

Competition Policy Enforcement as a driver for growth

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Guntram Wolff introduced the event by encouraging participants to an open-minded debate on Competition Policy as a driver for growth.

Mario Mariniello framed the event around the main question: how can Competition Policy enforcement be a driver for growth? This question is timely as the crisis has made the query for growth the most pressing one for economic policy. Mario has stressed that despite recent calls to coordinate competition policy with political target, such approach is wrong and the actions of antitrust authorities should always follow the economic science and not any kind of political consideration. Indeed, the business sector is voicing concern that the crisis is not over and that competition policy should be lenient towards the corporate sector. Mario acknowledged that if companies make lower profits, they can also lower their investments but also asked if then increasing profits by allowing more consolidation can be the answer. In fact, profitable investments may not be made because of imperfect competition in the banking sector, rather than because of too much competition in the sector – the example for this is the telecommunications sector where new generation networks need to be built. Eventually the main issue is to strike the right balance between incentives. What we want it is not a mere transfer of money from consumers or taxpayers to companies with the hope that this money will be reinvested in higher quality products, innovation or new infrastructure. Rents have to be granted but they have to be granted as a prize, as a reward for the efforts that are made by companies that strive to be the best, that innovate and invest in new and better infrastructures.

One emblematic case is the knowledge economy where the identification of the fair price that rewards innovation is very hard, one exercise that the antitrust authorities are confronted with very often. And even if we get the balance of incentives right in our domestic markets, we cannot forget to live in a deeply interconnected world, where competition rules are not uniformly applied. To explain the tension for Competition Policy in the international marketplace, Mario drew a parallel with the current Olympic games: if some countries do not strictly apply the anti doping controls on their athletes, should also we be doing the same? Doping our own athletes is against the rules and against the sport culture, and eventually a poison for the athletes. Similarly, doping our companies will make them dependent that aid as they lose the incentive to outperform foreign competitors, let alone the damage for the domestic customers. Perhaps, we should try to get China to the table and try to achieve a convergence on a common set of rules which would be good for everybody? These were the questions set for the panels to discuss.

Panel 1. Knowledge Economy

Reinhilde Veugelers.

Europe is facing slow innovation-based growth during the crisis, but this was also a problem before the crisis. The R&D efforts are still below the Barcelona 3% target, with particularly limited business investments (only at 1.22% of GDP in 2012). This can be seen as a symptom that Europe has a business structure that is rooted in medium-size incumbents and does not favour young innovative enterprises, particularly ICT and digital sectors. When comparing the EU with the US, we discovered that the gap in business R&D investment can be largely explained by the lack of young leading innovators as opposed to innovation made by incumbents. Competition Policy is one of the instruments to foster higher innovation in the new activities; for instance, it is possible that the

US performs well in ICT because of its lively competition environment reinforced by antitrust; also, competition policy can contribute when IP protection is unsatisfactory at the early stage of development. Some of the fast moving sectors in EU and the US have witnessed a market development characterized by two sided networks effects, which give advantage to incumbents. At the same time the dominant technologies change very quickly, so that incumbents normally have short-lived dominant positions. Nonetheless, the relationship between incumbents and new entrants is not solely given by competition. Indeed, there is a lot of cooperation on innovation between them, e.g. by licensing patents or by outright acquisitions for further development. Sometimes large incumbents can also buy new entrants to shield from new disruptive technologies.

What role can indeed Competition Policy play? Some of the challenges are the non-linearity, high velocity and fluid boundaries of markets and the factors causing entry and exit. In order to improve its role, Reinhilde said that all fields of Competition Policy can be important. In particular, she invited the panel to discuss the following points: the concept of market definition in fast moving sectors; the dynamic efficiencies in merger regulations, which are part of the guidelines but have never been considered so far; market monitoring; and the merger effects on innovation by the entities outside the merging parties.

Paul Seabright. European Competition Policy the main challenges for innovation.

Paul started giving a structure to its presentation. He said he would first describe the ways in which we can describe the Innovation Economy and why this is more and more important nowadays and then focus on what Competition Policy should be updated to keep up with the evolution of innovation needs.

What do we mean by the Innovation Economy? The starting point is to understand productivity. The Modern growth theory dealt with the question on how to increase capital per worker when population is growing at the same time. Total Factor Productivity was a mysterious residual until 10-15 years, when detailed panel firm data became available. Thanks to this data analysis, research was able to identify how aggregate productivity depends on incumbents' efforts to improve their products or in the selection of the most productive companies versus the least productive ones. This research has made a number of facts. First, competition is necessary – but that maximal competition is not always desirable for growth as rents reward investments and innovation. Second, research also showed that entry and exit is a central part of the process as more innovative and productive companies need to replace the least productive incumbents. Third, alongside competition, public support for research and development plays a role (empirical literature has shown that social returns to R&D are almost twice as big as private returns to R&D). Finally, the adoption of Information Technology and improved communications have boosted up productivity.

Looking at the trends of IT capital stock per hour worked in Europe and the US we observe similar growth rates in the 80s and early 90s, but much faster developments in US afterwards. This much be at the origin of diverging output per hour worked (Bloom and Van Reenen, ?). The benefits of IT capital are reaped when new configurations are implemented from time to time.

What are the features of a knowledge economy? First, high fixed and low variable cost structure. This means that pushing prices as close as possible to marginal costs is no longer working in an innovation-led economy. Companies may not be able to finance the innovation costs. Second, much innovation is made in platforms in so-called multi-sided markets, where the pricing of goods and services is dependent on conditions in other markets; assessing competition there is much harder than in classic markets. Thirdly, firms collaborate a lot more than before on innovation activities. Fourthly, firms often produce a portfolio of goods and services so that it is

hard to look at just one precisely defined market. Fifthly, in fast moving sectors, a company cannot know if competition will come from companies adopting a similar technology or from a whole different set of technologies. Sixth, big economies of scale coupled with turbulence in the markets mean that market leader may retain huge markets shares for a relatively short period of time. Seventh, real scarce resources are not always what they appear to be, e.g. when firms try to attract individuals' attention they might be competing at some point and collaborating at another point.

