ARTICLES

VISA-MASTERCARD AND THE IDENTIFICATION OF COLLUSIVE PRACTICES IN TWO-SIDED MARKETS

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In the last couple of decades, several new businesses have come to dominate the high-tech sector, such as Google and Amazon. Pioneering research by French economists Jean-Charles Rochet and Jean Tirole has identified these businesses as two-sided markets or platforms. Two-sided platforms are novel because they require a business to bring on board two sets of customers so that they can engage in mutually beneficial interactions. The more users there are on the platform the more indirect network effects that are generated. Nevertheless, two-sided platforms are complex and this complexity makes it difficult to determine when their practices are anticompetitive and when they are procompetitive. A recent case that tries to grapple with the complex issues presented by two-sided platforms is the Competition Tribunal's decision in Commissioner of Competition v Visa-MasterCard (Visa-MasterCard). *The decision addresses allegedly collusive practices engaged in by credit card networks. These networks are two-sided platforms where banks, merchants and credit cardholders interact. The purpose of this Paper is to provide guidance on how to properly identify collusive practices in two-sided markets. First, the Paper provides an overview of the economics of two-sided markets. Second, it analyzes the* Visa-MasterCard *decision to demonstrate the errors that should be avoided when trying to differentiate procompetitive from anticompetitive behaviour in two-sided markets. Third, it analyzes the U.S. Department of Justice's Apple e-books case to provide a fuller picture of collusive practices in two-sided markets. Lastly, it lays out plausible collusive theories of harm.*

Au cours des vingt dernières années, plusieurs nouvelles entreprises comme Google et Amazon ont assis leur domination sur le secteur de la haute technologie. Des recherches novatrices menées par les économistes français Jean-Charles Rochet et Jean Tirole ont déterminé que ces entreprises constituaient des cas de marchés ou de plates-formes bifaces. Concept récent, les plates-formes bifaces obligent les entreprises à attirer deux catégories de clients qui interagissent de manière mutuellement bénéfique. Plus la plate-forme compte de clients, plus d'effets de réseau indirects apparaissent. Toutefois, la complexité des plates-formes bifaces fait qu'il est difficile de déterminer quand leurs pratiques sont anticoncurrentielles et quand elles sont bénéfiques pour la concurrence. Récemment, le jugement du Tribunal de la concurrence dans la cause Commissaire de la concurrence c Visa-MasterCard (« Visa-MasterCard ») *a mis en lumière cette réalité complexe des plates-formes bifaces. Ce jugement portait sur des allégations de pratiques*

collusoires par les réseaux de cartes de crédit. Ces réseaux sont des plates-formes bifaces caractérisées par l'interaction de banques, de commerçants et de détenteurs de cartes. Cet article indique des moyens de repérer les pratiques collusoires au sein des marchés bifaces. Tout d'abord, il est question des principes économiques régissant ce type de marché. Ensuite, une analyse de l'affaire Visa-MasterCard *permet de souligner les erreurs à éviter lorsqu'on tente de différencier les pratiques bénéfiques pour la concurrence des pratiques anticoncurrentielles dans les marchés bifaces. Puis, une analyse du jugement du ministère de la Justice des États-Unis dans l'affaire des iBooks d'Apple offre une perspective élargie des pratiques collusoires dans ces marchés. Enfin, on présente des théories plausibles des effets des pratiques collusoires.*

I. Introduction

Many revolutionary technologies have been introduced in the past few decades that have changed the way society engages in business and commerce. Many of these technologies have a common and novel economic structure. Economic literature has emerged over the last decade that has identified certain technologies as being "two-sided markets".[2] Broadly speaking, two-sided markets arise when an intermediary platform is required to coordinate two sets of users to allow them to engage in beneficial interactions.

Although the economic literature has identified the many benefits of two-sided markets, what is less clear is how competition agencies around the world should evaluate and scrutinize the practices of firms that participate in two-sided markets. Are the traditional tools of competition law adequate for analyzing two-sided markets? How do you identify anticompetitive practices in two-sided markets? What are some features of two-sided markets that can help illuminate the competitive effects of various practices?

In its decision in *Commissioner of Competition v Visa-MasterCard*,[3] the Competition Tribunal (the "Tribunal") handed down its latest decision involving collusive practices[4] in two-sided markets. The case dealt with credit card networks, which are complex two-sided platforms that mediate the interaction between banks, merchants and cardholders in order to facilitate credit card transactions. The Competition Bureau (the "Bureau") unsuccessfully tried to challenge practices employed by Visa and MasterCard, the two largest credit card networks operating in Canada, that it alleged resulted in merchants paying higher fees when cardholders used their credit cards to make purchases. This Paper has two primary purposes. First, the Paper provides a commentary on the Tribunal's analysis regarding collusive practices in two-sided markets and also compares its analysis with decisions from other jurisdictions involving credit card networks. This analysis will permit a comparison

of how tribunals and courts from different jurisdictions have tried to grapple with the difficult competition law issues presented by two-sided markets. Second, in order to provide a fuller discussion of collusive practices in two-sided markets, this Paper also analyzes cases in the online retail sector with a focus on the U.S. Apple e-books case. Online retailers are two-sided markets that mediate the interaction between buyers and suppliers. The online retail cases provide a prime example of two-sided platforms being used to facilitate collusion between users.

Part II of this Paper provides an overview of the economics of two-sided markets. Part III goes into greater detail regarding efficiencies and entry in two-sided markets. Part IV analyzes the Tribunal's *Visa-MasterCard* decision and several other important credit card cases. Part V analyzes cases in the online retail sector. Based on the analyses in Parts IV and V, Part VI identifies plausible collusive theories of harm in two-sided markets. Finally, Part VII provides some concluding remarks.

II. The Economics of Two-Sided Markets

The growth in research into two-sided markets can be traced to the pioneering work of French economists Jean-Charles Rochet and Jean Tirole.[5] Rochet and Tirole provide the following definition of a two-sided market:

> [A] market is two-sided if the platform can affect the volume of transactions by charging more to one side of the market and reducing the price paid by the other side by an equal amount; in other words, the price structure matters, and platforms must design it so as to bring both sides on board.[6]

In technical terms, a market is two-sided if price structure is non-neutral and affects profits and the volume of transactions.[7] In a single-sided market, price structure is neutral with regard to a transaction. This is exemplified in the application of a value added tax. When a value added tax is applied in a single-sided market, regardless of whether it is applied to the buyer or seller, the transaction price will adjust to make the effect of the tax neutral.

In their research on two-sided markets, Rochet and Tirole's goal is to combine the economic research on network externalities with the research on multiproduct pricing.[8] The former is used to explain the importance of indirect network effects[9] for two-sided markets. In two-sided markets, a platform becomes more valuable for users on one side of the platform the more users there are on the opposite side. For example, in the videogame industry, a videogame console acts as a platform between videogame developers and videogame players. The more

videogame developers there are that produce games for a particular console the more valuable that console becomes for videogame players because they will have access to more games. Conversely, a videogame console with many videogame players will be more valuable to videogame developers because the videogame developers will have a larger market for their games.

With respect to the economic research on multiproduct pricing, Rochet and Tirole rely on this research to explain the greater importance in two-sided markets of price structure (*i.e.*, the distribution of the price of a transaction between the two-sides of the market) over price level (*i.e.*, the total price paid from the two-sides). Price structure is important for multiproduct firms because they structure the prices of their products to take into account the cross-elasticity of demand between the products. For example, a firm selling two complementary products will spread the prices over its products so that if one is sold at a high price then the other one will be sold at a low price.[10] This price restructure optimally balances the prices of the complementary products and allows the firm to maximize profits. In contrast, the firm would sell less products, and receive less profits, if it set the price of each complementary product at the profit maximizing level in isolation from one another. Similarly, a two-sided platform will create a price structure that ensures there is an optimal amount of users on both sides of the platform by taking into account the effect that users on one side of the platform have on the other. If there is not a sufficient amount of users on one side of the platform then the platform will not be valuable to users on the other side, and vice versa.

