Towards a Competitive Society?

The Promotion of Competition as a Goal of Economic Policy.

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Abstract

This paper discusses the problems involved in considering competition policy as a separate area of economic policy. Two problems are given special attention. The first is the doubtful efficiency gain from enforcing competitive conditions in one industry when other industries are not operating at their competitive levels; this is a classical problem in the theory of the second best. The other is the justification for defining competition policy solely in terms of efficiency without regard for distributional effects. It is argued that the concern for distribution is the main reason why labour and agricultural markets, as well as the markets for public services, have to a large extent been immune to interference from competition policy.

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1. Introduction.

The aim of competition policy is usually taken to be the achievement of efficient resource allocation through the promotion of effective competition. In fact, this is more or less a literal translation of the official objectives of the Norwegian Competition Authority according to the Competition Act of 1994. It is of considerable interest to note that it was not always like that. The Price Act of 1953, which provided the legal foundation for the Authority's institutional predecessor, the Price Directorate, had among its aims the promotion of full employment, an efficient utilization of production possibilities and the achievement of an equitable distribution of income, and among its instruments the regulation of prices and dividends was accorded a degree of prominence at least equal to that of the promotion of competition. While the 1953 Act defined the objectives of the Price Directorate as being more or less equal to the goals of government policy in general, the new Act narrowed it down to the promotion of efficiency, while at the same time stating that the proper way to achieve this objective is to create conditions for effective competition.

It is probably fair to say that the new Act defines aims and objectives in a way which is much more congenial to economists who approach this area with a background in economic theory. But it also raises problems. Thus, by instructing the Competition Authority to abstract from distributional considerations, the new Act is based on some implicit assumptions about the separability of the goals of efficiency and equity which are not unproblematic. Moreover, by effectively excluding some parts of the market economy (e.g. agriculture and the labour market) from the scope of competition policy, the Act raises some fundamental questions about the justification for efficient markets in the rest of the economy. Basically, the question is

whether the Competition Act represents a sensible policy of decentralization. In this paper I propose to approach this question from the point of view of welfare economics, drawing in particular on the theory of the second best. Competition policy must fundamentally be judged in terms of its contribution to welfare, and the relationship between competition and welfare is one of the central concerns of welfare economics.

Before moving on to the substantial questions I should like to consider briefly the two central concepts used in the Norwegian Competition Act, viz. efficiency and competition. In a specific theoretical context the meaning of these terms is generally defined in a way which leaves little doubt about their precise content. However, theoretical concepts usually need a practical interpretation before they can be translated into the language of instruments and targets of economic policy.

2. Some History of Thought.

Economists are fond of quoting Adam Smith's pronouncement on the invisible hand, by which individual economic agents in pursuing their own interests are led to promote the interests of society as a whole. While it may be tempting to see in this statement an early version of the first fundamental theorem of welfare economics, this would be an idealization of the history of ideas.

First of all, the concept of the public interest or the interests of society as a whole is a complex one, and Smith never gave a precise definition of it. It is possible to read into his statements a concept of the public interest as *efficiency in production*, as we would now say. Clearly, his

conclusion that competition leads capital to flow to sectors of production where its rate of return is highest, is consistent with a view of competition as ensuring productive efficiency. But to go beyond this to a more general definition of efficiency would have required theoretical concepts that Smith and the other early economists simply did not have. To define efficiency in an economy with many individuals with partly conflicting interests was not possible before the introduction of the notion of Pareto optimality, which again was built on the concepts of preferences and utility. Needless to say, it took another hundred years for these concepts to be developed in the theoretical literature.

Second, Smith never gave a reasonably precise definition of what he meant by competition. Stigler (1965, p. 234) comments that the concept of competition did not in fact receive systematic attention in the theoretical literature until the 1870s, and that earlier it was «treated with the kindly casualness with which one treats of the intuitively obvious». But it is clear that Smith identified competition with rivalry between independent agents, and that this rivalry would, at least in the long run, guide the flows of resources towards their most profitable uses.

Rivalry assumes at least two independent agents, i.e. the absence of monopoly, but the conditions for rivalry would be more likely to obtain, the larger the number of independent agents:

> «If this capital [sufficient to trade in a town] is divided between two different grocers, their competition will tend to make both of them sell cheaper, than if it were in the hands of one only; and if it were divided among twenty, their competition would be just so much the greater, and the chance of their combining together, in order to raise the price, just so much less.» (Smith, 1776 (1976), p. 361.)

