

# Analysis: The Sabre/Farelogix Transaction and Why Platform Economics Will Matter

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On August 20, 2019 the U.S. Department of Justice (“DOJ”) sued to block Sabre Corporation (“Sabre”) from acquiring Farelogix, Inc. (“Farelogix”). Sabre is a travel technology company that sells New Distribution Capability (“NDC”) solutions. Farelogix is a travel technology company that operates a global distribution system (“GDS”) platform. The DOJ’s suit alleges that the acquisition will “likely result in increased prices, reduced quality, and less innovation for booking services, causing substantial harm to airlines and American travelers.”<sup>2</sup>

About three weeks later, on September 11, 2019, the Second Circuit revoked a three-year-old \$15 million antitrust damages award for US Airways against Sabre.<sup>3</sup> Pointing to *Ohio v. American Express Co.*, 585 (“Amex II”),<sup>4</sup> the Second Circuit found that Sabre’s GDS is a two-sided transaction platform and that the Southern District of New York jury’s decision should have relied on a two-sided analysis rather than on a one-sided analysis that ignores the travel agents’ side. This decision by the Second Circuit is prone to set the stage of the antitrust analysis in the review of the Sabre/Farelogix transaction.

## *Background: The Parties and the Industry*

Airlines can choose to sell airline tickets to travelers directly through their websites and call centers, or indirectly through brick-and-mortar and online travel agents. For the indirect sales through travel agents, airlines use computerized services such as those facilitated by Sabre’s GDS platform. The GDS platform enables travel agents to search for and book flights across multiple airlines and to aggregate offers across multiple providers, which facilitates easier price comparison. The GDS also provides many other computerized services to airlines and travel agencies.<sup>5</sup> Sabre’s GDS thus exhibits the characteristics of what economists refer to as a “two-sided platform”: GDS provides services to two distinct customer groups (travel agencies and airlines)

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<sup>2</sup> *U.S. v. Sabre Corp. et al.*, 1:19-cv-01548 (D. Del. Aug. 20, 2019), available at <https://www.justice.gov/atr/case-document/file/1196836/download>.

<sup>3</sup> *US Airways, Inc. v. Sabre Holdings Corp.*, No. 17-960 (2d Cir. 2019), citing *Ohio v. American Express Co.*, 138 S. Ct. 2274 (2018) (“Amex II”).

<sup>4</sup> *US Airways, Inc. v. Sabre Holdings Corp.*, No. 17-960, at 57 (2d Cir. 2019).

<sup>5</sup> Sabre also offers a “host of other functionalities and services to its travel agent network beyond airline ticket bookings, such as access to a broad range of travel service providers, including airlines, hotels, rental cars, cruise ships and tour groups, amongst others; [...]” Answer of Defendants Sabre Corporation and Sabre GLOB Inc., *U.S. v. Sabre Corp. et al.*, at 6, 1:19-cv-01548 (D. Del. Sept. 10, 2019).

and exhibits so-called “indirect network effects” (the airlines’ utility is higher the more travel agencies are using the GDS, and vice versa).<sup>6</sup>

Farelogix develops New Distribution Capability (“NDC”) technology and sells related IT solutions.<sup>7</sup> NDC technology optimizes the application program interface (“API”) connectivity between airlines and travel agents.<sup>8</sup> With NDC, travel agents have access to a broad variety of an airline’s products (including ancillaries like baggage fees, pre-assigned seats, boarding privileges, etc.). By contrast, traditional GDS platforms provide a more limited set of information comprised mainly of routes and availability. Farelogix’s NDC thus differs from Sabre’s GDS in that NDC “enables airlines to make more varied and personalized offers to consumers who book through travel agents, including bundles of ancillary products such as wi-fi, lounge passes, entertainment options, and meals.”<sup>9</sup>