Furthermore, the economic literature on two-sided markets identifies factors that are important to determining the optimal price structure for a platform. First, the price structure will be dependent on the indirect network effects generated on each side of a two-sided market.[11] The price structure is intended to internalize the network externalities created by the two sets of users interacting on the platform. For example, readers of a newspaper create indirect network effects by creating an audience for an advertiser who advertises on the newspaper. The newspaper creates a price structure that internalizes these network externalities by charging a fee to advertisers and compensating readers with newspaper content that is offered for free or at below cost. The price structure reflects the value of readers to advertisers and ensures there will be enough readers and advertisers operating on the platform.

Second, the price structure will be affected by the elasticity of demand facing each side of the two-sided market.[12] The side with the more

elastic demand will pay a smaller share of the total price of a transaction relative to the other side. The reason is that providing a lower price to the more elastic side will have more of an effect on increasing the platform's total output. This provides a further explanation for the price structure of newspapers. Newspaper readers have many alternative options to obtain news and thus have more elastic demand than advertisers, who have relatively fewer advertising options. As a result, advertisers pay a larger portion of the price of a newspaper than readers, who often effectively receive the newspaper at a zero price.

Lastly, the price structure will be affected by the marginal costs of serving each side of a two-sided market.[13] An increase in the marginal cost of serving one side of a market will have two effects. First, it will increase the overall price level. Second, assuming equal elasticities of demand on both sides, the price will increase less on the costlier side of the market relative to the other side. A two-sided platform will find it optimal to effectively subsidize the costlier side of the market because this results in a greater increase in output than if the price increases accurately reflected the increase in costs. In this case, subsidizing the costlier side has a greater effect on stimulating demand than it would on the other side of the market.

In addition to network externalities and price structures, there are two additional characteristics of two-sided markets that are important for competition law analysis. First, two-sided platforms are either organized as for-profit firms or not-for-profit associations.[14] The function of a for-profit platform is to maximize its own profits. For example, an online retailer sets its price structure in such a way as to maximize its profits from all the transactions that occur between buyers and suppliers on its platform. In contrast, the function of a platform organized as a not-for-profit association is to maximize output for the collective benefit of its members. For example, the purpose of a not-for-profit credit card association organized by banks is to maximize the total quantity of credit card transactions for the benefit of its member banks. Whether a platform is organized as a for-profit firm or a not-for-profit association has important implications for determining whether its practices are plausibly anticompetitive or procompetitive.

Second, users of two-sided platforms either single-home or multi-home.[15] Users that single-home only use one platform while those that multi-home use multiple platforms. For example, private users of Microsoft Windows normally single-home because the costs of buying an additional personal computer in order to obtain another operating system make multi-homing prohibitively costly. In contrast, many merchants multi-home by accepting cards from multiple credit card

networks because the costs of accepting an additional credit card brand are small. The prevalence of multi-homing is important because multi-homing encourages two-sided platforms to compete to steer a user's transactions toward their platform and away from rival platforms. This competition for a user's transactions puts downward pressure on the price level of two-sided platforms. For this reason, practices that deter or facilitate multi-homing are important from a competition law perspective.

III. Efficiencies and Entry

In order to accurately identify anticompetitive practices in two-sided markets, it is essential to understand potential procompetitive justifications. The primary efficiency justification that is specific to two-sided platforms is the need to coordinate demand on the two sides of the market. Two-sided platforms normally do this by instituting a price structure where one side of the market is charged prices significantly above marginal cost in order to cross-subsidize the other side. As stated above, whether a side is cross-subsidized is dependent on its elasticity of demand, ability to generate indirect network effects and marginal cost. This feature of two-sided markets provides an efficiency justification for many practices that in a single-sided market would be considered anticompetitive. For example, because a two-sided platform is charging a price to one side of the market that is below cost does not necessarily indicate it is engaging in predatory pricing.[16] The fact that Google gives away its Android mobile operating system does not necessarily mean it is engaging in a predatory strategy against Microsoft, which charges $23-31 per phone for a license to its mobile operating system.[17] Although it does not make money off Android directly, Google gains revenue indirectly from selling licenses to complementary products such as Google Maps[18] and from selling mobile ads.[19] In this situation, requiring Google to charge for Android a price that reflected cost would interfere with a business strategy it considers optimal. In order to make out a proper case of predatory pricing in a two-sided market, one would have to compare costs and revenues for the platform as a whole and not just for one side.

A two-sided platform could justify tying for similar reasons.[20] For example, a platform may find it optimal to offer users on one side of the platform a negative price. This situation may arise if a platform wants to pay potential users to use its platform in order to gain a foothold into a market. But because of adverse selection and opportunistic behaviour, it would not be practical for the platform to offer users direct cash payments. The platform could get around this problem by tying a complementary product and giving away the bundle for free.

Examples of this practice include shopping malls that give away free parking and online retailers that give away free shipping.

The ability to manipulate its price structure in the above ways is also important when a two-sided platform is attempting to enter a market. Entry is a particularly important and difficult stage in the life of a two-sided platform. The reason is that platforms need to be able to establish a critical mass of users on both sides of a two-sided market before they can become viable.[21] In the economics literature, this is referred to as the "chicken and egg problem".[22] The chicken and egg problem arises when a two-sided platform cannot get a sufficient amount of users on one side to commit to the platform because a sufficient amount of users on the other side will not commit, and vice versa. This problem can be demonstrated by looking at the online retail sector. An online retailer needs to get a critical mass of suppliers to sell their products on its platform before it can get buyers to start visiting its platform. Conversely, if an online retailer cannot attract a critical mass of buyers to use the platform then suppliers will not commit to selling on the platform. In this situation, an online retailer may be able to use its price structure to obtain critical mass by, for example, offering a negative price in the form of a free bundle of complementary services, such as free product reviews and descriptions, to buyers in order to reach critical mass on that side of the market.

Two-sided platforms can also employ other strategies to overcome the chicken and egg problem.[23] For instance, a platform can adopt a zigzag strategy by signing up one group of users first and then obtaining the other group at a later time. This strategy will work if the indirect network effects only go in one direction. For example, because search engine users place little to no value in ads, Google was able to obtain a critical mass of search engine users first before it attempted to sign up advertisers. Alternatively, if the indirect network effects go both ways, a platform can employ the zigzag strategy by vertically integrating upstream and self-supplying the product in order to attract users. Once it has obtained a critical mass of users then it can start attracting suppliers to the platform. An electronic device maker, for instance, could initially produce its own software applications before obtaining a critical mass of device users. Once it has obtained a sufficient amount of device users, the device maker could attract third-party software developers to produce their own applications for the device. Furthermore, a platform can solve the chicken and egg problem by obtaining pre-commitment. For example, videogame players will not commit to buying a videogame console unless they know there will be games available on the console that they wish to play. A videogame console

can solve this problem by obtaining contractual commitments from videogame developers to produce games for its console.[24]

An important point to keep in mind from a competition law perspective is that entry into two-sided markets can also be more difficult because the markets are prone to "tipping".[25] Tipping arises when a market has a natural tendency to gravitate towards having one dominant firm. Markets with network effects often experience tipping because of the positive feedback effects that occur when users gravitate toward a single firm. The prevalence of tipping in a market depends on the level of consumer heterogeneity and product differentiation. Examples of firms that have become dominant because of tipping are Facebook (social media) and eBay (online auctions). Once a market has tipped, the dominant firm may become entrenched because the opportunity cost of switching to a new entrant increases and users become locked in.[26] Markets that are prone to tipping are thus more difficult to enter. For this reason, whether users multi-home is important to determining whether a new entrant can overcome the network effect barrier to entry.[27] If users on one side of a platform multi-home then that becomes a viable entry point for a new entrant and provides a means for it to try to tip the market toward its platform. The prevalence of multi-homing thus disciplines the dominant platform even in the presence of tipping. Furthermore, although multi-homing may inhibit a market to tip towards only one platform, since users could always use multiple platforms, there may be instances where this would not be the case. For example, multi-homing may only be a practice that occurs initially but then dies out once a platform achieves a certain coverage of a market. This is likely what happened with respect to social media platforms. Users may have initially multi-homed on both MySpace and Facebook but once Facebook achieved a certain coverage of the market MySpace users abandoned multi-homing and started using Facebook exclusively.

