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List of abbreviations

AT&T	: AT&T Inc
CQGR	: Compound quarterly growth rate
CMA	: Cellular market areas
CR	: Concentration ratio
DOJ	: The United States Department of Justice
EC	: The European Commission
FCC	: The Federal Communications Commission
FTC	: The Federal Trade Commission
H3G	: Hutchison Drei Austria
HHI	: Herfindahl-Hirschman Index
ITU	: International Telecommunication Union
MNO	: Mobile network operator
MNP	: Mobile Number Portability
MVNO	: Mobile virtual network operator
ROI	: Return on investment
RTR	: The Austrian Regulatory Authority for Broadcasting and Telecommunications
Sprint	: Sprint Corporation
TA	: Telekom Austria
Telco	: Telecommunications company
T-Mobile	: T-Mobile US, Inc.
Verizon	: Verizon Communications Inc.

1. Introduction

In Austria, the number of mobile network operators shrank to three from four after H3G completed the takeover of Orange Austria in January 2013¹. The acquisition was completed one month after H3G got regulatory approval from the EC on 12 December 2012. As selling YESSS!, which was the no-frills sub-brand of Orange, by H3G was a part of this approval, TA took over YESSS! simultaneously².

On the other hand, during its T-Mobile acquisition attempt in 2011³, AT&T, the second-largest U.S. wireless provider, failed to convince the DOJ and the FCC that a market with one less player would be better for consumers.

Different approach to mergers and acquisitions of two regulatory bodies at the opposite sides of the Atlantic is not limited to one example. For instance, T-Mobile was once again an acquisition target in 2014, this time of Sprint. However, the Antitrust Division of the United States Department of Justice declared that⁴ it would not approve the takeover, resulting in termination of the offer by Sprint. Controversially, EC approved⁵ another takeover, Telefonica's acquisition of E-Plus in Germany, in 2014.

In this study we will explore the motivation behind the different approaches of the US and the EU regulatory authorities to the merger and acquisition activities in the mobile telecommunications markets in the US and the EU. To do so, we will analyze the underlying reasons of both regulatory authorities in approving or not approving an M&A attempt in the mobile telecommunications markets that they regulate. We will focus on two markets for the purpose of this study: The US mobile telecommunications market and, on the European side, the Austrian mobile telecommunications market. By comparing two markets, we aim to find out the answers for the following questions:

1 <http://www.hutchison-whampoa.com/en/media/topic/2557/3Austria-completes-Orange/>

2 http://ec.europa.eu/competition/mergers/cases/decisions/m6497_20121212_20600_3210969_EN.pdf

3 http://www.nytimes.com/2011/11/25/technology/att-deal-with-t-mobile-takes-a-step-back.html?_r=0

4 <http://www.bloomberg.com/news/articles/2014-08-06/sprint-s-abandoned-t-mobile-bid-a-consumer-win-depends>

5 <https://www.telefonica.de/fixed/news/5631/telefonica-deutschland-completes-acquisition-of-e-plus-group.html>

- What are the main arguments of the US regulatory authorities for dismissing the attempted purchase of T-Mobile USA by AT&T?
- What are the main arguments of the EU regulatory authority for approving the H3G's acquisition of Orange?
- Would the arguments of the regulatory authorities presented in Austria apply to the US?
- Would the arguments of the regulatory authorities presented in the US apply to Austria?
- Are the reasons of different decisions due to different structures in the US and Austrian mobile telecommunications markets or due to the approaches of these regulatory authorities against M&A activities in the mobile telecommunications markets?

2. Theoretical background

It is widely accepted that horizontal mergers happen between two companies that operate in the same industry⁶. There are also two other merger categories. One is a merger type called vertical merger (merger of a company and its supplier), and the other merger type is called conglomeration (merger of two companies whose products are neither direct substitutes nor complements merge⁷).

It is known that horizontal mergers have two main effects on a market, which are unilateral (or non-coordinated) effects and pro-collusive (or coordinated) effects⁸. Unilateral effects, which are the consequence of the enhanced market power of the merged firm, have two main components. First of all, the increase in the market power might lead to higher prices or lower service quality for customers (e.g., reduction of handset subsidies) in the market. Further, merger of two or more entities might lead to efficiency gains, which might result in price reductions in the market. As a result, combination of these effects might influence the prices in either a negative or a positive way depending on which effect is dominant over other. The pro-collusive or coordinated effects, on the other hand, refer to the effects of the mergers that appear as more appropriate conditions for

6 For detailed explanations, see Belleflamme and Peitz (2010), and Roberts et al. (2012).

7 Pepall, L., Richards, D. J., & Norman, G. (2008). Industrial organization: Contemporary theory and empirical applications. Thomson/South-Western. p.450

8 Motta, M. (2004). Competition policy: theory and practice. Cambridge University Press. p.231

collusions in the industry after the merger. Let us briefly explain those effects mainly in the light of Massimo Motta's well-known book "Competition Policy", which is one of the most widely accepted reference textbooks in the area of industrial organization.

2.1. Unilateral effects

As already defined above, unilateral effects lead to ambiguous changes in the prices. Whereas a horizontal merger unilaterally increase the market power of the new entity, leading to price increases, the same merger might also result in efficiency gains, pulling the prices down for customers. Let us evaluate both effects separately below.

Increased market power

As we mentioned above, a merger is likely to unilaterally increase the market power of the new entity, and this increase is likely to raise prices while decreasing consumer surplus and total welfare of the society. We can consider a simple example to understand why a merger is likely to unilaterally increase the market power of the new entity. As an illustration, let us think about a hypothetical town called Wurstdorf in Austria, where only three restaurants that serve schnitzel exist. Besides, let us assume that the schnitzels served in these restaurants are identical. In that case, if, let us say, Restaurant A tries to increase the price of the schnitzel it serves significantly, not surprisingly, many of its current customers would shift to the one of the other two restaurants in the town, mainly to the closest alternative, which is restaurant B. Expecting this shift, the restaurant manager who plans a price increase will avoid doing so. As a result, we can conclude that, the market power of this restaurant, which is also known as the ability of profitably raising the market price of a good or service over marginal cost, is limited by the existence of the other restaurants in this town.

Let us consider another case. If Restaurant A acquires Restaurant B and operates as a unique firm, the market power of Restaurant A will be higher. A price increase in schnitzel sold

by restaurants A and B might now be profitable, because the number of rival stores is reduced. In this case, of course some of the existing customers churn to the cheaper option, namely restaurant C. However, because of various reasons, such as location of restaurant C, lower service quality, long service response time, etc., many of existing costumers of Restaurant A and B would continue visiting their favorite existing

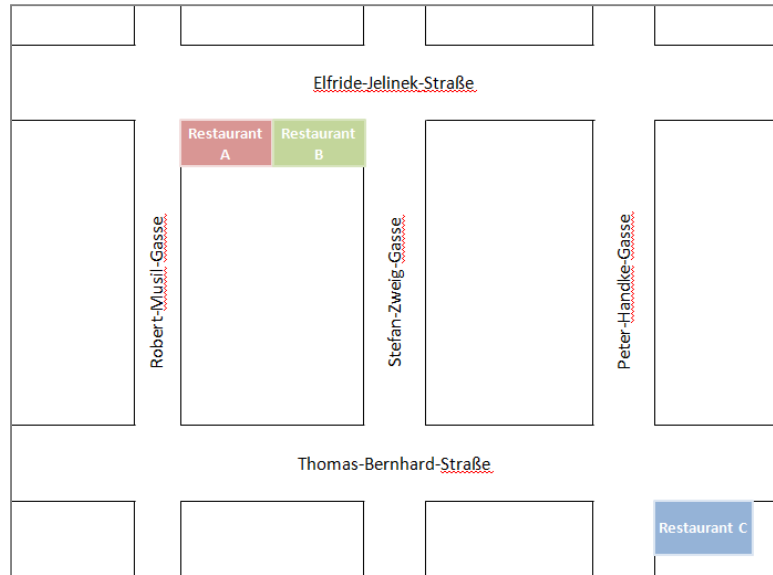


Figure 1: Three restaurants and their locations in the theoretical town Wurstdorf

restaurant as well. Thus, the owner of the restaurants A and B would have higher ability to consider a price increase then he had during pre-acquisition phase. As a result, the merger increases market power of the merging firms, and the increase in market power might increase the prices to some degree. Interestingly, restaurant C, which has nothing to do with the merger, can benefit from this acquisition as well. If we assume no efficiency gains, the merger will not only provide benefits to the merged entity but also to the outsiders. We can explain this assertion by using our simple demand-supply framework: Shift of some of the existing customers of Restaurant A and B to Restaurant C leads to an increase in the demand faced by Restaurant C. Restaurant C, thus, may find it profitable to increase its prices as well. Moreover, Motta suggests that the rivals might benefit from a merger even more than the merging firms. As a result, without any expected efficiency gains and with market power increase, the mergers hurt consumers and society.

It is also important to note that Motta defines the variables which affect unilateral market power as concentration, market shares and capacities, entry, demand variables, buyer power and failing firm defense. We can explain each of these factors briefly as following:

Concentration: To understand the effects of concentration on unilateral market power, let us consider the extreme case, monopoly. If a merger creates a monopoly, it is clear that this new firm does not face any restraint from any competitors in its pricing decisions. Hence, new firm sets

prices to maximize its profit. If we, on the other hand, consider perfect competition, we can claim that, the merger of two firms will have no (or very limited) effects on prices. As a result, the higher the

Table 1: Factors affecting unilateral market power		
Factor	Direction	Effect of merger on prices
Industry concentration	Lower	Less detrimental
Market share of merging companies	Lower	Less detrimental
Unused capacities of rivals	Higher	Less detrimental
Costs of entry to market	Lower	Less detrimental
Demand elasticity	Higher	Less detrimental
Buyer power	Higher	Less detrimental

number of firms after the merger in the market, the less likely that the merger has negative effects on consumers.

Market shares and capacities: In principle, merger of two or more firms with small market shares does not create adverse effects. However, if two or more companies with large market shares merge, than the merger might create significant adverse effects. It is, furthermore, shown by Farrell and Shapiro (1990)⁹ that the lower the market share of merging companies the less detrimental the effect on market prices. Similarly, as a firm with remarkable unused capacity in a market can easily address a possible increase in demand, the ability of a merged entity to increase its prices in this market would be limited. Hence, we can conclude that the larger the unused capacity of rivals, the less likely it is that the merging firms will exercise market power.

Entry: Microeconomic theory suggests that positive profits in a market attract new firms to the market. Yet, high entry barriers can prevent a firm from entering a market. In that case, a merged entity can easily increase its prices. However, if a new firm can easily enter the market, it would be more difficult to increase prices. Therefore, we can conclude that, the easier the entry of potential firms in the market, the less harmless the effect of the merger on prices.

Demand elasticity: Not surprisingly, sellers can sustain higher prices easier in a market with inelastic demand than in a market with elastic demand. Thus, the higher the price elasticity of demand in a market, the less harmless the effect of a merger on prices.

