
**COMPETITION AND COMPETITIVENESS IN
A NEW ECONOMY**
JOSEPH E. STIGLITZ

I welcome this opportunity to talk about competition policy, because there is perhaps no topic that is more important for the functioning of a market economy. The theorems and analyses stating that market economies deliver benefits in the form of higher living standards and lower prices are all based on the assumption that there is effective competition in the market.

At the same time when Adam Smith emphasised that competitive markets deliver enormous benefits, he also emphasised the tendency of firms to suppress competition. Enterprises can generate far more profits by suppressing competition than by innovating and producing better products. It has thus become an important role of government to insure the maintenance of competition.

One of the experiences I had when I was at the White House was the recognition that all people seemed to adhere to certain principles. One of them was the strong belief that there should be no subsidies – for everyone except themselves. Another principle that was universally agreed upon was the value of competition in every sector of the economy except their own. And of course a third one was the importance of transparency and information, except the need for secrecy in their own room.

It has been an important issue of public policy to analyze the appropriate extent of competition and the mechanisms by which the government can promote competition. The subject is vast, and in the limited amount of time I will only touch upon three specific aspects of this issue:

1. competition and the New Economy,
2. competition and globalisation and
3. certain issues associated with the administration of antitrust laws.

1. COMPETITION AND THE NEW ECONOMY

As Mr. Bartenstein said, while the myth has been taken out of the New Economy, a lot of ideas associated with the New Economy have remained. In the United States we estimate that, as a result of the changes associated with the New Economy, productivity has dramatically increased from the 1.1 percent that prevailed from 1987 to 1993 to around 2.5 to 3 percent. One way of thinking about the New Economy is that it is an innovation in the process of innovation. In a way, it has brought to the floor an approach to the economy that was pioneered almost a century ago by the Austrian economist Joseph Schumpeter. He emphasised the importance of innovation in a market economy, and his work, I think, is now beginning to come into its own.

For very long periods of time, the focus in market analysis was on static models in which innovation was ignored, and clearly, this is an inappropriate way of approaching the virtues of a market economy. One has to focus not on the static analysis which is underlying much of traditional economic analysis, but on the dynamic aspects that were at the heart of Schumpeterian analysis. Schumpeter's view was that markets would be characterised by a sequence of short term monopolies. Competition would not be static. There would be a monopoly for a while, which would be succeeded by another monopoly, so that competition would be dynamic. In that sense he provided strong criticism to traditional antitrust policy. He seemed to argue, although he never formulized the idea, that, through this process of dynamic competition, the market economy would achieve some form of what economists would call in templating jargon "intertemporal efficiency".

Schumpeter, I think, was asking the right question, unlike Arrow and Debreu and many of the neoclassical economists who have ignored the **importance of innovation**. But Schumpeter got the wrong answer. Unlike the picture that Schumpeter envisaged, the analyses of Schumpeterian models over the past two decades have shown that there is a real possibility that a firm that established a temporary monopoly position had a variety of mechanisms by which it could perpetuate that temporary monopoly. As a result, the overall level of innovation would be suppressed.

This was an argument I put forward with my co-author P.S. Dasgupta in a series of papers in the early 1980s. The points that we raised at that time have amply surfaced in the New Economy. Take the Microsoft case. The findings clearly demonstrated that this firm was able to engage in a number of practices that suppressed competition and thereby suppressed the overall level of innovation. Very early in the so-called "wave of New Economy", in the early 1990s, when I was Chairman of the Council of Economic Advisors, the practices of Microsoft came to our attention and became immediately a source of great concern. It was not just the Council of Economic Advisors that was concerned about this issue, but also the Office of Science and Technology Policy, the Office within the White House that is responsible for maintaining an overall environment in which innovation is encouraged. They believed, and we concurred, that the anti-competitive practices posed a real threat to the level of innovation in the United States and around the world. So both institutions urged the Department of Justice to look at this issue more closely.

One of the issues that had been raised was that many of the proposed resolutions to anti-competitive behaviors would in effect curtail in one way or the other **intellectual property rights (IPR)**. It is very important to recognise that IPR are not a matter of natural law, but they are man-made law. And they reflect the balance between the users and the producers of knowledge. The Uruguay-Round tried to incorporate and internationalize IPR by the TRIPS Agreement. In the judgment of the Office of Science and Technology Policy and the Council of Economic Advisors, and also in my judgement, that agreement did not get the balance right. It was basically dictated by commercial interest. The worst aspects of that have already come to light. The poorest people in the world, in Sub-Saharan Africa, would not have access to aid and drugs at prices they could afford. This meant that when the Uruguay-Round was signed, it was effectively condemning to death thousands of people. Fortunately the outcry that came in the last couple of years about the TRIPS Agreement has served to redress the imbalance, but the issue remains.