The formulation «just so much the greater» probably should not be interpreted in a strict mathematical sense. In fact, the first mathematical formulation of a model of competition in the celebrated work of Cournot (1838) showed that such an interpretation would be incorrect. From his work one can easily derive an analytical expression for the degree of competition. For a monopolist the percentage markup of price over marginal cost will be equal to the inverse of the price elasticity of demand. In a Cournot duopoly equilibrium with identical cost functions it will be one half of the monopoly markup. With *n* oligopolists the markup will be *1/n* times the inverse elasticity. As *n* increases the equilibrium price approaches marginal cost, in which case «the effects of competition have reached their limit»[2]. So the markup, the deviation of price from marginal cost, diminishes with the number of competitors, but at a diminishing rate.

Cournot's model was one of partial, not general equilibrium. The main step towards a model of general competitive equilibrium came in the 1870s with the work of Jevons, Menger and - above all - Walras (1874-77). When Pareto (1896-97) later laid the foundations for welfare economics, there is a direct line forward to the emphasis in contemporary theory on the two main theorems of welfare economics (first formulated by Arrow (1951) and Debreu (1951)) on the equivalence of competitive equilibrium and Pareto optimality. With Pareto optimality being the generally accepted standard of efficiency, it also became clear that the institutional framework that could be used to implement it was perfect competition, i.e. a market system in which no single agent was able to exercise market power.

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[2] Cournot (1838), quoted from Stigler (1965, p. 243).

Thanks to the precision of modern welfare economics it now also became clear to what extent one could set up an objective standard for the «public interest» to be pursued by economic policy. Under «first best» conditions, in which redistribution can be carried out by means of non-distortionary lump sum transfers, efficiency would always[3] be desirable as being in the public interest. However, when such transfers cannot be made, matters are more complicated, and a move towards greater efficiency would no longer necessarily be in the public interest in the sense of leading to unambiguously greater social welfare. The further implications of this conclusion will be discussed in more detail in the following.

This brief sketch of the history of economic thought on the connection between competition and efficiency over almost two hundred years shows a remarkable increase in the clarity and precision of the relevant theory. At the same time the theory also presents a competition authority with something of a puzzle. With perfect competition being necessary for efficiency, is *any* deviation from the competitive ideal a reason for interference? In order to answer this question one cannot rely solely on the formal theorems of welfare economics. All acts of policy interference are costly, and interference should therefore be based on a cost-benefit analysis. With limited resources on the part of the competition authority, priority should be given to interference in markets where the marginal efficiency gain, relative to the marginal cost of interference, is greatest. Such a conclusion fits well with the looser concept of competition in the work of Adam Smith and other classical writers: Competition may be reasonably efficient even when it is not perfect. Most likely the prevention of monopoly is a more central task for the competition authority than the attempt to push the effect of perfect competition to its limit.

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[3] Actually, this requires the further assumption that the index of social welfare is of the Bergson-Samuelson individualistic variety.

Another important distinction for competition policy is that between permanent and transient deviations of markets from the competitive ideal. Short-run variations in monopolistic markups over the business cycle[4] should probably not be a major concern for competition policy. Nor should the high price charged by a successful innovator during the early life of a new product be an argument for policy interference; in fact, the expectation of profits is an important incentive for dynamic efficiency. It is the more permanent deviations from the standard of competitive efficieny that should be the focus of competition policy, and it is accordingly those that I have in mind in the following analysis.

2. The scope of competition policy.

The deviation of monopolistic from competitive prices has in principle two effects. (A) By raising prices above *average costs*, thereby generating pure profits, monopolistic pricing leads to a redistribution of income in society, away from that which would materialize under perfect competition. (B) By raising prices above *marginal costs* a monopoly distorts the efficiency properties of the competitive equilibrium, the normal implication being that the use of the monopolized commodity in consumption or production becomes too low. This is illustrated in Figure 1, which assumes that the demand function is linear and that unit costs are constant. The monopolist's optimal output is x^m, which corresponds to the intersection of the marginal cost and marginal revenue curves, and this is to be contrasted with the competitive output of x^*. With m being the monopolistic markup (the difference between price and unit cost), the monopolist's profit is $p = mx^m$, while the efficiency loss from monopolistic pricing is the triangular area $e = (1/2)m(x^*-x^m)$. In general, both monopoly profit and the effiency loss

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[4] Bils (1987) finds evidence of countercyclical markups, i.e. markups are lower during booms than during depressions, and this finding, although not universal, agrees with that of a number of other studies.

depend on the elasticity of demand as well as on the elasticity of supply (which in the case shown is infinite). It is perhaps worth noting that in the special case represented in the diagram it will always be the case that the efficiency loss is exactly equal to half the monopoly profit[5]; $e = (1/2)\boldsymbol{p}$.