⁹ Farrell, J. and C. Shapiro. 1990. "Horizontal Mergers: An Equilibrium Analysis." American Economic Review. 80(1): 107-125.

Buyer power: Buyer power is also a very important factor for suppliers in determining their prices. It affects the ability to charge high prices. If there are only a few buyers in a market, a strong player can threaten a seller to withdraw its orders and buying from another supplier. Certainly, this would prevent the seller from examining its market power. Correspondingly, the more the bargaining power of buyers in a market, the less harmful the effect of the merger on prices.

Table 2: Efficiency gains and their results		
Result of the merger	Reaction of the firm	Result
Lower efficiency gains	Increase prices and reduce output	Higher profits
Lower efficiency gains	Decrease prices and increase output	Lower profits
Higher efficiency gains	Increase prices and reduce output	Lower profits
Higher efficiency gains	Decrease prices and increase output	Higher profits

These variables and their possible effects on prices can be summarized in the Table 1 above.

Efficiency gains

We have shown above that, unilateral effects push prices upwards as a result of an increased market power. In contrast, there is a balancing part of these effects that occur as a result of efficiency gains from the merger as well. In brief, if a merger increases efficiency of the merged entity and if this entity succeeds to decrease its variable cost per unit of production, then, doing so might alleviate the negative effects of increased market power on consumers and society. We can explain the logic behind this conclusion by using our theoretical town, namely Wurstdorf, again. In our example, we saw that, the merger allowed Restaurant A and B to exercise more market power. If there are no efficiency gains after the merger, merged restaurants would find it profitable to charge higher prices. Yet, if the merger allows the restaurants to operate more efficiently than before, there would be some savings in average variable costs. Thanks to lower variable costs, the merged restaurant can either increase or decrease its prices depending on the most profitable strategy. The profitable strategy may be increasing prices and serving less customers, but it can also be decreasing prices and serving more customers. Although, most of the times, identifying the best strategy in advance is not possible, the higher the efficiency gains from the merger, the more likely it is that decreasing prices and serving to more customers will dominate.

However, it is very important to underline that while cost savings in variable costs directly affects prices, cost savings on fixed costs does not affect the pricing decision of a firm. Although fixed cost savings might increase the total welfare, it does not increase consumer surplus. Therefore, if a regulatory agency only cares about positive effects of a merger on consumers, then it should not take fixed cost savings into account.

Finally, the theory of industrial organization suggests that, if efficiency gains are large enough then the merged entity should decrease sales prices to increase its profits. Welfare of consumers and producers would, hence, increase. Unlike what we see in the “Increased market power” part, efficiencies achieved by the merged entity are not good for the outsiders. In this case, only the merged entity would benefit from a merger and profits of outsiders would deteriorate.

2.2. Pro-collusive (coordinated) effects

We explained one of the principal mechanisms of horizontal mergers that can either negatively or positively affect prices. There is one more mechanism called pro-collusive (or coordinated) effects that come out as a consequence of new conditions created by a merger in a market leading to a more appropriate structure for firms to collude.

Let us explain structural factors affecting collusions in a market briefly below¹⁰.

Concentration: It is easy to understand that if there are only a few players in a market, it would be easier to reach an agreement and coordinate behaviors among the competitors. For example, if there are only two players in a market, a firm needs to persuade only one firm to collaborate and form a cartel. If, however, there are ten players in a market, a firm needs to persuade nine other players, a situation that would be clearly harder than the previous case. As a result, other things being equal, collusion is more likely in a market with the smaller the number of firms.

Entry barriers: We know that positive profits attract new entrants to a market. Thus, a market where collusion occurs would be very attractive for profit seekers. However, there are always high or low entry barriers in a market, depending on the industry. If entry barriers are high,

10 Motta, M. (2004). Competition policy: theory and practice. Cambridge University Press. p.142

it would be difficult for a new firm to enter a market and easy to sustain collusive prices in the absence of new competitors. However, if a new firm can enter a market easily, sustaining the prices for existing firms would be more difficult as new entrants may not want to pursue a collusive strategy. In conclusion, other things being equal, collusion is more likely the higher the market entry barriers to a market.

Links among competitors: In brief, if a company owns some part of a competitor or it has a representative in the management of a competitor; it will definitely be easier to coordinate pricing policies.

Regularity and frequency of market interactions: It would be easier to sustain collusion when the same firms compete repeatedly. The reason behind that idea is very simple: If one of the firms deviates from collusion in case of frequent competition, it would be quickly “punished” by other participants of the collusion. In contrast, if firms interact infrequently, collusion is less likely as extra profits from deviating could be “punished” only much later in the far future.

Buyer power: Buyer side of a market is also important in order to identify sustainability of a collusion in a market. Let us think about the extreme case and assume that there is only one buyer for a certain product. In that case, this buyer can destroy a collusion buy using its bargaining power against sellers, such as threatening to redirect its orders from one seller to other one. Even if all firms set the same price, a strong buyer can threaten sellers by declaring that it would start upstream production itself if prices are high for the buyer. In that case, it might be difficult for sellers to sustain collusion, and they can deviate in order to retain their customer.

Evolution of demand: It is obvious that, in order to participate in collusion, a profit maximizing firm should expect total gains of collusion to be higher than total gains of deviating. It is, therefore, clear that a firm would not give up large collusive profits of future for a small gain today, if the market is growing. Similarly, collusion would be difficult to sustain if the market is declining where profits would be lower in the future. So, a firm would have an incentive to deviate in order to gain in the short-term.

Product homogeneity: There is a wide agreement among economists that it is easier to reach collusion in a market with homogenous products than in a market with differentiated products. We can explain the logic behind this argument as follows: As we already mentioned

above, other players punish a firm who deviates from collusion. Whereas it is very easy to observe a deviation in a market with homogenous products, a deviation might not be easy to observe if there are many variants of a product.

Symmetry of firms: We can think about different dimensions when we talk about symmetry, such as market shares, cost structures and capacity constraints. One can assume that firms with similar structures can reach an agreement

easier than firms with different structures as it is easier to define the conditions of an agreement. For instance, Compte et al. (2002)¹¹ suggest that a symmetric distribution of capacities would help collusion. When structures of firms are similar, their incentives to deviate and to punish would be more aligned. In a market with different structures however, it is harder to reach collusion. In particular, the largest firm in a market has the highest incentive to deviate from collusion as smaller firms cannot credibly threaten to punish the largest one since they are capacity constrained.

Although it is crucial to identify the factors affecting the probability of a collusion, it is not possible to be sure whether a merger lead to collusion or not. The only thing we can say is that, if the number of those factors in Table 3 is high in a market and the degree of them, except buyer power, increases with a merger, the probability of collusion increases in this market. As a result, a regulatory authority should be much more skeptical when evaluating a merger attempt if the number of those factors is high in a market and the degree of them except buyer power increases after the merger.

Table 3: Structural factors affecting collusions		
Factor	Direction	Probability of collusion
Concentration	Higher	Higher
Entry barriers	Higher	Higher
Links among competitors	Stronger	Higher
Regularity and frequency of market interactions	Higher	Higher
Buyer power	Higher	Lower
Evolution of demand	Increasing	Higher
Product homogeneity	Higher	Higher
Symmetry	Higher	Higher

¹¹ Compte, O., F. Jenny and P. Rey. 2002. "Capacity Constraints, Mergers and Collusion." *European Economic Review*. 46: 1-29.

3. Merger review procedures in the EU and US

A closer look at merger review procedures in the EU and US shows us that there are two different structures on the two sides of the Atlantic. Whilst there is a single investigator and decision maker in the EU, there are two antitrust agencies which enforce antitrust laws in the US. Moreover, in the US, merger review processes involve even sectoral regulators which have different standards, namely public interest, in some industries such as telecommunications. As a result, one can conclude that, public interest considerations play a less important role in the merger reviews of the European Commission¹². Let us briefly explain merger review procedures in the EU and US below.

3.1. A short overview of merger review procedures in the EU

The merger review process, led by the European Commission, is simple and straightforward in the EU. The EC examines a merger attempt if it is sufficiently large and combined turnover of merging firms reach predefined thresholds¹³. The evaluation process consists of two phases. In the first phase, namely phase I, the Commission examines a merger attempt at a high-level. In principle, if the attempt does not raise competition concerns, the EC approves the merger. An approval can have two different forms. In the first form, the EC approves the attempt without implementing any remedies. In the other case, it can attach conditions to approval of a merger, conditions that guarantee continued competition in the relevant market. Divestment of some strategical assets of the acquired firm or a label that is owned by one of the merging firms are two of the most frequently applied conditions by the Commission.

At the end of the first phase, if the Commission determines that the consummation of the merger may violate competition in the relevant markets, it opens a new phase, namely phase II, and conducts a deeper investigation. Similarly, the EC clears the merger without conditions or approves the merger subject to conditions, or rejects the merger. The decision of the Commission

12 Kovacic, W. E., Mavroidis, P. C., & Neven, D. J. (2014). Merger control procedures and institutions: A comparison of EU and US practice. *The Antitrust Bulletin*, 59(1), 55-109.

13 The detailed explanation of these thresholds can be seen at http://ec.europa.eu/competition/mergers/procedures_en.html

is subject to review by the court and parties who have interests in merger attempt can appeal against this decision.

3.2. A short overview of merger review procedures in the US

In the US, proposed mergers and acquisitions are reviewed by the United States Department of Justice or the Federal Trade Commission and these agencies use Horizontal Merger Guidelines to determine whether a proposed merger would eliminate competition in a way that harms consumers¹⁴. However, merger review process in the US in telecommunications industry is more complex than in many industries. Assessment of the DOJ is the first layer of proposed mergers and, besides, evaluation process involves an additional layer of the FCC review¹⁵ as transfer of licenses requires approval of the FCC.

Points where the DOJ and the FCC focus on and metrics they use are not same. Whilst the DOJ reviews proposed mergers to determine whether the mergers will substantially lessen competition, the FCC reviews these attempts to determine whether they serve the public interest¹⁶. The DOJ conducts a confidential investigation, and it applies to the court to stop the merger if it concludes that realization of the proposed merger would violate antitrust laws.

The FCC, on the other hand, reviews proposed mergers under the Communications Act and determines whether they serve the public interest¹⁷. Investigations of the FCC might have three possible outcomes. First, the FCC approves a proposed merger if the attempt does not raise competition concerns. An approval can have two different forms like in the EU. In the first form, the FCC approves the attempt without implementing any remedies. In the other case, it can attach conditions to approval of a merger like selling some strategical assets of the acquired firm to other players in the market or to new market entrants. Second, the FCC denies a merger attempt if it finds out that the proposed transaction violates a statute or rule. And finally, if the Commission

14 Robert S. Schlossberg. Mergers and Acquisitions: Understanding the Antitrust Issues. p.229

15 Ibid. p.228. This dual review process is conducted under the Telecommunications Act of 1996.

16 <https://www.fcc.gov/guides/mergers-frequently-asked-questions>

17 Ibid

cannot conclude that the merger would serve public interest, it “designate(s) the transaction for a hearing”¹⁸.