### *The Allegations and Counter-Arguments*

On November 14, 2018, Sabre announced its intent to acquire Farelogix for approximately \$360 million. On August 20, 2019 the DOJ sued to block the transaction, arguing that the parties are competing head-to-head to provide booking services to airlines and that Farelogix is constraining Sabre’s prices.<sup>10</sup> The DOJ also alleges that Sabre’s proposed acquisition of Farelogix is an attempt to “eliminate a disruptive competitor,” i.e., a maverick firm that has introduced new technology and disrupted the industry.<sup>11</sup> The DOJ further alleged that the acquisition would “likely result in increased prices, reduced quality, and less innovation for booking services, causing substantial harm to airlines and American travelers.”<sup>12</sup>

Both Sabre and Farelogix denied most of the allegations, arguing that the companies offer complementary products, and that the transaction is “the continuation of an already successful collaboration between the two companies.” In the U.S., three main GDS providers compete for business: Sabre, Amadeus, and Travelport and, according to Sabre, GDS providers also face new competition from technology firms such as Google and SAP. According to Sabre, there are also at least 39 companies with a high level of NDC capability, and several airlines have developed their

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<sup>6</sup> *US Airways, Inc. v. Sabre Holdings Corp.*, at 23-24, No. 17-960 (2d Cir. 2019).

<sup>7</sup> NDC technology is an open standard for software that is freely available and used to create NDC API software solutions that enable communication among industry participants. Answer of Defendants Sabre Corporation and Sabre GBL Inc., *U.S. v. Sabre Corp. et al.*, at 23-24, 1:19-cv-01548 (D. Del. Sept. 10, 2019).

<sup>8</sup> Farelogix, About Us, available at <https://www.farelogix.com/about-us/> (last visited Nov. 20, 2019).

<sup>9</sup> *U.S. v. Sabre Corp. et al.*, 1:19-cv-01548 (D. Del. Aug. 20, 2019), available at <https://www.justice.gov/atr/case-document/file/1196836/download>.

<sup>10</sup> *Id.*

<sup>11</sup> The Horizontal Merger Guidelines define a maverick firm as one “[...] that has a greater economic incentive to deviate than do most of its rivals and constitutes an unusually disruptive force in the market place.” Horizontal Merger Guidelines, US Department of Justice and Federal Trade Commission, § 2.12, Aug. 19, 2010), available at <https://www.justice.gov/sites/default/files/atr/legacy/2010/08/19/hmg-2010.pdf>.

<sup>12</sup> *U.S. v. Sabre Corp. et al.*, 1:19-cv-01548 (D. Del. Aug. 20, 2019), available at <https://www.justice.gov/atr/case-document/file/1196836/download>.

own solutions in-house.<sup>13</sup> In Sabre’s response to DOJ’s Complaint, Sabre explained it wants to “build an integrated NDC-based, end-to-end platform for retailing, distribution, and fulfillment capabilities.”<sup>14</sup> As is characteristic for two-sided platforms, travel agents only adopt new software if sufficient numbers of airlines are using it, and vice versa. Acknowledging that Farelogix’s user base is currently still relatively small, Sabre explained that it aims “to better compete with Amadeus by combining Farelogix’s NDC and retailing capabilities with Sabre’s travel agent network and global footprint.”<sup>15</sup>

#### *US Airways Litigation and Characterization of the GDS Platform as Two-Sided Transaction Platform*

While the merger suit is still ongoing, the litigation between US Airways and Sabre mentioned above, will likely set the stage for the analysis in the review of the Sabre/Farelogix transaction. In *US Airways, Inc. v. Sabre Holdings Corp.*, the jury had been relying on a one-sided market analysis, ignoring the travel agents’ side of the GDS platform, which – according to *Amex II* – is inappropriate in the context of transaction platforms such as GDS. On September 11, 2019, the Second Circuit therefore voided the awarded \$15 million in antitrust damages, finding that the jury should have relied on a two-sided analysis instead.