While private agents who try to create a monopoly (sometimes with the support of politicians) are motivated by (A), competition policy is mainly motivated by the efficiency losses implicit in (B). An interesting question is now whether competition policy should be designed with both objectives in mind, just like tax policy has to be designed with a view both to efficiency and justice. I take the standard answer to this question, just as in the formulation of the Norwegian Competition Act, to be no, implying that competition policy should be formulated solely with regard to efficiency. Whether the answer is a good one will be discussed further below.

To which sectors of the economy should competition policy be extended? The view from welfare economics is clear: To all of them! The aim to strive for is clearly to have price equal to marginal cost in all markets. In the markets for consumer goods and services the implication of this would be the equality between consumer prices and the marginal costs of production, while in factor markets the rule would have to be formulated as equality between the prices of factors of production, as facing consumers, and their marginal value products. Thus, the general principle would apply to markets for primary commodities like agriculture as well as to labour markets. As a matter of fact, these are both examples of sectors of the economy which are fairly well protected from competition policy, and I shall maintain later on that this is basically because of distributional considerations. It follows that competition policy must limit its scope to certain - although large - sectors of the economy. In the next section I discuss

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[5] With a linear demand function the slope of the marginal revenue curve is twice that of the demand curve. Hence $x^* = 2x^m$, and the conclusion follows.

some problems that follow from this limitation, even when efficiency is taken as the sole aim of competition policy.

Another area which traditionally has been well protected from interference by competition policy is the public sector. Some decades ago the prevailing view was that competition was not an issue in the evaluation of the public sector's activities; in fact, in many cases it was maintained that private competition was harmful and should be forbidden. This has changed. It has increasingly come to be realized that actual governments are far from the picture of the night-watchman state which supplies a small set of public goods, including basic administrative infrastructure. To a large extent the public sector has become a supplier of private goods, like education, health, energy and communications, and in these areas private firms present government organizations with both real and potential competition. The prevailing opinion is now that this competitive pressure should be utilized to make the public sector more efficient. Increasingly, therefore, competition policy has had to concern itself with the interface between the private and public sectors of the economy.

3. Competition and efficiency.

In its everyday work on implementation of competition policy, a competition authority must necessarily work on a market-by-market basis. Faced with monopolistic price-setting in a given sector, the aim of the authority should be to take measures which will lead to a reduction in price towards the competitive level.[6] This will promote effective competition. But will it lead to a more efficient allocation of resources? The answer to this question depends crucially on what is assumed about the nature of market equilibrium in the rest of the economy. To begin with, I shall focus especially on the conditions in the parts of the economy which lie outside the domain of the competition authority. If some sectors of the economy are taken as being protected from interference from competition policy, how then should competition policy be designed inside its own domain?

This is a classic problem in the welfare economics of the second best. Indeed, it is one of the central applications of the theory in the original formulation of that problem by Lipsey and Lancaster (1956-57)[7]. What they showed was basically that partial or piecemeal reform which appears to move the economy in the direction of efficiency, may not in fact do so. In particular, suppose that there is one market where there is an exogeneously given deviation of consumer price from marginal cost. This could be either because there is an institutional monopoly which cannot be removed or - perhaps more convincingly - a tax wedge which is motivated by overriding distributional concerns. Then it cannot in general be taken as

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[6] The analysis here is cast entirely in terms of prices. This is not meant to imply that other aspects of competition, such as quality or the degree of product variety, are irrelevant for welfare evaluation. I concentrate on prices mainly because it simplifies the exposition, but also because lower quality may under certain assumptions be interpreted as a higher price per «quality unit».