4. Review of the literature

Whilst merger attempts and regulator responses in the mobile telecommunications markets has not been widely studied, a number of studies related to its specific aspects can be found in the literature.

In a study in which they focus on the US telecommunications industry, Ouyang and Fallah build a model¹⁹ to assess predictability of merger reviews conducted by DOJ and FTC using the cases between 1996 and 2009. Similar to our study, Barkow and Huber compare the approaches of the DOJ and the FCC and evaluate the approaches of these authorities²⁰. According to their study, agencies have different approaches against merger attempts and while the FCC is more concerned about regulation, the DOJ tends to favor the free market. Likewise, Weiss and Stern focus on that difference and suggest that the antitrust analysis of the DOJ and the FCC are very similar and overlapping²¹. As a result, they suggest that this dual review process brings nothing but costs to merging parties and taxpayers in the US. Similarly, in an article²² where she criticizes the dual review process in the light of attempted purchase of T-Mobile by AT&T, Kaplan suggests a substantial reform and claims that curtailing the FCC’s authority to review mergers is the most efficient way to do that.

Apart from these papers which evaluate regulators’ approaches in the telecommunications industry, some authors focus on the relation of concentration and prices in those markets. For

18 47 CFR 73.3593 - Designation for hearing. (LII / Legal Information Institute).

19 Ouyang, Y., & Fallah, M. H. (2011, April). A prediction model of merger & acquisitions in the US telecommunications industry—A case study of a recent M&A in wireless communications sector. In *Wireless Telecommunications Symposium (WTS)*, 2011 (pp. 1-11). IEEE.

20 Barkow, R. E., & Huber, P. W. (2000). Tale of Two Agencies: A Comparative Analysis of FCC and DOJ Review of Telecommunications Mergers, *A. U. Chi. Legal F.*, 29.

21 Weiss, J. R., & Stern, M. L. (1998). Serving two masters: The dual jurisdiction of the FCC and the Justice Department over telecommunications transactions. *CommLaw Conspectus*, 6, 195.

22 Kaplan, L. (2012). One Merger, Two Agencies: Dual Review in the Breakdown of the At&T/T-Mobile Merger and a Proposal for Reform. *BCL Rev.*, 53, 1571.

instance, a study by Gugler and Miscisin²³ suggests that, after the M&A processes in the wireless telecommunications industry, the increased market power effect dominates the efficiency effect and higher concentration leads to an increase in prices of not only the merging parties but also the other telcos in the market, at least, in the short run.

On the other hand, a recent study reported by Affeldt and Nitsche²⁴ states that “there is no robust indication of a positive relationship between concentration and prices” in the mobile telecommunications industry in Europe. In contrast, their results suggest that there might even be a negative relationship between concentration and prices. The study they conducted using the data for the period 2003 to 2012 suggests, therefore, that the mergers in the mobile telecommunications markets lead to sizable efficiencies which are passed on to consumers in Europe. Although Affeldt and Nitsche claim that their results are robust, given the low number of observations they have, one can find this statement doubtful.

Similarly, Hausman and Sidak²⁵ reported that number of firms in an “oligopoly” demonstrates little or nothing of importance in terms of likely economic outcomes. Their regression analysis also suggests that “concentration does not have a significant effect on outcomes in mobile markets”. Apart from this study²⁶, they found out in another study that in spite of the general perception that concentrated telecommunications markets are resulting in high prices and harming consumers, “Mexican consumers were paying lower prices than what one would expect based on comparisons of comparable countries”.

In this respect it is worth mentioning another interesting study conducted by Sung and Kwon²⁷. These researchers reported that their findings show that more concentrated mobile markets lead to higher mobile prices and higher profits, if they use the annual panel data from 24

23 Gugler, K., & Miscisin, I., (2014) Horizontal Merger Effects in the Wireless Telecommunications Industry.

24 Affeldt, P., & Nitsche, R. (2014). A price concentration study on European mobile telecom markets: Limitations and insights.

25 Hausman, J. A., & Sidak, J. G. (2007). Evaluating market power using competitive benchmark prices rather than the Hirschman-Herfindahl index. *Antitrust law journal*, 74(2), 387-407.

26 Hausman, J. A., & Ros, A. J. (2013). An econometric assessment of telecommunications prices and consumer surplus in Mexico using panel data. *Journal of Regulatory Economics*, 43(3), 284-304.

27 Sung, N., & Kwon, M. A. (2011). An empirical analysis of the state of competition in OECD mobile wireless markets.

OECD member states for the period 1998-2009. However, they also claimed that in the second half of the 2000s, market concentration had no further effect on mobile prices in these markets.

5. A short overview of the Austrian mobile telecommunications market before the merger of H3G Austria and Orange Austria

According to an International Telecommunication Union study, in 2013, there were 13,27 million mobile subscribers in Austria, corresponding to a penetration rate of 156,2%²⁸. This number was quite above the world average of 93,1% and the developed world average of 118,4%, as ITU statistics display²⁹.

Furthermore, before H3G completed the takeover of Orange Austria and TA completed the takeover of YESSS! in January 2013, there were four mobile network operators in the market. TA was operating under the brand of A1 in the country. It had also a “no-frills” brand called Bob. Similarly, DT was operating under the brand of T-Mobile and it had a discount brand called Tele.ring. The third largest player Orange was operating under its own name and it was owning the low-cost brand of YESSS!. Among these telcos, A1 of Telekom Austria was the market leader in terms of subscriptions with a market share of 39,7% in Q4 2012³⁰. The closest follower of A1 was T-Mobile of Deutsche Telekom with a market share of 30,7%. The third biggest player was Orange with a market share of 17,1%. And finally, Hutchinson Drei was in the 4th rank with a market share of 12,6%. Apart from these MNOs and their low-cost brands there were only two MVNOs in the market before the merger attempt.

As we mentioned in the introduction part above in Q1 2013 Orange was acquired by H3G, and YESSS! was acquired by TA. After the acquisition of YESSS!, the market share of TA

28 The International Telecommunication Union. (2015). Mobile-cellular telephone subscriptions 2010 to 2014 [statistics]. Available from ITU Statistics database.

29 The International Telecommunication Union. (2015). Key ICT indicators for developed and developing countries and the world (totals and penetration rates) 2005 to 2015

30 The Austrian Regulatory Authority for Broadcasting and Telecommunications. (2013). RTR Telecom Monitor Annual Review 2012.

increased by nearly 6% from 39,7% in Q4 2012 to 45,5% in Q1 2013, according to The Austrian Regulatory Authority for Broadcasting and Telecommunications³¹.

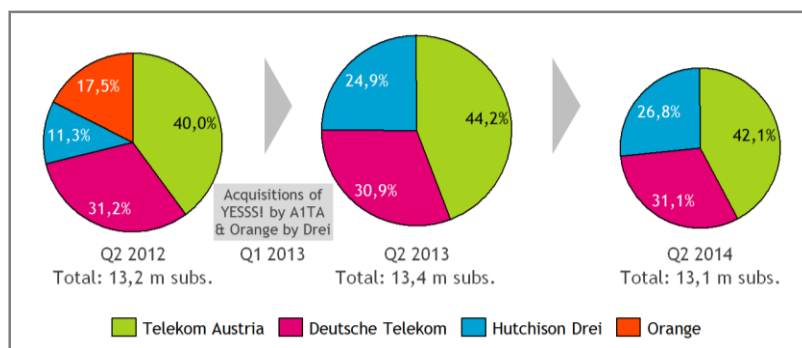


Figure 2: Mobile market shares in Austria in terms of subscriptions between Q2 2012 and Q2 2014

Similarly, H3G increased its market share from

12,6% to 24,1% between Q4 2012 and Q1 2013 when the acquisition of Orange was completed.

While market figures attained their new levels the total mobile subscriptions in Austria decreased by more than five hundred thousand, from its Q4 2012 level of 13.588.363 to 12.977.441 in Q1 2015, corresponding to a CQGR of -0,51% .

Furthermore, using market shares by subscriptions, we find out that the HHI³² of the Austrian mobile telecommunications market before the purchase of Orange Austria by H3G and the takeover of YESSS! by TA was 2970 and 3593 after the merger³³ demonstrating that the mobile telecommunications market of Austria was a highly concentrated one. In principle, the EC is likely to identify horizontal competition concerns in a merger with a-post-merger HHI above 2000 and a delta above 150. Clearly, these numbers were high enough for the EC to identify horizontal competition concerns and conduct further investigation in this merger.

31 The Austrian Regulatory Authority for Broadcasting and Telecommunications. (2013). RTR Telekom Monitor 3/2013.

32 Herfindahl-Hirschman Index, which is also known as HHI is a widely used market concentration measure. It is calculated by summing the squares of the market shares of the firms in a market. An HHI level of 0 corresponds to a perfect competition, while 10.000 corresponds to a monopoly. For more details, please see Baumol, W. J., & Blinder, A. S. (2015). Economics: Principles and Policy. South-Western College Pub.

33 Self calculated using the RTR figures from https://www.rtr.at/en/komp/TK_Monitor2012/29692_TM_Annual_Review_2012.pdf

6. A short overview of the USA mobile telecommunications market before AT&T's merger attempt with T-Mobile USA

According to the mobile-cellular subscriptions statistics of ITU³⁴ there were 297,4 million mobile subscribers in the United States, corresponding to a penetration rate of 94,4% in 2011. This number is above the world average of 2011 but, surprisingly, below the developed world average. As stated in an aggregate data spreadsheet of ITU³⁵, in 2011, mobile-cellular subscriptions per 100 inhabitants were 83,8 in the world and 113,5 in the developed world.

The US mobile telecommunications market is one of the most competitive mobile markets in the world pioneered by Verizon and AT&T. Before AT&T attempted to acquire T-Mobile in 2011, there were four nationwide, three multi-regional and approximately 95 local service providers in the market³⁶. When we look at the market shares of these telcos, we see that CR4³⁷ of the market was around 91,8% in terms of subscriptions³⁸ and 93,5% in terms of revenues³⁹ in December 2010. Among these telcos, Verizon Wireless was the market leader in terms of subscriptions with a market share of 33,8% in terms of revenues⁴⁰. The closest follower of the Verizon was AT&T which had a market share of 32,6%. The third biggest player was Sprint with a market share of 15,8%. On the other hand, Deutsche Telekom affiliate T-Mobile were in the 4th rank with a market share of 11,4%. Some of multi-regional and local service providers had

34 The International Telecommunication Union. (2015). Mobile-cellular telephone subscriptions 2010 to 2014 [statistics]. Available from ITU Statistics database.

