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# The Costs of Loyalty. On Loyalty Rewards and Consumer Welfare

*Os custos da Lealdade. Sobre recompensas de lealdade e Bem-estar do consumidor*

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**RESUMO**

As recompensas de fidelidade são generalizadas. As companhias aéreas oferecem programas de passageiros frequentes; cartões de crédito oferecem milhas, pontos e devolução de dinheiro; e lojas de mantimentos e farmácias oferecem pontos para resgatar produtos "gratuitos". Apesar de seu enquadramento, no entanto, "recompensas" podem prejudicar os consumidores. Acadêmicos emergentes notaram recentemente que, embora as recompensas bloqueiam os consumidores e aumentassem os preços dos bens, os tribunais e os reguladores prestaram pouca atenção a eles. Observando como surgiu uma tendência de "Sem Contrato" em compromissos de longo prazo depois que os consumidores perceberam que as taxas introdutórias do teaser com uma cláusula de lock-in desencadeavam taxas de exploração subseqüentes, eles concluíram que os consumidores também podem aprender os custos de lealdade. Neste artigo, desenvolvo uma visão alternativa, argumentando que existem obstáculos econômicos e psicológicos para o surgimento de "Sem lealdade". No que diz respeito ao anterior, enfrentando uma maior concorrência, os vendedores precisam manter os consumidores para permanecer no mercado e obter lucro. As recompensas de fidelidade

**ABSTRACT**

Loyalty rewards are pervasive. Airlines offer frequent flyer programs; credit cards provide miles, points, and cash-back; and groceries stores and pharmacies offer points to redeem "free" products. Despite their framing, however, "rewards" can harm consumers. Academics have recently argued that while rewards lock-in consumers and increase the prices of goods, courts and regulators have paid little attention to them. However, they have also suggested that consumer learning can cure current problems loyalty rewards produce on markets.

In this article, I develop an alternative view, arguing that there are economic and psychological constraints to the self-corrective power of markets, and that loyalty rewards are more harmful than previously stated. Regarding the limits of markets to eradicate rewards, I argue that loyalty rewards provide sellers with valuable information about consumer behavior in an efficient way. This information allows sellers to segment the market and tailor especial marketing strategies to keep their most valuable consumers loyal to them and enhance their spending. In addition, I discuss that consumers tend to overestimate the value of rewards, which leads them to pick bundles that

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podem bloquear os consumidores, mas também permitem que os vendedores obtenham informações sobre seus clientes. Esta informação é crítica para os vendedores, porque permite segmentar o mercado e segmentar promoções e propaganda sob medida para os clientes mais valiosos. A falta de uma boa base de dados coloca uma empresa em uma séria desvantagem competitiva. Quanto aos obstá- culos psicológicos, os consumidores tendem a superestimar seu valor. Recompensas podem desenvolver rea ções afetivas e cravings em compradores. Os consumidores também preferem o mercado com recompensas porque o produto-recompensa do pacote parece ser mais valioso do que realmente é para uma parte importante do mercado. A principal implicação deste trabalho é que ambos, consumidores e vendedores, preferem mercados com recompensas. Consequentemente, pesquisas futuras devem esclarecer os méritos da interven- ção legal em mercados específicos. Este trabalho analisa as recompensas de evolução mostradas nos setores financeiro e aéreo, argumentando que os programas de fidelidade desencadeiam problemas particulares em mercados específicos. Este artigo também sugere que os custos das recompensas são mais severos do que o lock-in e os preços mais altos. Além dos problemas específicos do mercado (como subsidios cruzados cruzados e excesso de gastos), as recompensas podem criar uma ilusão de vantagem (que deriva do "efeito médio"), desencadeando uma falha no mercado comportamental.

include rewards as part of the deal. According to psychological evidence, this is more patent when a reward is not valuable in itself but a medium that allows redeeming a valuable good in the future. This is the case of miles and points, which consumers tend to maximize despite not assessing their real exchange value.

I survey the evolution of rewards in the credit card and airline markets, claiming that loyalty programs cause particular problems in each market. Nonetheless, I argue that successful loyalty programs, in addition to lock-in and higher prices, may generally produce three other issues. First, loyalty rewards might produce affective reactions and cravings on buyers, which soften switching rates and lessen market competition. Second, loyalty rewards that involve “media” tend to create an illusion of advantage that distorts people’s preferences and might lead to inefficiencies. Third, loyalty rewards can impose distributional costs on low-income consumers. This is patent in the credit card market, where loyalty rewards cause a general increase in prices but only a handful of high-income consumers benefit from loyalty rewards.

The main implication of this article is that both consumers and buyers tend to prefer markets with loyalty rewards. If the self-corrective power of markets is limited, then legal intervention may be necessary, as demonstrated by countries where regulators have in fact regulated rewards. Of course, a detailed market-specific assessment is necessary to determine whether regulation is worth its costs.

**Palavras-chave**: Fidelidade, Recompensa e Consumo

**Keywords:** Loyalty, Rewards and Consumer behavior

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# 1. Introduction

Consumer protection has gained increased media attention in recent years. Governments have enacted new regulations to protect buyers from fraud and deception, among other forms of abusive conduct.[2] However, as two of the most eminent scholars in the field of consumer protection have noted, most of the analysis has focused on mandatory rules, disclosure mandates and default rules, but less attention has been paid to freedom *from* contract.[3]

Freedom from contract is an effective protective device for consumers. Sellers not only need to gain new customers, but also to keep their loyal consumers to stay in business and make a profit. With freedom from contract, consumers can switch to another provider in case of exploitation. This ability to switch from provider protects consumers ex-ante, deterring sellers from exploiting consumers in first place.[4]

Since freedom from contract benefits consumers, they should demand it from sellers. If this occurred, markets would increasingly offer free exit from deals. However, sellers have strong economic incentives to lock-in consumers. Studies indicate that companies can increase their profits significantly by retaining just five percent more of their customers.[5] Sellers can do this by two means: (i) punishing exit; or (ii) rewarding loyalty. The former mechanism was very common in long-term contracts with the inclusion of early termination fees. Sellers enticed consumers with promotional introductory rates, which then became exploitative. Consumers often only paid attention to the introductory rates and overlooked the subsequent high fees. After benefiting from the promotional rate, consumers experienced the "bill-shock."[6] Given the existence of a termination fee, consumers had no opportunity to end the contractual relationship. However, consumers have become increasingly aware of this, and the market responded offering "No Contract" contracts.[7] Today even firms that offered lock-in contracts in the past lure consumers with a "No Contract" policy.[8]

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[2] In the US, former President Obama enacted important pieces of legislation, especially after the financial crisis (e.g., the Credit CARD Act of 2009 and the Dodd–Frank Wall Street Reform and Consumer Protection Act of 2010). In Europe, DIRECTIVE 2011/83/EU OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 25 October 2011 on consumer rights, amending Council Directive 93/13/EEC and Directive 1999/44/EC of the European Parliament and of the Council and repealing Council Directive 85/577/EEC and Directive 97/7/EC of the European Parliament and of the Council.

[3] Oren Bar-Gill and Omri Ben-Shahar, "Exit from Contract," *Journal of Legal Analysis*, October 1, 2014, 152. ("A host of different regulatory techniques are employed in the service of consumer protection—from disclosure mandates, to pro-consumer default rules, to outright bans of abusive practices … But there is one, powerful antidote to abuse that has received less attention: Exit.").

[4] *Ibid.*

[5] Lisa O'Malley, "Can Loyalty Schemes Really Build Loyalty?," *Marketing Intelligence & Planning* 16, no. 1 (February 1, 1998): 47. ("Companies can boost profits by almost 100 per cent by retaining just 5 per cent more of their customers"). Citation omitted.

[6] Bar-Gill and Ben-Shahar, "Exit from Contract," 154.

[7] *See*, Oren Bar-Gill and Omri Ben-Shahar, *No Contract?*, Rochester, NY, SSRN Scholarly Paper ID 2220271 (Social Science Research Network, February 16, 2013); Bar-Gill and Ben-Shahar, "Exit from Contract." No

Sellers looking for another instrument to lock-in consumers found the loyalty program. Loyalty programs lure consumers with different types of rewards, some of which can make exit costly. Rewards can be immediate or delayed. An immediate reward is a mere promotion. Sellers usually offer 2x1 or similar tactics to encourage consumers to try their products. If consumers benefit from the promotion, then they are free to buy from another seller. However, *delayed* rewards, such as points or miles, can trigger a lock-in problem. Once a consumer has started accumulating points with a provider, switching to a different one implies losing the endowed progress to redeem the first provider's reward (e.g., losing the miles to redeem a plane ticket). With delayed rewards exit "is not free." However, unlike termination fees, consumers love rewards.[9] The power of framing and loss aversion help rewards to be less salient switching costs.[10] While I sometimes refer to both types of rewards throughout this piece, this article focuses on delayed rewards.