When establishing two-sidedness of the GDS platform in *US Airways, Inc. v. Sabre Holdings Corp.*, the Second Circuit drew several direct comparisons between Amex and Sabre’s GDS, summarizing that: “Amex and Sabre share all of the characteristics that require a two-sided analysis: (1) a platform that brings together two sets of consumers for a simultaneous transaction; (2) demand on each side of the platform depends on widespread adoption by the other side; (3) pricing on either side of the platform can impact demand on the other; and (4) fees on one side of the platform fund incentives that attract users on the other.” To be more specific:

- 1) The GDS platform links airlines and travel agents, facilitating transactions (e.g., searches and bookings) between them.
- 2) Demand by airlines and travel agents depends on widespread adoption by the other side, i.e., indirect network effects exist. The more travel agents use the GDS, the higher the value of the GDS for airlines, and vice versa.<sup>16</sup>
- 3) The higher the incentive payments paid to the travel agents, the more travel agents will turn to the platform to attempt to meet traveler needs, increasing, by virtue of the indirect network effects, demand by airlines.<sup>17</sup> Also, any quality decreases by the GDS (e.g., if the GDS provider manipulated the airline offerings to not rank the best offers highest for the travel agents) would result in reduced demand by the travel agents and, due to the indirect

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<sup>13</sup> Answer of Defendants Sabre Corporation and Sabre GBL Inc., *U.S. v. Sabre Corp. et al.*, 1:19-cv-01548 (D. Del. Sept. 10, 2019)

<sup>14</sup> *Id.*

<sup>15</sup> *Id.*

<sup>16</sup> Letter Brief, *US Airways Inc. v. Sabre Holdings Corp., et al.*, 2018 WL 3577549, at n.2 (July 16, 2018 C.A.2) (“US Airways gets value from Sabre by having more travel agents on Sabre”).

<sup>17</sup> *Id.* at n. 3 (“[T]he more incentives that Sabre . . . pays, the more bookings they attract to their . . . particular platform.”).

network effects, reduced demand by the airlines, thus mitigating the GDS platform provider's incentive to reduce quality in the first place.<sup>18</sup>

4) Under the traditional GDS payment model, a GDS charges the airline a "booking fee" for each flight segment a travel agency books through the GDS.<sup>19,20</sup> On the other side of the platform, the GDS providers pay the travel agents each time they use the platform to book a ticket, which serves as an incentive to book through the GDS. Travel agent incentives are thus funded by the booking fees from the airlines. If the booking fees paid by the airlines decrease and that imposes pressure to lower the payments to travel agents, the incentives of the travel agent to use the GDS also decrease (which in turn reduces the incentive of airlines to use the GDS).<sup>21</sup>

Since the GDS platform is two-sided, "competition cannot be accurately assessed by looking at only one side of the platform in isolation."<sup>22</sup> Any analysis of anticompetitive conduct and competitive effects needs to take both sides of the GDS platform into account when defining the product market. In fact, since the Second Circuit characterized the GDS platform as a transaction platform, the analysis *must* take both sides into account according to *Amex II*: "according to the Court, there is a subset of two-sided platforms that must always receive two-sided treatment: transaction platforms. A transaction platform is a two-sided platform where the business 'cannot make a sale to one side of the platform without simultaneously making a sale to the other.'"<sup>23</sup>

These facts and findings will likely shape the analysis in the Sabre/Farelogix merger litigation.

#### *Relevant Market & Competitive Effects Analysis*

When defining the relevant antitrust market in a two-sided platform context, the standard tools recommended by the agencies in the 2010 Horizontal Merger Guidelines ("HMG") need to be adjusted to account for the indirect network effects characteristic for two-sided platforms. I.e., any market definition analysis must consider both sides of the platform.

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<sup>18</sup> "Sabre can in effect punish the airline by moving its flights from the first to the second or third screen, to which the booking agents would rarely refer. Id. at 1677, 1680-91. Again, this has an impact on both the travel-agent side of the platform and the airline side." *US Airways, Inc. v. Sabre Holdings Corp.*, 938 F.3d 43, 62-63 (2d Cir. 2019).