35 The International Telecommunication Union. (2015). Key ICT indicators for developed and developing countries and the world (totals and penetration rates) 2005 to 2015

36 The Federal Communications Commission. (2013). 16th Mobile Competition Report.

37 Concentration ratio is calculated by summing market shares of companies in a market. CR4 refers to total market shares of 4 largest firms in a market.

38 Grading the top 10 US carriers in the fourth quarter of 2010. FierceWireless.

39 The Federal Communications Commission. (2013). 16th Mobile Competition Report.

40 Ibid

significant shares in some local markets but their overall national market shares were small. The most important operators among those small operators were MetroPCS, which was a prepaid-only mobile

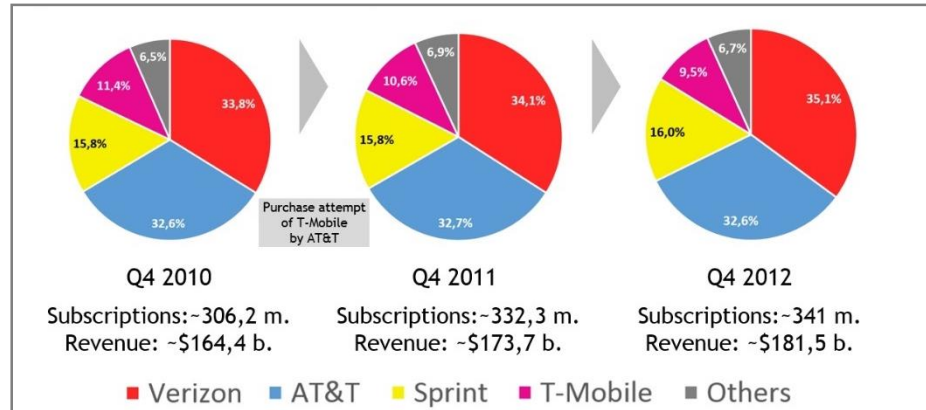


Figure 3: Mobile market shares in the USA in terms of revenues between Q4 2010 and Q4 2012

operator with a market share of 2,2% in Q4 2010, US Cellular, with a market share of 2,1%, and Leap Wireless, with a market share of 1,5%⁴¹. As we see, even though the number of mobile operators in the US was significantly high, the total share of the small operators was less than 7% and the largest four operators were dominating the market with their combined market share of more than 93% in Q4 2010.

The weighted average of the HHIs is reported as 2868 by the FCC at the end of 2010⁴². Furthermore, using retail revenues, we find out that the HHI of the USA telecommunications market was around 2572⁴³ if we assume the smallest players, which have a total of 1% share in terms of revenue as a unique firm⁴⁴. As a market with HHI above 2500 is considered to be a highly concentrated market by the Horizontal Merger Guidelines of the US Department of Justice and the Federal Trade Commission we conclude that the US mobile telecommunications market was a highly concentrated market in terms of subscriptions and revenue before the purchase attempt of T-Mobile USA by AT&T.

⁴¹ Ibid

⁴² The Federal Communications Commission. (2013). 16th Mobile Competition Report.

⁴³ Self-calculated using the figures in 16th Mobile Competition Report

⁴⁴ HHI gives more weight to the market shares of larger firms. Therefore, although it is better to include all firms in the calculation, if there is no available data, ignoring unique shares of these small firms does not affect HHI significantly.

7. Comparison of the two markets: Similarities and differences

Taking a look at the differences of the two markets it is easy to see that due to the large difference between the populations of the countries the US mobile telecommunications market is significantly larger than the Austrian. The high penetration rate, namely 156,3%, and the negative growth rate reveal the maturity of the Austrian market. On the other hand, relatively low penetration and high growth rate in the US point out that the market in the US was still growing. As we indicated in the theoretical background section a higher demand growth rate makes a collusion more likely to sustain. The higher growth rate of the mobile telecommunications market in the US, hence, might give regulators a reason to reject the takeover of T-Mobile by AT&T.

The competition level in these markets is the next distinction. Although the number of major players was exactly same, there were a lot of regional players in the US with a total market share of less than 7% in Q4 2010. There were no mobile network operators operating regionally in Austria.

Whereas the market leader in Austria had 7% higher share than the one in the US, those of the second, third and fourth players were relatively closer.

The HHI of the USA in Q4 2010 was 2572, in contrast to the HHI of Austria which was 2970 in Q2 2012. The difference of 398 in the HHI makes clear, however, that the Austrian market was obviously more concentrated than the American one.

Moreover, one can calculate the hypothetical HHIs of those markets using the combined market shares of the new entities, with assuming the approval of the regulatory agencies. Using the new shares we find out that in Q4 2012 the HHI of Austria would be 3593⁴⁵ whereas the HHI of the US would be 3048 in Q4 2010⁴⁶.

After checking Table 4, where we summarized these indicators, it is important to note that the market share of H3G after the merger in Austria is 6% lower than the total market shares of Orange Austria and H3G before the merger. This difference is a resulting from the takeover of no-

45 Self calculated using the RTR figures from The Austrian Regulatory Authority for Broadcasting and Telecommunications. (2013). RTR Telecom Monitor Annual Review 2012.

46 Self calculated using the figures described above.

frill brand of Orange, namely YESSS!, by Telekom Austria. In order to guarantee the approval of the European Commission H3G proposed to sell YESSS!, which had a market share of 6% before merger, immediately after the EC clears merger. This clarifies the difference between the market share sums of the two players and the market share of the new firm after the merger in Austria.

Table 4: Key indicators before the merger attempts				
	AUSTRIA		USA	
Number of mobile subscribers	2013	13,27	2011	297,4
Growth rate		-2,3%		4,3%
Penetration rate		156,30%		94,40%
Number of major players		4		4
MS of the biggest operator	q4 2012	39,7%	q4 2010	32,7%
MS of the second biggest operator		30,7%		30,5%
MS of the third biggest operator		17,1%		16,0%
MS of the fourth biggest operator		12,6%		10,8%
Industry ARPU		\$22,7		\$47,3
HHI		2970		2572
MS of the new firm after the merger		23,7%		41,2%

8. Review of the decisions of the regulatory authorities in both countries

A look at the reports of the regulatory bodies in two cases makes clear that regulators follow similar high-level approaches with what we discussed in the theoretical background section. Both regulators evaluate the possible coordinated and non-coordinated effects of the mergers and come to a conclusion. However, the factors they identify seem to be different from the factors we defined in section 2. Now we will focus on reports which are published by the EC and the FCC to analyze them in detail. Let us start with the decision report of the EC⁴⁷.

⁴⁷ Full name of the decision of the EC is "COMMISSION DECISION of 12.12.2012 addressed to Hutchison 3G Austria Holdings GmbH declaring a concentration to be compatible with the internal market and the EEA agreement" and can be reached at http://ec.europa.eu/competition/mergers/cases/decisions/m6497_20121212_20600_3210969_EN.pdf

8.1. Hutchison 3G Austria / Orange Austria

The European Commission investigated the application of H3G to acquire Orange under the case “M.6497 Hutchison 3G Austria / Orange Austria”⁴⁸. In the following sections, we will identify its decision in order to understand the reasons behind approving the merger of those companies.

8.1.1. Unilateral effects

As we discussed in the theoretical background section, the unilateral effects have two dimensions: increased market power and efficiency gains. The EC follows a similar path and discusses both aspects in its decision. Let us start with examining increased market power dimension.

Increased market power

In the light of Horizontal Guidelines, following factors are considered by the EC as the potential factors, which may influence significant non-coordinated effects as the results of a merger:

1. whether merging firms have large market shares,
2. whether merging firms are close competitors,
3. whether customers have possibilities of switching supplier,
4. whether competitors are likely to increase supply if prices increase,
5. whether the merged entity able to hinder expansion by competitors and
6. whether the merger eliminates an important competitive force.

In the case of H3G and Orange, the EC does not consider all of these factors and focuses on only factors 1, 2, 4 and 6. Apart from those factors mentioned in the Horizontal Guidelines, the EC also takes into account the likelihood of entry and countervailing buyer power when evaluating the merger application. Moreover, it examines the efficiency claims made by H3G.

⁴⁸ Related documents can be found at http://ec.europa.eu/competition/elojade/isef/case_details.cfm?proc_code=2_M_6497

Concentration of the market and market position of merging firms: As previously mentioned, in Q4 2012, combined market shares of the merging companies would be 23,7%. According to the Horizontal Guidelines, a combined market share below 25% does not raise competitive concerns⁴⁹. Underlining this fact, the commission starts its analysis and states that the HHI levels and delta values are above those defined as initial indicators of the absence of competition concerns in the Horizontal Guidelines. According to the guidelines, a merger with a post-merger HHI above 2000 and delta above 150 are considered as an initial indicator of the existence of competition concerns⁵⁰. Obviously, the post-merger HHI of this case is quite above the limits defined in the guidelines with its HHI level of 3593 and delta of 623. Thus, the EC considers that the merger brings significant changes in the structure of market and requires further investigation.

Degree of the competition between H3G and Orange: Beyond discussing the possible competition level of the market, the Commission focuses on the competitive constraints imposed by the applicants on each other. According to the Horizontal Guidelines "a merger between two producers offering products which a substantial number of customers regard as their first and second choices could generate a significant price increase"⁵¹. Therefore, the EC checks if the services delivered by merging parties viewed as closest substitutes to each other by a substantial amount of customers. Analyzing diversion ratios⁵² is one of the best ways to understand the level of direct competition between two firms. A high diversion ratio means that the corporations in question are close opponents and that the potential anticompetitive effects of a merger are high. For the proposed transaction to confer a unilateral incentive on H3G to increase the prices of its goods, a considerable amount of its customers must regard Orange as a close or closest substitute.

49 Guidelines on the assessment of horizontal mergers under the Council Regulation on the control of concentrations between undertakings. (2004). Paragraph 18

50 Ibid. paragraphs 19-21.

51 Ibid. paragraph 28.

52 Diversion ratio is a term which is very close to a term we use frequently in economics, namely, cross-price elasticity. Carl Shapiro defines it as the answer of following question: "If the price of Brand A were to rise, what fraction of the customers leaving Brand A would switch to Brand B?" Please see faculty.haas.berkeley.edu/shapiro/diversion.pdf for details

After evaluating the closeness of the competition between the merging parties⁵³, the Commission points out that if the switchers would choose a mobile operator randomly due to the almost identical nature of the products they offer, then each MNO would be expected to capture switchers proportionally to its market share. It emphasizes, however, that while the market shares would predict a diversion ratio of only 19,5%⁵⁴ from H3G to Orange and a diversion ratio of 15,2%⁵⁵ from Orange to H3G, the switching data shows, a diversion ratio between 20% and 30% from H3G to Orange and between 20% and 30% from Orange to H3G before the amalgamation. These figures underline the fact that the diversion rates are inconsistent with the market shares and that they imply a relevant competitive constraint imposed by H3G on Orange and vice versa. Therefore, the Commission concludes that the degree of such closeness predicts a considerable impediment to effective competition as a result of the merger.