Professors Bar-Gill and Ben-Shahar's recently published article notes how loyalty rewards are artifacts designed to erect barriers to exit at the expense of consumers.[11] In their piece, they note how termination fees declined thanks to consumer learning, and suggested that a similar process can help overcome the hurdles of loyalty programs. In this paper, I share Professors Ben-Shahar and Bar-Gill's overall premise but I argue that markets are unlikely to correct themselves. Sellers need rewards not only to erect barriers to exit, but also to collect information about their consumers. On the other hand, consumers perceive rewards as extra value and tend to overestimate their worth. This psychological effect can trigger a behavioral market failure.[12] Consumers can certainly learn that some rewards are not worth the effort towards redemption; however, this is a context-specific learning. The assessment of trends in the credit card market and the airline industry shows that rewards emerge as a response to market competition. Actually, the more intense the competition in a market is, the more necessary it is for firms to develop loyalty programs.

One of the most relevant implications of this work is its emphasis on the ways rewards affect consumers' affective system.[13] When a reward is included in the deal, consumers tend to perceive an illusion of advantage. Furthermore, sometimes they tend to maximize the reward rather than the outcome of the transaction. The consequence of this "medium effect" is an inconsistency between consumers' preferences and their efforts. I consider these two effects as the most relevant presented in this work. However, consumers can also develop cravings for rewards. This is a type of conditioning, which allows sellers to couple cues with a desired routine (*e.g.*, the use of a particular product). If there is a craving in the market, sellers

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contracts are, of course, legally binding contracts. However, what the concept conveys is that consumers are not going to be stuck prospectively with terms they do not like. Bar-Gill and Ben-Shahar, "No Contract?," 2.

8 Bar-Gill and Ben-Shahar, "No Contract?," 2.

9 As Professors Bar-Gill and Ben-Shahar put it "[t]ermination fees are viewed as penalties and are widely resented, while at the same time loyalty plans are adored." *Ibid. at 159.*

10 *Ibid. at 154.*

11 Bar-Gill and Ben-Shahar, "Exit from Contract."

12 On behavioral market failures, *see* Oren Bar-Gill, *Seduction by Contract: Law, Economics, and Psychology in Consumer Markets* (Oxford: Oxford University Press, 2012), chap. 1.

13 Daniel Kahneman, *Thinking, Fast and Slow* (Macmillan, 2011), chap. 1.

will have strong incentives to exploit it rather than educate consumers. Additionally, though there is only a handful of empirical studies on this topic, there is evidence that rewards can induce cognitive learning processes on consumers, which alter their memories, distort their perceived satisfaction, and develop greater patience, softening competition in the market.

This article also notes that rewards lead to particular problems in specific markets. In the credit card market, rewards produce a general increase in prices. This is because issuers charge interchange fees to the merchants to fund the rewards; and merchants transfer this cost to the general public, which generates not only a general rise of prices but also cross-subsidization between consumers. This subsidy is regressive because lower-income consumers who have no access to rewards-cards subsidize high-income consumers, who, eventually, benefit from rewards. In the airline industry, in addition to the illusion of advantage that can lead people to make poor choices, Frequent Flyer Programs (FFP) can erect barriers to entry to particular geographic markets. When there is a dominant actor in a hub, then most travelers would have accumulated miles they would not like to lose. Moreover, FFP allow airlines to collect valuable information to target marketing more effectively and keep the most profitable consumers loyal to the brand.

This article is structured as follows: Section I introduces the topic. It follows the narrative and analysis of Professors Bar-Gill and Ben-Shahar's article.[14] Section I deals with the value of freedom from contract from a consequentialist view. It emphasizes the importance of exit from contract as a protective device for consumers and introduces the topic of switching costs—those costs that prevent consumers from switching from one seller to another, enabling sellers to escape from competition. This section summarizes the trend identified by Professors Bar-Gill and Ben-Shahar towards a "No Contract" model and notes the reasons that explain why loyalty rewards have escaped public scrutiny.

Section II addresses loyalty rewards in light of marketing literature. This part discusses the economic incentives sellers have to offer rewards, how consumers perceive them, how sellers design rewards to create an appearance of advantage, and the outcomes of loyalty rewards. I emphasize the concept of "medium maximization" and the development of cravings. This section notes that, ultimately, rewards can trigger a behavioral market failure. Section III surveys the recent evolution of rewards in the credit card market and the airline industry. Credit card transactions are probably the most habitual act involving rewards, and frequent flyer programs provide one the most attractive rewards for consumers, hence their particular analysis. Section IV concludes.

## 2. Free Exit from Contract, Lock-In and Consumer Welfare

Free exit is a strong protection for consumers. It keeps markets competitive among incumbents and facilitates entry into the market. With free exit, sellers have incentives to provide better quality, lower prices, and greater value than the rest of the firms in the marketplace. Indeed, those sellers offering inconvenient deals risk losing market share or even going out of business. Since consumers can look for a better alternative in case an abusive

[14] Bar-Gill and Ben-Shahar, "Exit from Contract."

term triggers or quality drops, sellers should avoid disappointing their consumers. In this sense, the prospect of consumer switching acts as a deterrent of consumer abuse.[15]

In addition, free exit from contract favors entry to the market, disciplining incumbents and encouraging innovation.[16] Indeed, if prices rise significantly, potential market participants might find it attractive to enter the market, which might lead to a post-entry price-war. Entry benefits consumers and harms incumbents. However, entrants need potential customers to recoup the investments of entry and stay in the market. If most consumers cannot switch from provider, potential entrants will tend to lack the economic incentives to defy incumbents. In this sense, a responsive demand enhances competition in the market among incumbents, allowing entry, and, accordingly, preventing abuses.

When exit is too costly, there is a "lock-in" problem. Locked-in consumers cannot escape from inconvenient deals. The costs of lock-in are reduced competition in the market among incumbents, less dynamic markets, and risk of abuses. Though in the past free exit was discussed only with respect to long-term commitments, nowadays free exit also plays a relevant role in one-shot deals.[17] For instance, withdrawal rights provide the opportunity to return goods in one-shot transactions.[18] More importantly for the purpose of this work, sellers try to maintain the patronage of their consumers in transactions that are not long-term in nature, but which can evolve towards a similar long-term model thanks to the introduction of loyalty rewards in the deal.

## 2.1. Switching Costs : Sticks, Carrots and their Perception by Consumers

### 2.1.1. Switching Costs

When consumers face limited or restricted freedom from contract, economists say consumers face *switching costs*.[19] In Edlin and Harris' words, "[s]witching costs are those costs that are incurred when switching from one supplier of a particular good or service to another supplier, including money costs and the value of users' time."[20] There might be many causes that explain these costs, such as different technologies firms use, learning costs, and the introduction of contractual terms that deter exit. Generally speaking, "switching costs are

[15] *Ibid. at 152.* ("Consumers' ability to exit from undesirable deals provides meaningful protection against abuse. First, it allows the consumer to end the abuse by ending the contractual relationship. Second, the threat of exit deters abuse; sellers have a strong incentive to keep their customers happy when they know that bad behavior will result in consumer exit and hurt their bottom line.").

[16] William J. Baumol et al., "Contestable Markets and the Theory of Industry Structure," 1982.

[17] Bar-Gill and Ben-Shahar, "Exit from Contract," 157.

[18] *Ibid.*

[19] *See, e.g.,* Joseph Farrell and Paul Klemperer, "Coordination and Lock-In: Competition with Switching Costs and Network Effects," in *Handbook of Industrial Organization*, ed. M. Armstrong and R. Porter, vol. Volume 3 (Amsterdam: North-Holland: Elsevier, 2007), 1967–2072.

[20] Aaron Edlin and Robert Harris, "The Role of Switching Costs in Antitrust Analysis: A Comparison of Microsoft and Google," *Yale Journal of Law and Technology* 15, no. 2 (July 9, 2013): 176, http://digitalcommons.law.yale.edu/yjolt/vol15/iss2/4. Citing Farrell and Klemperer, "Coordination and Lock-In," 1971. Some switching costs are inherent to the product or service. Inherent switching costs include compatibility issues, the learning of a new product or technology, uncertainty, and also the time that takes to switch from one supplier to another. However, switching costs can also be strategic, artificial artifacts designed by sellers with the specific purpose of inducing consumers' lock-in. These artificial costs can be manipulated and increased. As I will detail below, loyalty rewards are a good example of strategic switching costs.

created whenever the consumer makes an investment specific to his current seller that must be duplicated for any new seller."[21] When switching costs are sufficiently high to induce consumers to stay with a current supplier they do not like rather than switching to another that they prefer, there is a *lock-in* problem.[22]

Lock-in provides sellers with market power—the ability to gain profits above the competitive level[23]—and this occurs precisely because consumers cannot walk away when sellers decide to exploit them. Of course, consumers do not renounce to their freedom to exit the contract for nothing. In long-term contracts, firms lure consumers with teaser promotional rates, and ask for a long-term commitment in return.[24] In this case, consumers can get a product in very convenient conditions in period 1 (even below-cost). Subsequently, however, when consumers are locked-in, sellers can charge a supra-competitive price in period 2, to recoup the investment of period 1. Accordingly, for multi-period long-term contracts, lock-in generates *quantity distortions*: excessive purchases in the low-price period and below-optimal purchases in the high price period.[25] Though firms may compete for market power ex ante, offering convenient conditions to induce consumers to contract, which might compensate higher fees in period 2, "[m]ost theoretical models confirm the popular intuition that switching costs raise firms' profits and lower social welfare."[26]

Lock-in reduces the flexibility of consumers' buying patterns since they cannot adjust to new market conditions and new technologies switching to more innovative products.[27] For example, a consumer of internet services might sign a 2-year contract with an exit penalty. If a new technology emerges, which the consumer values more than her current service, and her supplier does not offer it, she would need to either enter into a new contract in addition her current contract or pay the early termination fee. Lock-in often means that customers stick to a service that they value less.