IV. *Commissioner of Competition v Visa-MasterCard*

As credit card networks, Visa and MasterCard are complex two-sided platforms.[28] Financial institutions participate in the platforms by acting as either issuers or acquirers. Issuers distribute credit cards to cardholders who are normally charged annual and transaction fees for the use of the card. Acquirers, on the other hand, process credit card transactions on behalf of merchants who accept credit cards as a form of payment from cardholders for purchases. Merchants pay a fee to the acquirer, referred to as the "merchant discount fee", for this service. The merchant discount fee consists of three components: a fee paid to the acquirer for processing the transaction (acquirer services fee),

a fee paid to the credit card network for use of the network (acquirer network fee) and a fee referred to as the "interchange fee". The interchange fee is the largest component of the merchant discount fee and is set by the credit card networks. The interchange fee is collected by the acquirer but is transferred entirely to the issuer who issued the credit card that was used in the transaction.

In addition to this complex fee structure, Visa and MasterCard impose two primary restraints on merchants: the "no-surcharge rule" and the "honour-all-cards rule".[29] The no-surcharge rule prevents merchants from levying fees on cardholders when they use their credit cards. The purpose of the rule is to prevent merchants from transferring the costs of the merchant discount fee onto cardholders.[30] The honour-all-cards rule requires merchants to accept all credit cards issued under a specific credit card brand.[31] The rule prevents merchants from discriminating against different types of credit cards that may charge different merchant discount fees. In addition to the above restraints, MasterCard also imposes the "no-discrimination rule".[32] The rule is an anti-steering provision that prevents merchants from steering business away from MasterCard toward another credit card network.

In *Visa-MasterCard*, the Bureau attempted to challenge as anticompetitive the merchant restraints imposed by Visa and MasterCard. The Bureau relied on Section 76 of the *Competition Act* (the "Act"),[33] which prohibits resale price maintenance, as the basis of its challenge against the restraints. At first glimpse, the decision to initiate the case under resale price maintenance appears to be a strange choice. The Bureau initially tried to argue that it was not required to prove that there was a resale of a product under Section 76(1)(a)(i) but merely that there was a vertical relationship.[34] The Tribunal reviewed the language of Section 76 and its legislative history and held that the Bureau's interpretation found no support.[35] Indeed, the Tribunal found that the clear legislative intent of Section 76 was to require a resale of a product. Alternatively, the Bureau tried to argue that if Section 76 requires a resale then that requirement was met because acquirers resell credit card network services from Visa and MasterCard to merchants.[36] The Tribunal also rejected this line of argument based on the fact that the evidence suggested that the credit card networks and acquirers provide different services to merchants.[37] The networks supply authorization, clearance and settlement of transactions services to acquirers while the acquirers provide credit card acceptance services to merchants.

The reason that the Bureau tried to awkwardly shoehorn its case under Section 76 is likely because its challenge to the merchant restraints did not comfortably fit under any other provision. The

Tribunal suggested that the case may have been more appropriately brought under Section 79, which prohibits abuses of dominance.[38] However, the Tribunal pointed out that it also would have been difficult for the Bureau to make its case under Section 79 because the provision requires an anticompetitive act that has the intent of excluding a competitor.[39] The Bureau's case was built on a collusive theory of harm rather than an exclusionary one. In other words, it alleged the merchant restraints resulted in reduced price competition rather than the exclusion of a rival credit card network. Alternatively, the Bureau could have attempted to argue that Visa and MasterCard's rules, by reducing competition between the credit card networks, were prohibited anticompetitive agreements under Section 90.1.[40] This line of argument also would have had difficulties, however. Section 90.1 only prohibits anticompetitive agreements between competitors. Visa and MasterCard's rules were agreements with their acquirers and they do not compete with their acquirers. Only an agreement between Visa and MasterCard or between the acquirers would have fallen under Section 90.1. The inability of the Bureau to challenge non-horizontal agreements that have collusive, rather than exclusionary, effects under any of the provisions in the Act other than Section 76 suggests the Act may have an enforcement gap. For example, the Bureau may not be able to challenge meet-or-release clauses under the Act even though these clauses are known to facilitate collusion by deterring cheating among cartelists.[41] These clauses are non-horizontal and can be employed by non-dominant firms to facilitate collusion.

With respect to its analysis of the interchange fees, the Tribunal erred by inferring that the credit card networks' ability to increase the interchange fee without losing market share alone was evidence of their market power.[42] The purpose of an interchange fee is to increase transaction volume on a credit card network by balancing the demand between the users on the two sides of the platform, in this case merchants and cardholders.[43] The fee does this by providing issuers with the funds to offer cardholders rewards and subsidized card fees. Exercises of market power result in reduced quantity rather than increased quantity. The fact that increased interchange fees may result in higher transaction volumes suggests the increases alone should not be considered evidence of market power. Indeed, the increased competition on the issuer side of the market can account for the observed historical rise in interchange fees.[44] Credit card networks increased their interchange fees on merchants in order to allow issuers to compete more aggressively for cardholders.

Furthermore, the Tribunal explicitly rejected the increased competition for cardholders resulting from increased interchange fees as an offsetting procompetitive benefit. In its decision, the Tribunal held that:

> The Merchant Rules may also have contributed to the observed increase in demand for Credit Card Network Services. Indeed, it is hard to imagine that either network would have agreed to set higher default Interchange Fees unless it anticipated that this would increase network volume. *To the extent that they have resulted in higher Interchange Fees than would otherwise have prevailed, the Merchant Rules may have provided Issuers with both the means and incentive to promote card use more heavily. In the Tribunal's view, this should not be interpreted as an offsetting pro-competitive effect of the No-Surcharge Rule* [emphasis added].[45]

This statement indicates that the Tribunal did not believe the increased interchange fees imposed on merchants could be offset by increased competition for cardholders. The Tribunal, however, overlooks the fact that the increased competition among issuers not only benefits cardholders, but also merchants. The reason is that when a credit card network competes and gains additional cardholders this amplifies the indirect network effects generated by the platform. The amplified indirect network effects increase the value for merchants of being part of the credit card network. Furthermore, the increased competition between issuers stimulates market demand for credit cards, which increases credit card use in absolute terms and not just for a single credit card network. The Tribunal acknowledged the possibility that the restrictions imposed by Visa and MasterCard may have resulted in increased transaction volumes, which would directly benefit merchants. If the merchant restraints plausibly result in benefits that accrue to merchants then this should be taken into consideration as an offsetting benefit.