[7] The relevant application is actually formulated by Lipsey and Lancaster as finding optimal price/output policies for nationalized industries when there are monopolies in the private sector whose existence must be taken as given. The nationalized industries in the Lipsey-Lancaster formulation correspond in the present discussion to the firms which are within the domain of competition policy.

desirable to have prices equal to marginal costs in other markets in the economy.

Why is this? There are two related explanations, one mathematical and one economic. To take the mathematical interpretation first, the classic conclusion about the efficiency properties of marginal cost prices can be seen as derived from the solution to a welfare maximization problem. In that problem the only constraint on the maximization of consumer welfare is production feasibility. If in addition it is assumed that there is one price which must be taken as different from the relevant marginal cost, this introduces an additional constraint into the problem. This constraint obviously prevents one of the first order conditions to be attained. But because of the interdependence of the variables in the overall maximization problem this also means that *all* the first order conditions will be affected by the additional constraint. Hence the conclusion.

This line of interpretation does not give us a good feel for the economics of the second best problem. To achieve this, let us consider the problem within a specific model in which the structure is so simple that it can be analyzed by purely verbal arguments. To be concrete, let us think of a model in which there are three goods - leisure, energy and a generalized consumption good which serves as the numéraire. For redistributive reasons there is a distortionary income tax, so that the consumer price of leisure, i.e. the after-tax wage rate, is below labour's marginal productivity. The assumption is that this price distortion is one that competition policy cannot touch. I shall also assume that the substitution effects on leisure demand are larger than the income effects, so that the consumption of leisure is too high relative to the first best, i.e. labour supply is too low.

Suppose now that it is found that the consumer price of energy is higher than its marginal cost and that energy use for this reason is too low[8]. This is within the domain of competition policy, and various measures are therefore considered which will lower the price of energy towards its marginal cost. The question is: When is such a measure welfare improving?

Focusing on the consumer side of the economy, assume first that energy and leisure are complements. A decrease in the price of energy will increase energy consumption, which is fine from the point of view of efficiency. However, because of the complementarity a fall in the price of energy will also lead to an increase in the demand for leisure. But the consumption of leisure was already too low in the initial situation; hence the efficiency loss from the distortion of the wage rate has become larger, and this has to be set against the efficiency gain in the energy market. There is no guarantee that there is an overall efficiency gain for the economy as a whole, although the price structure has apparently moved closer to the competitive ideal.

If instead we suppose that energy and leisure are substitutes, the conclusion will be a different one. A lower price of energy will now generate a lower demand for leisure, i.e. an increase in labour supply. The price reform in the energy market will counteract the distortion of the wage rate and lead to efficiency gains in both markets and therefore for the whole economy as well.

The point of this analysis has not been to make recommendations for competition policy in the energy market. I have named the commodities «leisure and energy» rather than «A and B» or

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[8] Obviously, I am not trying to capture all aspects of reality which are relevant for the determination of the socially efficient price of energy. Energy use has environmental effects which call for a higher price of energy than its marginal cost of production in the usual narrow sense. Although I ignore this aspect of the problem, it could easily be incorporated in a more complete analysis.

«apples and bananas» in part to convey the view that price reforms as a result of competition policy may be very important in terms of its consequences for the economy and certainly comparable in this respect to major changes of the tax system. I should also stress that I have simplified the analysis in some important respects from what one would do on the basis of a fully specified general equilibrium model; e.g. I have taken no account of the effect of a lower energy price on the *demand* for labour. But this is really beside the central point of the example, which has simply been to show the fundamental implication of second-best welfare analysis, viz. that piecemeal reforms do not necessarily lead to efficiency gains for the economy as a whole. We can identify additional theoretical restrictions which are sufficient to ensure that such gains will indeed emerge (Dixit, 1975), but these are very restrictive. Consider as an example Dixit's Theorem 7 (p. 118):

> «Lowering the price of any one commodity towards its marginal cost will increase welfare if the commodity is complementary to all those with a greater proportional distortion and substitute for all others including the numéraire.»

In a particular case facing the competition authority conditions like this, to put it mildly, are unlikely to be satisfied. But note that the theorem is an example of a *sufficient* condition for welfare improvement; it does not imply that any other pattern of complementarity and substitutability will lead to a decrease of welfare. Basically, the signs and magnitudes of the spillover effects in other markets is an empirical issue that requires econometric measurement and informed judgement.