In addition, lock-in hinders the availability of potential consumers in the market, discouraging entry. This leads to *static* and *dynamic* inefficiencies. As previously indicated, the market is not disciplined by the prospect of entry, facilitating consumer exploitation, and coordinated behavior in an oligopolistic market.[28] Furthermore, potential entrants do not have incentives to introduce more innovative products or terms, because they cannot recoup the investments of entry without consumers available to switch to their products.

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[21] Paul Klemperer, "Markets with Consumer Switching Costs," *The Quarterly Journal of Economics* 102, no. 2 (May 1, 1987): 1.

[22] Edlin and Harris, "The Role of Switching Costs in Antitrust Analysis," 176. ("“Lock-in” is defined as switching costs that are sufficiently high so that buyers stay with a current supplier rather than switch to a supplier whose product they consider to be preferable (or, alternatively, that the costs of switching suppliers exceed the benefits of switching.")

[23] *See, e.g.*, William M. Landes and Richard A. Posner, "Market Power in Antitrust Cases," *Harvard Law Review* 94, no. 5 (March 1, 1981): 937–96.

[24] Bar-Gill, *Seduction by Contract*, chap. 1.

[25] Bar-Gill and Ben-Shahar, "Exit from Contract," 154.

[26] Paul Klemperer, "Switching Costs," in *The New Palgrave Dictionary of Economics*, ed. Steven N. Durlauf and Lawrence E. Blume, 2d ed. (Basingstoke: Nature Publishing Group, 2008), 125–28. This is developed by Professors Bar-Gil and Ben-Shahar. *See* Bar-Gill and Ben-Shahar, "Exit from Contract," pt. 3.

[27] Bar-Gill and Ben-Shahar, "Exit from Contract," 154.

[28] George J. Stigler, "A Theory of Oligopoly," *Journal of Political Economy* 72, no. 1 (February 1, 1964): 44–61.

### 2.1.2. Sticks, Carrots and The Rise of 'No Contract'

Contractual switching costs come in two forms: as sticks and as carrots.[29] *Sticks* are penalties —out of pocket costs—that consumers must pay to exit a contract. *Carrots*, in contrast, *reward* non-exit. Examples abound in many markets: most airlines offer FFPs; credit cards offer miles, points and cash-back; supermarkets and pharmacies also offer points that allow consumers to redeem products after reaching a redemption target, miles, and the like (hereinafter, I will use the word "medium" to refer to these means that allow consumers to redeem a reward).[30] As long as there is a *delayed* reward, consumers switching to a different seller face an incremental switching cost (more on this in the next section).

While early termination fees were a common practice in the U.S., today a "No Contract" model prevails in many markets. Firms seduce consumers stressing the possibility to terminate the contract at any time —even firms that used to lock-in consumers with exit penalties in the past.[31] Professors Bar-Gill and Ben-Shahar explain this trend is a market response to consumer learning. They show consumers realized—from their own experiences, and the experiences of others—that the appeal of up-front offers of long-term commitments ended in hardship, either as a "bill shock" or as a "quality drop."[32] Since consumers learned the tricks sellers used to take advantage of their imperfect foresight, sellers developed a new business model responsive to consumers' hesitations about the costs of lock-in: "No-Contract."[33]

Starting as a strategy for low-income and low-credit consumers, "No Contract" is expanding throughout the market.[34] Once termination fees became salient, sellers had to look for another mechanism to lock-in consumers. And they found an effective one: loyalty rewards. While sticks are declining, loyalty rewards are on the rise.[35] In 2005 Capizzi and Ferguson documented that according to Web Flyer, "there [were] 89 million members of airline frequent-flyer programs in the world, 74 million of them in the USA alone. The Food Marketing Institute report[ed] that more than 76 percent of all US grocery retailers with 50 or more stores [offered] a frequent-shopper program."[36] Furthermore, they noted that "40 percent

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[29] This is the terminology adopted by Bar-Gill and Ben-Shahar. *See, Ibid. at 157.*

[30] Following the psychology literature. See, e.g., Christopher K. Hsee et al., "Medium Maximization," *Journal of Consumer Research* 30, no. 1 (June 1, 2003): 1–14.

[31] *Ibid. at 153.* ("A striking trend in consumer transactions is the rise of the "No Contract" contract. Businesses entice consumers with the assurance that no commitment is required—that the consumer can terminate the service freely at any time, without paying a termination penalty. Web sites, storefront ads, billboards, and various marketing vehicles now carry the increasingly colloquial pledge of "No Contract." Providers of wireless and internet service, cable TV, security and alarm systems, health clubs, energy utilities, and even bottled water suppliers, which used to lock consumers in with exit penalties, now lure new customers by the comfort of No Contract.").

[32] *Ibid. at 154.*

[33] This terminology was coined by Professors Bar-Gill and Ben-Shahar. See Bar-Gill and Ben-Shahar, "No Contract?"

[34] *Ibid. at 2.*

[35] Bar-Gill and Ben-Shahar, "Exit from Contract," 153.

[36] Michael T. Capizzi and Rick Ferguson, "Loyalty Trends for the Twenty-first Century," *Journal of Consumer Marketing* 22, no. 2 (March 1, 2005): 72.

of all Visa and MasterCard issuers [operated] a rewards program tied to their credit card offering."[37]

The rising trend of loyalty programs is remarkable. According to the Colloquy Loyalty Census of 2015, there were 355.9 million members of frequent-flyer programs in the USA that year,[38] which means an increase of 381% in 10 years. The same report accounts for 169.7 million of loyalty program members in the groceries market,[39] 577.9 million of members in the financial sector,[40] and 267.6 million of members is the drugstore sector, one of fastest growing sectors.[41] In Colloquy's view, "[t]he big finding in the 2015 Census is that the membership growth shows no signs of slowing; it's still going gangbusters, with 3.32 billion loyalty members in 2014, compared with 2.65 billion in 2012."[42] This trend also reaches business models that in principle were targeted at price sensitive consumers (e.g., low-cost airlines, and prepaid cards).

Though having the potential to be at least as harmful as stick-based switching costs, loyalty rewards have tended to escape public scrutiny. Professors Bar-Gill and Ben-Shahar's article is a remarkable contribution addressing ways to overcome this issue. They explained the main causes of this different perception are the power of framing and loss aversion.[43] I will refer to this topic in the following paragraphs.

### 2.1.3. The Power of Framing, Loss Aversion and Loyalty Rewards

"Sticks" and "carrots" appeal to different psychological sweet spots. Consumers that are able to anticipate stick-based switching costs tend to underestimate them because of *myopia*. Myopia is excessive discounting of future costs and benefits.[44] "Myopic consumers care more about the present and not enough about the future."[45] A myopic consumer, accordingly, finds a multi-period contract attractive when it offers low introductory fees, and higher fees in later periods.[46]

When it deals with loyalty rewards, however, consumers tend to underestimate the effects of lock-in for mainly two interrelated reasons: the power of *framing* and *loss*

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37 *Ibid. at 73.*

38 Colloquy, *The 2015 Loyalty Census, Big Numbers Big Hurdles*, (2015), 10.

39 *Ibid. at 7.*

40 *Ibid. at 9.*

41 *Ibid. at 7.* ("The launch of Walgreens' Balance Rewards program in 2012, which hit 100 million members in its first two years, made a big contribution to the healthy 88% growth in the drugstores category. Meanwhile, Rite Aid and CVS Health debuted tailored programs that indicate a trend among retailers with pharmacies to open separate and distinct sub-loyalty programs: In 2013, Rite Aid launched wellness 65+ in its wellness+ program, and CVS, which has long had a storewide loyalty pro- gram, rolled out Rx Rewards.").