<sup>19</sup> *US Airways, Inc. v. Sabre Holdings Corp.*, 938 F.3d 43, 50 (2d Cir. 2019)

<sup>20</sup> An alternative payment model is the so-called "wholesale approach." *U.S. v. Sabre Corp. et al.*, 1:19-cv-01548, at 12 (D. Del. Aug. 20, 2019), available at <https://www.justice.gov/atr/case-document/file/1196836/download> ("Under the wholesale approach, an airline does not pay the GDS a booking fee. Instead, the airline compensates the online travel agency directly and the online travel agency pays a technology fee to the GDS for each booking. This change, resulting from competition, has saved at least one U.S. airline millions of dollars per year.").

<sup>21</sup> Letter Brief, *US Airways Inc. v. Sabre Holdings Corp., et al.*, 2018 WL 3577549, at n.4 (July 16, 2018 C.A.2) (travel agents use Sabre in significant part because of "incentive pay that they get every time they make a booking"; travel agent incentives "are funded by and come from the booking fees from the airlines"; "If the booking fees that the airlines pay Sabre went down, the incentives to the travel agent would go down"; travel agents, "if faced with lower incentives, might start using a different mix of channels") (internal citations omitted).

<sup>22</sup> *Amex II*, 138 S. Ct. 2274 (2018).

<sup>23</sup> *US Airways, Inc. v. Sabre Holdings Corp.*, 938 F.3d 43, 62-63 (2d Cir. 2019) (citing *Amex II*, 138 S. Ct. 2274 (2018)).

When implementing a Hypothetical Monopolist Test (“HMT”), for example, the small significant non-transitory increase in price (“SSNIP”) corresponds to a net price increase by the platform, which could be implemented on one or more sides of the platform. When evaluating the demand response in response to the SSNIP, the analysis needs to account for indirect network effects: a SSNIP imposed on the total price that results in a price increase on one side of the market will decrease demand on that same side of the market, and due to the indirect network effects, such reduced demand will impact the demand on the other side of the market as well (even if the price for the other side is unchanged). With positive indirect network effects in both directions, as present on the GDS platforms, the demand response to a SSNIP will be larger on two-sided platforms than in a one-sided context. When only accounting for the effect on one side, the market will be defined too narrowly.<sup>24</sup>

Likewise, for the evaluation of competitive effects, the consideration of both sides of the platform is crucial. This was made clear by the Supreme Court in *Amex II*: “[t]o ensure sufficient participation, two-sided platforms must be sensitive to the prices that they charge each side” of the platform to avoid the phenomenon of “[r]aising the price on side A . . . [and] losing participation on that side, which decreases the value of the platform to side B,” which in turn risks losing participation on side B—and so on.<sup>25</sup> Two-sided platforms therefore often “cannot raise prices on one side without risking a feedback loop of declining demand.”<sup>26</sup> Due to the positive indirect network effects present on GDS platforms, for example, both the impact of any unilateral conduct on demand of the airlines as well as on demand of the travel agents needs to be evaluated. Consequently, “[p]rice increases on one side of the platform . . . do not suggest anticompetitive effects without some evidence that they have increased the overall cost of the platform’s services.”<sup>27</sup> This means that an evaluation of whether prices are supra-competitive, needs to be based on an evaluation of prices on both sides of the platform.

