and encourage competition to facilitate entry and encourage competition may be an effective mechanism to encourage innovation.

Despite the general economic support for patents as encouraging innovation, there is a recognition in antitrust laws that they can confer market power on their holders which can be abused. As a result, there is considerable antitrust jurisprudence on when a patent holder is deemed to abuse its monopoly position.

Price Discrimination

Hayek's disdain for price discrimination has been a historical feature of the debate over free market competition (Giocoli 2014). He shared the general view that firms can acquire market power by predatory practices that seek to block potential competitors and weaken existing smaller competitors, although he was never explicit about this nor used the term.

Predatory pricing loosely speaking is where a monopolist incurs short-term losses by under-pricing its products to consumers where it faces a competitive threat. This is designed to weaken competition and exclude potential rival firms from the market.

Hayek's view was not based on a well-worked-out economic theory of exclusionary behaviour. The core of his unease was his adherence to the rule of law, which abhorred discriminatory treatment as inherently coercive²⁶ and opposed to the political theory of a liberal competitive order. So, it was logical if not somewhat strained to apply this principle to require uniform prices be charged by large corporations to prevent them from coercing their competitors. Hayek (1979: 85) later modified his position: '[T]he problem can therefore not be solved by imposing upon all monopolists the obligation to serve all customers alike' so 'it would not be desirable to make all discrimination illegal.'

process, foreclosing markets and encouraging unproductive rent-seeking. In short 'too much property' can lead to excessive patent activity which impedes efficiency and innovation (Buchanan & Yoon 2000).

²⁶ Hayek (1960: 133) said 'Coercion occurs when man's actions are made to serve another man's will, not for his own but the other's purpose'.

Hayek's prohibition of exclusionary discrimination is not as consistent with his liberal views as he would have his readers believe. Reducing prices to meet a rival's price or in reaction to the entry of new firms is a routine competitive response, so it will not be easy to determine whether the action is exclusionary or not. Hayek's theory of harm, to use the modern antitrust term, would require potential competitors that are harmed and the courts to establish that a firm was a monopolist in the sense of having non-transitory market power, and then to distinguish 'bad' from 'good' price discrimination. Hayek gives no guidance on how this is to be done. But more fundamentally his proposal creates a discriminatory law which requires the courts to distinguish good from bad discrimination. Hayek seems have been drawn into the trap of proposing a discriminatory legal rule – a rule of reason – which deals with predation on a case-by-case basis, and which invites administrative discretion. Here Hayek's economics clashes with his adherence to the rule of law – that all be subject to the same general rules. Making exclusionary price discrimination actionable carves out an exception, and therefore is itself discriminatory.

Hayek's acceptance of exclusionary price discrimination as the most egregious monopoly abuse jars with the thinking of other Austrian and Chicago School economists. To them, there is only one monopoly profit and there is no need for a monopolist to sacrifice its profits to reinforce its monopoly position (McGee 1956, 1958). Since exclusionary practices were unprofitable if they survived it must be assumed that they are efficient. Hence genuine cases of predatory pricing were treated as rare as unicorns, and price discrimination as pro-competitive. The Chicago School's position has subsequently been challenged for its failure to account for strategic behaviour which can under certain assumptions make predation profitable (see Giocolli 2014). Most contemporary antitrust economists, lawyers and regulators reject the view that predation is a trivial issue and so Hayek's position is more in line with current thinking.

Hayekian antitrust would seek to protect the competitive process rather than be guided by economic efficiency or consumer welfare standards. This is in line with modern antitrust laws which seek to protect competition, not competitors and do not treat corporate bigness or market power as an antitrust violation, only its abuse.²⁷ That is the theory. In practice, corporations which have large market shares are often treated

²⁷ Even during the Brandeis era, the US Supreme Court did not hold corporate bigness as an antitrust violation - *United States v. Columbia Steel Co.* 334 U.S. 495, 526–27 (1948) (rejecting government challenge to large corporate acquisition on grounds that it did not diminish competition); *United States v. Int'l Harvester Co.* 274 U.S. 693, 708 (1927) (“The law . . . does not make the mere size of a corporation, however impressive, or the existence of unexercised power on its part, an offense, when unaccompanied by unlawful conduct in the exercise of its power.”); *United States v. U.S. Steel Corp.* 251 U.S. 417, 451 (1920) (“[T]he law does not make mere size an offence or the existence of unexercised power an offence.”).

presumptively as having market power. Smaller rivals often call foul when they struggle to compete with the larger firm. It is here that the distinction between protecting competition and protecting competitors becomes blurred and difficult to determine. Frequently smaller firms will complain to the antitrust regulator who typically relies on complaints to identify antitrust violations using this strategically to gain advantages that they could not secure in the marketplace.