42 *Ibid. at 4.*

43 Bar-Gill and Ben-Shahar, "Exit from Contract," 154.

44 Bar-Gill, *Seduction by Contract*, 22.

45 *Ibid. at 21.*

46 As I will address in the next section, the presence of a medium can arguably overcome myopia. Experiments show that when people face the choice of (i) getting more *media* today, and the reward later; or (ii) getting a reward today with no *media*, a considerable percentage of consumers chooses more *media* today. See, Hsee et al., "Medium Maximization." This may be because consumers focus their attention on the medium, which generates an anticipation of future positive feelings today, despite the medium's real value comes in the future, at the moment of redemption.

*aversion*.[47] Tversky and Kahneman showed how different representations of the same information have the ability to induce different associations in our minds.[48] When a consumer faces a transaction and sees "loyalty rewards" as part of it, she perceives the *reward* as it is framed: as a prize or a gift. It is counterintuitive to be suspicious about a reward. This perception is actually a key element of a well-designed loyalty program.[49] Relatedly, loyalty rewards involve *foregone benefits* rather than out of pocket costs (*e.g.*, flying with airline A means not adding miles to your frequent flyer account with airline B).[50] It is well-documented that people are more sensitive to losses than gains.[51] As losses have a greater psychological impact in our perceptions, we consider "sticks" (termination fees, a wealth loss) more significant switching costs than "carrots" (gaining additional points for a future benefit).[52]

## 3. The Two Sides of The Coin : Why Sellers and Consumers Highly Appreciate Rewards

Rewards are very useful for sellers and highly valued by consumers. Consumer retention is key for the success of firms, and loyalty rewards are an essential tool to turn one-shot transactions into long-term relationships. As one commentator puts is: "[the new field of *loyalty marketing* is] currently accepted by many academics and practitioners as ''the new orthodoxy''"[53] in marketing. Nonetheless, consumers also value rewards, not only the rewards themselves, but also the *media* that at some point may allow them to redeem a reward. In this section, I describe the objectives, design, and outcomes of loyalty programs. I also discuss how consumers perceive rewards. In this respect, I address how *media* may lead consumers to overestimate the value of the deal, how rewards facilitate habit induction and the development of cravings, how *media* provides sellers the opportunity to manipulate consumer behavior, and why the foregoing economic and psychological phenomena tend to hinder the self-corrective power of markets.

### 3.1. Why Sellers Offer Rewards

[47] Bar-Gill and Ben-Shahar, "Exit from Contract," 154.

[48] A. Tversky and D. Kahneman, "The Framing of Decisions and the Psychology of Choice," *Science* 211, no. 4481 (January 30, 1981): 453–58.

[49] Michael McCall and Clay Voorhees, "The Drivers of Loyalty Program Success An Organizing Framework and Research Agenda," *Cornell Hospitality Quarterly* 51, no. 1 (February 1, 2010): 48.

[50] Blanca García Gómez, Ana Gutiérrez Arranz, and Jesús Gutiérrez Cillán, "The Role of Loyalty Programs in Behavioral and Affective Loyaltynull," *Journal of Consumer Marketing* 23, no. 7 (December 1, 2006): 389. "… frequent travel programs use by airlines have a similar effect because they lead customers to perceive that competitors offer higher prices since they are deprived of the discounts offered in return for loyal behavior.").

[51] Daniel Kahneman and Amos Tversky, "Prospect Theory: An Analysis of Decision under Risk," *Econometrica* 47, no. 2 (1979): 263–91.

[52] It is important to note, however, that this argument applies when a consumer is thinking about a sporadic shift in her demand. When a consumer thinks about switching and building a new relationship with a different provider, loss aversion can also play a role with respect to the points the consumer has accumulated. And the more points a consumer has accumulated, the stronger their impact on decision-making is in both frames: gains and losses. Indeed, the opportunity cost is incremental (because the closer the consumer is to the goal of the reward, the more valuable points are), and the endowed progress (or effort invested in the relationship with the particular seller) can also set a reference point, despite being a sunk cost.

[53] Lisa O'Malley and Andrea Prothero, "Beyond the Frills of Relationship Marketing," *Journal of Business Research* 57, no. 11 (November 2004): 1286.

Loyalty rewards, ultimately, aim at increasing the profitability of firms by retaining customers and stealing market share from competitors. Since the early 1990s commentators have emphasized that customer retention has a significant effect on firms' profitability.[54] Studies indicate that firms "can boost profits by almost 100 per cent by retaining just 5 percent more of their customers."[55] Marketing scholars agree that "an old customer retained is worth more than a new customer won."[56] This is so because "[l]oyal customers offer businesses a steady customer base, more frequent purchase cycles, higher profit margins, and a group of advocates who voluntarily market the firm to prospective customers."[57] Consumer retention is key in today's markets, subject to increasing competition and greater dynamism. When loyalty rewards adopt features that I present later in this section, they can act as a strategic *barrier to exit*, locking-in consumers. As Nunes and Dréze put it, "… the focus is on keeping accounts from failing into enemy hands."[58] Rewards can lead consumers to stick to their current provider even when they are not fully satisfied with the product or service if switching to a competitor means losing the points they have accrued.

Relatedly, loyalty rewards can limit the possibility of consumers to try competing products. As long as consumers remain loyal and consolidate their purchases in one or a few stores, they tend to be less knowledgeable about the performance of competing alternative goods and services.[59] This limits performance information about existing alternatives, which can have a significant impact on post-choice valuation and reduce switching rates.

However, in many markets consumers buy goods and services from more than one seller. In this case, loyalty rewards can induce consumers to *consolidate their purchases* and *increase the share of wallet* of the seller that offers the best reward.[60] For instance, Nunes and Dréze documented that in 2004 the 185 million credit card holders in the U.S. had in average four cards.[61] A convenient loyalty program may act as a strong incentive to encourage consumers to consolidate their purchases in one card. By doing so, consumers can redeem rewards more quickly and/or access to more valuable rewards.

Once a competitor has introduced a loyalty program, firms can react introducing one as a *defensive strategy*.[62] As Dowling and Uncles note, the "decision to launch a program is often motivated as much by the fears of competitive parity as anything else, which companies

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54 O'Malley, "Can Loyalty Schemes Really Build Loyalty?," 47.
55 *Ibid.*
56 Joseph C. Nunes and Xavier Dréze, "Your Loyalty Program Is Betraying You," *Harvard Business Review* 84, no. 4 (April 2006): 124.
57 McCall and Voorhees, "The Drivers of Loyalty Program Success An Organizing Framework and Research Agenda," 35.
58 Nunes and Dréze, "Your Loyalty Program Is Betraying You," 125.
59 Ruth N. Bolton, P. K. Kannan, and Matthew D. Bramlett, "Implications of Loyalty Program Membership and Service Experiences for Customer Retention and Value," *Journal of the Academy of Marketing Science* 28, no. 1 (January 1, 2000): 98. ("members of loyalty programs are likely to be less knowledgeable—and less certain—about the performance of competing service alternatives than nonmembers because the bulk of their experience is with their current service provider.").
60 Nunes and Dréze, "Your Loyalty Program Is Betraying You," 125.
61 *Ibid.*
62 O'Malley, "Can Loyalty Schemes Really Build Loyalty?," 51.

rarely state publicly."[63] When this happens, commentators note that firms tend to focus on the short-run, rather than in achieving loyalty.[64] This is one of the causes of failure of some programs, which has led some analysts to question their effectiveness more broadly.[65]

Loyalty programs also facilitate sellers to *collect information* about their customers. Data crunching is vital to find general patterns about consumer behavior and target promotions to individual customers.[66] The Pareto Rule in marketing states that 80% of firm's revenue come from only 20% of customers.[67] A good database is a valuable marketing tool and a significant competitive advantage because it allows businesses to determine which consumers are part of that 20% and target particular promotions to them so that they keep loyal to the brand—or even become more loyal. Consumers value their privacy. Even when they receive a reward in exchange for their data, they might find data collection as intrusive and unacceptable.[68] Rewards have helped to justify and organize data collection.[69] Without rewards, it would be much harder for sellers to collect such information.

For firms that have a broad customer base and excess capacity, loyalty rewards can also function as a *profit center*.[70] This is the case of most major airlines. Jointly, U.S.-based airlines sell nearly $2 billion worth of miles to more than 22,000 businesses.[71] The hospitality sector has similar economies. Marriot, for example, allows members of its loyalty program to collect points by shopping at retail centers such as Target, Macy's, Best Buy, and others.