Elimination of an important competitive force from the market: Another point the Commission evaluates is whether an important competitive force is eliminated from the market. In order to do that, it tries to understand the incentive of H3G to continue operating as an active and significant competitive force in the future if the merger is allowed. H3G claims that the competitive constraints exercised by H3G on the market would rise after the merger, as it will continue its growth strategy. The EC, on the other hand, argues that H3G's incentive to provide low prices depends on the number of its present customers and on the number of new customers that it expects to attract⁵⁶. The high penetration and low growth rate in the Austrian telecommunications market, yet, reduces the attractiveness of offering lower prices. Because of the reasons we mentioned, the EC infers that the gains of behaving more aggressively in terms of

53 Mobile Number Portability data for the period between 2009 and 2012 is used for this evaluation

54 Calculated with using the following formula: Expected diversion ratio from H3G to Orange: Market share of Orange / (100% - market share of H3G)

55 Similarly, calculated with using the following formula: Expected diversion ratio from Orange to H3G: Market share of H3G / (100% - market share of Orange)

56 Although lower tariffs attract more subscribers, not surprisingly, they also mean lower profit margin per subscriber because it is non-sustainable to offer lower prices for new comers and higher prices to the existing customers. Thus, a telco with more subscribers will have less incentive to decrease its prices.

prices would be reduced after the merger. Hence, the Commission deduces that the incentive of H3G to remain a disruptive force in the market would be reduced.

Likelihood of entry: The costs of a market entry to mobile telecommunications market are high. As a MNO, an operator needs spectrum to be able to operate. Yet, like in many markets, the access to free spectrum in Austria is very limited and costly. Furthermore, according to the estimation of the Commission, deploying a complete network would exceed two years and building a sufficient customer base for a fair ROI could take 10 years for an MNO. At this point, we can also consider MVNOs as potential entrants to the market. The EC reports that some potential MVNOs have complained about high entry barriers for a virtual operator in Austria because of high wholesale access fees. Not surprisingly, the elimination of one MNO would lower the bargaining power of MVNOs, which are willing to enter the market, and such elimination would, therefore, even increase the barriers. Thus, the EC emphasizes the fact that no market entry would be sufficiently timely to exercise a disciplining effect on the price levels resulting from the merger, in the absence of appropriate remedies.

Countervailing buyer power: The Commission also focuses on the bargaining power of buyers and argues that consumers lack sufficient buyer power to neutralize the negative effects caused by the amalgamation. Given that purchasing volumes of the individual customers are very low, customers not surprisingly, lack the power to bargain prices. Although several big enterprises have the power to resist price increases to some degree, they form a very small part of the market and would not be able to prevent the rest of the market to suffer from the exercise of market power. Therefore, the Commission concludes that bargaining power of the buyers is not enough to prevent the merged entity from exercising market power.

Unlikelihood of supply increase by competitors in case of price increase: The EC cites the unlikelihood of supply increase by competitors in case of price surge as a major factor to predict future behaviors of the merged entity. In addition, the Commission also claims that the profit-maximizing response of competitors to a price increase would be rising their own prices instead of their output, even if they are not capacity constrained. To clarify this statement, we can shortly turn back to our theoretical town Wurstdorf we introduced in section 2. As we remember, Restaurant C, which has nothing to do with the merger, also benefited from this acquisition, because, after the price increase of the merged entity, it faced a higher demand and increased its

prices in order to maximize its profits⁵⁷. So, the Commission infers that the other players on the Austrian market are unlikely to become a competitive constraint to the merged entity after the merger.

Relevant alternative scenario for Orange without the merger: The Commission also considers the relevant alternative scenario for Orange if the merger is not cleared. Although H3G argues that Orange has been financially constrained and would not be able to invest in the new technology, which would make it less attractive for the customers, the Commission points out that there are no available indicators suggesting that the competitive position of Orange would deteriorate in the medium term. Moreover, it states that even investments might be necessary to stay attractive for the customers in the absence of the merger, there is no available proof which shows that this would be impossible. Hence, the EC concludes that Orange is expected to remain a serious competitive force to end customers as it has been to date.

Claimed efficiency gains and other gains: As we have explained in the theoretical background section, non-coordinated effects do not only refer to the effects of the amalgamation resulting from the raised market power of the merged firm and leading to price increases, but also refer the efficiency gains leading to ambiguous price changes. Let us explain each efficiency gain H3G claims to occur and the evaluation of the Commission below.

Capacity increase: H3G maintains that, combining Orange's network with its own network would increase the capacity of its network significantly compared to the two standalone networks in the absence of the merger. It also claims that, because its network is close to congestion, it already experiences network quality problems. If the merger is not cleared, the consumers would suffer from low service quality. However, if it is cleared, they would benefit from this capacity increase as it would allow faster and higher quality services. The Commission agrees that some network related efficiencies may be attained through the merger. The EC also states that, nevertheless, the recent mobile network quality results, which show that H3G had the

⁵⁷ One can, of course claim that increasing supply and selling more units might be better for a company but this depends on the shapes of demand and supply curves. In our case, the EC suggests that the best strategy would be increasing prices rather than increasing supply.

best network quality in Austria⁵⁸ refute the claim of H3G about network congestion. Furthermore, the Commission also questions the merger specificity of that assertion, stating that there are alternative ways to achieve better network quality although they might be less advantageous for H3G to implement.

Faster LTE rollout: Second, H3G argues that the proposed transaction would allow it to roll out LTE nationwide within a short time period. The Commission agrees that the merger could make the roll out of LTE faster for H3G. However, referring to some internal documents of Orange, the Commission emphasizes that Orange is already planning to deploy LTE and that therefore this is not a benefit at all. Moreover, similar to its response to the efficiency claim of capacity increase, the Commission questions the merger specificity of that claim as there are alternative ways to deploy LTE. Finally, it states that a subscriber does not derive any benefit from the faster roll out of LTE by itself if the merged entity is not constrained by enough competitive pressure. Otherwise it could increase prices and get any benefits back from the customers.

Improved network coverage: Next, H3G also claims that the combined network would be better than the current coverage of H3G and Orange's networks. The Commission emphasizes that increased network coverage can also be attained through other means even they are less attractive to H3G. According to the EC, for instance, H3G could build new sites or enter into network sharing agreements with other operators in order to improve its network coverage. The EC, again, suggests that even though better service quality would be experienced by the subscribers as a result of improved coverage, if the merged entity is not constrained by enough competitive pressure, it could increase prices and get some benefits back from customers.

Reduction of alleged scale advantages: The final efficiency claims which H3G makes are that the merger would reduce its scale disadvantages and that it would improve H3G's competitiveness. As a result, it would generate cost savings that would be used to develop new services and offer lower prices. However, the Commission rejects the claims on the basis that network related savings are merger specific. The EC suggests that other alternatives such as network-sharing would have to be considered.

58 In 2012, H3G was rewarded by German telecommunications magazine "connect" as the best network in Austria. H3G received 466 out of 500 points while A1 was the second with 458 points.

8.1.2. Coordinated effects

As we discussed in the theoretical background section, a merger might also lead to pro-collusive or coordinated effects, emerging as a consequence of the new conditions in the industry which lead to a “better” structure for the firms to collude. Two main reasons creating a favorable environment for collusions are lower number of firms and more symmetric distribution of assets.

The approach of the European Commission is not overlapping with what we have described above since the Commission focuses in particular on: (i) the ability to reach terms of coordination; (ii) the ability to monitor deviations; (iii) the existence of a credible deterrent mechanism if deviation is detected; (iv) the reactions of outsiders such as potential competitors and customers.

After analyzing the market characteristics, the Commission finds out that some characteristics of the Austrian mobile telecommunications market may be conducive to coordination and that some past behavior of the Austrian MNOs could point to co-ordination.

It is important to note that MNOs would rather have similar market shares and that there would be more symmetric distribution of the assets in the market after the transaction. This was one of the main factors that could positively impact possible coordinated effects as we have discussed in the theoretical background session. However, the Commission does not even mention such impacts and suggests that facilitating market entry is the solution against coordinated effects. As a result, it concludes that commitment made by H3G would be sufficient to assume there would be no significant coordinated effects after the merger.

8.1.3. Conclusion of the H3G Austria – Orange Austria Case

In conclusion, on the basis of the above factors we discussed, the Commission views Orange as an important competitive force in the mobile telecommunications market. It declares that the elimination of it as an independent network operator and reduction of operators from four to three would significantly harm competition in terms of unilateral effects in the mobile telecommunications market of Austria. Plus, the Commission points out that, the efficiencies claimed by H3G are not verifiable, they are not merger specific and not to the benefit of consumers. Therefore, it declares that it cannot take those efficiency claims into account in order to offset the

competitive harm resulting from the merger. In addition, the EC underlines that the merger might increase the probability of collusion in the market.

Despite the precise statements showing the negative approach of the EC against the consummation of the merger, we see that the Commission clears the merger. The approval of the merger proves us that the commitments made by H3G⁵⁹ alters the Commission's view. Let us see which commitments H3G submitted in order to get the approval of the EC. H3G commits to

1. make wholesale access available to requesting parties
2. enter into an upfront agreement with an MVNO, and
3. make available spectrum to a new entrant.

After assessing these commitments, the Commission concludes that they are appropriate to eliminate unilateral effects which discussed above and possible coordinated effects. Competition concerns of the EC arises from the elimination of an important competitor in a market with high entry barriers and it suggests that the commitments made by H3G addresses these concerns with lowering entry barriers for new entrants. According to the Commission, whilst affordable wholesale access gives new MVNOs opportunity to appear on the market, available spectrum reserved for new entrants makes market entry possible and attractive for an MNO. Indeed, an upfront agreement with an MVNO already ensures the existence of a new competitive constraint on the other players in the market. According to the EC, thus, the purchase of Orange by H3G, supported with the above commitments, would not harm competition in the Austrian telecommunications market and these commitments make the merger compatible with the internal market and the EEA Agreement.

8.2. AT&T Inc. and T-Mobile USA

As we explained above when we introduced the merger review procedures, there is a dual review process for certain industries in the US. The DOJ and the FCC reviews merger attempts in the telecommunications market separately with using different metrics. While the DOJ takes

⁵⁹ Details of these commitments can be seen in annex III of the European Commission decision

violation of antitrust laws into account, the FCC evaluates whether a merger is in the public interest.

As the DOJ conducts its review confidentially, we do not have detailed information about its decision. The only document we have on the hand is a complaint filed by the Department to block AT&T's Acquisition of T-Mobile on 31 August 2011⁶⁰. The DOJ claims that the merger would reduce competition in the market and that would lead higher prices, lower service quality, less choices and innovative products for consumers⁶¹. The DOJ underlines that the proposed merger would raise HHI more than 500 and bring it to over 3000 which is significantly higher than 2500⁶². It also points out that the proposed merger would eliminate an aggressive competitor from the market. Entry by a new player in the market would be difficult, time consuming, and require huge investments. Claimed efficiencies, moreover, are far from being capable of reversing the merger's anticompetitive effects. As a result, it requests from the court to restrain the AT&T and T-Mobile from executing the merger.

