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The Effectiveness of Competition Policy: in Theory and Practice

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Thank you Mr. Chairman, thank you to the Competition Policy Research Center for inviting me to this symposium on this very interesting question, thank you Mr. Takeshima and Dr Suzumura for this opportunity to speak before this large and distinctive audience.

A lot of thanks the preceding speaker Larry who may up a very interesting scenarii of the discussion and I'll probably use his talk to clarify some of my presentation. I apology for having changed the title but I think it's a little be broader now. I am not a business school professor and I will not have a list of contents and you'll discover the contents of my presentation in the sequel. I will first look at some facts if there was somebody coming from outside maybe from a planet and you'll try to understand what is going on in this planet, maybe will go to a site of a competition authority. Here the European competition authority directory general for competition and he will look at the activity and someway is to present what there are doing and you'll see I have just took a few decision, a few actions that the DG competition has made between the end of the last year and the end of last month. And you can see from these different example that the activity of the DG competition is very broad, very active, very dense and doing very important things. You see that the competition policy is indeed and affecting an environmental issues. Then, the commission has found a cartel to launching important inquiries in the pharmaceutical industry in Europe. Then it's still going to make new investigation on Microsoft and taking actions on very important media industry on TV and on selling music and on credit card. So you see that the activity is very large. So why, there is a large activity? One day this guys coming from another planet could be that the economist are ready and they finally find a solution to improve their revenue and you can see it's seems there exists at the European commission a competition policy that started in the early 1900. The activity of economic consultancy in competition policy have increased dramatically. It's a good business where you should invest or you can be an economist. You can see that it was a few millions euros en 1990 and now 40 millions euros en 2007.

So really, economists have taken a large part of the total amount of leader fells link to competition issue. So how to explain this growth, maybe you can think that it's because economist are paradise but there are probably more serious reasons. More serious reasons… if you, this guy coming outside and if you are looking at what it's happening it can be a good business because look, you see that more and more countries are enacting a competition law and not only high income country but also lower low income , country enacted competition law. So you have seen that in particular in the last decade of the last century, the activity of setting up competition law has increased quite a lot and now roughly speaking in 2004, I don't have more recent data but it should a little bit higher because there are more and more countries in Africa enacting competition laws that more than one hundred countries have competition law. So, the question is now "why do you decide about having a competition law and when you decide. There is some interesting recent study by F. C. and G. S … and they looked at the decision to enact a competition law and they're different hypothesis and they looked at all decide hypothesis to see what are the reasons, what are the variables that increase the probability of enacting competition law. For example, size of the economy, small market, it's known that's small market should accommodate only small firms. Why ? because small companies are probably below efficient size. If you have a competition law you'll prevent them to much, to get bigger and of course that you are more difficult to reach an efficient size. Quite often small countries like national champions. So the size of the economy is measured by the national product if it's very important variable that affect the probability of deciding to enact of competition law so the higher the DDP and the probability to have a competition law. And so, you see I put also the results of the analysis in parentheses, so there is a surplus, it means that this variable have an effect on this probability. I will come back later on trade liberalization and foreign direct investment so that I have positive effect and I will look at when there is no size it’s means that the effect is not clear. For example, subsidies and state aids. If you have a lot of subsidies and state aids in a country, that could contradict the objective of competition law of establishing a level filled between all companies. That is to say of course if you give money as subsidies to firm to one firm, to another one, of course you change the situation of one with respect of the other and you change the terms of the competition but it depends if you give subsidies to all firms horizontally speaking then subsidies can be useful that for example when you give a credit on tax because firm are doing research and use a same rate then you help each firm in the same way and so for this reason that subsidies. Subsidies to firm are not necessarily but in fact when you put this variable in the regression to see if there is an effect of the variable of the probability to enact a competition law, the effect is not significant. So now, we understand why countries are choosing to have a competition law, now if there is a competition, what is the effect of competition law. Look at the problem, you see economic development affect the probability of an enactive law, a competition law but the existence of the competition law so competition, what is the effects of that ?