Even assuming that one side of the market benefits from a restraint at the expense of the other, should that matter in a two-sided market case? In its decision involving the credit card sector, the European Court of Justice ("ECJ") suggested that one should not look at whether a restraint causes one side to benefit at the expense of another but rather whether the two-sided market as a whole is better off because of the restraint.[46] Specifically, the ECJ stated that:

> [I]n the case of a two-sided system such as the MasterCard scheme, in order to assess whether a measure which in principle infringes the prohibition laid down in Article 81(1) EC — in so far as it creates restrictive effects in regard to one of the two groups of consumers associated with that system — can fulfil the first condition laid down in Article 81(3) EC, *it is necessary to take into account the system of which that measure forms*

> *part, including, where appropriate, all the objective advantages flowing from that measure not only on the market in respect of which the restriction has been established, but also on the market which includes the other group of consumers associated with that system, in particular where, as in this instance, it is undisputed that there is interaction between the two sides of the system in question. To that end, it is necessary to assess, where appropriate, whether such advantages are of such a character as to compensate for the disadvantages which that measure entails for competition* [emphasis added].[47]

The ECJ's approach to the analysis of competitive effects in two-sided market cases is arguably preferable to the Tribunal's approach. Because the two sides are so intertwined in a two-sided market, it does not make sense to only look at competitive harms and benefits that accrue to one side. Both sides of the market are essential so it would often not be rational for a two-sided platform to harm one side, merely to benefit the other side, unless doing so would benefit the platform as a whole. What should matter is not whether a restraint benefits one side sufficiently to offset the harm done to it but rather whether the benefits and harms on the whole platform result in a net benefit. This approach would increase consumer welfare in comparison to the Tribunal's approach where benefits and harms are only examined from one side. The reason is that if a restraint causes one side of the market to be harmed marginally but the other side to receive substantial benefits, under the Tribunal's approach the benefits could not be taken into consideration.

Furthermore, in contrast to the Tribunal, the U.S. Court of Appeals for the Eleventh Circuit ("11th Circuit") in *NaBanco v Visa* correctly identified the efficiency rationale of interchange fees.[48] In that case, the 11th Circuit stated the following with respect to interchange fees:

> Another justification for evaluating the [interchange fee] under the rule of reason is because it is a potentially efficiency creating agreement among members of a joint enterprise. There are two possible sources of revenue in the VISA system: the cardholders and the merchants. *As a practical matter, the card-issuing and merchant-signing members have a mutually dependent relationship. If the revenue produced by the cardholders is insufficient to cover the card-issuers' costs, the service will be cut back or eliminated. The result would be a decline in card use and a concomitant reduction in merchant-signing banks' revenues.* In short, the cardholder cannot use his card unless the merchant accepts it and the merchant cannot accept the card unless the cardholder uses one. Hence, the [interchange fee] accompanies "the coordination of other productive or distributive efforts of the parties" that is "capable of increasing the integration's efficiency and no broader than required for that purpose." Bork, *The Rule of Reason and the Per Se Concept*, 75 Yale L.J. 373, 474 (1966) [emphasis added]...[49]

The 11th Circuit recognized that credit card networks use interchange fees to coordinate the demand between merchants and cardholders. Further, in the absence of interchange fees, a merchant would not be willing to pay a fee that took into consideration the indirect network effects generated by the credit card network because it does not fully internalize all the benefits that accrue since other merchants benefit from the effects generated. Thus, credit card networks set interchange fees in order to internalize the positive externalities that additional cardholders produce for all the merchants that transact on the network.

There are also efficiency justifications for why the interchange fee is set by the credit card network rather than negotiated independently between acquirers and issuers.[50] Bilateral negotiations between individual issuers and acquirers to determine interchange fees would significantly increase transaction costs. Furthermore, the bilateral negotiations would suffer from holdup problems because of the honour-all-cards rule. The rule would disadvantage acquirers in the negotiations because their merchants could not decline cards from issuers that require a large interchange fee.

In *Visa-MasterCard*, the Bureau only challenged the no-surcharge and honour-all-cards rules rather than the interchange fee itself. This is still problematic, however, because the merchant restraints provide efficiencies for the credit card networks. Allowing merchants to levy a surcharge to offset the interchange fee would defeat the demand coordinating function of the interchange fee.[51] The purpose of the fee is to cross-subsidize cardholders, who have more elastic demand relative to merchants, in order to attract them to the platform. If merchants were to charge cardholders a surcharge to offset the interchange fee, it would remove any subsidy the cardholders receive from the issuers. In addition, removing the honour-all-cards rule and allowing merchants to discriminate between a brand's low- and high-fee credit cards would devalue the credit card network.[52] If cardholders cannot rely on merchants to accept their credit cards when they advertise they accept a specific brand then it reduces the value of the brand.

The honour-all-cards rule provides a useful contrast to the no-discrimination rule that was used by MasterCard and successfully challenged by the U.S. Department of Justice ("DOJ") in the *Amex* case.[53] The DOJ challenged Amex's no-discrimination rule because it prohibited merchants from steering customers away from Amex to credit card brands with lower interchange fees, such as by stating a preference for a particular brand or by offering a discount or free services for using another brand. The U.S. District Court of the Eastern

District of New York ("Eastern New York District Court") held that the rule unjustifiably interfered with the interbrand competition between the credit card networks:

> [B]y preventing merchants from influencing their customers' payment choices, Defendants' [no-discrimination] rules render merchant demand for network services less responsive to changes in the price charged for those services. In so doing, the [no-discrimination rules] effectively remove the incentive for American Express or its network competitors to compete with one another by offering merchants a lower price, as without merchant participation in the point-of-sale payment decision, a lower price will not translate into increased volume for the network. In undermining the competitive process and price-setting mechanism in the market for GPCC card network services, the challenged restraints impede a critical form of horizontal, interbrand competition.[54]

The Eastern New York District Court recognized that the no-discrimination rule reduced the incentive of the credit card networks to offer lower interchange fees to merchants because they would not be rewarded with increased transaction volume since the rule prohibited merchants from steering their customers toward non-Amex credit cards. In contrast, the honour-all-cards rule only prevents merchants from discriminating between credit cards within a brand and not between the credit cards of different networks. Merchants that multi-home on several credit card networks are still able to steer their customers toward lower cost networks and thus incentivize the networks to offer lower fees in return for steering transactions toward them. The honour-all-cards rule thus only interferes with intrabrand competition and not interbrand competition. For that reason, the rule is less likely to be considered anticompetitive because competition law's "primary purpose…is to protect interbrand competition".[55] Although the Tribunal did not go into detail regarding the differences between the no-surcharge rule and the no-discrimination rule, the rules do have a crucial difference. The no-surcharge rule prohibits merchants from steering through surcharging while the no-discrimination rule prohibits any type of steering. As a result, the no-discrimination rule is clearly the more anticompetitive rule.

A more nuanced economic critique of Visa and MasterCard's merchant restraints is that they result in an excessive amount of credit card transactions because they partially externalize the cost of credit card usage.[56] The basic argument is that, because merchants cannot pass on the costs of credit card usage onto cardholders, it results in more credit card usage than is socially optimal. The inability of merchants to pass on the costs requires them to raise prices on all goods to recover these costs. This effectively requires non-credit card users, such as those

who pay with cash or cheque, to pay higher prices and to subsidize cardholders. This reasoning provides the basis for jurisdictions like the EU that require interchange fees to be set lower than they would be if they were set by the credit card networks. However, many merchants offer services that only benefit some customers but are paid for by all customers.[57] Examples include parking, advertising and extended store hours. More importantly, forcing credit card networks to lower their interchange fees interferes with their ability to cross-subsidize. The inability to cross-subsidize will result in fewer rewards and higher fees for cardholders.[58] This results in higher costs for cardholders and reduces credit card transactions to merchants. It is not clear that legal interference in the credit card market would enhance consumer welfare.[59] As a result of the ambiguous effect on consumer welfare of any judicial remedy, the Tribunal declined to provide the Bureau with a remedy under Section 76 of the Act and provided the following explanation:

> The Tribunal is mindful that a change in one part of the credit card system is likely to have consequences in other parts, such as cardholder fees and benefits while price reductions to consumers may be undetectable. The law of unintended consequences is likely to be a significant force. It is uncertain that the supposed 'cure' will not be worse than the 'disease'.[60]

V. Online Retailers

Online retailers are two-sided platforms that allow users to come together to buy and sell products. The viability of such platforms depends on their ability to sign up both buyers and suppliers. Competition agencies, however, have been scrutinizing various contractual clauses employed by online retailers with respect to their suppliers. Of particular concern are the use of Most-Favoured-Nation ("MFN") clauses.[61] MFN clauses require a supplier to sell a product to a buyer at a price that is not higher than the lowest price given to a rival buyer.[62] The competition law literature has identified the potential harms to competition from MFN clauses.[63] For example, MFN clauses can make price coordination among suppliers easier by providing a mechanism to deter cheating. Furthermore, MFN clauses dampen price competition by making it more costly for a supplier to lower prices since any decrease in price has to be applied to all buyers with the clauses. The clauses also deter downstream entry by preventing a potential entrant from obtaining a cost advantage through lower input prices from suppliers. However, firms may have procompetitive justifications for adopting MFN clauses. A buyer, for example, may be tied to a supplier because it has made product-specific investments. In this situation, an MFN clause can be used to constrain the supplier from raising prices

opportunistically and disadvantaging the buyer relative to its rivals. Furthermore, MFN clauses may be efficient because they reduce the transaction costs of having to renegotiate prices in industries where prices often fluctuate.