When we opposed that imbalance, our view was that it was not just an imbalance of social welfare or protecting the rights of some of the poorest people in the world, but also one of innovation, as the major input into research is our given knowledge. Excessive intellectual

protection can increase the costs of this vital input and this slows down the pace of innovation. In order to maximize the pace of innovation, and thereby increase competition, one needs to balance IPR.

There is now a vast literature supporting the perspective that the New Economy entails huge **network externalities**, related to the fact that there are benefits from using common languages. If one was using a telephone for instance, and nobody was at the other side of the line, this would not help anybody. You have to be able to talk to somebody. The value of the telephone increases the more people are linked together in a network. The same analysis applies to computer software, including operating systems and word processing. On the other hand, having a single "language" and communicating with it makes it rather easy to establish a dominant technology, not because it is the most efficient one, but because it is used by many people. There are lots of examples of networks which are inefficient but used because it is difficult to move from one system to another one. So the network externalities have created an enormous potential for monopoly power and for the abuse of that monopoly power.

There is a certain irony in the fact that the New Economy has in some respect increased competition and the potential for competition, while at the same time these network externalities and the way they have been abused have actually reduced competition. To give you one example: The internet makes it possible for you to easily compare the prices that firms are charging. Increased information is essential for making markets work well and the absence of information is an impediment to the effectiveness of competition.

However, the new technologies have also increased the scope for suppressing competition. We have seen symptomatic examples of that within the United States. For instance, the airline reservation network was abused for communication with each other in ways intended to limit competition. The practice was discovered and has now been stopped. But it shows you how the new technologies have enhanced the scope for suppressing competition.

A great deal of emphasis has recently been placed on **the New Economy**. And I believe rightly so, because of the concentrations of economic power that have occurred in some key parts of the economy. I

should emphasise, however, that the old economy is still alive and represents an important part of our economy, and also that anti-competitive practices remain a deficiency of the whole economy. Let me just mention two examples in the old economy sector. First, the largest set of price fixing cases ever discovered have occurred within the last five years. So the notion that the old-fashioned antitrust behavior is a relic of the past is clearly not true.

Second, there are a whole variety of other practices which in some ways have been facilitated by the new information technologies. The most dramatic example is predatory pricing in the airline industry to prevent the entrance of competitors into a particular market. This is a problem more in the United States than in Europe. Normally when a new competitor enters a market, thereby splitting it up, the aggregate demand curve facing the incumbent firm shifts to the left and its supply goes down. In the predation case the response of the incumbent firm was not only to lower the price but at the same time to increase the supply. It lost money with the additional airplanes but continued its policy until the new entrant, who typically had only shallow pockets to finance the new entry, was wiped out. Miraculously thereafter, prices went up to very high levels. So when talking about the New Economy one should not forget the continuation of the old economy and the threats to competition in that arena.

2. COMPETITION AND GLOBALISATION

I now want to come to the second topic, competition and globalisation. There are four issues I want to talk about in that context. The first, and in some ways the most important, is that in an **international arena** we have competition policies that are completely incongruent with the policies that we have within our domestic economies. For instance, we have embedded a set of anti-dumping provisions within the WTO in order to stop the very kinds of activities that I just described, predation among others. Yet the standards used are by no means comparable with the standards employed in national competition policies. Europe should be familiar with this, as the United States are currently charging Europe under the anti-dumping laws with uncompetitive practices in the area of steel. Analyses have shown that if the WTO standards were used within the United States, some 80 to 90 percent of American firms would be judged to be dumping. The standards are completely unreasonable and

do not compare with any competition standards. Thus we have a double standard, one for trade within an economy and another one for trade between economies. The anti-dumping standards of the WTO are basically anti-competitive principles designed for the protection of domestic industries. One of the objectives of the next round, the development round of trade negotiations that just begun in Doha should be to eliminate these anti-dumping provisions. The problem is that they represent the interest of the US export industries in Europe and vice versa. As time goes by, other countries are learning from the United States and Europe. Because the American and the European economies are more competitive than any other economy in the world, they would be subject to more anti-dumping actions than other countries in the long run. Thus it is even in the self-interest of Europe and the United States to get rid of these anti-dumping provisions.

The second issue within globalisation I want to touch on very briefly is the view that you need to create large firms and reduce competition in order **to be competitive in the international arena**. It is my strong belief that this is wrong. There is a lot of evidence that the most effective way of attaining competitiveness is to have strong competition. The force of competition is indispensable to achieve a dynamic path of innovation. And it is innovation and increases of productivity, and not economies of scale, that are going to be most important in attaining competitiveness in the long run. Moreover, one of the greatest advantages of globalisation is that it has reduced transport cost. And although the size of firms tends to increase, there can be many large firms competing in any market. Thus the degree of competition should in fact be increasing not decreasing.