There’s a large literature on the effect of competition, large, not really large, there are still a lot of thing that has to be done. Most of the literature is focusing on particular aspect which is what is the effect of competition on productivity. In some sense what is this study is tried to see how competition move the competition function to the production frontier. In some sense, it’s telling whether growth can be intensive, competition policy is playing on the intensity of productivity. I just listed a few papers mainly paper I like but the author that I am not put in here. But I think that there are very important articles. So Haskel in 1991 is probably the one of the first paper very interesting paper on that so I’ve shown that high level of market concentration, high market shares of big firms are associated with total lower factor productivity. Nickell has very interesting result which is quit useful and seems quit realistic and there are others studies that seems to confirm his result, the ten per cent increase in mark-up produce 1.5 % in TFP (total factor productivity) decrease growth. Another way to look at how competition affects a productivity is by looking at the effect of liberalization, deregulation in the economy. One of the very interesting paper, an important paper in term of methodological aspects but the results by this way very strong and very robust, is the paper by Olley and Pakes. Olley and Pakes using a very modern and sophisticated method have shown that the deregulation in the US telecoms has produced a large level of productivity gains.

In the same type of spirit Nicolletti and Scarpetta (2005) have a paper showing that when you reduce regulation in the economy, when you remove too much regulation of in particular of network industries, then you have a boost on productivity growth. I'd like the paper by Bloom and Van Reenen, there is something missing and Bloom and Van Reenen have shown that there are observed low presence of poor management in competitive industry. So it means that in competitive industry there is incentive for the manager to improve efficiency and to improve other productivity. A very important recent paper by Aghion, Bloom, Blundell, Griffith, Hoowitt (2002) show that the threat of entry has a positive effect on incumbent innovation incentives in industries closed to the technological frontier. When you are closed to the production frontier of course if the competitor enters in the market, you can loose a lot of market share and so then you have more incentive to realize innovation. So there's another proof of the effect of competition on productivity. To summarize, but already, Larry did a lot explained that in details, I would say that there are three main ways that make a competition vector of productivity is a first because competition reduce inefficiency places pressure on managers to look for better and more efficient production mix or input mix the thing that the selection process of firm, bad firm are exiting good firm are entering the market so that's a good way to competition improve productivity and competition usually fosters innovation as I have just said. Another ways because there is too much competition then the risk of not recovering from your innovation can be high and he could be to the detriment of innovation but in general the literature concluded that competition is good for innovation. But when you have proved that the competition improved productivity you're not at the end. Competition is good when productivity gains are passed to the consumers. Behind that is of course a problem of defending what is the objective of competition policy.

If you include in competition policy profit and consumer surplus then of course you look for welfare improvement then just by taking into account productivity gains it can be good for the society but if you look only to the consumers surplus is totally because firm is getting efficient that consumers can benefit from the society and that it's the main part of my presentation. So the objective is here and is to see how productivity gains are passed to the consumer. What is the risk of not having a competition policy that's able to part productivity gains to the consumer. There are some statistics of mergers at the European Competition Commission. The statistics are not completely correct.

2626 is the total number of notification of merger since the beginning of the European authorities. So, you'll see that when the merger is notified to the competition authority, main competition authority first open what is called the phase 1. Phase 1 is a light investigation. It's last 4-5 weeks. At the end 4-5 weeks, they think there is a real concern about the measures we'll create, will * consumer, then we go to the phase 2, then will go to a more in deep more intensive investigation, more detailed investigation. So any way, you'll see that almost 19 % of the mergers has been accepted (correspond to the "yes"). "Yes if" is one the mergers who are accepted that we call remedies so for example, firm aims merger … So the commission said you can merge but you need to sell this plant because this plant. If you keep it, you will have too much market power. So please sell this plant to your competitor. So you see that about 95 % of merger has been accepted directly or with remedies. So these only have than 1 % where the competition commission said "No". I don't want this merger. And there is also 3.4 % of merger where the firm withdraws their project of merging. But if they withdrawn their project it was probably they felt that the decision will have be the "no" and so they didn't what to spend more money on economic advice or legal advice and they wanted to stop. So you have to have this number in mind to define two problems that faces are competition authority. Two problems is the type of error you can meet: the type 1 error is that gas prohibit procompetitive mergers. That is to say, among this 19 merger that have been blocked by competition, that have been prohibited. Maybe there was a mistake in the investigation and there was a good merger if the merger would have been accepted, it would have been good for the consumer, maybe a decrease in prices. So, this merger usually they make the headlines of a newspaper because firms are of course angry. And, even if this disagrees with the commission decision they go to the tribunal to attack the decision of the commission. And so prohibition has very important effect.