To see some key features of the Knowledge Economy in more detail, Paul presented some evidence on European firms collected by Eurostat, making the case of German firms, and compared them to aggregate R&D spending and patent applications. The data showed that the number of firms engaging in cooperation for their innovation activities increased from 11% to 16% between 2000 and 2010, while this trend was much stronger for relatively big companies (from nearly 30% to 46%). This is surprising as big companies should have more resource to carry out innovation projects in-house. Big companies engage in joint innovation projects more than the average in every EU country. Interestingly, this apparent shift seems not to be related to jumps in R&D expenditures over GDP (EU27: 1.85% in 2000, 2,00% in 2010; Germany: 2,47% in 2000, 2,80% in 2010) and almost stationary patent applications.

Paul's message for Competition Policy is that collaborations are everywhere and that when competitors meet, they might be discussing some interesting project rather than trying to reach a deal to increase prices, as originally suggested by Adam Smith. Paul's work highlights that most firms know which are the anticompetitive collaborations, but that the current competition rules do not create the right incentives to stop them.

Massimo Motta.

Massimo started saying that the innovation economy (or knowledge economy) can be defined under two lenses: extensively, it is whatever is conducive to productivity; restrictively it is about inventions. Massimo then discussed how competition impacts on these two concepts.

Massimo said that competition in its many forms – ie antitrust enforcement, trade liberalization, market integration – have a strong impact on productivity growth. First, it impacts internal productivity, ie firms productivity, by pushing them to become more efficient, for example by putting their resources at their most efficient use; second it impacts sectoral productivity as it pushes high-productivity firms to replace the least productive ones; third, it creates incentives to embark in innovation and investment projects.

Competition Policy can influence these channels in several ways: first by supporting the market culture; second, by enforcing Art. 101 TFEU which prohibits firms to enter in anticompetitive agreements and cartels; third, by enforcing Art. 102 TFEU which prohibits abuse of dominance and is therefore essential to enforce the level playing field – in fact, it is not bad per-se that firms investing and raising become dominant firms, we just need to be aware that preventing rivals from challenging the dominant firms is bad; third, merger control external growth is a good thing as long as efficiency gains outweigh the market power effects; fourth, State Aid policy can correct market failures (eg R&D schemes, access to finance for SMEs etc) but is sometimes negative when aid is granted to companies that do not deserve to stay in the market – something that can distort the market.

As for the creation of inventions (ie the second def of Knowledge Economy), Competition Policy faces the issue of finding the right balance: new inventions should be well rewarded when companies doing them then

become better than the rivals; the EU and US competition law recognize these very important incentives. At the same time, there is the risk that dominant firms that have innovated in the past can deter entry from potential rivals. This is the trade-off in Competition Law as well as in Intellectual Property Law – which needs to guarantee the right of the innovator but also aims at the diffusion of this innovation.

Which antitrust cases had to deal with this balance? A first stream of cases refers to so called pay-for-delay practice in the pharmaceutical sector: typically, a pharmaceutical company holding a patent on a pharmaceutical product pays a rival generic company to settle a patent litigation, with the latter committing not to enter the market (or delay entry). Crucially, the concern is not about respecting the patent holder rights but about the trade-off. In this, the Supreme Court in the US is in line with EU Competition Policy, as these agreements are not considered as justifiable by the exclusionary rights of the patent. This recognition comes from the fact that patents are probabilistic, some are invalid.

Another series of cases are the ones about standard essential patents. Here the holder of a Standard-Essential Patent seeks (or threatens) an injunction against another firm, to extract higher payments, as for instance in the EU Samsung Motorola. Obviously, Standards can be extremely beneficial: they create economies of scale and reduce barriers to entry by fostering interoperability. But a firm which owns a SEP could hold-up users. For this reason, owners of SEP should commit to license under FRAND (Fair, Reasonable, and Non-Discriminatory) terms. By threatening an injunction to a willing licensee (which is ready to accept FRAND determination by a court or arbitrator), a SEP-holder contradicts its FRAND commitment.

Lastly, we have the Google case, which can be seen in the same perspective: what is the right balance between innovator's rights and guaranteeing that other firms can contest that market position? In its specialised search services ("vertical" search) such as product, hotel, restaurant, flight, search engines, Google displayed own services more prominently than competitors', even if latter very relevant to consumers. The concern is that lower visibility would divert internet traffic, and may affect negatively consumers depriving them of new and better rivals' products. Google is now committing to display three rival links in a comparable way to its own services (e.g., pictures). The objective is restoring visibility so as to allow competitors to offer new products with minimum interference with Google's property rights and algorithm.

Matthew Heim.

Matthew started stressing that in defining a Knowledge Economy, it is crucial to talk of an open and free market.

First observation: when we talk about sustainable growth, we are talking about spendings in services, R&D, innovation, investments etc, which all entails a risk. At the same time, consumers expect products fast and cheap, but as employees, they dislike this risk to be taken by their employer. This is not dichotomy about Competition Policy

Then it is important to notice that we are talking about Policy which needs to evolve on the markets environment, differently from the law. One thing that should be noted then is that companies try to innovate but know if they were successful and what exactly contributed to that only at the end. This is typical of the digital economy sector where competition works through business models rather than on markets (Google, Apple and Microsoft, all very different, all very innovative). In these environments, Competition Policy has a difficult task as it

needs to update without increasing uncertainty. One suggestion is to look at the facts, rather than the theories. Matthew has seen lots of theories looking for facts rather than the other way around. If you do not separate out past cases from the facts, there is a risk to extrapolate too many presidentials.