Restraints of Trade

Hayek's proposal to make agreements in restraint of trade unenforceable is unexceptional. Current antitrust laws make agreements and understandings in restraints of trade unenforceable. Hayek's critical comments about the detrimental effects of freedom of contract impairing the competition process relate to the legality and enforceability under English common law well into the second half of the 20th century and in Germany before WWII. The Sherman Act of 1890 adopted English common law but evolved along different path outlawing restraints of trade around the 1900s.

Hayek's discussion is also ambiguous and limiting, although it is unclear whether this was intended given his previous understanding of the common law. He addresses the problem as one of the coercion of a party to agreements that restrain trade. This appears to restrict his proposal to the contractual arrangements between firms, and between firms and individuals, which coerced one of the contracting parties to join or continue to participate in a restraint of trade. As such the discussion appears confined to restrictive covenants, non-compete clauses and long-term restrictive contracts where the individual worker, business person or firm is prevented from competing. It does not seem to extend to situations where cartelists who happily agree to fix prices, share markets, and limit output which cause harm to consumers and other third parties. There is no recognition that these wider losses should be taken into account and those consumers who have been overcharged able to sue for damages.

The Knowledge Problem and Enforcement

Hayek's proposal to 'privatize' the enforcement of antitrust laws merits serious consideration. It is not novel as it is a feature of the common law, and of many jurisdictions including the USA. However, making 'potential competitors' the sole antitrust 'watchdogs' gives rise to its own set of knowledge and incentive problems.

First, a potential competitor does not exist. It has either been deterred from entering the industry or else is waiting in the wings with limited industry. Whatever the potential competitors circumstance it will lack knowledge and be second-guessing the reasons for the monopolists or oligopolistic discriminatory pricing policies. Secondly, it will be

difficult for potential competitors to determine whether a large corporation's response to competition is competing on the merits, or the exercise of market power designed to kill off the competition. Competition by definition harms competitors by producing better cheaper products at lower prices, so harm to competitors cannot be used as a test of anticompetitive behaviour. This ambiguity makes any legal action by potential competitors fraught with evidential problems who must marshal evidence to prove their case in court. Further, if the potential competitor has not entered the market, then it may not have standing to sue or an actionable legal claim. Potential injury is not sufficient in law.

One can dismiss the seriousness of these information problems by arguing that while a potential competitor may not have the immediate knowledge, the prospect of triple damages is incentive enough to pursue the 'bad' monopolist. But here we hit a theoretical inconsistency in Hayek's framework. A core proposition of Hayek's view of competition as a discovery procedure is that firms are relatively ignorant about market conditions. They contribute to and react to price signals, but they don't fully understand the particular circumstances and factors in the market, and they don't need to. So, information on the competitive level of price discrimination cannot be objectively determined based on gathering information on market shares, costs and demand elasticities.

This information problem is not unique to Hayek's proposal as it infects both EC and US antitrust which like Hayek focuses on exclusionary effects. The challenge for Hayek and under current antitrust laws is 'to distinguish those acts with exclusionary effects that result from legitimate competition on the merits from exclusionary acts which cannot be justified as normal acts of competition but which, to the contrary, exploit the special power that a dominant firm possesses to entrench the firm's position in the marketplace' (Schweitzer 2008: 134). The other aspect of this ambiguity is that smaller rivals can use the law strategically by alleging bad discrimination to opportunistically to hamper and constrain more efficient larger rivals. The Chicago School and Austrian economics approach deals with both problems – do not make discriminatory prices illegal.

HAYEK AND OTHER POST-WAR LIBERALS

At the risk of digression, I now briefly put Hayek's views on competition policy in the context of other liberal thinking by economists before the Chicago School began to dominate antitrust economics and law.