Similar second best problems are also likely to arise within the domain of competition policy itself. Thus, consider an extension of the model in which there are two sectors within the

domain of competition policy. Let us think of them as energy and public transportation. In both sectors the assumption is that the consumer price is too high because of monopolistic pricing, and the ambition of the competition authority is to bring both prices down to the level of marginal cost. However, it is not possible to take joint legal action against the two industries; they have to be tackled separately. This raises some problems of priorities. E.g., if the energy market has to be tackled first, the optimal policy to pursue in the energy market will depend on the expected outcome of the reform process in the public transportation market. In general, the optimal competition policy in each of the two markets will depend on the outcome in the other market. If the competition authority should turn out to be unsuccessful in the energy market, so that a substantial excess of price over marginal cost should remain even after the policy interference, then the optimal outcome in the public transportation sector should reflect this. If energy and public transportation are complements, this would be a strong argument for pursuing the aim of marginal cost pricing in transportation. If, on the other hand, they are substitutes, this would suggest that it is optimal to leave a positive price-cost margin in the public transportation market as well.

This analysis suggests that competition policy becomes extremely complicated once we move away from the unrealistic world of first best policy instruments. Regulators must always think in a general equilibrium perspective, which introduces a number of interdependencies among different areas of economic policy. Thus, in the example above the estimate of the efficient price of energy should be sensitive to the magnitude of the marginal tax rate on labour income. A way out of this difficulty is to institutionalize a decentralization of objectives by which the task of the competition authority is limited to that of achieving competitive conditions, with prices being equal to marginal costs. It is then left to other institutions of public policy, e.g. the ministry of finance, to decide on additional measures in order to internalize the externalities

between different policy areas. To return to the leisure-energy example above: If a careful

analysis shows that the optimal consumer price of energy is above marginal cost, the task of

the competition authority should still be to ensure that the producer price equals marginal cost.

It will then be the duty of the ministry of finance to propose a tax on energy use that is optimal

relative to the income tax distortion[9]. This tax should be determined on the basis of the same

kinds of considerations as were sketched above concerning the optimal deviation of the

consumer price from marginal cost.

This division of responsibilities has a number of attractive features, allowing each policy

authority to concentrate on doing what it knows best. Its appeal is strongest when in fact there

exist a number of other policy tools that can be used to pursue other objectives. If, on the other

hand, there are numerous political constraints on the differentiation of taxes, it becomes much

harder to argue for a narrow view of the objectives of competition policy.

Obviously, the conclusion to be drawn from this exercise in the welfare economics of the

second best is that there may be some difficult problems and challenges for the definition of

competition policy as a separate area of economic policy. A one-to-one allocation of

instruments to targets will only be optimal under particular assumptions on the availability of

policy tools and the nature of political organization. What the implications of this are for the

organization of competition policy will be considered in Section 5.

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[9] For an example of a second best tax analysis of this kind see Christiansen (1984).

4. Competition and income distribution.

One difficulty for competition policy is clearly that some monopolies have been created with at least implicit public support in order to change the distribution of income in favour of the owners. This is perhaps most obvious in the case of the trade unions, which have always had strong political support, especially from social democratic parties. However, over time trade unions have won the respect, although not always the love, of liberal and conservative parties as well. Similarly, agricultural monopolies have been able to count on the political support of parties with a strong base among rural voters. There is now probably a political consensus in Norway as well as in other countries that trade unions and agricultural organizations are established features of the economic and political system. As such, they are more or less immune to interference from competition policy[10]. To gain a full understanding of why this is so, it would be necessary to widen the perspective of the analysis to take account of political factors as well; see the discussion in Dixit (1996). Here I shall limit myself to a discussion of the political and economic *legitimacy* of the claim of workers and farmers that their monopoly organizations can be defended on the grounds of fairness.