Now there is a second type of error which is to approve anticompetitive mergers. That is to say in all that you have accepted which is a lot, about 95 of this number is start to be thousand of merger that you have accepted. So the probability is not zero. The probability that the commission how approved anticompetitive merger is clearly not zero. So we see that in both case we want to avoid Type 1 and Type 2 error. And it's very important because, when the commission is taking a decision, it does an effect in the future. My colleagues, Seldeslachts, Clougherty and Barros (2007) have written in a paper to look at one actor if there's an effect of the competition policy in the future. So and what they've proved is that the year after a decision where the commission has prohibited merger then the number of merger decrease. Everything being equal controlling for the activity. And it's different if you look at remedies. When the merger has been accepted remedies there's no effect on the total number of merger in the future. So you see that making a mistake in taking decision can be very important because of course even firms are taking into account the decision of the competition commission to decide their industrial policy. It is very important to know that as soon as you have a competition commission, as soon as you have a competition policy and it starts to be implemented then there is an effect on the economy even if there was no cases. The simple presence of commission has an effect. So it's important, it means that it's important that the decision of the commission has to be runned on correct rules. Now where are the sources of error. In my point of view there are 2 types of errors:

One type of errors is coming from the governance of the authority in particular and Larry was saying that in term of the capacity of investigation. Compared to the figure of Larry and in term of number of PHD at the department of justice or at the FTC in the US the chief economic team at European commission is now (just now) 30 persons. There was nobody, no PHD in economic at the DG competition 6 years ago. There was some but all. I'm speaking about 30 PHD at the international format (the actual format). So you can see that given all the activities they cannot do everything. So that is important measure. Another aspect which is even more important, is the organization of the decision.

In the US department of justice can have a case. *And against a merger and then there are in the party*. So both are going to the judge and the judge is listening to the argument of the department of justice of merging firm. And then they decided that's the European case and to the agreement of the commission (the DG competition, the authority) is making an investigation and taking the decision. Of course, it's very different and both systems have their advantage and inconvenient. I was against the European system before the facts that now the number of states plays more and more role in the definition of the competition policy in Europe make things a little bit more complicated. So I'm not going to speak on that I'll speak more on the all of source of error that can be made by competition authority. And there are two … types of error to my point of view.

One is too much emphasize on the measure of dominance. And I will come back on that.
The second * element is not enough capacity to account for efficiency gains.

We don't have to tools and to good measure to account for efficiency. When firm are merging of course we can measure the scale of effect but I'm speaking about efficiency gains when you think that for example we need one firm to produce a product. If the market has only one firm for producing software like Microsoft is there a reason for that. So I going very fast now, one important think is that all the result in the literature are showing that all the competition authority are making a lot of wait on the measure of market share and the dominance criteria to decide about merger or in many antitrust scales. Two big firms in bad situation that's the idea. Look at the market share and then you decide. I disagree with… There is a lot of problem in the process of deliberating market. I will maybe come back on this question later the main problem that we have right now is that market are define not taking into account enough substitution and given that marker share are defined and so as soon as market share are too high, then they decide to block merger for example. So all many study are showing that the effect of taking this decision produce ineffectiveness. But I'm going to skip that in a study, I've done a simulation so I created a simulated economy with thousand of consumer on different product and I've compared decision so because I can control everything I can compare the decision if a simulate a merger and then I simulate a merger in my simulated economy. But given that I know everything I can exactly know what is effect of a merger. So I can compare the decision based on a concentration and on a dominance criteria bigger firm but all the effect more sensible analysis on a price increase and the effect of consumer surplus. And it turns out that if you use the dominance criteria you increase the risk of type 1 error that is to say you increase the risk of prohibiting procompetitive mergers. And even more is the market is large enough them price changed and dominance criteria have completely defined. So, it means that mistake can be very (armful) for the economy. So to reduce the risk, I'm going to skip directly to my main point which is "we need more economic analysis". And Larry says before is turing in the US and turing in Europe, I just look at what is the agenda of the European commission in the last year. They have decided to move to a more effect base assessment that is to say to account more in term of the economy effect of a firm decision to say and just look at case, by looking at market shares or applying per-se rules.