Matthew talked of a past OECD workshop on the digital economy, where the following question was asked: should antitrust rules require that the platforms leave the access to others? The EU Digital Agenda seems to answer that if a company develops a new platform, then it needs to find ways of sharing it. According to Matthew, this is not obviously a good idea.

Data on levels of patents may be misleading. Patents grant you the opportunity to commercialize, but sometimes the in pharmaceutical markets, the regulator may stop you from getting in a certain market.

Matthew then said that there is a difficulty in the agencies as they make the announcements involving fast moving and dynamic markets when they are still thinking through certain areas. That is not healthy because companies who need to make significant and risky investments need be sure that the conditions at which they do the investments are not changed ex-post, also on how the law applies. The field of the Standard essential patents is a good example of that, as it is very complex area. If you look at some past cases, few companies made big investments under the understand of the rules at the time and it worked very well. But now, if you apply the rules strictly, you could reduce the level of the investments.

So what can the agencies do about it? First, try to understand market dynamics – especially that competition may happen for the market rather than in the market. Success is sometimes achievable but only for a short period of time, there is a phenomenal churn in the digital market. It is not clear what the optimal level should be. What you certainly do not want is firms that reach a certain market position, and stop competing.

Discussion.

Reinhilde introduced the discussion highlighting some of the points that could be covered in the discussion: 1) should we change the guidelines or enforce them differently? 2) should we go into market monitoring, ie ex-ante acquisition of info on some topical markets

Paul suggested which are the things that should change in his view. First, market definition needs to take into consideration new geographic market and new technologies. Second, the framework for standard essential patents setting needs to evolve; currently there is too much reliance on FRAND which means companies evaluate the royalties ex-post. Paul would like to see more clearance for royable caps; he suggested that royalty caps should be designed not to facilitate foreclosure of technology and leaving to companies the ability to pool technologies separately. Third, Paul would like to see a fast explicit clearance by DG COMP on collaboration agreements, for example along the lines of the timetable for the merger regulation. More generally, competition authorities procedures should be faster and should aim at ex-ante clarity rather than ex-post discretion, in order to reduce uncertainty.

Massimo replied saying that at the time of the DotCom bubble twenty years ago, competition policy was asked to change dramatically following similar points, eg competition for the market, fixed costs, variable costs etc. Then the two-sided market literature changed the paradigm for the understanding of these markets. Some say that these are completely different markets, where for instance predatory pricing because you need aggressive prices to

keep customers on board. Massimo deduced that every now and then something changes the economy and then someone says that competition law and policy must change dramatically; he completely disagrees with this view. Massimo remembered that soon it will be the Sherman act anniversary, and that the very basic principles are still hold for the current economy. In his view, of course this does not mean that there should not be any change. He also said that after starting his work at the Commission, he realized that before starting an investigation there is a huge amount of work done to understand how the industry works.

Massimo also replied to another point made by Paul in his presentation, ie on the fact that while in his data there is a shift in how innovation is done, this does not translates into very different aggregate R&D figures. This is worrying on some level and more data should be acquired (I think he means that these collaborations are useless at best, anticompetitive at worst). Massimo asked if perhaps the companies claiming to collaborate with others on R&D projects, they are actually collaborating with universities rather than other companies.

Massimo then said that Paul's paper gave him the impression that one message is that Competition Policy is hindering these collaborative agreements. Replying to this general impression, he said that the Commission has block exemptions on collaborative agreements between competitors under joint 35% market share and between companies competing in different markets; he also said that to his knowledge, no collaborative agreement has been stopped so far by the Commission. He concluded saying that the notification to the Commission and procedures on these agreements are already speedy as companies have to self-assess their agreements in advance, so that the Commission does not require time-consuming joining analysis with the companies. Competition Policy in EU already recognizes the R&D gains.

Finally, Massimo replied to Reinhilde on ex-post assessment and market monitoring: he agreed that it is crucial, as for example in merger control where pilot projects have started, or in state aids at the Member States level.

Paul then replied to Massimo, saying that with Competition Policy has changed a lot since the Sherman Act. In the Commission for example we have had the new merger regulation, the Chief Economist Team, and assessment on vertical agreements.

Matthew added some comments. First, on the new notification system he said that this can indeed be burdensome for companies. Second, in ten years he has not seen any evidence of hold-up, despite quite some effort in looking for data backing the theory.

Reinhilde said despite the disagreements, all converge on the need of more intelligence on ex ante monitoring and ex post analysis.

Q&A session.

Q: Ralf Nigge, Deutsche Telecom. He pointed out that in the field of telecoms Competition Policy enforcement is entrusted with the regulator rather than the competition authority. European Council conclusions in 2013 say that European citizens should have access to digital resources. He then asked how do you see the probability and desirability of this part of the digital economy to be governed by sectoral regulation rather than competition law. Policy makers might get to be impatient with telecom companies.

A: Paul answered saying that DG COMP has been on both sides of the angle. Commissioner Almunia made an excellent speech asking why is there not a single market. He wishes more people listened to DG COMP. Competition approach is better than the regulatory one because sectoral regulation tends to create vested interests and justify companies to say they are different from everyone else. Too much investment in sector regulation creates a sense of protection, of sector peculiarity.

A: Matthew said that the Council conclusions talk about access to platforms but do not clarify if these are existing platforms or ones to be developed. If they were the second ones, then incentives would be undermined and the Council would have been rather populist.

Q: Alexander Italianer, DG COMP. He said that in Competition Law enforcement we talk about consumers, price and quality. On what he could see the knowledge economy is a lot about the needs of firms. He asked then what is the consumer equivalent of the knowledge economy.

A: Paul replied saying that the knowledge economy is not about the needs of firms. The very idea of innovation is creating things that consumers value or at lower costs (and then prices); that's why it is a consumer centered definition.

Q: Swedish Ministry of Finance. To go back to on how ex-ante uncertainty affects productivity growth, he mentioned a paper on the macro perspective in US using instrumental variable which finds out that indeed uncertainty is important.