Loyalty rewards can also help to *increase purchases*. When consumers are advancing towards the goal of a reward, they tend to exercise greater efforts to reach such goal.[72] In addition, the inclusion of a medium in the transaction may lead people to maximize the medium,[73] which usually leads them to buy more than what is optimal for them (this is "the medium effect," more on this below). Most studies analyzing the effects of loyalty rewards do not consider the *endogeneity* problem of loyalty programs—that is, most loyal consumers buy more because they are already loyal to the firm. However, a study analyzing a case in which heavy-purchasers actively decided to enroll in a loyalty program showed that even considering endogeneity, loyalty programs can yield an exogenous increase in purchases (14% of the total increase in this case).[74]

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[63] Grahame R. Dowling and Mark Uncles, "Do Customer Loyalty Programs Really Work?," *Sloan Management Review* 38, no. 4 (Summer 1997): 73.
[64] Louise O'Brien and Charles Jones, "Do Rewards Really Create Loyalty?," *Harvard Business Review* 73, no. 3 (May 95–June 95, 1995): 75.
[65] Dowling and Uncles, "Do Customer Loyalty Programs Really Work?"
[66] Nunes and Dréze, "Your Loyalty Program Is Betraying You," 126.
[67] Dowling and Uncles, "Do Customer Loyalty Programs Really Work?," 73.
[68] O'Malley and Prothero, "Beyond the Frills of Relationship Marketing," 1286.
[69] O'Malley, "Can Loyalty Schemes Really Build Loyalty?," 51. ("[b]ecause of the rewards offered, customers have willingly cooperated in terms of data provision.").
[70] Nunes and Dréze, "Your Loyalty Program Is Betraying You," 127.
[71] *Ibid. at 126.*
[72] Joseph C. Nunes and Xavier Drèze, "The Endowed Progress Effect: How Artificial Advancement Increases Effort," *Journal of Consumer Research* 32, no. 4 (March 1, 2006): 504.
[73] Hsee et al., "Medium Maximization."
[74] Jorna Leenheer et al., "Do Loyalty Programs Really Enhance Behavioral Loyalty? An Empirical Analysis Accounting for Self-Selecting Members," *International Journal of Research in Marketing* 24, no. 1 (March 2007): 43. The authors suggest a series of practices to create "exogenous" loyalty programs, being the two most

Although it is challenging to assess the effects of loyalty rewards in a vacuum without analyzing the particular context how the strategy emerged and how competitors responded to it, there are strong economic, psychological, and sociological reasons that support the potential of loyalty rewards to increase sales and build loyalty. I will address these reasons in the next sub-section.

## 3.2.How Consumers Perceive Rewards

Loyalty programs tend to impact consumers' affective and deliberate systems strongly. Rewards can provide extra value to consumers, but they also allow sellers to create an "illusion of advantage." There are, accordingly, rational reasons to prefer deals with rewards, but this preference may also stem from consumers' imperfect rationality. The rational explanation is that *media* create an incremental switching cost. Consumers may develop calculative commitment, being loyal to the firm given the real value of the switching cost. Nonetheless, consumers may well overestimate the convenience of rewards.[75] *Media* tend to look more appealing than they really are and may even look appealing when decision-makers know that *media* are irrelevant.[76] Rewards also create smart shopper feelings. Once consumers enter into the "loyalty loop," they have incentives to spend more effort in order to achieve the goal of the reward. The closer the goal looks, the greater the efforts consumers tend to make to achieve the goal. In addition, loyalty programs can develop associative feelings between consumers and sellers.

From an *economic* perspective, consumers receive extra value in the form of the reward at the moment of redemption. Nowadays credit cards offer different types of rewards, and some people still prefer those that offer miles (39% according to a recent study.)[77] For those consumers, each payment provides a certain number of miles. During the first purchases, the opportunity cost of paying with a different card or with a different payment method is not significant. However, the opportunity cost is incremental: the worth of extra miles increases as redemption gets closer. At some point, the choice of payment method entails the opportunity cost of the reward itself (*e.g.*, a plane ticket). Commentators denominate this phenomenon as "calculative commitment"—the need to maintain a relationship because of the significance of switching costs.[78]

relevant the provision of information to non-loyal consumers about the benefits of the loyalty program, and the offer of delayed rewards over immediate rewards.

[75] Stijn M. J. van Osselaer, Joseph W. Alba, and Puneet Manchanda, "Irrelevant Information and Mediated Intertemporal Choice," *Journal of Consumer Psychology* 14, no. 3 (2004): 257–70.

[76] *Ibid.*

[77] "Are You Making the Most of Your Cash Rewards This Holiday Season? Fidelity® Customers Have Earned More Than $845(1) Million Using Fidelity Rewards Credit Cards | Business Wire," December 22, 2014.

[78] Inge Geyskens et al., "The Effects of Trust and Interdependence on Relationship Commitment: A Trans-Atlantic Study," *International Journal of Research in Marketing* 13, no. 4 (October 1996): 304. ("Calculative commitment … is the extent to which channel members perceive the need to maintain a relationship given the significant anticipated termination or switching costs associated with leaving. It results from a 'cold' calculation of costs and benefits, including an assessment of the investments made in the relationship and the availability of

From a *psychological* perspective, loyalty rewards can induce smart shopper feelings and pride in being economical.[79] Because consumers are receiving an extra benefit—generally a medium—they perceive they are getting a better deal and feel smart precisely because the transaction appears to be convenient. In the case of delayed rewards involving media, these feelings emerge because consumers overestimate the *media*,[80] and underestimate the cost of redemption.[81] Concerning *media* more broadly, two effects should be noted separately: (i) the *irrelevant points effect* and (ii) *medium maximization*.

Experimental evidence suggest that decision-makers consider *media* as valuable (paying higher prices) even when they know that *media* is irrelevant.[82] Van Osselaer et al. tested how points and their allocation influence people's purchase of plane tickets. They set up two groups of students; each one had to purchase plane tickets from airlines that offered different distribution of points. The students were informed they were going to fly the same route often. After the third trip with the same airline, they would get the fourth trip for free as a reward. Thus, the *allocation* of points did not matter. In the first group, students had to choose between a flat allocation of points (200 each time), and an ascending allocation of points (100, 200, and 300). The second group had to decide between a flat allocation of points, and a descending allocation of points (300, 200, and 100). On average, prices were the same, but varied from 0 to ± 20 units.[83] In both groups, the majority of students chose the airline that offered more points in the first choice (20 of 23 participants in the ascending vs. flat version, and 20 of 25 in the descending versus flat version). Notably, in 73% of those cases, the price of the higher mile option was higher than the price of the option that offered less points.[84] As the authors put it, "[c]learly, first choices were strongly influenced by irrelevant points."[85] To be clear, since the students knew the allocation of points was irrelevant, they should have chosen the cheapest alternative in the first round.

The second relevant effect of *media* is *medium maximization*. It arises when people face a medium between their *effort* and the *outcome* they pursue:

effort > medium > outcome

For example, people work for money, which allows them to satisfy their needs. In this example, people's work is the *effort*, money is the *medium*, and the satisfaction of people's needs is the *outcome*. A rational worker aims to maximize the outcome. However, studies

alternatives to replace or make up for the foregone investments."). Citation omitted. I owe this idea to Alvin Klevorick.

[79] Leenheer et al., "Do Loyalty Programs Really Enhance Behavioral Loyalty?," 33.

[80] van Osselaer, Alba, and Manchanda, "Irrelevant Information and Mediated Intertemporal Choice"; Hsee et al., "Medium Maximization."

[81] Joshua Tasoff and Robert Letzler, "Everyone Believes in Redemption: Nudges and Overoptimism in Costly Task Completion," *Journal of Economic Behavior & Organization* 107, Part A (November 2014): 107–22; Hean Tat Keh and Yih Hwai Lee, "Do Reward Programs Build Loyalty for Services?: The Moderating Effect of Satisfaction on Type and Timing of Rewards," *Journal of Retailing* 82, no. 2 (2006): 134.

[82] van Osselaer, Alba, and Manchanda, "Irrelevant Information and Mediated Intertemporal Choice."

[83] *Ibid. at 260.*

[84] *Ibid. at 261.*

[85] *Ibid.* A case "in which deliberative and associative processes simultaneously affect choice".

show that in times of inflation people overlook the inflation rate and focus on the nominal value of money rather than its inflation-adjusted real value.[86] For instance, when inflation is 12% people find a 10% increase of salary more satisfying than a 1% increase when inflation is 0%.[87] This phenomenon is known as "money illusion."[88] It shows that people tend to focus on the nominal value of the medium and ignore its exchange value compared to its real outcome. This suboptimal result that arises because of the presence of a medium is known as the *medium effect*.[89]

When consumers face a choice between a less effortful action and a more effortful action, in which the latter yields a greater medium, but not a more convenient outcome than the former, the medium might create an *illusion of advantage*.[90] Hsee et al.'s experiment is illustrative of this effect. Hsee et al. gave students the opportunity to choose between a short task and a long task to redeem ice cream as a reward.  In the *control condition*, the short task (6 minutes) was awarded with vanilla ice cream. The long task (7 minutes) was rewarded with pistachio ice cream. In a pre-test, the researchers found that most students preferred vanilla over pistachio. In the *medium condition*, the same incentives were offered but in the presence of a medium. For the short task, students got 60 points. For the long task, students got 100 points. With 50-99 points students were entitled to receive vanilla ice cream and 100 points awarded pistachio ice cream. The students were also told that the points had no other value and were non-transferable. Subsequently, they asked them which type of ice cream they preferred to determine whether the medium had an impact on the judgments of the actual outcomes. It had not.