MFN clauses present unique competition law concerns in two-sided markets because many online retailers have combined them with an agency model of distribution. Under the agency model, a supplier sets prices for its products on the platform and compensates the online retailer by giving it a per transaction fee, usually a percentage of the price of the transaction.[64] In contrast, under a traditional wholesale model, the supplier sells its products to the retailer and the retailer resells the products at its own prices. The economic literature suggests that the combination of MFN clauses and the agency model has several potential anticompetitive effects. First, the arrangement reduces competition among online retailers to lower their fees and thus results in suppliers charging higher prices.[65] The reason is that an online retailer has an incentive to raise fees because any subsequent compensatory price increase by suppliers will be spread across all online retailers. The online retailer also does not have to worry about buyers switching to another online retailer because any supplier price increase will apply equally to the other online retailers. Second, the arrangement deters low-cost entrants from attempting to enter the market.[66] A potential low-cost online retailer wanting to enter the market by offering suppliers a smaller fee to induce them to offer lower prices is unable to do so because the MFN clause would prevent it from gaining an advantage on price. Lastly, in markets where some online retailers use the wholesale model, and thus act as resellers, and others use the agency model and MFN clauses, the result is higher retail prices as though there was industry-wide resale price maintenance.[67] The reason is that the resellers have no incentive to lower prices because any price cuts will be matched by the suppliers selling on platforms through the agency model. The resellers thus end up raising prices as though the suppliers had imposed resale price maintenance.

The EU and its Member States have been aggressive in attacking MFN clauses in the online retail industry. The EU recently announced that it is conducting an investigation into Amazon's use of MFNs in the sale of e-books.[68] Amazon already abandoned its use of MFN clauses in Germany and the UK after being investigated by the Bundeskartellamt and the Office of Fair Trading, Germany and the UK's competition agencies, respectively.[69] The Competition Commission, another UK competition agency, issued a report condemning the use of MFN clauses by auto insurance price comparison websites.[70] The Commission found that the clauses reduced the websites' incentive to innovate

and compete on price and deterred entry. Similarly, competition agencies in Germany, the UK, France, Sweden and Italy have attacked MFN clauses in the online hotel booking sector for reducing price competition and deterring entry.[71]

In the United States, the most notable competition law case involving MFN clauses in the online retail industry is the DOJ's case against Apple for colluding with a group of major publishers to raise the price of e-books.[72] In that case, the U.S. District Court for the Southern District of New York ("Southern District New York Court") found that the publishers had been looking for an opportunity to force Amazon to raise e-book prices because it had adopted a loss leader strategy that priced e-books at $9.99. Amazon's low e-book prices threatened the publishers' profits in the sale of print books. Apple knew of the discontent among the publishers and used its impending entry into the e-book retail market to facilitate a cartel to raise e-book prices. Apple adopted the agency model to give the publishers the power to set prices and adopted MFN clauses to ensure that it would not have to compete with Amazon on price. The publishers used their agreements with Apple to pressure Amazon to adopt the same pricing arrangement. Under these facts, the Southern District New York Court found Apple liable for colluding with the publishers to fix e-book prices.[73]

A critical part of the case against Apple was that it facilitated a horizontal price-fixing agreement among the publishers. Otherwise, the fact that Apple had employed the agency model and MFN clauses has potentially procompetitive justifications because they facilitated Apple's entry into the retail e-book market.[74] As a new entrant, Apple could not have had any market power. Consequently, Apple's use of MFN clauses could not in themselves have had any anticompetitive effects. Rather, the MFN clauses facilitated Apple's entry by ensuring that it would not be undercut on price by Amazon, the dominant incumbent. Although the MFN clauses would reduce price competition between Apple and Amazon, the two-sided nature of the market would just cause competition to be directed towards the other side of the market. This procompetitive explanation for the MFN clauses is evident from some of the facts relied on by the Court to find that Apple was part of the cartel:

> As described above, *Apple, quite simply, did not want to compete with Amazon on price.* Apple was confident that the iPad would be a revolutionary and wildly popular device. It was happy to compete with Amazon on that playing field, where it believed its strength resided. It would match its device — the iPad — against the Kindle. As HarperCollins executive Robert Zaffiris observed on January 20, *Apple is cutting a blanket agency deal to level the playing field and ultimately compete in two areas they feel good about — technology and iTunes* [emphasis added].[75]

With respect to the agency model, although it contributes to the theory that Apple was part of the cartel because it provides a means for Apple to extract a portion of the monopoly profits, there are still pro-competitive reasons why Apple would prefer the agency model over the wholesale model. For example, it is more efficient for a two-sided platform to give suppliers the power to set prices on the platform when they have better information on customer demand.[76] Furthermore, Apple used the agency model to sell apps through its App Store, which suggests that Apple may have legitimate business reasons for adopting such a pricing model for its platforms.[77]

The *Apple* case presents a useful contrast with the credit card cases analyzed in Part IV of this Paper. In *Visa-MasterCard*, the honour-all-cards rule reduced intrabrand competition between the credit card networks but not interbrand competition. Although the no-surcharge rule prevented merchants from steering through surcharges, it did not prevent merchants from engaging in other types of steering. In contrast, the no-discrimination rule employed by MasterCard and by Amex in the *Amex* case prevented steering of any type. As a result, the no-surcharge rule may reduce platform competition between the credit card networks but not to the same degree as the no-discrimination rule. The recognition that the no-discrimination rule may pose a greater risk to competition compared to the no-surcharge rule explains why the DOJ challenged the former but explicitly declined to challenge the latter in *Amex*.[78] In the *Apple* case, on the other hand, Apple's agreements with the publishers reduced both user and platform competition. The agreements facilitated a publisher cartel and thus reduced price competition between the publishers. The agreements also reduced platform competition because they forced Amazon to adopt the same distribution arrangement as Apple and reduced the price competition between the two platforms.

VI. Collusive Theories of Harm

The case law and economic literature analyzed in the previous parts of this Paper provide guidance on how to identify plausible collusive theories of harm in two-sided markets. First, platforms can potentially engage in collusion with other platforms. They can do this by expressly entering into a price-fixing agreement. MFN clauses can assist platforms to collude by reducing the incentives to cheat and deterring entry by maverick platforms. However, some characteristics of two-sided platforms make entering into a price-fixing agreement implausible or at least less likely. For example, a theory alleging that a platform organized as a not-for-profit association entered into a price-fixing agreement is implausible because its function is to maximize

output and not profits.[79] Furthermore, price-fixing by two-sided platforms is more complex because the cartelists have to coordinate on both sides of the market.[80] If the colluding platforms agree to restrict competition on only one side of the market, then competition will just shift to the other side to reduce the monopoly profits.[81] In addition, it is important to keep in mind that the fact that price is well above marginal cost on one side of the platform does not necessarily suggest there is collusion. The platform could be pricing high on that side in order to cross-subsidize the other.