If there had been no trade unions and no agricultural monopolies, would the markets for labour and agricultural products then have been competitive? It seems highly likely that the answer is no. If there had been no employers' organizations, there would have been a strong asymmetry of power in labour markets in favour of the employers. There are two reasons for

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[10] I do not of course mean to imply that the market power of these institution cannot be influenced by economic policy; indeed, economic history is full of examples to the contrary. But competition policy in the more specific sense is usually taken to have no bearing on them.

this. One is simply that there are many more workers than firms, so that the concentration of power is on the employers' side of the market. The other is that in many industries it is the workers who make the heavy investments in particular jobs in terms of investment in firm-specific human capital and choice of residence. Their individual bargaining positions vis-à-vis owners of mobile capital are therefore likely to be weak. In agricultural markets there would similarly have been a much higher degree of concentration on the buyers' side of the market (wholesale purchasers, supermarket chains etc.), while the industrial mobility of farmers is obviously much less than among the buyers of their products. Trade unions and farmers' organizations can therefore be explained and defended as the development of «countervailing power» (Galbraith, 1956) to redress the structural asymmetries in the balance of power under laissez-faire[11]. Obviously, the implication is not that this development will reestablish efficiency. The point is simply that the magnitude of the distortionary effects of farmers' organizations and trade unions on prices and wages should not be taken for granted but rather be seen as an object of empirical research and measurement.

The social acceptance of some types of monopolies does not imply that nothing is done to alleviate their possible adverse efficiency effects by means of public policy. A typical measure taken by a competition authority against «normal» monopolies is to require the removal of barriers to entry. By introducing actual or potential competition this results in lower consumer prices and *lower* monopoly profits. Measures taken against agricultural monopolies, however, usually take the form of price subsidies to consumers. Although not usually regarded as an instrument of competition policy, such a subsidy lowers the consumer price towards marginal

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[11] This answer to the hypothetical question of the likely outcome of the removal of the monopolies gains some support from our knowledge that, historically, this is a reasonably realistic description of the situation in labour and agricultural markets before the formation of labour unions and agricultural cooperatives.

cost[12] while at the same time *increasing* monopoly profits[13]. The two types of policy will have

the same effect on consumer prices and on efficiency but opposite effects on monopoly

profits. The relative attractiveness of the two types of policy can easily be explained by their

distributional effects. In the case of trade unions the situation is less transparent, although it

can be argued that the adverse effects on unemployment of high wages have to some extent

been counteracted by the government in the form of selective employment subsidies and

creation of jobs in the public sector.

Many economists would argue that the creation and tolerance of monopolies is an expensive

way to redistribute income, because the distortion of prices will have a cost in terms of

efficiency. It would be preferable to achieve the same amount of redistribution through direct

transfers to the groups that one wishes to support, because this can occur without creation of

the substitution effects that impair efficiency. In other words, income redistribution ought to

take the form of lump sum transfers, a point well known from the general theory of welfare

economics.

But there are several difficulties with this type of recommendation. First of all, the design of

truly lump sum transfers which do not create unintended incentive effects is no simple task.

Second, even if it were possible to design the criteria for the allocation of transfer payments in

a non-distortive manner, they would have to be financed by taxes, and taxes do result in price

distortions and inefficiencies - just like monopoly markups. It is then not a question of

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[12] Indeed, a first best optimal price subsidy per unit of output would be equal to the inverse of the price elasticity of demand.

[13] Let p and x be price and quantity and s the consumer subsidy per unit. Monopoly profits are then $p=px(p-s)-c(x(p-s))$. Using the envelope theorem, we have that $\partial\pi/\partial s=-px'+c'x'=x>0$, where the last equality follows by substitution from the first-order condition for profit maximization.

avoiding price distortions completely; rather, the issue is whether the tax or markup distortions have the more adverse efficiency effects.

There are those that would argue that there is no reason to favour some people through redistributional policies simply because they are in particular occupations; income support should be given to the poor, not to farmers (some of whom are rich) or to particular groups of workers (some of whom also enjoy high incomes). There is something to be said for this point of view, but it tends to ignore the asymmetries of bargaining strength discussed above. Perhaps what competition policy should strive for in these areas of the economy is to diminish the role of such asymmetries, so that competitive effiency could become a real alternative to institutional monopolies. However, there is probably no escape from the fact that some of the asymmetries, especially in the labour market, are of a deep structural nature, not easily removed by government policy.