The results are remarkable, in the control group most students chose the short task (around 70%), and a similar percentage preferred the vanilla ice cream. They chose the task according to the type of ice cream they liked more (their real preference). In contrast, in the medium condition, more than 50% of students chose the long task, though less than 30% preferred pistachio ice cream.[91] In this case, the medium created an *illusion of advantage*. The implications of this study for loyalty programs are evident. As the authors put it "marketers can stimulate purchasing behavior by manipulating the way the medium in such a [frequency] program—for example, points or credits—is distributed."[92]

Furthermore, when consumers perceive rewards as a goal, they tend to exercise effort to achieve the reward.[93] For marketing this has mainly two implications: (i) people who are closer to redemption exert greater efforts towards achieving the goal (the goal gradient effect);[94] and (ii) sellers can create an illusion of advancement, so that consumers perceive the

[86] Hsee et al., "Medium Maximization," 2.
[87] *Ibid.*
[88] Daniel Kahneman, Jack L. Knetsch, and Richard Thaler, "Fairness as a Constraint on Profit Seeking: Entitlements in the Market," *The American Economic Review* 76, no. 4 (September 1, 1986): 731; Hsee et al., "Medium Maximization," 2.
[89] Hsee et al., "Medium Maximization."
[90] *Ibid. at 4.*
[91] *Ibid.*
[92] *Ibid. at 12.*
[93] Nunes and Drèze, "The Endowed Progress Effect," 504.
[94] *Ibid.*

task has been undertaken and is incomplete. Commentators denominate the latter as the *endowed progress effect*, the provision of artificial advancement encourages people to reach the goal with greater persistence.[95] For this to occur, consumers need to perceive they did something that deserves "the advancement." Nunes and Dréze tested this effect in a car wash. They offered two different types of rewards to consumers: (i) a free car wash after the eight paid visit; and (ii) a free car wash after ten paid visits, but as a courtesy, they were given two "stamps" for free. The benefit was the same for both groups: a free car wash after 8 paid visits. However, consumers who were part of the second option showed higher redemption ratios (34% vs. 19%) and also went back to the store at a faster rate.[96]

In addition to the economic and psychological phenomena that are relevant to assess how consumers perceive rewards, there are also relevant s*ociological* explanations. People like to belong to groups and feel identified with an organization.[97] This feeling of identification can lead to greater loyalty. Indeed, people can adopt a purchasing pattern based on the expectations people have concerning a pre-established category to which they are part.[98] Additionally, studies have found the reciprocity norm[99] in transactional contexts.[100] The reciprocity norm, in essence, states that people feel indebted to someone who treated them well.[101] In a commercial context, this can lead to greater patience and also greater patronage.

## 3.3.The Design of Loyalty Rewards

The design of a loyalty program seems straightforward in theory: it must be attractive for consumers and cost-effective for the firm. This design certainly takes into account consumers' misperceptions and biases, which sellers aim to exploit in order increase their profits. However, such design is quite challenging for sellers in practice.[102] Commentators tend to address the design of loyalty programs according to the divisibility, timing, and nature of rewards. Well-designed rewards provide the possibility to build barriers to exit and acquire information at a reasonable cost.

With respect to the *divisibility* of rewards, sellers try to offer rewards with limited divisibility because those are the rewards that produce the highest switching friction. However, those rewards can look unreachable, hindering consumers' incentives to invest efforts to achieve them.[103] Once consumers perceive the reward is achievable, they are willing to enter the "loyalty loop." Thus, sellers look for a compromise: a reward divisible enough to

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[95] *Ibid.*
[96] Nunes and Dréze, "Your Loyalty Program Is Betraying You," 127; Nunes and Drèze, "The Endowed Progress Effect," 506.
[97] Leenheer et al., "Do Loyalty Programs Really Enhance Behavioral Loyalty?," 34.
[98] George A. Akerlof and Rachel E. Kranton, "Economics and Identity," *The Quarterly Journal of Economics* 115, no. 3 (2000): 715–53. I owe this point to David Laibson.
[99] For an account of the reciprocity norm and further references to its assessment, *see* Kristof De Wulf, Gaby Odekerken-Schröder, and Dawn Iacobucci, "Investments in Consumer Relationships: A Cross-Country and Cross-Industry Exploration," *Journal of Marketing* 65, no. 4 (October 1, 2001): 108.
[100] Leenheer et al., "Do Loyalty Programs Really Enhance Behavioral Loyalty?," 34.
[101] Robert B. Cialdini, *Influence: The Psychology of Persuasion, Revised Edition*, Revised edition (New York: Harper Business, 2006), chap. 2.
[102] Nunes and Dréze, "Your Loyalty Program Is Betraying You," 128.
[103] *Ibid.*

entice consumers but indivisible enough to lock them in. Miles are a good example. People paying by a co-branded credit card can accumulate miles. After reaching a certain threshold defined per route, co-branded credit card users can redeem a plane ticket (after paying a booking fee). They need a considerable number of miles to redeem the reward. Nevertheless, consumers may anticipate an approximate number of miles they can accumulate during a period of time according to their spending patterns. Once they achieve the first threshold, they can either redeem a plane ticket in a cheap route or decide to save more miles to redeem a ticket for a more expensive route. After redemption, consumers keep the excess of miles in their accounts, which encourages them to get again into the loyalty loop.

Regarding *timing*, rewards can be (i) *immediate* or (ii) *delayed*. The former means an instant reinforcement, in the form of a discount, a coupon, a gift, etc. This is associated with a promotion,[104] which can enhance the penetration of the product in the market if consumers do not know it. Yet, such strategy does not create a barrier to exit. Every time a consumer gets a discount, she benefits from it and the next time she has to make a purchase decision she faces no switching constraints to choose a different product. Immediate rewards can work well when the product is of better quality than competing alternatives. However, if products are homogenous, a different firm can have a promotion next time and consumers may just buy the cheapest alternative available.

In contrast, when a consumer accumulates points, the loyalty loop may lead her to consider the opportunity cost of buying elsewhere, or the sunk cost concerning the points she has accumulated if she was thinking of a radical switch to a competitor (e.g., closing a bank account to open an account with a competing bank). A delayed reward is a "rear-loaded incentive."[105] Here the goal gradient effect and the endowed effort effect play an important role in consumers' decision-making. Nonetheless, delayed rewards that involve *media* provide sellers with another advantage: the offering of *media* today and rewards in the future. Since consumers underestimate the cost of redemption,[106] sellers can lure some consumers for free. In fact, a significant percentage of consumers never redeems the reward.[107] This might appear unrealistic, because myopic people prefer benefits today, even when the benefit comes at high cost in the future.[108] However, when there is a medium, people tend to maximize the medium even when this means delaying the benefit into the future.[109] This proves an inconsistency between people's choices and their preferences.

Illustrating this effect, Hsee et al. tested how "points" influence people's decision-making in a fictitious banking transaction. In the control condition, people had to choose between buying a certificate of deposit (CD) in bank 1 or bank 2. Bank 1 was 5 minutes away, and the purchase of the CD there gave a reward of $100 immediately. Bank 2 was 6 minutes

[104] O'Brien and Jones, "Do Rewards Really Create Loyalty?," 75.
[105] Leenheer et al., "Do Loyalty Programs Really Enhance Behavioral Loyalty?," 43.
[106] Tasoff and Letzler, "Everyone Believes in Redemption."
[107] See, e.g., "Why Frequent-Flyer Programs Are an Effective Marketing Tool - Market Realist." ("According to the IATA, the time between earning and redeeming miles is 30 months and 17% of the miles aren't redeemed.").
[108] Xavier Gabaix and David Laibson, "Shrouded Attributes, Consumer Myopia, and Information Suppression in Competitive Markets," *The Quarterly Journal of Economics* 121, no. 2 (2006): 505–40.
[109] Leenheer et al., "Do Loyalty Programs Really Enhance Behavioral Loyalty?," 43; Keh and Lee, "Do Reward Programs Build Loyalty for Services?"

away, and the purchase there gave a reward of $150 three years after. In a pretest, most students preferred $100 immediately to $150 three years later. In the medium condition, Banks 1 and 2 were also at 5 and 6 minutes away, respectively, however the reward for choosing Bank 1 was 100 *points*, which they could exchange immediately for $100 at the Bank 1. Bank 2 offered 150 *points*, which they could exchange for $150 three years later, when the CD matured.[110] Notably, 44% of students chose Bank 2 in the medium condition, whereas only 17% of the students chose Bank 2 in the control condition.[111] In other words, the medium distorted the preferences of a significant percentage of students, which focused on maximizing the medium rather than maximizing their true preference. The medium introduced an *illusion of advantage* for Bank 2.