A: Paul said that the data on that is still not good enough to answer the uncertainty question.

Q: Bruce Lyons, East Anglia. He asked about remedies, in particular on Pay-to-delay cases. He said it can be very difficult to find out the remedies that establish correct incentives in the concerned markets but also in other markets. Google is such a case.

A: Massimo agreed that the remedy's question is very difficult, structural remedies in mergers. Sometimes remedies are so complicated that they did not resolve the problems. As for Google, this brings about another question, ie when you should rely on commitments rather on prohibition. Massimo said that when we are talking about sectors which are quickly changing then relying only prohibitions can be dangerous there, because the decision arrives when the industry is already too late. To rely on remedies is a better approach. He argued that this is the case in Google: even in the latest 6 months, the type of services by Google was changing. In his view, these remedies are working because: First, the auction is the most efficient mechanism in order to make companies pay for the slots,

which will select the best companies and have a positive impact on consumers. Second, Google would have preferred not to give access at all. Third, the sort of remedy is not costless to Google. Finally, if Google would have offered these remedies earlier, the investigation would have stopped immediately as this is how the industry works normally.

A: Matthew said that the competition authorities should not impose remedies on some companies with the purpose of also affecting the other companies in the same market in the fields where there is no law. In the case of dominant positions they are instead valid.

Q: John Davies, OECD. A comment on Matthew's point about uncertainty in the knowledge economy. John stated that the same uncertainty that creates turbulence in a market and supports only short-lived dominant positions can at the same time create very long dominant positions, as in the case of Microsoft where some products have been dominant for more than twenty years. Therefore, the non-interventionist approach is not necessarily right. Rather, what competition authorities are missing at the moment are the instruments to understand where uncertainty in an industry will support a strong dominant positions or rather a short-lived one.

Panel 2

Alex Barker has started the discussion by pointing out that many banks have met their masters in DG comp, as the competition authorities were getting involved in the decision on state aid to the banks.

Gert-Jan Koopman.

In state aid we were looking at 106 banks in past 7 years, including 46 rescue and restructure cases, 26 liquidation cases. Around 20 banks are under review. More reviews are on the way. By assets it is roughly 25% of the European banking sector. Liquidation concerns 2% of total assets. The general public impression was that in Europe the regulators were reluctant to close banks, which is untrue.

We look at three factors when we work with banks. In restructuring viability concerns matter. The basic question is where the state aid led the banks and their viability. We can see some interesting statistics already. Restructured banks are on their path to viability after receiving state aid, but the process may take longer than expected. However, not all banks were deemed viable after DG Comp assessed their status, which triggered their liquidation.

We took complete dataset and looked when intervention took place. Net income has increased after interventions and cost to income has significantly decreased, which is an evidence that restructuring plans are working.

We see in the dataset that NPL has stabilized. Undue reliance on short funding was the driver of banks

getting into trouble - loan to deposits ratio was the evidence. But now LTD ration has decreased as well. Return of equity has also stabilized and the core capital ratio started to increase after the intervention.

Another important metric is the amount of guarantees under the burden-sharing chapter on remuneration guarantees, which are an important contingent liability for states. Total guarantee amounts were in billions. Remuneration guarantees were regulated through state aid also. When you add up the total amount of fees that total stands at 33 billion Euro. It is important to ensure that the exposure of tax payer is remunerated.

We have required very strict restructuring measures. Econometric evidence for market where PLB were deployed show very limited effects on lending rates. The third part of this intervention is to limit distortions of competition were important. One example: the largest banks in UK divest and ensure that IT platforms essential for competitor's survival are also launched properly. These structural measure are likely to have a lasting effect.

How this is helping growth? First, at least 25% of the banking sector is already in a much better shape in terms of liabilities. We know from historical evidence that when banks don't lend, it significantly inhibits growth. We were really attentive to ensure that restructuring plans do not lead to undue deleveraging and banks can concentrate on their real function of lending to the economy.

In a highly-leveraged economy deleveraging is necessary on macro perspective, independently from state aid control. Banks that engage in risky lending practices in real estate sector and elsewhere will necessarily have to make a larger contribution to the deleveraging. It should not be misinterpreted as banks holding back a healthy expansion of the economy. It is worth looking at this very carefully. One case study was on interventions in Spain. Total lending was going down by 12% due to this restructuring, but vast bulk of this decrease comes from reduction of lending to real estate developers and mortgage. Lending to corporate was flat. So our restructuring effort has not acted as a binding constraint and was not influencing the real economy. Real estate also had to deleverage. The weakest banks have contributed to the deleveraging the most.

The bulk of the activities of the Commission was on state aid. However, it has dealt with other issues. Via commitments the collectively agreed, hidden inter-bank fees were lowered to foster competition. Contribution to creation of open, EU wide and integrated payments system was also very important in terms of competition policy and growth. By eliminating the market fragmentation, we have pushed for creation of more open and cheaper payment system. The competition policy intervention was a starting point for legislation.

Jordi Gual.

Competition policy as growth enforcing policy is to be doubted. Competition policy promotes more competition, not always growth. But more competition does not always imply more economic efficiency by definition. There is a positive correlation between that. In some static markets the old principle works. In more dynamic markets it may be not the case. The relationship between growth and competition is of inverted U-shape. So there is an optimal level of competition, particularly in technologically-driven industries.

In the banking markets something similar can be stated. They are typically oligopolistic, have a certain component of innovation (digital systems etc.). It is clear here that more competition is always good. What makes it different is that it is heavily regulated. The goals for policy maker is financial stability, not only competition. Financial instabilities arise due to procyclicality and excessive risk taking by market player in presence of liability

or implicit government guarantees. We have capital, liquidity regulation, structural separation and a little bit of bail-in and resolution regulations. Moreover, a banking license is needed. There is no free entry and exit. Sometimes it can also be harder to exit than enter.