The Austrian School

Hayek has been described 'as the most prolific, most influential and most successful twentieth-century propagandist for the Austrian School of Economics' (Steele 2007: 104). He also advanced the Austrian economics founded by Karl Menger (1840-1921) and Ludwig von Mises (1881-1973), although not to the taste of the latter. Mises ([1949]: 363), Hayek's mentor, and like Hayek, held the view that: '[T]he great monopoly problem mankind has to face today is not an outgrowth of the operation of the market economy. It is a product of the purposive action on the part of governments.' 'If monopoly prices prevail in the sale of the product of big-size business,' claimed Mises ([1949]:368), 'the reasons are either patents or monopoly in the ownership of mines or other sources of raw material or cartels based on tariffs.'²⁸ But unlike Hayek, Mises (1949: 388) dismissed any concerns about price discrimination: 'that within a market economy not sabotaged by government interference the conditions required for price discrimination are so rare that it can fairly be called an exceptional phenomenon.' On cartels, Mises (1920: 360) said: 'In the long run . . . a national cartel cannot preserve its monopolistic position if entrance into its branch of production is free to newcomers.'²⁹

Today's Austrian economists, mostly found in US universities and research institutes, see no role for antitrust. Israel Kirzner (1997) states their position: 'Freedom of entry (that is, absence of privilege) is the only requirement', and that '[T]he only government action needed to ensure the dynamically competitive character of market activity is to remove all such government-created obstacles.' Kirzner (1991: 61/62 - 1997) argues that 'anti-trust activity emerges as a well-meaning but clumsy interference in the market process, which has the effect of hampering competition'. He and others call for its repeal (Armentano 1972, 1990; Block 1994).

²⁸ Mises ([1949]:360): 'One may wonder whether duopoly and oligopoly are of practical significance.'

²⁹ Mises and Hayek's views must be seen in historical context. Before World War II cartels were not illegal, collusive agreements were enforceable, and cartels operated openly and were fostered by governments. Export cartels existed for every major commodity by European producers. There were thousands of cartels active in Germany over the period from 1873 to 1933. Cartels were so pervasive that in 1918 the Webb-Pomerene Act allowed US companies involved in international trade to participate in cartels, providing the goods affected were not subsequently sold in the US. The interwar years have been described as the Golden Age of cartels. Stocking and Watkins (1948) study calculated that cartels accounted for around 43% of net domestic US manufacturers' sales in 1939; the shares for agriculture and minerals were even higher (Voight 1962) with international cartels controlling an estimated 40% of world trade between 1929 and 1937 (Nussbaum 1986). Until the second half of the 20th century the UK was rife with restriction agreements which were not illegal (Symeonidis, 2002).

Boudreaux (2017) gives three reasons why Austrian Economists continue to reject the need for antitrust – it becomes highly politicised and subject to lobbying and strategic actions by corporations who use it as both a shield and a weapon; the ‘knowledge problem’ which makes it difficult for the antitrust authorities to devise remedies which themselves are not anti-competitive; and the overriding belief that markets are much more robustly competitive than mainstream economists assume. Hayek would not have disagreed with any of these claims. Boudreaux (2017: 10 draft version) continues:

Austrians thus reject most of the mainstream markers of monopoly power – markers such as $P > MC$, profits greater than normal, high market concentration, and price discrimination. These mainstream signs of monopoly power are, instead, at least as likely to be evidence of on-going competitive struggles among firms each to better position itself to 'win' more consumer patronage.

Boudreaux (2017: 13 draft version) proposes a market test based on barriers to entry: ‘If a particular horizontal arrangement survives in the face of entry or the possibility of entry, we are not scientifically entitled to assume that that arrangement is undesirable.’