Concerning the *type* or *nature* of the reward, experts indicate that five elements determine a program's value for consumers: (i) cash value; (ii) choice of redemption options; (iii) aspirational value; (iv) relevance; and (v) convenience.[112] *Cash value* refers to a percentage rebate on what the consumer spent to earn the reward. *Choice of redemption options* means the choices a rewards program offers. A well-designed program provides options to consumers and does not limit them to a single item. *Aspirational value* denotes the offer of products that are highly appreciated in a social context, such as an exotic free travel. *Relevance* means the ability and timing to win the reward. A well-designed program actually rewards consumers within a reasonable time. Finally, *convenience* implies that it is simple to get the reward. According to experts, few programs offer all of them, but companies should pay attention to these five features to design a competitive program. Sellers try to maximize the perceived benefits rather than the actual benefits. However, consumers can learn that particular types of rewards are not convenient, and this has indeed led to changes in the rewards firms offer, as I describe in the next section.

## 3.4. The Outcomes of Loyalty Rewards

After referring to the reasons why sellers offer rewards, how consumers perceive them, and the relevant design features that sellers take into account to entice consumers, I will describe the outcomes that arise from the interaction between sophisticated sellers and imperfectly rational consumers. The first one is a potential behavioral market failure. Sellers design their products and price structures in response to the demand generated by imperfectly rational consumers, which results in inefficiencies and distributional costs.[113] In addition, rewards can develop psychological switching costs and cravings in consumers, which the market will tend to exploit. Some of these outcomes are obstacles for the rise of "No Loyalty."

[110] Hsee et al., "Medium Maximization," 5.
[111] *Ibid. at 6.*
[112] O'Brien and Jones, "Do Rewards Really Create Loyalty?," 79.
[113] *Ibid.* ("…when sellers design contracts and prices in response to the demand generated by imperfectly rational consumers, the result is a behavioral market failure. Several common welfare costs associated with this market failure are incurred, including efficiency costs and distributional costs. These welfare costs are often mitigated by market solutions; specifically, learning by consumers and education by sellers.").

### 3.4.1. Behavioral Market Failure: Consumer's Overestimation of Rewards

When sellers design their products on the grounds of consumers' misperceptions and biases, there is a behavioral market failure.[114] Markets produce efficient outcomes when suppliers compete, parties are well-informed, and there are no third-party effects. However, in reality it is hard to conceive this hypothetical scenario. Consumers often lack information, there may be significant third-party effects that lead to the excessive production of goods or services, and incumbents may not compete so vigorously for a variety of reasons. In addition to these conventional market failures, consumers' misperceptions and biases might lead them to enter into welfare reducing contracts, or not entering into welfare increasing contracts.[115] In this case, consumers' misperceptions and biases trigger a welfare loss.

When we make decisions, our judgment is affected by biases and misperceptions that sellers can predict.[116] Offering value is expensive for sellers. They can, however, use their knowledge of our psychological sweet spots to create an appearance of a better deal. Loyalty rewards facilitate this task. Once a seller introduces a reward that exploits consumers' misperceptions, competition will drive the rest of the firms in the market to follow the move. What we see then is a market equilibrium in which rewards play a relevant role for sellers in terms of marketing their products.[117] As a marketing expert puts it, "across the different airline brands FFP became successful *because they appeal to the same instincts that induce people to save coupons or buy lottery tickets*."[118]

These instincts are normal features of our System 1 (or Automatic System).[119] As previously indicated, rewards involving media might generate an illusion of advantage and consumers can consider media as valuable even when they have been warned that it is irrelevant. This effect occurs precisely because rewards touch our System 1 in a very strong fashion.[120] When consumers compare a product alone with a bundle including *media* (*e.g.*, a

[114] *Ibid. at Introduction.*
[115] *Ibid. at 1.*
[116] As Professor Bar-Gill nicely puts it "[w]e consumers are imperfectly rational, our decisions and choices influenced by bias and misperception. Moreover, the mistakes we make are systematic and predictable. Sellers respond to those mistakes. They design products, contracts, and pricing schemes to maximize not the *true* (net) benefit from their product, but the (net) benefit *as perceived by the imperfectly rational consumer*. Consumers are lured, by contract design, to purchase products and services that appear more attractive than they really are." *Ibid. at 2.*
[117] David Gilbert, "Airlines," in *Relationship Marketing Theory and Practice*, ed. Francis Buttle (London: Paul Chapman Publishing Ltd., 1996), 139.
[118] *Ibid. at 134.* Emphasis added.
[119] Richard H. Thaler and Cass R. Sunstein, *Nudge* (Yale University Press, 2008), 21. ("One way to think about all this is that the Automatic System is your gut reaction and the Reflective System is your conscious thought. Gut feelings can be quite accurate, but we often make mistakes because we rely too much on our Automatic System.").
[120] van Osselaer, Alba, and Manchanda, "Irrelevant Information and Mediated Intertemporal Choice."

plane ticket from Boston to San Francisco without miles, or a plane ticket for the same route at the same time with 500 miles), the bundle tends to look more valuable. For some consumers this psychological impact of the medium is so strong that they focus too much on the medium and tend to maximize it rather than the total outcome of the transaction.[121]

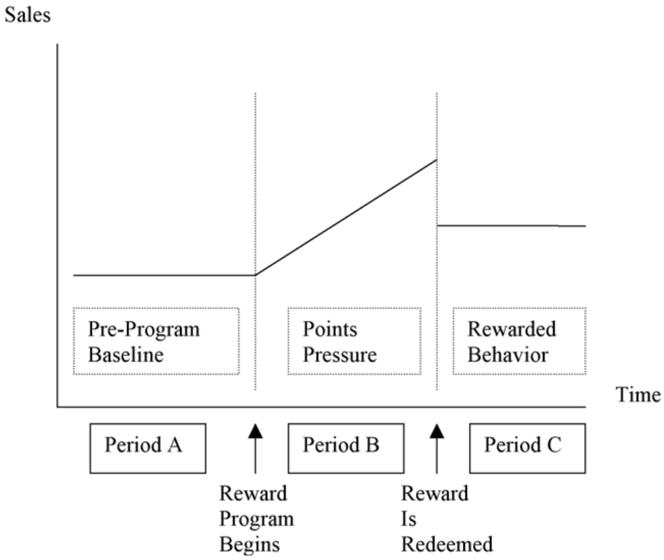
The medium effect leads to inefficient contracting and distributional concerns. A numerical example illustrates inefficient contracting: a consumer enters into a credit card contract. She pays USD$10 in annual fees (and pays no other fee). She values the card in USD$12, because she can save miles and then, eventually, redeem a plane ticket "for free." However, her buying pattern is not intensive enough to redeem a plane ticket. She values the sole credit card in USD$6 (because the only attribute valuable to her is the opportunity to pay by plastic and there are other alternatives that perform the same function she could get for USD$6, such as a debit card or a prepaid card). This outcome is a loss of USD$4 for this consumer. The reward leads the consumer to enter into a contract that is not convenient for her. More realistic examples may include burdensome redemption procedures, black-out dates, unilateral modifications of the miles' exchange value, among others. The most blatant distributional effect of rewards is the cross-subsidization that occurs between consumers who pay by any method different than rewards cards, to those who use these cards and redeem rewards.[122] More on distributional effects in the next section.

### 3.4.2. Psychological Switching Costs

Loyalty programs can increase sales by two means: *point pressure* and *reward mechanism*.[123] The *point pressure effect* is "the short-term impact whereby consumers increase their purchase rate in an effort to earn a reward."[124] It refers to the additional purchases of a consumer triggered by the cue of the reward. The *reward mechanism*, in contrast, "is the long-term impact whereby consumers increase their purchase rate after they have received the reward."[125] Stated differently, the reward mechanism assesses whether it is due to the loyalty program that consumers increase their purchases *after receiving the reward*, having the pre-program period as a benchmark. The following figure is illustrative. Period A is the benchmark, the baseline purchase rate. Period B represents the increase in the customer's purchase rate in order to earn the reward (point pressure). And Period C shows the potential long-term impact (rewarded-behavior).

[121] Leenheer et al., "Do Loyalty Programs Really Enhance Behavioral Loyalty?," 33.
[122] Sumit Agarwal, Sujit Chakravorti, and Anna Lunn, *Why Do Banks Reward Their Customers to Use Their Credit Cards?*, (Federal Reserve Bank of Chicago, December 2010).
[123] Gail Ayala Taylor and Scott A. Neslin, "The Current and Future Sales Impact of a Retail Frequency Reward Program," *Journal of Retailing* 81, no. 4 (2005): 293.
[124] *Ibid.*
[125] *Ibid.*

Figure Nº1. Points-pressure and rewarded-behavior effects[126]




In this example, the loyalty program is a strategic tool for building the brand, since Period C shows a higher rate of purchases than Period A. If Period C was equal to Period A there would be no rewarded-behavior effect. In this latter case, the reward would function as a mere promotion.[127] It is important to note that the line in Period B does not need to be linear. Actually, because of the goal gradient effect, it probably tends to increase at a higher ratio the closer it gets to the redemption zone. In addition, although it is not depicted in this figure, it is also useful to have in mind that the consumers' opportunity cost increases in Period B, and fades away at the moment of redemption.