Competition policy has to be tailored to these peculiarities. However, the fact that the industry does not have a very good working resolution scheme means that sometimes zombie banks remain in the marketplace. At some point antitrust policy is playing the substitute of a proper resolution policy that leads banks to the market exit. The abuse of the dominant position, merger control, the degree of tolerable concentration is related to financial stability issues. We have the risk that authorities try to determine the rate of return by a combination of regulations and competition policy. The most controversial policy was state aid control, because of the absence of proper bail-in and resolution regime. If it was present, there would be a system for proper exit of competitors.

Dilemma between state aid and competition is actually a trilemma: you have limiting spending by the government, ensuring stability and maintaining competition. In these cases, we are interested, because the issue is how you handle the exit in the industry. It is also an efficiency issue. You want to make sure that inefficient players exit and facilitate credit growth in the economy and deleveraging in the industry. We face these tradeoffs.

Let's consider first the tradeoff between financial stability and competition. Once you have a large significant bank failing, what are the constraints that you are going to impose? Is it related to the amount of aid needed, previously taken risks? What is the proper size of the restructured bank, so that it becomes viable? The Commission first determines the right size of the bank to return to viability and then imposes constraints with a set of criteria, which are not very specific though. However, they should be determined jointly with the "right" size, because there are several bank sizes and market structures that can be compatible with the new market structure.

This brings me to the discussion of what the return to viability means. By the definition of the Commission, a viable company should be able to return to the capital markets by its own merits. Moreover, the restoration of viability should imply the return of the state aid. If that's the case, partial recapitalization of banks makes sense in some cases. In other cases, we have seen utter failures of banks where the government had to inject equity to return the banks to zero and then additional equity to return to the proper regulatory levels. The return on equity that you need in the market to be able to return the state aid sounds completely out of the box in these scenarios. The proper application of the rule in this case would be restructuring and dismantling such entities.

The second tradeoff is between competition and the fiscal costs. This has to do with the fact that when the constraints are imposed on the government-owned bank, it simultaneously diminishes the market value of that bank. Naturally, the government tries to maximize the value of the bank. However, competition should take precedence by selling the bank while the situation is stable to the highest bidder. Ideally, there should be a built-in mechanism that would impose restrictions on state aid to government-owned banks.

Finally, the third tradeoff is between financial stability and fiscal cost. When selling the bank back to the marketplace, one has to be careful in the sale to the highest bidder. It has to be considered whether this will not impact the competitiveness on the market and if it will not decrease the financial stability, as in the case when the bid brings the acquirer beyond his financial viability. Here the precedence should be given to the stability of the financial system.

Patrick Legros.

After the crisis OTC derivatives were blamed for increasing the systemic risk. partly it was so, because people were trading on derivatives that they did not understand and there was a domino effect in the market. The post-crisis regulation has forced the players to impose more transparency, higher capital requirements and better risk management at the time when you engage in the transaction. Additionally, some self-regulation was imposed by traders.

Theoretically competition and innovation have an inverted U-shape. If we think of growth, innovation is the key. And when you think of OTC vs. exchanges, OTC derivatives are the first step. In case, someone has a tradeable risk, he can draw a contract for it and proceed with a transaction. In case the contract can be of interest to many people, it can also be brought to a full exchange market. This is where the competition policy problem arises.

There are several relevant points. Peterson, Rajan (1995) show that young firms obtain substantially lower loan rates in more concentrated markets and access to credit is easier in markets with more concentration. Panetta, Schivardi, Shum (2004) show that merged banks can evaluate risk better, for example.

In simple OTC derivative can be described as a simple insurance contract between a buyer and a seller, which can be quite complex. The risk is however that the seller may not be able to pay in case the event arises. Given the transaction nature it is possible for the seller to be anonymous and in that case the question is how you can manage your risk?

OTC derivatives involve inter-dealer agreements and are often tailored for specific risks and cannot be traded.

Successful exchanges have to answer several questions: whether the exchange is organized for profit or by users, who does the clearing, how the guaranteed fund is established and how liquid it is. The competition between exchanges involves network effects and the market has seen a plenty of failures (EUREX, LIFFE). Tipping behavior can occur, as in case of DTB and LIFFE, but continuous coexistence as well (OSE, SIME and CME).

CCP's can lower the risk exposure between the parties, but the multiple competing CCP's actually increase the exposure. One solution is implementing some standard of interoperability, but that still involves the contracts between CCP's and helps only partially.

In this scenario, the concentration is not always necessarily bad for consumer.

Discussion.

Q: Alex Barker: What needs to change now in competition policy?

A: Gert-Jan Koopman: During the crisis it was the national governments standing behind the national financial systems, the EU internal market was very fragmented. What we are trying to build in terms of banking union provides an answer. I would argue that interventions are entirely appropriate.

A: Jordi: Don't think that more concentration is bad for consumer. You can see tough competition, but it can be instability and fighting for resurrection. The regulation, increased capital, liquidity requirements together with the basic economics is leading towards an increasing minimum size to be able to make proper return to investors.

A: Patrick: Concentration of lending may not be better for consumers, are you w

A: Koopman: Through regulation we got rid of banks that engaged in very risky activities. Extreme example: Greece: 20 banks before, now 4 banks with 95% market share. Is it competition problem? Yes, if markets remain fragmented. As the situation normalizes we will see entry in this market.

Q: Guntram: 1) What's the mechanisms that will pick-up credit intermediation function if the deleveraging is ongoing? Capital markets are highly national with no or little cross-border dimension. Deleveraging is necessary, but what can replace these capital flows? 2) Low profitability of European banking system is due to high degree of competition. In the US rates are higher than in Europe. Do we have too much competition and should have further consolidation?

A: Koopman: 1) It is about the quality of deleveraging, not quantity. Debate in macro terms is misguided. In countries where is strong need for deleveraging you also have to look at the forecast. We try to make sure that our restructuring plans do not set a bound for expansionary lending where it is necessary, but try to squeeze out the zombie banks. We take decisions across the system, not individual banks. 2) Three reasons: recovery from crisis; banks need to build up capital; transition itself in business models takes time.