Ordoliberalism

The Ordoliberals or Freiburg School were fellow ‘Austrians’ and liberals. Ordoliberalism was founded in the 1930s by economist Walter Eucken, and lawyers Franz Böhm and Hans Großmann-Doerth. Ordoliberals saw competition laws as critical in ‘securing individual freedom’ within the rule of law. But unlike Hayek and the Austrian School, they had much less faith in the ability of markets to limit the economic power of large corporations and monopolies (Möschel 1989). Like Hayek, the Ordoliberal school disagreed with the proposition that *laissez faire* and free competition would establish a liberal outcome in the absence of government intervention. The Ordoliberal experience of the Weimar Republic and the rise of National socialism in Germany had shown them that *laissez-faire* led to cartelization and market power destroying competitive markets. Strong competition rules enforced by administrative and adjudicative means within a ‘constitutional’ framework were needed to protect the process of competition from distortion and to minimize government intervention. They would set the ‘rules of the game’ limited to prohibiting exclusionary conduct rather than prescribing behaviour. Later Ordoliberals abandoned the perfect competition benchmark and the idea that monopolies were harmful when they emerged from competition on the merits (Anchustegui 2015, Felice and Vatiello 2015, Adams 1976; Behrens 2015).

The ‘Chicago School’ – then and later

Chicago Liberalism 1930s-1950s

From the 1930s through to the 1950s most liberals displayed general hostility to monopoly, bigness, corporations and patents, and favoured strong antitrust laws. The approach was epitomised by American economist Henry Simons (1899-1946) whose ideas exerted a strong influence over his colleagues at the University of Chicago most notably Aron Director (1901-2004) and Milton Friedman (1912-2006) together with George Stigler (1911-1991) who together later to become the principal exponents of the Chicago School.³⁰

Henry Simons has been described as a Big Government Ordoliberal something he would have picked up during his study year in Germany in the 1930s. His approach was heavily influenced, like most US liberals of the period, by the Great Depression and the incompetence of the Hoover and Roosevelt administrations. Simons' (1934 [1948]) restatement of liberalism is set out in his pamphlet *A Positive Program for Laissez Fair – Some Proposals for a Liberal Economic Policy*. There he writes that private 'monopoly in all its forms is the great enemy of democracy and freedom' and that its abolition is the central plank on which his 'liberal-conservative policy must stand or fall.'

Simons advocated 'drastic measures for establishing effective competition in all industries including the 'gradual transition to direct government ownership and operation where competition cannot be made effective.' He called for the 'outright dismantling of our gigantic corporations,' 'the unqualified repudiation' of the rule of reason in US antitrust, the prohibition of the acquisition of substantial monopoly power, and wanted to make the Federal Trade Commission (FTC) the most powerful and well-resourced government agency. 'In short, restraint of trade must be treated as a major crime and prosecuted unremittingly.' More controversially Simons advocated 'the socialization of the railroads and utilities and of every other industry where competitive conditions could not be preserved.' (58) He argued that advertising '[e]ntrenches monopoly by setting up a financial barrier to the competition of new and small firms' and creates a wasteful arms races among firms, which "must spend enormous sums . . . if only to counteract the expenditures of competitors." Simons called (57) for a 'limitation upon the squandering of our resources in advertising and selling activities' and proposed that it be taxed. This view was widely held by economists at the time.

The influence of Simon's lingered on for many decades. Milton Friedman (1962: 199) in *Capitalism and Democracy* endorsed the need for antitrust laws: 'There can be little doubt that the Sherman anti-trust laws, despite the lack of vigorous enforcement during most of their existence, are one of the major reasons for the far higher degree of competition in the United States than in Europe.' George Stigler (1957) in characteristic tongue-in-cheek fashion claimed that '[O]ne of the assumptions of perfect competition

³⁰ Aron Director (1948) called Simons the 'leader' and Stigler (1974: 1) the 'Crown Prince' of the Chicago School.

is the existence of the Sherman Act'. In the early 1980s, Stigler (1982: 15) still favoured extensive restrictions on mergers and the 'bust up' of companies with monopoly powers regarded US antitrust law as a beneficial 'public-interest law' (quoted in Hazlett 1984).