As a GDS platform provider, Sabre optimizes the total price level and the price structure across the different customer groups. On GDS platforms, airlines traditionally pay a positive fee to Sabre while travel agents traditionally receive an incentive payment to maintain the efficient scale of the platform. Such a price structure is very common on two-sided platforms: “[P]latforms often treat one side as a profit center and the other as a loss leader, or, at best, as financially neutral.”<sup>28</sup> Prices

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<sup>24</sup> In a two-sided platform context, a one-sided analysis of demand and switching would suggest that a SSNIP is profitable “earlier” than it would be when accounting for the indirect network effects. See also Affeldt, P. & Filistrucchi, L. & Klein, T.J., *Upward Pricing Pressure in Two-Sided Markets*, Discussion Paper 2012-069, Tilburg University, Center for Economic Research; OECD Report, *Rethinking Antitrust Tools for Multi-Sided Platforms*, p. 38 (2018), available at [www.oecd.org/competition/rethinking-antitrust-tools-for-multi-sided-platforms.htm](http://www.oecd.org/competition/rethinking-antitrust-tools-for-multi-sided-platforms.htm).

<sup>25</sup> *Amex II*, 138 S. Ct. at 2281.

<sup>26</sup> *Id.* at 2285.

<sup>27</sup> *US Airways, Inc. v. Sabre Holdings Corp.*, No. 17-960 (2d Cir. 2019), citing *Amex II*, 138 S. Ct. at 2285-86.

<sup>28</sup> Rochet, Jean-Charles and Jean Tirole, *Platform Competition in Two-sided Markets*, Journal of the European Economic Association 1, no. 4 (2003): 990-1029.



would only be supra-competitive if the total price charged to travel agents and airlines combined exceeded the total price that would have been charged in a competitive market.<sup>29</sup>

To account for the peculiarities of the demand interdependencies on two-sided platforms, standard economic tools, such as the Gross Upward Pricing Pressure Index (“GUPPI”) analysis in the context of merger reviews, for example, need to be adjusted to reflect the indirect network effects and the platform pricing structure. The GUPPI indicates the unilateral incentives to raise prices post-merger. These arise because some of the lost sales of a product, following an increase of its price, will be diverted to/recaptured by the other, merged firm.<sup>30</sup> On two-sided platforms the diversion on both sides of the platform needs to be considered.

Even if we were to assume that DOJ’s position is correct, that Sabre’s GDS platform and Farelogix are competing platforms with substitutable rather than complementary product offerings, the GUPPI calculation would need to be adjusted to account for the demand interdependencies across the platform. As illustrative and stylized example, let  $P_1^A$  be the price charged to airlines by Sabre’s GDS platform, and  $I_1^T$  the incentive payment paid to travel agencies. If Sabre and Farelogix were both two-sided platform providers that offer competing services, an increase in the fee charged to the airlines,  $P_1^A$ , would result in airlines switching from Sabre’s GDS platform to Farelogix (let  $D_{12}^{AA}$  be the share of airlines switching to Farelogix in response to the increase of price  $P_1^A$ ). As a result of the indirect network effects, this would then also result in travel agents diverting from Sabre’s GDS platform to Farelogix (let  $D_{12}^{AT}$  be the share of travel agencies switching from the GDS platform to Farelogix due to lower participation of airlines in the GDS platform). Comparably, a decrease in Sabre’s incentive payment to the travel agencies,  $I_1^T$ , would result in a shift of travel agents from Sabre’s GDS platform to Farelogix (let  $D_{12}^{TT}$  be the share of travel agents shifting from GDS to Farelogix due to the decrease in incentive payment), which also makes Farelogix’s NDC offerings relatively more attractive for airlines. As a result of the indirect network effects, the airlines would then also shift from Sabre’s GDS platform to Farelogix’s NDC (let  $D_{12}^{TA}$  be the share of airlines switching from the GDS platform to Farelogix due to fewer travel agents on the GDS platform).