It's true in different cases for example on guidelines of non horizontal merger so I will explain what is double marginalization when you have a upstream firm and downstream firm. The downstream firm being the input form the upstream firm. If the upstream firm increases the price of the input, then of course, you can expect that the price of the output of a downstream firm will increase. That is the price in downstream firm increase I'm not taking the second effect then you will expect a decrease in the production in the sens of this product. But of this product decrease then he will have less a lower amount of input, so both guys are going to suffer from the price of increase of the input if they are together in the same firm they will take into account this externality between that

So that what we call double marginalization and quite often and that the problem of integrated firm can be beneficial for the consumer. So as I said we are deep a lot of progress in the analysis of different cases. In particular in the literature on merger we know since Williamson that a merger create a trade-off. There's a trade-off between an increase of market power when firm A and B are merging then they have product A and B together. So, if the price of product A increases then you can expect that people will buy more product B. But given that they are the same firm they will keep the revenue. So if you merge you increase the market power because you are more able to attack, to keep the rent on the market but if you * the size, if you merge you're getting bigger you can exploit more effect, so you decrease your cost. So if you passed the efficiency gains to the consumer and you have an interest to passed a part of this efficiency gains to the consumer because if you decrease a little bit your price you will sell more and still you could have more profit. So the thing is a merger is not always bad for the consumer. Also, we have proved and it has been proved in the literature "when you have a merger the price could increase" even that you have an efficiency gains it can be counterbalanced.

And you see that it's very complicated because to evaluate whether merger is going to be bad or good for the consumers, you need to know the demand how there are substitution between product to know how things are going to one firm to the other you need to know the cost function you need to know how you are going to get efficiency. So you need very detailed analysis. I want to go directly to my last point at the conclusion: competition policy, are more and more country in access competition law. It's more and more effective. Now to my point of view, the next challenge for competition policy is globalization. We all know that trade can announce a growth and that trade can be substitute for competition policy. If you open your market to competition and there will be foreign firm entering in your own country and of course that create more competition. But it not always true, think about the all case between Fuji Color and Kodak and it was on access so there are a lot of discussion and sometime competition policy is… there is a conflict. And the problem is that it creates a lot of tension between authorities. If you look at right now, if how to control, how to analyse what's a big firm, international firm are doing. If you look at the recent years, has been a big fight between the US and Europe, a different case.

On the GE (General Electric)-Hooney Well merger, the US say well it's very good. It's a lot of efficiency gains, you can go and you can merge. The EU authority say "No, no, no". You're going to be bad based on theory that we call portfolio effect theory saying 'No, no, no" because you're selling equipment for the plane and motors of the plane then you will in some way get out your competitor from the market and the merger. You know that it's completely different decision on the Microsoft case. All together the US authority didn't do anything to Microsoft. Right now, (or it was very soft) the European competition authority are * Microsoft normal than a billion euros in the recent years

So I think that the problem of globalization of international * of the market is going to create a very big challenge because we have no way to sold this problem. WTO is not the right place to do it. WTO is for trade. We have bilateral agreement or multi lateral agreement between countries. But it's too many * to solve a problem and so the risk will be that one agreement will solve a dispute in a different way than another agreement. So my conclusion is should we need a more centralized authority competition at the international level some kind of international tribunal to discuss the new issue of competition policy at the international level because if competition is useful and if we think that completion is good for growth we need also to have a good competition at the international level to be sure that we are going all to benefit from this growth.

Thank you very much for your attention.