Simons' most eye-catching proposal was his radical 'new deal' for corporation law. Simons believed that 'the corporation is simply running away with our economic (and political) system - by virtue merely of an absurd carelessness and extravagance on the part of the states in granting powers to these legal creatures.' (58) Among the reforms he proposed was a complete ban on manufacturing corporations owning securities in any other manufacturing corporation, that no single corporation should be allowed to grow to dominate an industry, and that firm size be limited to the minimum size of an efficient operating plant or even more narrowly if necessary to preserve competition (60), a ban on interlocking directorships, and that the capital structure 'should be held to Spartan simplicity' (60). Again, these views were common among economists of the time. For example, and most significantly, Aron Director joined Simons in advocating radical reform of corporation law:

The unlimited power of corporations must be removed. Excessive size can be challenged through the prohibition of corporate ownership of other corporations, through the elimination of interlocking directorates, through the limitation of the scope of activity of corporations, through increased control of enterprise by property owners and perhaps through a direct limitation of the size of corporate enterprises (cited in Horn 2009 n.22)

Simons (1934 [1949]: 42), like Hayek advocated strong active government³¹ in words that could have come directly from Hayek:

The responsibility of the state should ... be ... to establish and maintain such conditions that it may avoid the necessity of regulating "the heart of the contract"—that is to say, the necessity of regulating relative prices. Thus, the state is charged, under this "division of labor," with heavy responsibilities and large "control" functions: the maintenance of competitive conditions in industry, the control of the currency, ... the definition of the institution of property, ... not to mention the many social welfare functions.

Some fifty years after Simons' essay at a symposium (Kitch 1983) Ronald Coase challenged his standing as a classical liberal saying that his *Positive Program* was 'highly interventionist' proposing the use of antitrust to 'restructure American industry.' Milton

³¹ Hayek was in touch with Simons as early as 1934 to express admiration for *A Positive Program* and they became close friends until Simons' untimely and tragic death.

Friedman on the same occasion claimed he was 'astounded' how interventionist Simons was even though Friedman held similar views at the time. These reactions reflect the change among Chicago School economists of Simon's generation rather than Simons' illiberalism or lack of support for the free market (De Long 1990).

Chicago School as we know it.

By the mid-1950s the Chicago School started to break away from Simons' hold moving decisively to Hayek's position on competition issues as reformulated by Aron Director.³² Chicago liberals moderated their attack on monopoly, the modern corporation and patent laws treating them as either benign, pro-competitive or else adequately controlled by competitive forces. Stigler (1988:165) took longer to change his position but by late 1980s he also felt that: '[A]ntitrust remedies should be reserved for important and persistent monopoly problems, many or most of which are created by government regulations'.³³

What was Hayek's influence on this change? While Hayek was at Chicago, he was not a member of the economics or law schools (the former had rejected his appointment). His influence came largely through his writings and friendship with and influenced Aron Director and other Chicago economists who were members of the Mont Pelerin Society. It was further cemented by his role in setting up the Free Market Study (1946-1952) funded by the Volker Foundation to investigate the legal foundations of competition but originally conceived to support Aron Director to write an American version of *The Road to Freedom* (which he never did).³⁴ This was reciprocated by Director's persuading the University of Chicago Press to publish *The Road to Freedom* and organising Hayek's book promotional tour in the USA. The Free Market Study brought together economists Aron Director, Frank Knight, Theodore Schultz, Garfield Cox and lawyers Edward Levi and Wilbur Katz. A turning point in their thinking was Warren Nutter's (1951) dissertation – a student of Frank Knight - which produced evidence that concentration had not increased and was not associated with higher profits.³⁵ This led to a major research

³² Some debate whether Chicago School liberals should be labelled 'neoliberals pointing out they never really took on this label. While it is of small importance Friedman (1951) did identify as neoliberal in 1951.

³³ Overtveldt (2007) claims that Stigler's change of heart was influenced by Schumpeter's view of competition. This is surprising, if true, as Stigler did not focus on dynamic competition and innovation though did share Schumpeter's belief that economics could be made an 'exact science' and the importance of econometrics. Schumpeter was one of the founders of The Econometric Society.

³⁴ Horn (2013; Burns 2023: Chap 7) based on archival material shows that Director was a great fan of Hayek, was in active contact and correspondence with Hayek between 1945 and 1955.

³⁵ Mention should also be made of the controversy stirred up by Harberger's (1954) estimate of the very small deadweight loss due to monopoly in the US economy.

effort called the 'New Learning' which produced mounting evidence supporting Nutter's conclusions and challenged the then dominant Harvard 'structure-conduct-performance' approach to industrial organisation.