Second, a two-sided platform can potentially facilitate collusion among its users. Again, looking at the organization of the platform would be important. A platform organized as a for-profit firm would not have an incentive to facilitate collusion among its users. The reason is that, since the platform is in a vertical relationship with its users, allowing them to collude would effectively raise the platform's costs. This situation would be analogous to a retailer facilitating collusion among its suppliers. This would not be in the retailer's interest unless it was vertically integrated upstream or it was receiving side-payments from the cartel to compensate it. But even if a two-sided platform had an incentive to facilitate an upstream cartel, it would be constrained by the fact that users raising price on one side of the market would induce users on the other side to exit. The exit of users would reduce the indirect network effects and thus reduce the value of the platform.[82] As a result, a platform would only facilitate collusion if it received side payments sufficient to offset the loss of profits from users exiting the platform. Alternatively, if users on the non-colluding side had inelastic demand or produced no indirect network effects,[83] then the platform would have more of an incentive to facilitate a cartel because the exit of users would be less likely or would result in less of a reduction in value to the platform.

If a two-sided platform implemented an agency model, rather than a wholesale model, then it would have more of an incentive to facilitate a user cartel. The reason is that the agency model provides a mechanism for the platform to extract a portion of the monopoly profits from the cartelists.[84] With the agency model, a platform would extract a portion of any monopoly profits since its fee is based on the price of the product being sold on its platform. A higher collusive price would mean a higher fee. Furthermore, if the platform is organized as an association then there is the heightened risk that the members will use it to facilitate a cartel. Associations can be useful mechanisms for facilitating cartels because they provide a means for members to reach a price-fixing agreement, to detect and punish cheaters and to prevent entry.[85] Similarly, members of a platform could use the platform to implement

a cartel agreement, to detect and punish members that cheat and to prevent the entry of potential members that would undercut the cartel.

VII. Conclusion

Courts and academics are still wrestling with the complex competition law issues surrounding two-sided markets. With respect to the online retail sector, the case law and literature all suggest that MFN clauses and the agency model of distribution may be used by two-sided platforms to lessen price competition and to deter entry by low-cost entrants. With respect to the credit card sector, however, the case law and literature are less clear. The restrictions on merchants may have anticompetitive harms but there are also plausible and substantial efficiency justifications for these practices. Consequently, it is not clear that with the current state of knowledge of two-sided markets that one can proclaim confidently that these practices have a negative effect on consumer welfare. Until we gain a better understanding of the effect on consumer welfare of these practices, a rule of thumb that can be applied in two-sided market cases is to treat as presumptively suspect any practices that have the effect of reducing competition between platforms, but to treat as permissible any practices that restrain competition within a platform if there are plausible and substantial efficiency justifications for such restraints.

As more competition law cases get litigated and economic analyses are conducted, our understanding of how to properly set competition law policy in two-sided markets will improve. This improved understanding will allow competition agencies to minimize error costs and maximize consumer welfare. This Paper hopes to contribute to this understanding by providing deeper insight into how to accurately identify collusive practices in two-sided markets.

Endnotes

[1] I would like to thank Professors Steven Salop and Mark Popofsky for their penetrating lectures on advanced antitrust economics and law and for their comments on my paper, both of which contributed immensely to its quality. I would also like to thank Professor Thomas Ross and an anonymous referee for their very helpful comments. All mistakes are my own. The views expressed in this paper are my own and do not reflect those of the Federal Trade Commission or any of its Commissioners.

[2] Some authors use the term "two-sided markets" and some use "two-sided platforms". The use of the word "market" in the two-sided market literature is not intended to have the same technical meaning as it does in the competition law context. In this paper, a platform that participates in a two-sided market is referred to as a "two-sided platform". Furthermore, although reference will

mostly be made to two-sided platforms, it should be noted that platforms can have more than two sides.

[3] (23 July 2013), CT-2010-010, online: Competition Tribunal <http://www.ct-tc.gc.ca/CMFiles/CT-2010-010_Reasons%20for%20Order%20and%20Order%20Dismissing%20the%20Commissioner%27s%20Application_337_38_7-23-2013_7109.pdf> [Visa-MasterCard].

[4] Collusive practices are practices which reduce the incentives of rival firms to compete with each other. These practices are often contrasted with exclusionary practices which reduce competition through the exclusion of a rival.

[5] See Jean-Charles Rochet & Jean Tirole, "Platform Competition in Two-Sided Markets" (2003) 1 J Eur Econ Ass'n 990 [Rochet & Tirole, "Platform Competition"]; Jean-Charles Rochet & Jean Tirole, "Two-Sided Markets: A Progress Report" (2006) 37 RAND J Econ 645 [Rochet & Tirole, "Two-Sided Markets"].

[6] *Ibid*, Rochet & Tirole, "Two-Sided Markets" at 664-65.

[7] See *ibid* at 648-49.

[8] See Rochet & Tirole, "Platform Competition", *supra* note 5 at 993-94.

[9] Direct network effects arise when a platform becomes more valuable to a user the more additional users there are on the platform. For example, a telephone network becomes more valuable to an individual telephone customer the more additional telephone customers there are because it makes possible more potential phone calls. In contrast, indirect network effects arise when a platform becomes more valuable because the existence of one set of users on a platform make it more valuable for another set of users.

[10] See Sandro Shelegia, "Multiproduct Pricing in Oligopoly" (2012) 30 Int'l J Indus Org 231.

[11] See Rochet & Tirole, "Platform Competition", *supra* note 5 at 1,017-18.

[12] See Richard Schmalensee, "Payment Systems and Interchange Fees" (2001) at 17, online: NBER <http://www.nber.org/papers/w8256.pdf> [unpublished].

[13] See Ricardo Gonçalves, "Policy Challenges in Two-Side Network Industries" (2003) 4 J Network Indus 327 at 334.

[14] See Rochet & Tirole, "Platform Competition", *supra* note 5 at 1,002-07.

[15] See Rochet & Tirole, "Two-Sided Markets", *supra* note 5 at 659-60.

[16] See David S Evans, "The Antitrust Economics of Multi-Sided Platform Markets" (2003) 20 Yale J Reg 325 at 367-70.

[17] See Andy Weir, "ZTE reveals cost of Windows Phone OS licensing", *Neowin* (19 January 2012), online: Neowin <http://www.neowin.net/news/zte-reveals-cost-of-windows-phone-os-licensing>.

[18] See Charles Arthur & Samuel Gibbs, "The hidden costs of building an Android device", The Guardian (23 January 2014), online: *The Guardian* <http://www.theguardian.com/technology/2014/jan/23/how-google-controls-androids-open-source>.

[19] See Ginny Marvin, "Android Closing Gap In Mobile Ad Revenue, Up 3 Percent In Q3 To 41.8 Pct. [Report]", *Marketing Land* (22 October 2014), online: Marketing Land <http://marketingland.com/android-closing-gap-mobile-ad-revenue-3-percent-q3-41-8-pct-report-105063>.

[20] See Andrea Amelio & Bruno Jullien, "Tying and Freebies in Two-Sided

Markets: Preliminary and Incomplete" (2007), online: Institut Économie Industrielle <http://idei.fr/doc/conf/sic/papers_2007/jullien.pdf>.

[21] See generally David S Evans, "How Catalysts Ignite: The Economics of Platform-Based Start-Ups" (2008), online: SSRN <http://papers.ssrn.com/sol3/papers.cfm?abstract_id=1279631>.

[22] See e.g. Bernard Caillaud & Bruno Jullien, "Chicken & egg: competition among intermediation service providers" (2003) 34 RAND J Econ 309; Andrei Hagiu, "Pricing and commitment by two-sided platforms" (2006) 37 RAND J Econ 720.