The third issue has to do with **agglomerations and de-agglomerations**. I want to emphasise the distinction between horizontal and vertical agglomerations. Many of the conglomerates, particularly the conglomerates in the 50s and 60s, did not really restrict competition. They bought, say, one firm in the furniture industry, one firm in the computer industry, and these had nothing to do with each other. These agglomerations did not result in economies of scope; they just aimed at an eclectic assortment of profit-making enterprises. They did therefore not attain market dominance in any of the areas they covered. That is very different from a strategy of mergers intended to reduce competition

and obtain market dominance, which is exactly what competition authorities ought to prevent from happening.

One should also keep in mind that the size of an agglomeration alone does not necessarily cause limitations of competition, except when it becomes large within a given society. In countries like Korea, where the concentration of conglomerates is so high that any of the firms is too big to fail, competition can be severely damaged. But that is a slightly different issue. The point was raised that in the last fifteen years, the restructuring of sectors like electricity and communication has enhanced the ability of the market to have competition by itself, and has therefore decreased the role of regulation and government oversight. I agree, except that there remain areas in most of these industries in which there is still a large degree of market power that can be abused and leveraged. In the case of the telephone industry, for instance, the last mile remains a monopoly. It has been undermined only by the cable network and by mobile phones.

I was very much involved in the 1996 Communications Act in the United States. At the time we had a big debate about the necessity for Justice Department oversight. Some people believed that competition was about to surface and that we could abandon any oversight. Others, and I was among those, argued that we still needed oversight, as we did not know how fast competition would develop. I think we proved to be correct.

Competition has been growing very slowly and monopoly practices have remained very strong. In California one has seen a lot of evidence of abuses of market power in the electricity market. Among firms, it has long been a standing issue whether competition should be confined by using trade secrets or patents. Coca Cola is still protected by a trade secret. The main issue here that any patent policy has to keep in mind is "getting the balance right". If this is not attained, there would be an incentive to move out of the patent system. And the patent system has certainly the advantage of disclosure, as you have to write down what you want to be patented. Most firms continue to rely heavily on patents. At least in the United States there has been a massive expansion of the scope of patents in business practices.

The fourth issue in the context of competition and globalisation concerns the **co-ordination of antitrust policies** among various authorities. Some people believe that there should only be one antitrust authority per country and that having more than one results in unnecessary duplication. I find that view peculiar, because as market economists we think that duplication is good, because it causes competition: we are in favor of many firms producing goods and services and argue that their overlap is in fact of positive benefit. To be sure, there needs to be some degree of harmonisation and there has to be a high degree of co-operation. But the big advantage of having more than one antitrust authority is that there can be a race to the top. The antitrust authorities that are most stringent, most efficient, most effective in promoting competition among firms will be the most important in determining the structure of markets.

For that reason I welcomed the role that European competition authorities exercised in the Honeywell-GE merger. The American authorities basically caved in to corporate pressure from American firms. The European antitrust authority was not under a similar pressure, it recognised the dangers, and it spelled out ways in which they could arrange the merger which would mitigate the anti-competitive effects. And when Honeywell-GE refused to comply, the merger was blocked. That kind of check and balance between different competition authorities, I believe, is a very positive development.

3. ADMINISTRATION OF ANTITRUST LAWS

The third broad issue I want to talk about is the administration of antitrust policies. I want to address two sub-topics within that field. The first is that antitrust is an extremely complex subject, and one of the problems is how to administer this complex area, how to generate the appropriate level of expertise. I believe that it is important to develop independent traditional systems focusing around antitrust. In the United States we have developed an independent traditional system focusing on another complex area, bankruptcy, but we have not done that in the area of antitrust. If you read some of the court decisions, you realize the adverse consequence of this: judges who have never studied economics try to make decisions that are extremely difficult – with disastrous results.

The second point I want to raise is the **importance of independence**. In the United States we have more than two overlapping approaches to antitrust. Within the public arena, we have the Federal Trade Commission and the Antitrust Division of the Department of Justice. But apart from that we have the civil court system: the parties can directly go to court and ask for a redress of the damages they have incurred as a result of anti-competitive practices. This provision was put in at the very early stage of antitrust laws, at the end of the 19th century. The reason was concern that government may not be strong enough to sustain corporate interest. Antitrust law in the United States was not so much influenced by Adam Smith and the theories of market economies that I alluded earlier, but a broader political movement that was concerned with the power of large corporations in our society and the monopoly practices which adversely affected consumers. There was a worry that those same powers would have been able to suppress the role of the government in suppressing anti-competitive practices. In the United States we saw that actually happen in the context of the Microsoft case. Microsoft, through the Senator in the State of Washington, tried to persuade Congress to withdraw all funding for the prosecution of Microsoft. He did not succeed, but he tried very hard. It is important to have another check, and I think that this check is provided by civil action. Even though there are large costs and the system is imperfect, it is an important check.