After the lawsuit filed by DOJ and negative approach of the FCC against the deal⁶³, on November 23, 2011, AT&T withdrew its applications "to facilitate the consideration of all options at the FCC" and on December 19, 2011, it abandoned its bid⁶⁴.

As AT&T abandoned its bid before seeking the final decision of the FCC, there is no final decision available about the case. Moreover, the DOJ did not release a document about its investigation except the lawsuit it brought to block the attempt. The only document we have on the hand is the "Staff Analysis and Findings"⁶⁵ document which is released by the FCC. Therefore, we will use this document to answer our research questions.

60 United States of America, Department of Justice, Antitrust Division. Disapproving the Attempted Purchase of T-Mobile USA by AT&T Inc. Complaint, August 31, 2011.

61 United States of America, Department of Justice press release. Justice Department Files Antitrust Lawsuit to Block AT&T's Acquisition of T-Mobile. August 31, 2011.

62 HHI levels higher than 2500 are considered to be highly concentrated in the US.

63 The Associated Press. (2011, November 22). FCC chair opposes AT&T takeover of T-Mobile.

64 AT&T press release. AT&T Ends Bid To Add Network Capacity Through T-Mobile USA Purchase. December 19, 2011.

65 The Federal Communications Commission. (2013). Staff Analysis and Findings for Attempted Purchase of T-Mobile USA by AT&T Inc.

Throughout its evaluation, the FCC follows a similar path to the EC. After analyzing the unilateral and coordinated competitive effects, the FCC discusses the claimed efficiencies and benefits of the parties. In the following sections, we will identify analysis and findings of the FCC to understand the reasons behind the merger veto of those companies.

8.2.1. Unilateral effects

Similar to the theory and steps of the EC, the FCC discusses increased market power and efficiency gains aspects of unilateral effects in its decision. Let us start with focusing on the parts related to increased power evaluation part of the analysis.

Increased market power

Concentration and market position of merging firms: As we mentioned in the market definition section above, if the merger had been allowed, the combined market shares of AT&T and T-Mobile would have been 41,3% in Q4 2010 and the HHI of the US mobile telecommunications market would jump from 2572 to 3048⁶⁶. The Commission states that, it examines the potential anticompetitive effects of transactions if the change in the HHI would be more than 100 if the HHI is greater than 2800. Obviously, the post-merger HHI of this case would be quite above the limits of the Commission to the mobile telecommunications markets with its HHI level of 3048, and delta level of around 500. Therefore, the FCC considers that the merger would enhance the market power and requires further investigation.

Elimination of an important competitive force from the market: The FCC believes that T-Mobile is a very important competitive force in the mobile telecommunications market of the US and that the transaction would result in the elimination of this competitive force from the market. It considers some of recent announcements of T-Mobile related to expanding its LTE coverage strong indicators of strengthening T-Mobile's disruptive role in the industry. Furthermore, the Commission supports this argument with a few examples of its pricing and

⁶⁶ According to the DOJ/FTC Horizontal Merger Guidelines, an HHI above 2500 indicates a market with a high degree of concentration, and mergers resulting in concentration above this level that increase the HHI by more than 200 points are presumed likely to enhance market power.

technical innovations, which force the other players to be innovative as well⁶⁷. As a result, since the Commission predicts the elimination of T-Mobile to be harmful for the consumers.

Degree of competition between AT&T and T-Mobile: To support the possible merger, AT&T claims that the merged entity would have only minimal incentives to increase the prices, since AT&T and T-Mobile are not close competitors as their target groups are different. To check the accuracy of this claim, the Commission uses the same approach as the EC and checks the diversion rates in the market. Depending on the diversion rates, the FCC infers that many AT&T customers view T-Mobile products as their second choice and vice versa, which is consistent with concerns about unilateral effects⁶⁸.

Repositioning and likelihood of entry: As there are three multi-regional and approximately 95 local service providers apart from national operators in the mobile telecommunications market in the USA, AT&T and T-Mobile argue that the competition of other service providers would prevent any exercise of market power if the merger is cleared. The Commission evaluates whether other service providers would be able to compete effectively in the market and, as a result, finds the claim doubtful. The Commission maintains that regional providers cannot replace the competition lost from the departure of T-Mobile for several reasons. First, the FCC describes the regional providers to be significantly smaller than T-Mobile which lack the most important source to compete effectively, namely, spectrum. Furthermore, their small scale lowers their bargaining power against smartphone vendors, leading to significant cost disadvantages in providing smartphone offers to their customers. Second, the FCC demonstrates that only few customers of the nationwide telcos consider the products of the regional providers to be the closest substitutes to those offered by the nationwide providers as their services are far away from meeting the needs of customers of nationwide telcos with high data usage and interest in

67 Some of these innovations include being the first provider to offer to customers, who subscribed to Hotspot data plans, unlimited Wi-Fi calling without using the voice minutes in their bundles, and also introducing an online tool that allows a subscriber to manage all services on a multi-line family plan, like, changing the limits of services on a child's line.

68 Similar to the approach of the EC in the document it releases, the FCC avoids publishing a lot of indicators due to the concerns related to confidential information. However, unlike the EC, instead of giving intervals to give an idea to the readers, it completely covers the confidential data. Most of the time, this prevents getting the overall picture of the motivation behind the claims. Through our evaluation, we will try to discover those numbers using other sources like we do in calculating HHI. However, if it is not possible, we will simply summarize the claim without giving a quantitative indicator like we did in this part of our analysis.

smartphones. Finally, the Commission suggests that even it requires a huge capital, a regional telco can, theoretically, obtain the necessary spectrum and build the necessary infrastructure. However, even in the best-case scenario, it would take years to do that, and prevent regional telcos from substituting T-Mobile in the short term.

Claimed efficiency gains and other gains

As higher efficiency gains are expected to increase the welfare of society, AT&T and T-Mobile suggest a couple of efficiency gains in order to get the merger approval, as H3G did during its application to the EC. Like the EC, the FCC evaluates the merger specificity and verifiability of the claimed efficiencies and their benefits to consumers. Let us explain each efficiency gain AT&T claims to occur and the evaluation of the Commission below.

Better service quality: AT&T and T-Mobile claim that the merger would increase the quality of service in various areas for the customers of both parties. For instance, they argue that they consider adopting the best practices of each company and therefore, expecting clients of both parties to benefit from practices of the other company. In addition, the applicants claim that the proposed transaction would benefit current T-Mobile customers by improving the range of tariffs available to them and allowing them to be able to keep their current T-Mobile rate plans, if they choose to do so. Finally, they also claim that customers would enjoy improved coverage with the integration of the networks. The Commission agrees with the Applicants that the customers would benefit from some of these factors. However, it also argues that many of the claimed benefits are not transaction specific. The Commission only finds access to the AT&T network while continuing on current tariffs for T-Mobile customers as a transaction-specific benefit but excludes it from its balance test due to lack of quantification of this benefit. In conclusion, stressing that the applicants could not prove the merger specificity of these benefits, or verifiability of these benefits if they are merger specific, the Commission considers these benefits as unrecognizable and non-quantifiable.

Lower prices and higher output: AT&T and T-Mobile use an economic model to show that the merger would lead to lower prices in the industry, thanks to cost efficiencies. They claim that they would achieve significant amount of cost savings with eliminating jobs and reducing other corporate general and administrative costs. However, the FCC emphasized that, although eliminating personnel might result in price cuts, this cannot always be considered to be in the

benefit of customers. For instance, in the absence of increased efficiency, eliminating T-Mobile's customer support personnel (resulting less representatives per customer) might lead to quality reductions which cannot be considered as a benefit to the public. Moreover, general and administrative costs are considered as fixed costs and fixed cost savings cannot be esteemed to offset anticompetitive harms. One of the other claims of the applicants is that the proposed transaction would raise the scale of the merged entity and increase its bargaining power against the vendors. AT&T, hence, would be able to decrease per unit cost of the handsets it purchases. The Commission identifies the estimated savings of AT&T coming from smartphone procurement without objection, and takes this component into account. Last but not least, AT&T and T-Mobile claims to achieve a significant amount of cost savings in network expenses. They also suggest that consumers would benefit from the internalization of roaming charges between AT&T and T-Mobile. The commission agrees with the parties that these savings would affect their marginal costs, but it also emphasizes that it is not possible to quantify these benefits and use them to understand whether they balance the competitive harms arising from the transaction.

Extensive deployment of LTE services: AT&T declares that, in the absence of this transaction, it could deploy the LTE services to only 80% of the US population by 2013, and stop the deployment. If the transaction is allowed, however, the combined telco would upgrade its whole network by 2017. In case of this merger specific upgrade, almost 20% of the US population living in the rural areas, which corresponds to more than 50 million people, would have significant benefits. During the evaluation of these claims, the Commission considers the existing plans of Verizon, which is the main competitor of AT&T, as a benchmark. As Verizon already announced that it would increase its LTE footprint to cover 95% of the population by 2013, the FCC argues that the number of people lacking LTE connection would be much less than AT&T's claims. It also suggests that, given the historical practices of the company and competitive pressure from Verizon, it is highly probable that AT&T would extend LTE beyond its announced plans.

Increased jobs: Job creation is historically considered as an important part of the analysis by the Commission. In the light of this information, AT&T claims to create thousands of direct and indirect jobs through the new network investments in the US. However, the commission finds the commitment related to the direct jobs to be inconsistent with personnel cost reduction plans of AT&T. In order to eliminate the doubts, AT&T proposes to

1. offer alternative positions to the non-management employees of T-Mobile
2. offer alternative positions to the employees whose job functions are no longer required because of the merger
3. keep existing call center employees of AT&T and T-Mobile in the new company and bring 5.000 call centre jobs back to the US, which are outsourced to other countries.

Nonetheless, after evaluating these commitments, the Commission concludes that the proposed transaction would result in net direct job losses. AT&T also claims that it would create thousands of indirect jobs when extending the LTE deployment to 97% of the population in case of the consummation of the proposed transaction. The Commission responded, however, that because of savings generated by network utilization, total LTE investments made by the AT&T and T-Mobile would be less in case of the consummation of the proposed transaction. At the end of the day, the result would be reduction of indirect jobs.

8.2.2. Coordinated effects

According to the FCC “combination of a concentrated market and barriers to entry is a recipe for price coordination”⁶⁹. Since the mobile telecommunications market in the US is relatively concentrated and entry barriers to the market are high, the FCC considers the market to be appropriate for price coordination. Despite the theory, identification of related paragraphs shows us that the FCC does not take the symmetric distribution of the assets into account as a factor which increases the probability of collusion in a market. High concentration of the market and high barriers to entry are the two main factors it considers.