[23] See Evans, *supra* note 21 at 16-20.

[24] See Hagiu, *supra* note 22 at 720-21.

[25] See Michael L Katz & Carl Shapiro, "Systems Competition and Network Effects" (1994) 8 J Econ Persp 93 at 105-06.

[26] See Scott Andes, "Making the Market: How Interoperability and Tipping Points Can Influence Network Size" (2012) 9 Heinz J 1 at 7-8, online: The Heinz Journal <http://journal.heinz.cmu.edu/wp-content/uploads/2012/05/Final-Making-the-Market.pdf>.

[27] I want to thank Mark Popofsky for bringing this point to my attention.

[28] For a more detailed description of how credit card networks operate, see *Visa-MasterCard*, *supra* note 3 at paras 9-30.

[29] See *Visa-MasterCard*, *supra* note 3 at paras 35-42.

[30] See David S Evans & Richard Schmalensee, "The Economics of Interchange Fees and their Regulation: An Overview" in David S Evans, ed, *Interchange Fees: The Economics and Regulation of What Merchants Pay for Cards* (2011) 1 at 20-21, online: Competition Policy International <https://www.competitionpolicyinternational.com/assets/Hot-Tubs/Interchange-Fees-web.pdf>.

[31] See *ibid* at 12-13.

[32] See *Visa-MasterCard*, *supra* note 3 at paras 43-44.

[33] SC 1985, c C-34:

> **Price maintenance**
>
> 76. (1) On application by the Commissioner or a person granted leave under section 103.1, the Tribunal may make an order under subsection (2) if the Tribunal finds that
>
> (a) a person referred to in subsection (3) directly or indirectly
>
> (i) by agreement, threat, promise or any like means, has influenced upward, or has discouraged the reduction of, the price at which the person's customer or any other person to whom the product comes for resale supplies or offers to supply or advertises a product within Canada, or
>
> (ii) has refused to supply a product to or has otherwise discriminated against any person or class of persons engaged in business in Canada because of the low pricing policy of that other person or class of persons; and
>
> (b) the conduct has had, is having or is likely to have an adverse effect on competition in a market.

[34] See *Visa-MasterCard*, *supra* note 3 at paras 113-14.

[35] See *ibid* at paras 115-30.

[36] See *ibid* at paras 141-42.

[37] See *ibid* at paras 148-52.

[38] *Competition Act*, *supra* note 33:

> **Prohibition where abuse of dominant position**
>
> 79. (1) Where, on application by the Commissioner, the Tribunal finds that
>
> (a) one or more persons substantially or completely control, throughout Canada or any area thereof, a class or species of business,
>
> (b) that person or those persons have engaged in or are engaging in a practice of anti-competitive acts, and
>
> (c) the practice has had, is having or is likely to have the effect of preventing or lessening competition substantially in a market,
>
> the Tribunal may make an order prohibiting all or any of those persons from engaging in that practice.

[39] See *Commissioner of Competition v Canada Pipe Company Ltd*, 2006 FCA 233 at paras 63-73.

[40] *Competition Act*, *supra* note 33:

> 90.1 (1) If, on application by the Commissioner, the Tribunal finds that an agreement or arrangement — whether existing or proposed — between persons two or more of whom are competitors prevents or lessens, or is likely to prevent or lessen, competition substantially in a market, the Tribunal may make an order
>
> (a) prohibiting any person — whether or not a party to the agreement or arrangement — from doing anything under the agreement or arrangement; or
>
> (b) requiring any person — whether or not a party to the agreement or arrangement — with the consent of that person and the Commissioner, to take any other action.

[41] See Jürgen-Peter Kretschmer & Oliver Budzinski, "Advertised Meeting-the-Competition Clauses: Collusion Instead of Price Discrimination" (2009), online: SSRN <http://papers.ssrn.com/sol3/papers.cfm?abstract_id=1364208>. For a more thorough analysis of this flaw in the *Competition Act*, see Ralph Winter, "The Gap in Canadian Competition Law Following *Canada Pipe*" (2014) 27 Can Comp L Rev 293.

[42] See *Visa-MasterCard*, *supra* note 3 at paras 261-62.

[43] See Benjamin Klein et al, "Competition in Two-Sided Markets: The Antitrust Economics of Payment Card Interchange Fees" (2006) 73 Antitrust LJ 571 at 610-14.

[44] See Klein et al, *ibid* at 603-09.

[45] *Visa-MasterCard*, *supra* note 3 at para 374.

[46] See *MasterCard and Others v Commission*, C-382/12 P, online: Curia <http://curia.europa.eu/juris/document/document.jsf;jsessionid=9ea7d0f130de0acf97d61cff4e20bd0af05a4a47380f.e34KaxiLc3eQc40LaxqMbN4ObxiNe0?text=&docid=157521&pageIndex=0&doclang=en&mode=lst&dir=&occ=first&part=1&cid=145436>.

[47] *Ibid* at para 237.

[48] *National Bancard Corp (NaBanco) v VISA USA, Inc*, 779 F Supp (2d) 592 (11th Cir 1986).

[49] *Ibid* at 602.

[50] See Evans & Schmalensee, *supra* note 30 at 12-13.

[51] See Timothy J Muris, "Payment Card Regulation and the (Mis)Application

of the Economics of Two-Sided Markets" (2005) 2005 Colum Bus L Rev 617 at 632-33.

[52] See Klein et al, *supra* note 43 at 592.

[53] *United States v American Express Co (In re Am Express Antisteering Rules Antitrust Litig)*, 10-CV-4496 (NGG) (RER) (ED NY 2015), online: U.S. DOJ <http://www.justice.gov/atr/cases/f312000/312037.pdf> [Amex]. In *Visa-MasterCard*, only MasterCard had a no-discrimination rule (which is referred to as an "antisteering rule" in the DOJ's case). However, the rule was not analyzed extensively in the decision because it was lumped in with the other merchant restraints. See *Visa-MasterCard*, *supra* note 3 at paras 43-45.

[54] *Amex*, *ibid* at 107.

[55] *State Oil Co v Khan*, 522 US 3 at 15.

[56] See *Visa-MasterCard*, *supra* note 3 at paras 276-321. For competition law literature supporting this line of argument, see e.g. Dennis W Carlton & Alan S Frankel, "The Antitrust Economics of Credit Card Networks" (1995) 63 Antitrust LJ 643; Dennis W Carlton & Alan S Frankel, "Transaction Costs, Externalities, and 'Two-Sided' Payment Markets" (2005) 2005 Colum Bus L Rev 617; and David A Balto, "The problem of interchange fees: costs without benefits?" (2000) 21 Eur Comp L Rev 215.

[57] See Klein et al, *supra* note 43 at 617.

[58] These results have been observed empirically. Australia instituted a regulatory regime that required Visa and MasterCard to set their interchange fees closer to costs. This resulted in Visa and MasterCard providing fewer rewards and imposing higher fees on their cardholders. See Howard Chang, David S Evans & Daniel D Garcia Swartz, "The Effect of Regulatory Intervention in Two-Sided Markets: An Assessment of Interchange Fee in Australia" in David S Evans, ed, *Interchange Fees: The Economics of What Merchants Pay for Cards* (2011) 57 at 68-69, online: Competition Policy International <https://www.competitionpolicyinternational.com/assets/Hot-Tubs/Interchange-Fees-web.pdf>.

[59] See Klein et al, *supra* note 43 at 626.

[60] *Visa-MasterCard*, *supra* note 3 at 398. Although the Department of Finance did not issue any new regulations in response to the *Visa-MasterCard* decision, it did nevertheless intervene by persuading Visa and MasterCard to offer voluntary commitments to reduce their interchange fees. See Department of Finance, Press Release, "Archived — Minister of Finance issues statement on voluntary Visa and MasterCard proposals" (4 November 2014), online: Department of Finance Canada <http://www.fin.gc.ca/n14/14-157-eng.asp>.