A: Jordi: The healthy bank has been obliged by regulation to deleverage and may have contributed to deleveraging too much. Why banking is not profitable: Insufficient capacity reduction of European banking industry.

Q: Alex Barker: Do you think that SRM put in place will be more efficient dealing with the overcapacity if necessary and how will DG Comp will deal with it in the future?

A: Koopman: If we look at BRD which applies to SRM then granting state aid is very difficult. We will see very soon how this rules are applied. There has been keen interest that the market is protected.

Q: Mario: Do you think that switching costs are too high, what could be done in retail banking?

A: Jordi: The nature of competition is peculiar. The switching cost depending on the market are lower in banking. The competition is so tough that the bank does all the service for the customer. International expansion in retail banking is difficult. Banking profitability requires a large market share. Plus, you have to control the differences in regulation.

Q: Bruce Lyons: DG comp was better than financial regulators. The focus on punishment is not the constructive way to move forward the market.

A: Koopman: It was not someone seriously contemplated, given the risks in 2008. A number of these measures had a real effect on competition. Price leadership of Dutch institution and regulation has stopped this institution from dominating. We need to look at the situation in normal times.

Panel 3. Fostering Growth Enforcing Competition Policy in Network Industries.

Chair: John Fingleton, Fingleton Associates

Linsey McCallum. European Commission, DG COMP.

- If we think of new generation mobile technologies (e.g. 4G), it is pretty clear that some economies are much ahead of EU in terms of deployment.

One of the critical factors that can explain this delay is that Europe overall has been slow in allocating 4G spectrum. However, if we look at some countries that allocated the spectrum early (e.g. Sweden), we can see that their deployment is comparable to that of other developed countries in the world. For example, Sweden 4G network is the fastest in the world.

- If we look around the world we see that state aids are very important for a successful deployment of network infrastructures.

- One of the priorities of state aid modernization is to share best practices among member countries.

- Market definition in this fast changing environment is a challenge for competition policy.

- In many urban areas the quality of the mobile network is still significantly lower than that of the fixed network.

- Mobile-fixed substitution varies greatly from country to country but also within a country.

- When we look at competition, price is not the only parameter that we have to look at: quality and innovation are also relevant variables.

- A common argumentation used to justify a merger is that consolidation is necessary to have good networks. However, the question is: are mergers the only way to have good networks?

Tommaso Valletti. Imperial College.

- Network industries contribute a lot to the economy, but it is hard to quantify their impact. With this respect, the lack of publicly available micro-data is a serious obstacle to research in this field.

- Characteristics of the network industries:

- o Cost structure. The high fixed and sunk costs that characterise this industry require a price mark-up in order to justify the investments.

- o Complementarities. The presence of complementarities in this industry cause a tendency to adopt a vertically integrated structure: the positive aspect is that this structure avoids a double mark-up; the negative aspect is the problem of foreclosure.

- o Externalities. Network externalities are relevant in this industry.
- o Social obligation. Network coverage for the entire population is usually an objective of policy makers.

Phillip Malloch. Teliasonera.

- The network industry is characterised by a phenomenal market growth. This growth poses some challenges. One of the main challenges in the past 5 years has been the monetization of this growth.
- The high complexity of this sector implies that it is hard to define competition. The definition of who are the competitors and what are the bounds of the industry is challenging.
- Several of the products introduced in this competitive arena are not made to make money out of them: they are made to attract consumers into an ecosystem, where the company makes money in some other ways.
- Some geographical areas are incredibly difficult to serve: extending high-speed network coverage to the whole population is still a challenge.
- Innovation in network products is as valuable and important as innovation in services.
- Network sharing is an alternative to consolidation, but it is not the silver bullet.

Panel 4. Fostering Growth through International Convergence in Competition Policy Enforcement.

John Davies. OECD.

John started his intervention highlighting the key trends in the diffusion of Competition Law and Authorities in the world. First of all, the number of countries with Competition Laws and Authorities has been steadily increasing in the last twenty years. John called this a “revolution”. Secondly, over the same period we have witnessed a new Globalization wave, as for instance captured by the rise in cross-border M&As, ie involving two or more jurisdictions. This means that cooperation among the new Competition Agencies is necessary. Thirdly, this cooperation has indeed taken place, but mainly limited to EU, USA, Japan and other English-speaking countries (AU, NZ etc). Convergence in the enforcement has also started, eg in the field of merger regimes where most International Competition Network members have conformed to best practices. In John's view, these trends make clear that Globalization is moving faster than this convergence, which still is very positive. The risks of non-converging are exemplified in a recent case involving two European countries, ie the Euro Tunnel case where the UK competition authority took a decision that the French one did not take. A French minister then said he would “arbitrate” with the UK Transport minister for a better solution. This triggered a reaction by the UK Competition Commission who said that the government is excluded from enforcement by law. This is case in which competition authorities reach incompatible conclusions on a case assessment – something that in fact is surprisingly rare. John justifies such cases in three ways. First, comp authorities might have different standards. Second, eg a merger can have different effects on the two (or more) involved markets. Third, competition policy is hard and people disagree sometimes (see the dissenting opinions within the same Comp authorities, eg FTC). What is the lesson of this disagreement story? That the “no” of one competition authority prevails, not according to any international code, but as it does as simple practical matter, because eg a merger would not be done if it is blocked in one influential market (the dissenting opinion of a smaller competition authority would perhaps be less influential). This means that first, the toughest standard will prevail; and second, that going ahead mergers will need to pass assessments in more jurisdictions, meaning that the risk of a blocking will be higher as well as the hurdles for the merging companies. As a consequence, inefficient mergers are less likely to be proposed in the first place. To conclude, John made a remark on globalization: he said that globalization is indeed proceeding at fast pace and it will continue to do so, making it more compelling for competition authorities to cooperate, perhaps at the multilateral rather than the bilateral level.