The main push however came from the Chicago Antitrust Project (1952-1956) on the law and economics of antitrust. Under the intellectual leadership of Aron Director (and his teaching in Edward Levi's antitrust course), this applied the unflinching logic of neoclassical price theory to practices that were hitherto regarded as monopoly abuses to show that many were not anti-competitive (in theory) or else pro-competitive. In a rare article (Director and Levi 1956) Aron Director challenged the idea of the existence of monopoly abuse through exclusionary tactics. Such tactics when viewed through the lens of neoclassical price theory were unlikely as they 'did not pay.' As Director (1950: 166) would say the monopoly explanation arose from 'the failure to grasp the effective tendency of the market system to destroy all types of monopoly'.

The Chicago Antitrust Project generated a host of important publications³⁶ including John McGee's (1956) influential article on predatory pricing which undermined the idea that it was a monopoly abuse.³⁷ Aron Director's students – Robert Bork, John McGee, Edward Kitch, Henry Manne, Bernard Siegen, Wesley Liebler - and sympathetic economists such as Lester Teller and Ward Bowman, went on to cultivate and propagate his view on antitrust policy.

The Chicago School as it evolved proposed that antitrust should only punish inefficient conduct – namely cartels and horizontal mergers which created monopolies. And even then, cartels were unlikely to pose a genuine problem because they were inherently unstable. Robert Bork's (1978) and Richard Posner's (1976) influential treatises which provided the intellectual basis for the revision of US antitrust.³⁸ As Richard Posner (1978: 928) the Chicago School's new thinking implied 'a breathtaking contraction in the scope of antitrust policy.' This was later augmented by a producer interest theory of government intervention (Stigler 1971, 1988). Study after study published in the *Chicago Journal of Law and Economics* pointed to the failure of government regulation and its overriding pursuit of sectional interests. Hayek again was well ahead of Chicago who only much later under the leadership of George Stigler (and James Buchanan's public

³⁶ Such as Letwin (1954, 1956) Director & Levi (1956), McGee (1956, 1958), Bowman (1955, 1956, 1957) and Bork (1954).

³⁷ No account of the development of the Chicago School approach is complete without reference to Henry Manne's (1965) revolutionary paper on the market for corporate control which showed that the separation of ownership and control in the modern corporation did not necessarily lead to runaway management.

³⁸ The Chicago School saw price theory as having universal application of all human activities fostering a period of 'economic imperialism' over the social sciences and politics. The arch exponent of this was Gary Becker (1976) another Chicago School economist and Nobel Prize winner.

choice approach) showed that legislation invariably promoted producer rather than the public interests.

Notwithstanding the different views on price discrimination, the emerging Chicago liberal economists moved to Hayek's position and away from Henry Simons' structural atomistic view of competition. Hayek's view was adopted by the Chicago School through his writings and influence on Aron Director. The Chicago School approach then had a profound influence on US antitrust under the Reagan administration and filtered through to the antitrust laws of other countries albeit with varying intensity. Hayek's influence was far greater than his indirect influence on US antitrust. Under the Thatcher and Reagan administrations, his worldview was adopted politically and led to the privatisation and deregulation movements and the replacement of central planning by markets and private property as the Soviet bloc collapsed, and other socialist countries including China turned 'capitalist.' One cannot claim that Hayek was directly or even largely responsible for these developments, but he more than any other economist or political philosopher provided the intellectual, if not the ideological basis for the ascent of liberalism and free markets.

Differences between Hayek and Chicago

Despite the similarity between Hayek's and the Chicago Schools' view of competition, there are several important differences. First, the Chicago School replaced the free market process with the pursuit of a technocratic concept of economic efficiency. Following Robert Bork this took the form of the consumer welfare standard which in the 1980s and 1990s reoriented US antitrust, but which now has come in for heavy criticism. Hayek on the other hand ascribed no single goal to individuals and markets. Hayek offered a grander 'Big' theory in the tradition of Adam Smith's *The Wealth of Nations* which sought to set out the conditions for economic growth and liberty. Competition gave individuals the ability to pursue their own goals and generated a 'spontaneous order' that best fostered economic growth over the long run.