[61] MFN clauses are also sometimes referred to as "Most-Favoured-Customer" clauses.

[62] See Luca Aguzzoni et al, *Can 'Fair' Prices Be Unfair? A Review of Price Relationship Agreements* (2012) at paras 3.2-3.3, online: Lear <http://www.learlab.com/pdf/oft1438_1347291420.pdf>.

[63] See e.g. Jonathan B Baker & Judith A Chevalier, "The Competitive Consequences of Most-Favored-Nation Provisions" (2013) 27 Antitrust 20; Steven C Salop & Fiona Scott Morton, "Developing an Administrable MFN Enforcement Policy" (2013) 27 Antitrust 15; Joseph J Simons, "Fixing Price with Your Victim: Efficiency and Collusion with Competitor-Based Formula Pricing Clauses" (1989) 17 Hofstra L Rev 599; Jonathan B Baker, "Vertical

Restraints with Horizontal Consequences: Competitive Effects of "Most-Favored-Customer" Clauses" (1996) 64 Antitrust LJ 517; and Pinar Akman & Morten Hviid, "A Most-Favoured-Customer Clause with a Twist" (2006) 2 Eur Comp J 57.

[64] See generally Andrei Hagiu & Julian Wright, "Marketplace or reseller?" (2013), online: Harvard Business School <http://www.hbs.edu/faculty/Publication%20Files/Marketplace_Reseller_HBS%20WP%2001312014_138e1ae7-e457-4143-b984-249c4a9ca0aa.pdf>.

[65] See Justin P Johnson, "The Agency Model and MFN Clauses" (2014), online: SSRN <http://papers.ssrn.com/sol3/papers.cfm?abstract_id=2217849>.

[66] See Andre Boik & Kenneth S Corts, "The Effects of Platform MFNs on Competition and Entry" (2013), online: Yale University <http://economics.yale.edu/sites/default/files/corts_17-oct-2013.pdf>.

[67] See Øystein Foros, Hans Jarle Kind & Greg Shaffer, "Turning the Page on Business Formats for Digital Platforms: Does Apple's Agency Model Soften Competition?" (2013), online: SSRN <http://papers.ssrn.com/sol3/papers.cfm?abstract_id=2317715>.

[68] European Commission, Press Release, "Antitrust: Commission opens formal investigation into Amazon's e-book distribution arrangements" (11 June 2015), online: European Commission <http://europa.eu/rapid/press-release_IP-15-5166_en.htm>.

[69] Bundeskartellamt, Press Release, "Amazon abandons price parity clauses for good" (26 November 2013), online: Bundeskartellamt<http://www.bundeskartellamt.de/SharedDocs/Meldung/EN/Pressemitteilungen/2013/26_11_2013_Amazon-Verfahrenseinstellung.html>; and Office of Fair Trading, Press Release, "OFT welcomes Amazon's decision to end price parity policy" (29 August 2013), online: The National Archive <http://webarchive.nationalarchives.gov.uk/20140402142426/http://www.oft.gov.uk/news-and-updates/press/2013/60-13>.

[70] Competition Commission, *Private Motor Insurance Market Investigation: Provisional findings report* (2013), online: The National Archive <http://webarchive.nationalarchives.gov.uk/20140402161338/http://www.competition-commission.org.uk/assets/competitioncommission/docs/2012/private-motor-insurance-market-investigation/131217_summary.pdf>.

[71] Bundeskartellamt, Press Release, "Online hotel portal HRS's 'best price' clause violates competition law – Proceedings also initiated against other hotel portals" (20 December 2013), online: Bundeskartellamt <http://www.bundeskartellamt.de/SharedDocs/Meldung/EN/Pressemitteilungen/2013/20_12_2013_HRS.html>; Office of Fair Trading, *Investigation into the hotel online booking sector*, online: The National Archives <http://webarchive.nationalarchives.gov.uk/20140402142426/http:/www.oft.gov.uk/OFTwork/competition-act-and-cartels/ca98/closure/online-booking/>; and European Commission, Press Release, "Antitrust: Commission announces the launch of market tests in investigations in the online hotel booking sector by the French, Swedish and Italian competition authorities" (15 December 2014), online: European Commission <http://europa.eu/rapid/press-release_IP-14-2661_en.htm>.

[72] *United States v Apple Inc*, 952 F Supp (2d) 638 (SD NY 2013) [*Apple*]. The European Commission had earlier investigated Apple and four

major publishers for the same activities and found them to have engaged in coordinated behaviour to raise prices. The Commission obtained commitments from the parties to terminate the agency agreements and to not use MFN clauses for five years. See EC, Commission Decision (2012) 9288; Case COMP/AT.39847-E-BOOKS, online: European Commission <http://ec.europa.eu/competition/antitrust/cases/dec_docs/39847/39847_26804_4.pdf>.

[73] Apple is currently appealing the case. See Philip Elmer-DeWitt, "They laughed at the DOJ's e-book antitrust case against Apple" Fortune (15 December 2014), online: *Fortune* <http://fortune.com/2014/12/15/mondays-e-book-antitrust-appeal-hearing-went-well-for-apple/>.

[74] See Geoffrey Manne, "Why I think the Apple e-books antitrust decision will (or at least should) be overturned", *Truth on the Market* (22 July 2013), online: Truth on the Market <http://truthonthemarket.com/2013/07/22/why-i-think-the-apple-e-books-antitrust-decision-will-or-at-least-should-be-overturned-2/>.

[75] *Apple*, *supra* note 71 at 663.

[76] See Hagiu & Wright, *supra* note 63.

[77] *Apple*, *supra* note 71 at 658.

[78] *Amex*, *supra* note 52 at 25.

[79] Although Visa and MasterCard converted into corporations and are no longer not-for-profit platforms, there are still many platforms that exist as not-for-profits. For example, France's national payment card network, Groupement des Cartes Bancaires CB, is organized as a not-for-profit association. See "What is CB?", online: Cartes Bancaires CB <http://www.cartes-bancaires.com/spip.php?rubrique50>. Another example is the Toronto Real Estate Board. The Board consists of licensed real estate brokers and operates an online real estate listing platform, the Multiple Listing Service, on behalf of its members. See "Who We Are", online: Toronto Real Estate Board <http://www.torontorealestateboard.com/about_TREB/who_we_are/index.htm>.

[80] See David S Evans & Richard Schmalensee, "The Industrial Organization of Markets with Two-Sided Platforms" (2007) 3 Comp Pol'y Int'l 151 at 174.

[81] This is not to argue, however, that platforms should be allowed to collude on one side of a market merely because they may compete away the monopoly profits, since the monopoly profits may not be competed away entirely, but merely that a collusive agreement would be more difficult to maintain in the case of a two-sided market.

[82] The fear that the iBookstore would not have a sufficient amount of customers because of the publishers raising prices through their cartel was the reason that Apple included price caps in its agreements with the publishers. If it did not have to be concerned about the effect on the other side of the market, Apple would have had an incentive to let the publishers raise prices as high as they wanted since it was receiving a part of the monopoly profits. See *Apple*, *supra* note 72 at 659.

[83] For example, since readers place little value in ads, a newspaper could extract monopoly profits from advertisers and not have to worry about the effect this would have on the value of the platform.

[84] In *Apple*, the existence of the agency agreements made the U.S. DOJ's theory

of harm more plausible because they provide an explanation for how Apple could profit from an upstream cartel.

[85] See Andrew I Gavil, William E Kovacic & Jonathan B Baker, *Antitrust Law in Perspective: Cases, Concepts and Problems in Competition Policy*, 2d ed (St. Paul, MN: Thomson/West, 2002) at 235-36.