Hassan Qaqaya. Chief, Competition and Consumer Policies Branch, DITC / UNCTAD.

The UNCTAD is an international organization which deals on Competition Policy. There is a voluntary code, which has worked quite well in spreading best practices. Initial remark: since URSS collapse there is clearer convergence on how markets should work. UNCTAD has then tried to push the competition agenda following four lines: first, trying to prove how competition is good for growth and good to alleviate poverty as well; second, pushing best practices; third, capacity building for young competition authorities in developing countries; fourth, fostering

international cooperation. The latter is not just about cross-border anti competitive agreement or conduct but also about rising awareness in developing countries.

A crucial problem encountered in the past is that in many economies, competition law and policy are not independent. Hassan said that it is really a matter of degree: even formally independent competition authorities need to listen to some ministers to some extent. In particular, when they are just born these authorities might need to pursue the ministry's objectives. This raises some problems at the multilateral level, ie the issue of competition neutrality. The fields of international trade, industrial policy, state-owned enterprise, export promotion are delicate. Many of these have a bearing for competition and therefore, when we think of competition policy we need to think of it in the context of wider national government objectives.

Hassan then said that competition networks are able to produce standards and eventually convergence. So why this convergence is important? First, it gives consistency to the decisions. Second, it encourages sharing experiences and capacities. Third, when more competition authorities fight together in bigger cases (eg international cartels), the case can have spillovers on the overall activity.

In order to encourage coordination, Hassan proposed some ways to proceed. He noted that informal discussion about cases can be extremely helpful. Other two promising areas are peer reviews and Regional forums that can act as advocates.

Eduardo Perez Motta.

Eduardo talked about the issues of convergence, cooperation and coordination of different competition authorities. The first question was regarding the impact of competition on growth. While this issue could be highly technical, one could also look at practical aspects of how competition can affect productivity and growth.

As mentioned earlier in the discussion, there are three ways how competition affects growth: first, by improving the internal efficiency of the companies; second, the displacement of less efficient firms in the industry and the dynamic efficiency, in the sense of increased innovation and research.

But this discussion will focus on the sectoral issues. As an example, one can look at the pay TV market in Mexico. Before 2008, there was only one provider of a satellite TV in Mexico and several cable and microwave providers. After the approval by authorities there was a merger between a Mexican and US companies, so that a new satellite operator came into the market. The reaction of the incumbent was to lower price and increase promotion. Since then the satellite TV market has grown by more than 200% by 2012.

Another example is the airline market. Until 2005 there were not low-cost companies. Only two legacy companies and two large ones Aeromexico and Mexicana were present. Once the new licenses were granted the market has grown, despite the massive crisis in 2008. several changes have occurred in the market since then: the new companies have taken up to 50% of the market, the total amount of passengers has increased by 25% and Mexicana had to exit the market.

The third example is the market for pension funds. Before the regulation, commissions were calculated based on stocks and flows and were not transparent at all. Once the law has prohibited commissions on flows, the

process became more transparent and easier to understand, so that the estimated amounts of savings for workers were in range of 68 million dollars due to lowered commission fees.

In 2005, there was a merger in the train sector that was initially prohibited, but was later cleared through the judicial process. The result of it was that the price of the railroad services went up significantly which also reduced competition in substitutes: air and truck transportation. It resulted in higher costs for everybody, as agricultural goods are most often transported by railroads as well.

All these network sectors are crucial to productivity. One major problem is that these sectors are not internationally integrated. The only source of competition in this case is regulatory frame. It is not a surprise that the growth in Mexico was lagging in the last 25 years. However, looking at the capital accumulation, it is not doing bad; the major problem of Mexico is the lack of productivity. This also true for many other developing countries.

Clearly competition is the main source of productivity. Second, in a country with structural inefficiencies, the best way to grow in the short-term is through increasing efficiency, rather than simply through capital-accumulation.

Competition could be a crucial source of growth and an important instrument to improve the distribution of income also. In Mexico, 30% of the disposable income is spent in sectors that do not have enough competition. And in those sectors people are paying prices that are 40% higher than in a scenario with higher competition. The poorest people are the ones who are paying the most. So, higher competition could promote both productivity and income redistribution.

Regarding the international cooperation OECD has become one of the most important platforms. The second one is UNCTAD that is more concentrated on the developing countries. The other one is the International Competition Network. Lastly, another source of cooperation are the free trade agreements. For the efficient promotion of competition on a global scale, convergence between the regulation policies of authorities is important.

Bruce Lyons.

Does convergence in competition policy enforcement foster growth? The answer may be quite indirect. For example, European firms do not see periods of rapid growth and rapid decline as you see in the US. A lot of European firms are stuck in the middle. The distribution of growth rates of the firms is not as conducive to overall aggregate growth. Also, in terms of new product development and mega-market creation, this is a serious concern. For example, in software, internet, biotech and GM seed markets the US firms dominate the top 10 ranking by global revenue. The only exception is the pharma industry where 5 top firms are from the US and 5 are from Europe.

Regarding the productivity growth, there is a lot of evidence that competition enhances growth, which is available from recent panel data on firms' performance. A lot of productivity growth happens through entry and exit of firms, and benefits from lower barriers. The tools of competition policy include antitrust, merger control, state aid, trade liberalisation, however are not always straightforward as in case with rescue and restructuring aid and appropriate R&D aid. The state aid policies in particular are very important to get right.

The quality of competition policy is unexpectedly less explored and its evaluation is quite hard. The available tools include ex-post evaluations and peer-review. In many ways the general reputation of the competition authority does reflect the quality.

However, there has been general convergence over time. The economists from the US, Germany, France, Britain think the same. The competition law statutes have also become closer over time. A similar pattern has been observed in the advice networks: competition policy networks (ECN, ICN, OECD, UNCTAD), global competition consultancies etc. Less convergence was observed in the governments, which still differ in terms of corruption, courts, political independence, agency design (investigative vs. prosecutorial), scale and other practices.