Secondly, Hayek and Chicago School were poles apart on the nature of economic inquiry. Chicago economists continued along neoclassical lines seeing markets as allocating resources to satisfy consumers' wants, using mathematical equilibrium modelling, 'as if' theorising and statistical analysis. Hayek rejected these as 'scientistic' for mimicking the physical sciences, regarded the assumption of rationality as misconceived, and because it failed to understand the evolutionary nature of markets, institutions and cultural factors.³⁹ However, Hayek was not entirely antagonistic to neoclassical price theory. He

³⁹ Boudreaux (2017:15) claims that Austrian and Chicago economics often align citing favourably Telser's (1960) work on vertical restraints; McGee's (1958) and Easterbrook's (1981) on predatory pricing; Bittlingmayer's (1982) on collusion; Demsetz (1982) on barriers to entry.

did concede its value: 'Economic theory can elucidate the operation of the discovery procedure by constructing models in which it is assumed that the theoretician possesses all the knowledge' (1979: 69). But he continues that these 'mental models' cannot be tested because the theoretician does not have the assumed knowledge.

The third difference is that Hayek was much more willing to advocate state intervention. His interdisciplinary approach recognised that free markets need legal foundations which required a strong state to enforce. While the impression is often given that Hayek ignored the weakness of the price system in the face of public goods and externalities, a fuller account of his liberalism shows a range of state interventions recognising the need for the public financing of public goods and controls to mitigate unpriced neighbourhood effects. In this, he was closer to the Chicago of Henry Simons and the Ordoliberalists than the Chicago School's antagonism to Government and regulation.

HAYEK'S RELEVANCE TODAY

Today Hayek's intellectual influence, direct and indirect, has waned as has that of the Chicago School and liberalism.

In the US, a new structural approach – called among other labels neo-Brandiesian after the US Supreme Court Justice Louis D. Brandeis (1856-1941)⁴⁰ – has gained academic and political traction. This is largely a rejection of the Chicago School approach. Neo-Brandiesians claim that US antitrust has been neutered by the Chicago School consumer welfare standard, political indifference and corporate lobbying which has allowed increased industry concentration⁴¹ and monopoly abuses, particularly by Big Tech. This new structural approach is epitomised by Lina Kahn (1971) who under President Biden's Administration was appointed Chair of the FTC who has adopted Brandeis' animosity toward big business and initiated a war against Big Tech. This concern was already present in Europe with the European Commission actively pursuing Big Tech under competition laws and recently enacting ex-ante regulation.

⁴⁰ Brandeis (1915). For a profile of Brandeis views and influence see McGraw (1984: Ch 3).

⁴¹ It is claimed that industrial concentration has increased in the last two decades in the US economy and to a lesser extent Europe (Bajgar *et al* 2023) although the reasons and effects are unclear. Some empirical studies find the increase led to lower investment, higher prices and lower productivity growth (Covarrubias *et al* 2020) while other empirical research finds that the increase in concentrations has been due to economies of scale (Kwon 2024) associated with higher productivity and real output growth without evidence of increased prices (Ganapati 2018). Also, Katay *et al* (2023).

The debates, controversies and thinking all have a sense of déjà vu. The irony is that neo-Brandiesians share Hayek's belief in economic freedom and liberal values, but not his or Chicago's belief in the self-regulatory powers of free competition.

Yet as antitrust academics, regulators and politicians struggle to reformulate antitrust they are looking back to the history of antitrust and economics to find new ways to frame old problems. Hayek's approach while associated with the Chicago School approach differs in that it does not posit economic efficiency (consumer welfare) as a goal or standard. It focuses on protecting the competitive process. This chimes with the recent use of 'ecosystems' with dynamic feedback loops as a means of understanding digital markets. Hayek's emphasis on dynamic and potential competition, rejection of rationality, perfect competition, and interdisciplinary approach are all features of the current debate. Hayek's focus on exclusionary discrimination, rejected by the Chicago School, is at the core of the numerous prosecutions currently being pursued by antitrust authorities across the world. Where Hayek would differ strongly is the technocratic mentality of today's regulators and their belief that they can second guess market development for the better to use antitrust to restructure industry. He even had a phrase for it – 'the pretence of knowledge.'

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