The final issue raised was the relationship between **competition policy and trade policy**. Those of us who have been involved with anti-dumping cases had to deal at the same time with competition policy. This resulted in ongoing disputes in some cases. Every year, a few pages in the report of the Council of Economic Advisers (which is actually seen as the economic report of the President) have been about the issue of trying to harmonise competition policy and trade policy, including anti-dumping policy. The latter is at times called the "fair trade laws", but actually the laws on dumping are "unfair trade laws", as they undermine competition. We always had long negotiations with our US Trade Representative who simply didn't understand our position on competition. He always won the negotiations in the WTO, but we won what went into the president's report. However, there has been enormous progress in the last five years, as many trade ministers are beginning to realise that official trade barriers, government barriers to getting into another country, may turn against themselves when they try

to get into another country and face a monopoly there that refuses to buy their goods. As a result, the whole area of competition policy is becoming recognised as an important part of trade policy.

4. CONCLUDING REMARKS

I want to conclude by trying to put into perspective some of the issues that I have raised. I have emphasised that competition is an important vehicle for increasing competitiveness and that I do not subscribe to the view that one ought to tolerate anti-competitive practices or dominant firms because it was necessary to attain competitiveness – quite the contrary.

I also want to reecho what the Minister said about the **importance of macroeconomic policies**. As a consequence of large macroeconomic disturbances, even well-functioning firms can bust. In that context the case of Korea comes to my mind, where a great mass of macroeconomic problems were exacerbated by the policies pushed on that country by one of the international financial institutions. We did a study attempting to ascertain whether the firms that went bankrupt were on average more or less productive than the firms that survived. The answer was that the firms that went bankrupt tended to have slightly higher debt-equity ratios, but in terms of efficiency and profitability over the preceding decade, they could fully stand up with the other firms. When you have large macroeconomic disturbances, bankruptcy does not serve as a good sorting device between good and bad firms. This is one of the important reasons for maintaining sound macroeconomic policies; they are absolutely essential for maintaining competitiveness.

There is a third related point that I want to emphasise. In American competition policies we stress the **difference between protecting competition and protecting competitors**. We want to protect the competitive process but not particular competitors. There is another important distinction and that is between protecting individuals and protecting firms. When firms go bankrupt the workers in those firms suffer. However, the Schumpeterian competition that I alluded to earlier, inefficient firms being replaced by firms that are more efficient, is an important part of the dynamics of the economy. In that process, some individuals are adversely affected, and it is an important responsibility of government to provide social protection as well as

training to facilitate those individuals moving into other enterprises. Having a sound macroeconomic policy with low unemployment is absolutely vital, because it enables individuals to move from one job to another. It means that when you loose a job there is another job available. If unemployment rates are ten percent or more, net mobility is impaired.

These are issues not only of social justice, but they actually relate to the issue of competitiveness that is primarily of concern today. Success and competitiveness entail **risk taking** which in the end is borne by individuals. Let me deal with two concrete examples of downside risks. The first one is **unemployment**. In the United States over the last decade, we have created an enormous number of firms. In the first two years of the Clinton Administration two million new firms were created. But successful economies have lots of failures. In the United States, the social consequences were minimized both through a retraining program and, most importantly, because of a very low unemployment rate. That macroeconomic environment served as a safety net which enabled individuals to take risks that they otherwise would not undertake. It is not an accident that one of the most successful economies in the New Economy besides the United States is Sweden. This country has an active labor market policy which facilitates the ability of individuals who loose their jobs to move into other jobs. In the last eight years Sweden has been able to maintain relatively low levels of unemployment. The United States and Sweden have been among the most successful economies in creating new firms and a whole variety of new technologies.

The second example concerns the relationship between **pension reform** and competition policy, namely the higher risk for firms to go bankrupt because of stronger competition. In the United States right now, everybody has seen the consequences of one big bankruptcy, Enron. Many people who thought they had a private pension program have just discovered that they don't have one. As a matter of standard advice, individuals are told that you shouldn't have a lot of your wealth in the company for which you work, because if the company goes bankrupt you lose not only your job, but you lose everything else. Enron represented an abuse of that basic principle.

We have seen in country after country that this volatility is very high and that individuals are not well equipped to make decisions that provide them effective protection for their old age. In country after country, including the model country Chile, we have seen the adverse consequences of that. Around the world there is a re-examination of the balance in the three-pillar-approach for pensions and the recognition that there are some real limitations in the form in which it has often been applied, particularly for developing countries.

Let me conclude and reiterate what I said in the beginning. I think the debated issues are among the most important facing any society. In the long run, designing a competition policy that works will be the most important part of the strategy for maintaining the competitiveness of the market economy.