Other aspects in which the convergence was slower than expected are case selection and practical tools of analysis (UPP, market definition). However, many authorities have explicitly concentrated on the price. The focus was due to easier analysis and immediate impact, but it also dealt with lower quality incentives and concerns about dynamic efficiency and innovation.

Julia Hotz.

There is a remarkable degree of convergence in competition policy law, more than in other areas of law, e.g. employment law. There is also significantly more literature on comparison of competition law across the countries. However, some improvements can be made.

There are over 120 competition authorities and currently more than 70+ countries have implemented merger control and it is questionable whether it is worth having so many competition authorities, when the law is very similar across the borders. In case of smaller countries, mergers would often proceed regardless of the decision of competition authorities and then it could be reasonable to save resources for smaller domestic cases. However, that would be an implicit acknowledgement that the US and EU have stronger influence over merger control, which could be undesirable from the political perspective.

Another potential improvement could be a requirement that companies have a significant presence in the country to be required to notify its competition authorities. Multinational companies should not be required to notify countries in which they have only a minor presence. However, the current leaders do not always lead by the example - Europe still requires notifications of joint ventures which have negligible local impact.

The outcomes differ in terms of substance given the large number of authorities. Even very sophisticated regimes can come to different outcomes as evidenced by the case of Google, where the European Commission agreed to remedies and the US FTC has dropped the case. It has a lot to do with the institutional system and the way cases are handed in courts.

Generally, in the digital environment it will be harder and harder to determine jurisdiction and resolve conflicts between them. Internet is accessible from everywhere. For example, when a small pacific island has very strict antitrust rules, should tell Google and the entire world how the website should look like? In another case, a European court has required a European subsidiary to request their Taiwanese parent company to produce legal documents. While the subsidiary had to claim that they cannot force the parent company to produce paperwork, they somehow managed it and appealed the case. Unfortunately, the case was withdrawn.

The things are made worse by different procedural work and rights, as privileged documents are required to be disclosed in some jurisdictions, but not the other.

Carles Esteva Mosso. European Commission DG COMP.

Carles started from some trends (along the lines of John). He said that today around 85% of world population is nominally covered by competition rules. This figure was 25% in 1990. He then focused on the risks of having multiple enforcers in the world from the European perspective. First remark: cooperation in competition policy enforcement takes place in different overlapping networks: the ICN includes the ECN (ie, International v European), but not only. Indeed, at the moment 34% of competition authorities in the ICN are applying EU-based competition law. These countries of course are converging/cooperating much better. Let's then look at this smaller network first. The ECN was created 10 years ago (May) and works according to common Competition Law as for cross-border practices. A lot of informal cooperation has been going on among the 28+1 authorities. As for enforcement in the 2004-2014, Carles noticed that there has been convergence towards a greater weight given to cartel fighting, which has stepped up in member states thanks to new rules, eg leniency.

Beyond the EU: the ICN deals with a much more varied set of authorities and has therefore focused on discussing and establishing world best practice. One great success has been the recommendations for merger notifications and review, and on merger analysis (72% of ICN members said that ICN work has contributed to changes in their merger review regimes, 2011). A more difficult area is unilateral conduct practice. Carles noted that despite the differences in application, the objectives are quite homogeneous among members (2007).

Speaking about cooperation in enforcement, Carles showed some numbers on the proportion of EU cases that involved an exchange of information (or deeper cooperation) and concluded that Phase II mergers are the neediest of cooperation (67%), then coming cartels (60%). Looking at the geography of cooperation in cartels, the most important countries are US, Canada, Japan and Korea, but in merger cases developing countries authorities have a larger weight. Increasing coordination will be important for several reasons, eg to avoid conflicting remedies and to give legitimacy and increase credibility of multiple enforcement. The EU is moving both on bilateral and multilateral level.

Another difficult area is the procedural rules, which are different in every country. This is deeply linked to the institutional setting of every authority. It is basically impossible to establish global procedural rules.

Last point is about subsidies. At multilateral level we have worked already a lot on that. Great distortions are out there because of subsidies and it is good to fix them in the international settlements.

Discussion.

Following what commissioner Almunia said on competition policy enforcement and populism during his keynote earlier, the discussants talked about ways to foster competition culture. Some of the remarks made are in order.

- The discussion should expand more generally to Market-oriented policy. In fact, trust in markets in general is low, people are not aware of the benefits. This is also because some big projects like privatizations were not done correctly (the Gov just sells selling dominant positions) [Perez-Motta].
- Solid institutions are the key as they gain respect no matter the government in place.
- The 2008 crisis had a devastating effect on people's trust in markets. [Lyons]
- Consumers should be made aware of the benefits, real-world example [Lyons]
- If competition is to do with several policy fields, then this makes it a good opportunity to spread the competition culture, rather than a threat [Lyons talking on Mario Monti]
- Stepping up competition policy enforcement may be harder in developed countries where consumers might not see the need. In highly regulated countries, dismantling huge monopolies have the backing of the people. Instead, in a country like the UK that is already very competitive, the case for stronger enforcement is less compelling for consumers. In the US you have the class action, which works well already, same thing.
- UK is already quite a competitive environment, but still it has even more pressure to become more competitive. And if the competition policy in the EU cannot tackle the problems as barriers to entry, it might lose public appeal and we'll see more protectionist movements.
- Authorities should coordinate on the ex-post evaluation as it will help to analyze what are the cross-country factors that lead to better outcomes.
- It was stressed that the independence of competition authorities is absolutely crucial. However, this is not internalized in all countries, sometimes because it is not needed. For example, Swedish authorities were never pressured by the government.
- The question is what are the legal requirements that make an authority independent, what is the legal framework. As in the example above, Swedish authorities need very little to be independent, but it can certainly not be the case for every country.