According to the Commission, T-Mobile performs the role of a maverick in the market and consumers benefit from its disruptive behaviors. It claims that, when such a player exists in a market, any attempt of price coordination would be unlikely because this player would destroy the profits of other players with its disruptive behavior. Furthermore, given the lower market share of it compared to the other national telcos, T-Mobile would have an incentive to continue playing

⁶⁹ The Federal Communications Commission. (2013). Staff Analysis and Findings for Attempted Purchase of T-Mobile USA by AT&T Inc.

this disruptive role. Let us explain the logic behind that inference to be more precise: as a rational profit-maximizing company, T-Mobile would simply compare profits it would make from supporting the coordinated price and setting a disruptive price. Not surprisingly, if the gains it would have from setting a disruptive price and increasing output exceeds the profits it would make by supporting the coordinated outcome, then it would have an incentive to act as a disruptor. At this point, the Commission suggests that profits from rising market share are related to T-Mobile's ability to increase its output cost effectively. As variable costs in the mobile telecommunications markets are significantly low, the Commission suggests that in case of a price coordination in the market, T-Mobile would be able to increase its output and market share cost effectively. As a result, the FCC suggests that T-Mobile would gain less from coordination and act as a disruptive force against any price coordination in the market. The elimination of this force with the proposed transaction, on the other hand, would significantly increase the concerns related to coordinated effects.

The Commission also points out that the largest two telcos in the market, namely Verizon and AT&T, appear to have parallel behaviors in the past. The consumers faced similar prices and features of the service plans of these companies. They have also made similar decisions to make new entries more difficult to the market. Moreover, Sprint is seen as the closest substitute by many T-Mobile customers. That means that, after elimination of T-Mobile from the market, a significant number of T-Mobile's existing customers are expected to switch to Sprint which would lead Sprint's market share to increase. As a result, Sprint would also have higher incentives to coordinate its behaviors with the market leaders as the companies with higher market shares have higher incentives to accommodate coordinated behaviors. Only the smaller regional service provider would have an incentive to be disruptive. Yet they have resource and capacity constraints to do so. As a result, they would not be able to provide a competitive constraint on the coordinated behaviors of the larger operators. Furthermore, the FCC claims that, as the number of firms would decline, reaching a consensus would be easier with the proposed transaction.

In conclusion, the Commission declares that the proposed transaction would significantly raise the incentives of the big market players to coordinate their behaviors. And therefore, it would result in a more vulnerable market to coordination.

8.2.3. Conclusion of the AT&T Inc. – T-Mobile USA Case

In conclusion, on the basis of the above factors we discussed, the Commission views T-Mobile as an important and disruptive competitive force in the mobile telecommunications market. The elimination of such force as an independent network operator and the reduction of national telcos from four to three would significantly impede the effective competition in the market, in terms of unilateral effects in the mobile telecommunications market of the US. The Commission also points out that the efficiencies claimed by AT&T are not verifiable; they are not merger specific and not beneficial for consumers. Therefore, it cannot take these efficiency claims into account in order to offset the competitive harm resulting from the merger.

Moreover, it is also declared by the FCC that, the proposed transaction would create a more vulnerable market to collusion and it would raise the incentives of the national telcos to coordinate their behaviors.

At the end of the day, the Commission states that, if the merger is allowed, significant harms to competition are likely to occur mainly in the form of higher prices, lower incentives for innovation, and less consumer choice. Hence, it suggests that the merger should not be allowed.

9. Discussion and conclusions

Up to now we have identified the structure of the mobile telecommunications markets in both countries and classified the main arguments of the regulatory authorities in their reports when evaluating the merger attempts in Austria and in the US. Meanwhile, we have also managed to answer two of our research questions related to identifying the main arguments of the regulatory authorities which are the FCC, in dismissing the attempted purchase of T-Mobile USA by AT&T, and the EC, in approving the H3G's acquisition of Orange. Now we will continue with the rest of our questions and discover whether the arguments of the regulatory authorities in the US and EU apply to each other and whether the reasons of different decisions arise due to different structures of the markets or different approaches of the regulators.

Considering decision criteria which the EC implements to evaluate negative unilateral effects, we see that they coincide with the decision criteria of the FCC. This criteria, indeed, coincide with the criteria suggested by the theory of industrial organization to a certain degree.

Both regulators give weight to certain aspects in their reports such as the concentration of the market, the market position of the merging firms, and the likelihood of entry to the market after the merger. These elements are also suggested by the theory. In addition to what the theory suggests, they also take the competition level between the firms in the proposed transaction and elimination of an important disruptive force from the market into the account. Furthermore, the EC considers some additional factors, which the FCC does not, that are countervailing buyer power and likelihood of supply increase by competitors in case of a price increase in the market. Whilst the former criterion is exactly the same as one of the suggestions of the theory, the latter is parallel to the “unused capacity of the rivals” element. To sum up, all the decision criteria implemented by the FCC are used by the EC as well. The EC, on the other hand, evaluates more dimensions than the FCC and its tools show more similarities to the factors suggested by the theory.

Although both regulatory agencies follow a similar pattern when evaluating negative unilateral effects, significant differences can be identified when they evaluate coordinated effects. The factors that the FCC focuses on coincide with the criteria suggested by the theory to a certain degree. Parallel to what the theory suggests, the FCC analyses the market concentration, the number of players and the entry barriers. Besides, it assesses whether the merger eliminates an important disruptive force from the market, whether the capacities of the remaining small firms are sufficient to destroy a possible coordination and whether any coordinated behaviors are observed in the past of the market. In contrast it seems as if the European Commission does not put particular importance on coordinated effects, at least in this case. Indeed, without a deep focus on the explanation, it states that some features of the Austrian mobile telecommunications market could create a favorable environment for coordination and some past parallel behavior of the Austrian telcos could point to coordination. It declares, nevertheless, that the indications does not prove a significant impediment on competition which result in collusion⁷⁰. The Commission, besides, concludes that the commitment to facilitate the entry to the market is enough to hinder possible coordinated effects.

It is clear that, although the approaches of regulators overlap to a great extent when evaluating unilateral effects, the method they use when evaluating coordinated effects and the

70 European Commission. Commission Decision, Regulation (Ec) No 139/2004 Merger Procedure. December 12, 2012. Paragraph 448

degree of importance they attach to those effects are completely different. Looking at the structural factors affecting collusions which we summarized in Table 3 above can give an idea about the probability of collusion in the mobile telecommunications markets of the USA and Austria. First of all, thanks to the HHI figures we calculated in the related section above, we know that in case of approval of the transactions the concentration level of the Austrian market would be higher than the concentration level of the US market. We also clarified that the distribution of the assets would be more symmetric in the Austrian market than in the US market if both mergers were cleared. Third, other important factors suggested by theory to consider when evaluating coordinated effects have similar characteristics in both countries. For instance links among competitors and the buyer power of the consumers are very limited in both markets. Furthermore, we cannot observe a significant difference in the regularity and frequency of market interactions and product homogeneity between the two markets. Looking at these factors one can conclude that collusion was more likely in the mobile telecommunications market in Austria. However, there is one more critical factor we did not mention yet that makes this conclusion very doubtful. As we discussed in the comparison of the markets section growth rate of both markets were significantly different from each other before the merger attempts. Whilst the Austrian market is shrinking with a growth rate of -2,3%, the US market is expanding with a growth rate of 4,3%. These numbers show us that the demand is declining in the Austrian mobile telecommunications market and growing in the US market before the merger attempts. Interpreting only demand figures, thus, contradicts with above conclusion which claims that the market conditions were more appropriate for the collusion in the Austrian market. On the basis of the information at hand, as a result, we cannot be sure in which market a collusion is more likely to hold since we do not know which factor (factors) is (are) dominant against others.

When drawing a conclusion regarding to coordinated effects, the FCC expresses that the proposed transaction would significantly raise the incentives of the big market players to coordinate their behaviors. The opposite way the EC came to the same conclusion but it declared that attaching conditions to the approval of merger which facilitate market entry would be enough to remove coordination related concerns.

The EC, indeed, optimistically concluded that

1. the immediate entrance of an additional MVNO which would use the network of H3G,
2. providing wholesale access to other new entrant MVNOs and
3. the agreement to offer divesting a certain amount of its spectrum if a MNO attempts to enter the market

would be enough to eliminate collusion related concerns. At this point we would like to underline that it would take at least two years, even according to the most optimistic scenario⁷¹ has predicted, for a new MNO to build its own network.

Apart from above points, it is also important to discuss whether the merger attempt in the US would also be cleared if the same remedies were proposed by AT&T in the US. To be able to understand that we should first discover which steps the EC takes in order to ensure competition with attaching these conditions to its approval. With attaching the first condition to its approval, obviously, the EC wants to ensure that the number of players in the Austrian mobile telecommunications market including MVNOs does not decrease after the merger. The other two of those three remedies are attached to the approval of the merger in order to lower market barriers for MNOs and MVNOs which may consider to launch services in the Austrian mobile telecommunications market.

Therefore, in order to conclude that the purchase attempt of T-Mobile by AT&T would be cleared if the same remedies were proposed by AT&T in the US, it would have to be shown that the immediate entrance of an additional MVNO which would use the network of AT&T would have a significant effect on competition and that market barriers needed to be lowered to encourage new market entrants to the US market.

As we mentioned in section six above, yet, there were already three multi-regional and approximately ninety-five local service providers in the market apart from four nationwide mobile operators before the purchase attempt of T-Mobile by AT&T in 2011, which was significantly higher than the number of mobile operators in Austria. Even though the FCC emphasizes that it is unlikely that small operators become effective competitive forces in the near future due to the

⁷¹ Estimation of H3G

physical and financial restrictions. As a result one can conclude that ensuring immediate entrance of an additional MVNO to the market which would use the network of AT&T would not change the view of the FCC.

Similarly, providing wholesale access to other new entrant MVNOs would not convince the FCC for clearance of the merger due to the same reason. As it is already mentioned above the existence of MVNOs and small operators does not ensure effective competition due to their physical and financial restrictions according to the FCC.

The only remedy which could be convincing for the FCC could be the third remedy of the EC which is the agreement to offer divesting a certain amount of spectrum if a MNO attempts to enter the market. However, as we explained above, deploying a complete network would exceed two years and building a sufficient customer base for a fair ROI could take 10 years for an MNO in Austria. Given the size of the USA and the capital required for a new entrant to build its new network, one can claim that it could even take more for a new entrant to deploy its own network and obtain a reasonable return on its investment in the US. Thus we can conclude that the merger attempt in the US would not be cleared even if the same remedies were proposed by AT&T.

Apart from the differences in economic and methodological attitudes, one can also suggest that political pressure might also be another reason for the approval of Orange Austria's takeover by H3G in Austria. Although we did not encounter any claims that the European Institutions or politicians raised political pressure against the European Commission in the H3G and Orange case in Austria, we came across some comments made during the review of the recent acquisition of E-Plus by Telefónica in Germany. For instance, German Chancellor Angela Merkel and President of the European Commission Jean-Claude Juncker called for restrictions on European telecom mergers to be eased in the face of global competition⁷². Given these statements one can suspect that political pressure was one of the reasons why the EC approved the merger of Orange by H3G in Austria.