An area of increasing importance for competition policy, at least potentially, concerns service production in areas like health, child care, care for the elderly and education. In many countries these have been areas where production has been dominated by public monopolies and where the guiding principle has been to make the same level of service available to all. The argument in favour of uniformity is a redistributional one, since it means that rationing of these basic goods among individuals will not be based on their ability to pay. But on the other hand the uniformity of service implies a loss in efficiency, both because it restricts the extent to which supply can be tailored to individual needs and desires, and because institutions that are sheltered from competition are likely to become inefficient. The trend in recent years has been towards increasing public institutions' degree of exposure to competition from private producers, and this trend is one that has been recommended by a number of economists; see

e.g. Lindbeck et al. (1994). If the trend continues, it will move some important new areas into the domain of competition policy and face policy makers with some difficult challenges. One of the main problems in the area is e.g. to ensure that competition between public and private producers takes place «on equal terms». This notion is undoubtedly appealing, but it is also important to ask on whose terms. If private and public agents are to compete under conventional market conditions, it may come to imply that the original redistributional justification for public production will no longer be able to count in the production of welfare services; there is then a small step to full privatization of the production of these services. If, on the other hand, the terms are defined so as to include standards of equal treatment, like equal access, non-discriminatory pricing etc., the regulatory constraints on public agents could easily become so restrictive that competitive incentives would lose much of their force. The role of competition policy in this area will not be an easy one to define.

5. Implications for the organization of competition policy.

The arguments in Sections 3 and 4 cast some doubt on the wisdom of organizing competition policy as a separate area of economic policy with its own institutions and policy tools. The general point is that a one-to-one allocation of instruments to targets is unlikely to result in an optimum. Different areas of economic policy should really be seen as parts of an integrated whole. Tax policy, trade policy and competition policy should, according to this view, be designed jointly in order to internalize the spillover externalities between them. Attempts to design competition policy with the single aim of achieving social efficiency through effective competition may in certain circumstances do more harm than good. This line of argument has

far-reaching implications, leading one e.g. to doubt the wisdom of organizing a competition authority as an independent body outside the central government administration.

For my own part I am not entirely convinced by this conclusion. Having discussed some of the intricacies of policy interdependence, I still believe that one needs to distinguish, using the vocabulary of Krugman (1993)[14], between the narrow and broad arguments for competition policy. The narrow arguments are of the type that I have mainly discussed above. Although welfare economics tells us that competitive markets result in overall social efficiency, piecemeal reforms are not guaranteed to result in welfare improvements. This is first because there are other distortions in the economy that may interact negatively with reforms intended to stimulate competition, and second because of constraints on redistribution policy. Competition policy, according to this perspective, has to be much more sophisticated than e.g. indicated in the 1994 Norwegian Competition Act.

The broad arguments for competition policy are more political in nature. They recognize first that the design of policies to attain efficient resource allocation is a very difficult task which involves considerable costs. It has to be pursued along several dimensions like general tax policy, environmental policy, trade policy and competition policy - to name a few. Each of these areas requires particular expertise both among politicians and bureaucrats. Reforms must be based on legislation, which takes time. A reform proposal which is contingent on the existing level of a distortion somewhere else in the economy will have to be revised when that level for some reason changes. The insights of policy-makers and administrators which such a policy requires is very demanding and may easily lead to mistakes. By pursuing the single aim of perfect competition, leaving other aspects of policy to others, the competition authority will

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[14] Krugman's article discusses the case for free trade in the light of the insights provided by the so-called new trade theory, which has emphasized the importance of imperfect competition in international trade.

probably make a few mistakes, but probably not so severe mistakes as it would do in the attempt to carry out more ambitious and sophisticated policies. To paraphrase Krugman:

> «[promotion of competition] is a pretty good if not perfect policy, while an effort to deviate from it in a sophisticated way will probably end up doing more harm than good» (1993, p. 364).

In addition to this argument, which emphasizes the transaction costs of policy design and reform, there is also an argument which is based more explicitly on the nature of the political process. Competition policy is an area where policy-makers inevitably face the resistance of private agents who have a direct interest in preserving existing inefficiencies. If these agents could legitimately resist the actions of the competition authority on the grounds that the existing market structure had beneficial effects on the environment, the terms of trade etc., then presumably similar arguments would have to be admitted in areas like environmental and trade policies. The result could then easily be that it would become impossible both to promote effective competition and improve the environment. A decentralization of policy, although not based on the most sophisticated of theoretical arguments, would be more likely to make the economy as a whole move in the general direction of greater efficiency.

This conclusion seems to indicate that my detour through the welfare economics of the second best was an unproductive effort, but I do not think so. It is by trying to understand the theoretical complexities of policy design that we are able to understand the nature and consequences of the simplifications on which policy must be based. Or in other words, to appreciate the broad arguments for competition policy, one has to understand the essence of the narrow arguments.

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