possible derivations from his ideas and the most recent theories of regulation of public utilities¹⁸¹. There is also a thread that from Pareto leads to Lerner, via Amoroso, and to Lerner's famous index to measure market power, even if there is no proof of direct influence¹⁸².

4. Why a history of the ideas on the causes of market power?

Why is it important to follow up historically this notion of monopoly power? Which "arcane ideas" are revealed only if it is reconstructed by making use of this category? In other words, what makes the question we have raised a good historical question? We have several times stated that there are no studies on this subject: the suspicion may arise that if this history has not yet been written it is because it is not important. We shall try to show why we think it is.

1. We have already hinted at the possible derivation of the ideas of Sraffa as well as those of Sylos Labini and Modigliani from an Italian matrix: thanks to this category one might therefore write an Italian part of the history of the theory of non-competitive markets, which has not yet been written. We have also already mentioned possible influences of the Italian marginalists on the history of the thinking beyond their national borders and on later generations in environments akin to ours; research closely focused on the subject of the causes of market power may enable us to discover new lines of thought. So going back over the history employing this category allows us to find new derivations.

2. Finding the causes of monopoly power is as useful as finding entry barriers. The reason why it is important to know the sources of market power is the same as why it is important to know what entry barriers are; both allow us to understand what causes prevent new firms from entering an industry. We know that the historiography has

¹⁸¹ Petretto (2002) does not trace the actual paths of the ideas, but offers useful hints on how to look for them.

¹⁸² Keppler (1994b) attributes to Amoroso, a follower of Pareto, the formulation in 1930 of an index similar to the one developed by Lerner four years later (597).

not dealt with the answers that were given to this question in the years before the studies of Bain and of Sylos Labini. Yet from the few mentions provided by the secondary literature reported here we have seen that in actual fact, from the marginalist age onwards there was a great deal of thinking on the question of entry. What was lacking therefore before Bain and Sylos Labini was only the treatment of entry *in a model*: it was only in the models, not in the theory, that this subject wasn't considered¹⁸³. So our study serves in the first place to avoid erasing from historical memory an entire chunk of *theoretical* thinking that is not mentioned in the history of the models, only because they are non-formalized theories.

3. Thanks to the emerging of these theories, this category allows us to reject clearly and definitively the widespread idea that up until the Thirties in economic theory only the two extreme situations of perfect competition and monopoly were considered¹⁸⁴. On the contrary, precisely because there wasn't yet a fully worked out notion of perfect competition, the economists **were well aware of the hybrid situations, and worked out theories to explain them**. In the literature there are numerous, even if vague, references to this awareness; for example Chamberlin declares that his theory does not break with the past¹⁸⁵;

¹⁸⁵ "Although the idea has never been developed into a hybrid theory of value, it represents, so far, no departure from currently accepted doctrine" Chamberlin (1933

¹⁸³ Martin's (2007) recognition of Marshall is significant on this: "There are many anticipations of the limit price model, including Marshall (1925/1890: 270): The leaders in the movement towards forming Trusts seem to be resolved to aim in the future at prices which will be not very tempting to any one who has not the economies which a large combination claims to derive ... from its vast scale of business and its careful organization" (31).

¹⁸⁴ Joan Robinson states this (1933 [1969]: 3): "In the older text-books it was customary to set out upon the analysis of value from the point of view of perfect competition ... But somewhere, in an isolated chapter, the analysis of monopoly had to be introduced" and adds: "the books never contained any very clear guidance as to how these intermediate cases should be treated". Also Martin (2007) is of this opinion: "The mainstream price theory of the early twentieth century consisted of a theory of competitive markets and a theory of monopoly, with a vast wasteland in between" (27). Myatt and Hill (2003) argue on the other hand that still in the Forties textbooks were much less focused on perfect competition than they are today.

Galbraith describes the state of theory in the early Twenties in these terms: "Competition was not supposed perfect. Those who already operated in economic activity would have impeded access in various ways to new operators"¹⁸⁶. And again, Schumpeter writes that Marshall considered pure competition and pure monopoly as limiting cases, and the hybrid ones as fundamental¹⁸⁷. Our theoretical category of market power therefore enables us to quite clearly demonstrate that, even if not formalized in a model, a real theory of the situations in which firms have market power existed in fact.

4. What was this theory? The notion of monopoly power allows us to show that the ideas of the marginalists on entry **were mostly based on a theory that originated in adapting the classical theory of competition to the new situation:** i.e. competition was for them still an activity, as for the classicals, but limited by more pervasive and more resistant obstacles when compared to those of the age of the classicals. To demonstrate this thesis is important, because it would disprove the idea, to which we have already referred, that the greater focus on situations of monopoly in the marginalist period was due only to a mutation of the theory. In essentials, the theory didn't change, but the contextual situation did.

5. Furthermore we wish to argue that the **marginalist conception** of competition has much more in common with the new industrial economics than with the theory of perfect competition¹⁸⁸. For the recent theory competition consists of strategies adopted by asymmetric

^{[1962]: 66).}

¹⁸⁶ Galbraith (1948 [1953]: 120).

¹⁸⁷ Schumpeter (1954 [1976]: 974-975).

¹⁸⁸ Referring to the underlying theory of competition, DiLorenzo and High (1988) state: "Economists of the late nineteenth and early twentieth centuries ... anticipated modern critics of antitrust law" (424). Blaug (1997) even goes so far as to establish a relation between classical theory and the present day one: "Producers in the *Wealth of Nations* treat price as a variable in accordance with the buoyancy of their sales, much like enterprises in modern theories of imperfect competition" (67). Petretto (2002) also confirms this thesis of ours for the case of De Viti de Marco.

firms with limited knowledge, which is a very different thing from the notion of perfect competition. One of our theses is that present day theory gave a formal appearance precisely to the conception of competition mainly adopted by the marginalists.

6. The notion of entry barriers is important also for its implications for microeconomic policy. If there are causes of market power that bring about inefficiency, and it is not a short run phenomenon, then it is necessary to intervene¹⁸⁹; and to identify these causes theory is required. The singling out of entry barriers is therefore the theoretical premise to the call for public intervention. And this was so even before Bain, even if the causes of monopoly power were not yet called "entry barriers". In section 2.2 we argued that by looking at the origins and development of antitrust legislation the history of the concept of market power cannot be found; however, this does not at all imply that it wasn't developed with the aim of being applied. Especially as far as our four marginalists are concerned, we can be certain that they wrote to actually influence economic policy¹⁹⁰. If, as we believe, there was a correspondence between the reform proposals put forward by the economists and the explanations they gave to the phenomenon of market power, then the marginalist age could have been the age when for the first time¹⁹¹, and not only in the USA, the ideas on the non-legal causes of market power made up the theoretical basis for the call for energetic competition policies. Our study therefore serves to provide the just recognition to those contributions that are not

¹⁸⁹ On the recent tendencies of antitrust on this subject Grillo (2006) writes critically: "Today, antitrust is greatly concerned with *dynamic* competition. The critical point is that incentives to innovative activity require some sort of *ex-post* monopoly. The need to foster 'competition through innovation', with its corollary of necessarily protecting monopoly, allegedly temporarily, is making its way in contemporary antitrust grounded as it is on dynamic 'efficiency' arguments, and this is setting new challenges to the received perspective" (47, author's italics).

¹⁹⁰ Meacci (1998) "The call for reforms ... is a prominent feature of the Italian tradition" (6).

¹⁹¹ Since we saw that for the classicals the obstacles to competition weren't really a problem.

mentioned in the histories of competition policies.