In summary, we can suggest that the arguments of the regulatory authorities made in Austria and in the US would apply to each other to some extent: If we were only comparing the

⁷² Fairless, T. (2014, July 2). EU Approves Telefónica's Takeover of E-Plus.

evaluation of non-coordinated effects we could say that those arguments were substantially overlapping. However, since we observe that both regulators have totally different attitudes when assessing the coordinated effects, we conclude that the arguments of the regulatory agencies made in Austria and US do not apply to each other. The merger attempt in the US would not be cleared even if the same remedies were proposed by AT&T due to the different approach of the FCC against merger attempts. We, furthermore, did not find any arguments supporting that the different outcome in both cases were related to the different structure of the markets. On the contrary this outcome appears to be the result of different approaches on two sides of the Atlantic. While the European Commission assesses merger attempts to determine whether they are compatible with the common market within the scope of Horizontal Guidelines, the Federal Communications Commission reviews them to determine whether they serve the public interest. As a result the FCC evaluates merger attempts on behalf of the public rather than on behalf of the competition.

10. APPENDIX: Horizontal Guidelines of the EU and US

Horizontal merger guidelines of EU and US provide guidance to regulatory authorities when they evaluate a horizontal merger in the related markets. Although they provide analytical frameworks to the regulatory authorities, they are not set of receipts to be mechanically applied by the commissions. Each case is evaluated uniquely in the light of those guidelines. Let us begin with the horizontal merger guideline of the EU⁷³.

10.1. A short overview of the Horizontal Guidelines of the EU

During the examination phases, main source of the EC to assess the possible impacts of a merger on the relevant markets and consumers is the Horizontal Guidelines. Most of the possible anticompetitive effects of a merger we discussed in the theoretical background chapter above are mentioned in the Horizontal Guidelines as well. According to the Guidelines, mergers might have anticompetitive effects, which are unilateral effects and pro-collusive effects, in the absence of countervailing factors. It is declared in the Guidelines that the larger the market shares of the merging firms and the larger the degree of competitiveness between them, the more detrimental the effect of a merger on market prices. In contrast, the less the number of alternative suppliers to customers and the less likely the competitors increase their supply in case of a price increase, the more detrimental the effect of a merger on market prices. Furthermore, if the merger is eliminating an important competitive force and if the merged entity is able to hinder expansion by competitors the Horizontal Guidelines suggest that the merger is likely to raise competitive concerns in terms of unilateral effects. Similarly, the Horizontal Guidelines indicates that higher concentration, higher product homogeneity, more frequent market interactions, higher links among competitors, more symmetric distribution of assets among competitors and lower buyer power increase risk of collusion after merger.

As discussed above, the Horizontal Guidelines provides a general analytical framework to the Commission when evaluating a merger attempt although it is not a cookbook which defines the whole process step by step. First of all, the Horizontal Guidelines suggests the EC to evaluate

⁷³ Guidelines on the assessment of horizontal mergers under the Council Regulation on the control of concentrations between undertakings. (2004).

the market structure with identifying the market shares of the merging firms and HHI of the market. Then, it recommends the EC to assess countervailing buyer power and the extent of entry barriers to the market, and potential efficiencies generated by the merger. Apart from these points, the EC also evaluates whether the conditions for a failing firm defense are met in line with the recommendations of the guidelines.

Total market share of the companies in a merger attempt can be a strong indicator for the EC. A combined market share lower than 25% is, in principle, regarded to be compatible with the common market by the Commission. Second, a merger resulting a market share between 25% and 50% can be seen as a threat to the competition and thus extensively analyzed. Last, market shares higher than 50% are considered to be an evidence of a dominant market position if there is no constraining factor in the market.

Moreover, the HHI and change in the HHI provide very useful aspects to the Commission in order to measure the intensity of competition and direct effect of a merger on the competition level in a market. Generally, post-merger HHI below 1.000 does not raise any concerns about the competition. If the change in HHI is less than 250 and post-merger HHI is between 1.000 and 2.000, or the HHI is higher than 2.000 and delta HHI is below 150, the EC does not identify horizontal competition concerns except the existence of some special conditions which are defined in the Horizontal Guideline⁷⁴. On the other hand, if HHI is higher than 2.000 and the change in HHI is higher than 150, these levels are seen as an indicator of competition concerns and the merger attempt extensively analyzed.

The Horizontal Guidelines give great weight to countervailing buyer power in a market when examining a merger attempt. It is claimed in the text that even firms with very large shares may not use their market power to increase prices if the buyers in a market have countervailing buyer power. Basically, buyers can have this power if they have the ability to switch to other suppliers. Even if the firms in a market decide to collude on prices, a significantly large buyer can threaten the sellers to vertically integrate into the supply chain or support a new entrant to market

⁷⁴ Please see paragraph 20 of the Horizontal Guidelines for related factors.

with placing advance large orders from this new entrant. As a result, the suppliers cannot increase prices even if they have large market shares.

Another factor the Horizontal Guidelines give a lot of weight is the possibilities to enter a market. In principle, merger attempts are considered as compatible with common market if market entry is easy and it is, therefore, a sufficient competitive constraint on market. For market entry to be considered as holding these conditions, it should be likely, timely and sufficient. The Guidelines define likely to be sufficiently profitable and constrain anticompetitive behavior of competitors. An entry is regarded as timely if it occurs in two years after the merger and finally sufficient is defined to have the capacity to prevent harmful results of the merger.

The Horizontal Guidelines also suggest to estimate efficiencies occurring as a result of a merger. Benefits to customers is the main point when evaluating these efficiencies which means that efficiencies which provide benefits to only producers and harms consumers are not considered as valid efficiencies. According to Guidelines, efficiencies resulting from a merger can only be taken into account if they do not make consumers worse off, are merger specific and are verifiable. It is also suggested to consider not only prices but also other benefits like service quality. Apart from these factors we defined above, the Guidelines also suggest the EC to consider a merger to be compatible with the common market if one of the merging firms is a failing firm⁷⁵.

10.2. A short overview of the Horizontal Guidelines of the US

During the examination phases, main source of the DOJ and FTC to assess the possible impacts of a merger on the relevant markets and consumers is the Horizontal Guidelines. Most of the possible anticompetitive effects of a merger we discussed in the theoretical background chapter above are mentioned in these Guidelines as well. Similar to the theory and the Horizontal Guidelines of the EU, according to the Guidelines of the US define anticompetitive effects of a merger as unilateral effects and coordinated effects.

⁷⁵ For “failing firm” argument to be valid for the Commission, three conditions must hold. First of all, the company which is claimed to be “failing firm” should be forced out of the market because of financial difficulties in the absence of merger. Moreover, the attempted merger should be the best alternative compared to alternative purchases for the sake of competition. Finally, it should be impossible to prevent the assets of failing firm to exit the market.

Guidelines suggest market shares and concentration to be considered as an important indicator when evaluating a merger attempt. Authorities classify markets into three categories.

1. An HHI level below 1500 is considered as an indicator of an unconcentrated market
2. An HHI level between 1500 and 2500 is considered as an indicator of a moderately concentrated market
3. An HHI level above 2500 is considered as an indicator of a highly concentrated market

Moreover, change in HHI level with a merger is also an important measure according to Guidelines. The agencies employ following rules for a change in HHI with a merger:

1. Mergers leading to an increase in HHI level less than 100 are considered to have no adverse effects on competition in a market. In principle, these mergers require no further examination and mergers are approved by the agencies.
2. Mergers in unconcentrated markets are considered to have no adverse effects on competition. In principle, these mergers require no further examination and mergers are approved by the agencies.
3. Mergers leading to an increase in HHI level more than 100 in moderately concentrated markets are considered to have potentially adverse effects on competition in a market. These mergers require further examination by the agencies.
4. Mergers leading to an increase in HHI level between 100 and 200 in highly concentrated markets are considered to have potentially adverse effects on competition in a market. These mergers require further examination by the agencies.
5. Mergers leading to an increase in HHI level more than 200 in highly concentrated markets are presumed to have adverse effects on competition in a market but this assumption might be refuted by the parties with evidences.

The Horizontal Guidelines of the US give great weight to countervailing buyer power in a market when examining a merger attempt. According to the Guidelines, powerful buyers can

constrain the price increase attempts mainly if they have the power to vertically integrate or support entry. However, it is underlined that existence of powerful buyers alone does not prohibit merging firms to increase their prices.

Another factor the Horizontal Guidelines give a lot of weight is the possibilities to enter a market. In principle, merger attempts are not considered to enhance market power if market entry is easy as merging entities and other players in the market cannot profitably increase prices in that case. For market entry to be considered as easy it should be timely, likely and sufficient, which is exactly same defined in the EU version of the Guidelines.

The Horizontal Guidelines takes also efficiencies generated as a result of a merger into account. It considers not only the efficiencies lead to price reductions but also the efficiencies improving service quality and enhancing products. However, only merger-specific efficiencies are taken into account.

Apart from these factors, the Guidelines also suggest that a merger is not likely to enhance power if one of the merging firm's assets would exit the market in the absence of merger.

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12. Abstract / Zusammenfassung

Abstract

Horizontal merger attempts in mobile telecommunications markets on the different sides of the Atlantic resulted in different outcomes in the recent years. We observe that whilst merger attempts in even highly concentrated mobile telecommunications markets in the EU are approved by the EC, merger attempts of national mobile telecommunications service providers are blocked by the US regulators. In this study, we examine the logic behind these different outcomes of the merger and acquisition attempts in the mobile telecommunications markets in the US and the EU by focusing on two cases. We find out that not the market structures but the approaches of these regulatory authority against merger activities lead to different final decisions.

Key words: mobile telecommunications, horizontal mergers, regulation.

Zusammenfassung

Versuche horizontaler Fusionen in Mobilfunkmärkten führten in den letzten Jahren auf beiden Seiten des Atlantiks zu unterschiedlichen Ergebnissen. Während in der EU Fusionsversuche in sogar hochkonzentrierten Mobilfunkmärkten von der EG zugelassen sind, werden in den USA diese Versuche der nationalen mobilen Telekommunikationsdienstleister von den Aufsichtsbehörden blockiert. In dieser Arbeit suchen wir nach den Gründen für diese unterschiedlichen Ergebnisse der Fusions- und Übernahmeveruche in den Mobilfunkmärkten der USA und der EU, indem wir uns auf zwei Fälle fokussieren. Ein Resultat der Untersuchungen ist, dass die Gründe der verschiedenen Entscheidungen nicht auf die unterschiedlichen Strukturen in den Märkten, sondern auf die Ansätze der Regulierungsbehörden gegen Fusionsaktivitäten beruhen.

Stichworte: Mobilfunk, horizontale Zusammenschlüsse, Regulierung

13. CV

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Publications

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