In addition, as discussed in detail by Cosnita-Langlais et al. (2017),<sup>31</sup> a price change on one side of the platform may also change what the optimal price is on the other side of the platform, and hence impact the degree of diversion. E.g., a higher fee charged to the airlines might render a higher incentive payment to the travel agencies optimal, mitigating their incentive to change platforms.<sup>32</sup> Such “within firm feedback effects” across the two sides of the platform need to be taken into account when analyzing the incentives to raise prices post-merger. Ignoring this price effect “might in some situations overstate the upward pricing pressure on the user side of the market. In fact, it might wrongly predict an upward pricing pressure when there is a downward

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<sup>29</sup> *US Airways, Inc. v. Sabre Holdings Corp.*, No. 17-960 (2d Cir. 2019), citing *Amex II*, 138 S. Ct. at 2287. *But see*, Herbert Hovenkamp, *Platforms and the Rule of Reason: The American Express Case*, Penn. Inst for Law & Econ Research Paper No. 19-10; COLUM. BUS. L. REV. (March 5, 2019).

<sup>30</sup> Affeldt, P. & Filistrucchi, L. & Klein, T.J., *Upward Pricing Pressure in Two-Sided Markets*, Discussion Paper 2012-069, Tilburg University, Center for Economic Research.

<sup>31</sup> Andreea Cosnita-Langlais & Bjørn Olav Johansen & Lars Sorgard, *Upward Price Pressure in Two-Sided Markets: Incorporating Feedback Effects*, EconomiX Working Papers 2018-3, University of Paris Nanterre.

<sup>32</sup> *Id.*

pricing pressure on that side of the market.”<sup>33</sup> Cosnita-Langlais et al. adjust the traditional GUPPI formula to incorporate these feedback effects.<sup>34</sup>

In brief: when analyzing competitive effects in a two-sided platform context, demand responses on both sides of the platform need to be taken into account. On a two-sided platform six different diversion ratios need to be estimated:<sup>35</sup>

- 1) Across products diversion ratios on each of side of the platform ( $D_{12}^{AA}$  and  $D_{12}^{TT}$ ), e.g., the diversion ratio of airlines from Sabre to Farelogix due to an increase in the fee Sabre charges airlines.
- 2) Across products and sides diversion ratios ( $D_{12}^{TA}$  and  $D_{12}^{AT}$ ), e.g., the diversion ratio of airlines from Sabre to Farelogix due to a decrease in the incentive payment Sabre pays to travel agents, which in turn, due to the indirect network effects, also reduces the travel agents’ demand for Sabre.
- 3) Within products but across sides diversion ratios ( $D_{11}^{TA}$  and  $D_{11}^{AT}$ ), e.g., the demand response of airlines due to a decrease in the incentive payment to travel agents that renders a lower fee to the airlines optimal, which, in turn, mitigates the decrease in demand by airlines captured in 2). Which effect overweighs is in an empirical question.

Estimates of these diversion ratios can be obtained by using market or survey data from the different customer groups on each side of the platform, for example.

### *Conclusion*

It will be interesting to follow the Sabre/Farelogix suit. With the decisions in *Amex II* and *US Airways Inc. v. Sabre Holdings Corp. et al.*, the stage for the play is set – whether Trojan horses will take a leading role is yet to be scripted.<sup>36</sup>

As discussed, the economics literature on multi-sided platforms also shows that a correct analysis of the impact of alleged anticompetitive conduct demands that the dynamics and effects on all sides of a platform are accounted for by properly defining the relevant product market.

A one-sided approach could lead enforcers to arrive at the wrong conclusion: either over- or under-estimating the competitive benefit or harm from a merger or unilateral behavior. This could lead enforcers to inappropriately take moves to stunt competition and innovation and reduce consumer welfare.

Both the economics literature and legal precedence appear to agree that a careful analysis that accounts for the dynamics and effects on all sides of a platform market is necessary. Given the breadth and growth of platform markets in recent years and the expected continuation of this dynamic, this recommendation is more relevant and important than ever.

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<sup>33</sup> *Id.*

<sup>34</sup> *Id.*

<sup>35</sup> *Id.*

<sup>36</sup> *U.S. v. Sabre Corp. et al.*, 1:19-cv-01548 (D. Del. Aug. 20, 2019), available at <https://www.justice.gov/atr/case-document/file/1196836/download>.