When the reward is delayed, one might expect consumers to do comparative shopping in the moment when the reward is redeemed. However, psychological evidence suggests that both behavioral[128] and cognitive processes[129] may boost a "rewarded-behavior,"[130] and increase the switching threshold. *Behavioral learning* assumes no active reasoning, but a conditioned behavior that arises from a repetitive routine coupled with a reward. By frequently coupling the reward with the cue, the product can eventually become a conditioned stimulus.[131] On the other hand, the *cognitive* perspective states that a reward can increase the purchase rate and increase the switching threshold if rewarded customers develop positive

[126] Copied from *Ibid. at 294.*
[127] *Ibid.*
[128] Michael L. Rothschild and William C. Gaidis, "Behavioral Learning Theory: Its Relevance to Marketing and Promotions," *Journal of Marketing* 45, no. 2 (Spring 1981): 70–78.
[129] F. Gregory Ashby, Alice M. Isen, and And U. Turken, "A Neuropsychological Theory of Positive Affect and Its Influence on Cognition," *Psychological Review* 106, no. 3 (July 1999): 529–50.
[130] Taylor and Neslin, "The Current and Future Sales Impact of a Retail Frequency Reward Program," 295.
[131] Robert C. Blattberg and Scott A. Neslin, *Sales Promotion: Concepts, Methods and Strategies* (Englewood Cliffs, N.J: Prentice Hall, 1990), 19–28.

feelings toward the seller, which provide the latter with higher patronage.[132] In the following paragraphs, I will refer to cognitive learning in more detail. I will refer to behavioral learning at the end of the section.

"Cognitive learning is a complex mental process of inclusion of all consumer mental activities in resolving the problem of purchasing certain products or services and resolution of the situation occurred."[133] It "allows consumers to utilize the stored information (memory) for building new knowledge used for the current behaviour, or it stores it in the memory as additional information for future use."[134] The designers of loyalty rewards expect rewards to foster affective reactions in consumers, which will then influence their decision to remain loyal to the brand. Studies indicate that rewards can actually develop positive feelings in consumers, which develop memory shortcomings favorable to the brand, higher satisfaction, and greater patience.[135] All of these emotional induced effects discourage switching from one supplier to another.

Concerning positive feelings, Brian Tietje showed that the emotional response to rewards might make positive information with respect to the product more accessible in the memory than unfavorable information.[136] In other words, the emotional reaction to the reward makes positive memories *more salient* for consumers than negative memories. Regarding consumer satisfaction, research shows that positive affective content can lead to higher gratification,[137] and, as a result of that, to higher purchase intentions.[138] Finally, concerning consumer patience, studies have found that the affective response rewards induce leads to greater customer tolerance with respect to negative service encounters.[139]

In sum, the designers of loyalty rewards aim to foster a "rewarded behavior" on the participants of loyalty programs. That effect can stem from the opportunity cost of accumulating *media* with another seller, consumers' distorted memories, satisfaction, and patience, all of which increase the switching threshold.

### 3.4.3. Habits, conditioning and cravings

[132] Taylor and Neslin, "The Current and Future Sales Impact of a Retail Frequency Reward Program," 295.
[133] Liljana Batkoska and Elena Koseska, "The Impact of Cognitive Learning on Consumer Behaviour," *Procedia - Social and Behavioral Sciences*, XI International Conference, Service Sector in Terms of Changing Environment, 27-29 October 2011, Ohrid, 44 (2012): 71.
[134] *Ibid.*
[135] Taylor and Neslin, "The Current and Future Sales Impact of a Retail Frequency Reward Program," 295.
[136] Brian Tietje, "When Do Rewards Have Enhancement Effects? An Availability Valence Approach," *Journal of Consumer Psychology* 12, no. 4 (January 1, 2002): 363–73. ("Two experiments demonstrate that an immediate reward from a product-related source enhances product evaluations by making favorable information more accessible than unfavorable information.").
[137] Linda L. Price, Eric J. Arnould, and Patrick Tierney, "Going to Extremes: Managing Service Encounters and Assessing Provider Performance," *Journal of Marketing* 59, no. 2 (1995): 83–97.
[138] Richard L. Oliver, Roland T. Rust, and Sajeev Varki, "Customer Delight: Foundations, Findings, and Managerial Insight," *Journal of Retailing* 73, no. 3 (1997): 311–36.
[139] Bolton, Kannan, and Bramlett, "Implications of Loyalty Program Membership and Service Experiences for Customer Retention and Value." ("*The results show that members in the loyalty reward program overlook or discount negative evaluations of the company vis-à-vis competition. One possible reason could be that members of the loyalty rewards program perceive that they are getting better quality and service for their price or, in other words, "good value"*.").

Most of our daily actions are performed almost automatically.[140] Studies show that "approximately 45% of everyday behaviors tended to be repeated in the same location almost every day".[141] Our brain detects repetitive behavior and its context, so that it can save time and energy when it faces the same stimuli in the future.[142] Marketing people know about habits, and they use their knowledge to influence our purchasing behavior on a daily basis.[143]

"Habits are a form of automacity in responding that develops as people repeat actions in stable circumstances".[144] They lead us to function in an automatic mode. Once we detect a cue, we follow a routine that tends to find a reward, which helps the brain to remember the cue. Notably, people usually decide what to do and how to do it when initially performing an action. However, when people start repeating that action, their decision-making recedes, and the behavior comes to be cued by the environment.[145] Habit formation means a process of "associations in memory between actions and stable features of circumstances in which they are performed."[146]

Cravings are the engine of habits. Modern marketing relies on finding and developing cravings, so that consumers can get into the habit loop, incorporating the seller's product into their routines. Loyalty rewards can have a prominent role in the development of those cravings. Indeed, marketing experts tend to explain rewards and promotions in terms of conditioning.[147] Promotions and rewards are reinforcers to assure a desired behavior. When the product has particular features, the conditioned behavior can survive after the gradual retraction of the reinforcer. However, when products are fungible, reinforcers are a crucial part of the deal, and their retraction can cause brand switching.[148] "In behavioral learning the message cue announces the upcoming reinforcement opportunity." [149] For instance, if consumers win miles every time they buy groceries in supermarket A, they might develop a craving for the particular reward. The reward acts as a reinforcer, and if the reinforcer is the main reason why people prefer the deal its retraction is likely to lead to brand switching. In this example, consumers might see the transaction not only as "buying the groceries," but as a more convenient deal: "groceries and part of next holidays."

Cravings generate a feeling of anticipation, such as other types of conditioning. If consumers do not get what they anticipate, they feel disappointed and this negative feedback can overcome the burden of inertia. This is perhaps what happened in the UK, where

[140] Okihide Hikosaka and Masaki Isoda, "Switching from Automatic to Controlled Behavior: Cortico-Basal Ganglia Mechanisms," *Trends in Cognitive Sciences* 14, no. 4 (April 2010): 154–61.
[141] David T. Neal, Wendy Wood, and Jeffrey M. Quinn, "Habits—A Repeat Performance," *Current Directions in Psychological Science* 15, no. 4 (August 1, 2006): 198.
[142] Bas Verplanken and Wendy Wood, "Interventions to Break and Create Consumer Habits," *Journal of Public Policy & Marketing* 25, no. 1 (March 1, 2006): 90–103.
[143] *See, e.g.,* Charles Duhigg, *The Power of Habit: Why We Do What We Do in Life and Business* (New York: Random House Trade Paperbacks, 2014).
[144] Verplanken and Wood, "Interventions to Break and Create Consumer Habits," 91.
[145] *Ibid.*
[146] *Ibid.*
[147] Michael L. Rothschild and William C. Gaidis, "Behavioral Learning Theory: Its Relevance to Marketing and Promotions," *Journal of Marketing* 45, no. 2 (Spring 1981): 70–78.
[148] *Ibid. at 74.*
[149] *Ibid. at 76.*

consumers were accumulating miles every time they purchased in Sainsbury. After this supermarket changed from Air Miles, to Nectar, a different loyalty program that did not offer miles as a reward, Tesco, Sainsbury's main competitor, immediately joined the Air Miles loyalty program. Studies indicate that tens of thousands of consumers then switched from Sainsbury to Tesco, at least partially because they wanted to keep collecting miles.[150]

The development of cravings is, of course, pervasive in the world of marketing.[151] However, a craving for rewards is a considerable obstacle for the rise of a "No-Loyalty" trend.

## 3.5.Economic and Psychological Obstacles for the Rise of No-Loyalty

Sellers and consumers highly appreciate rewards. Sellers' preference for a market with rewards is rational and calculative. They need to maintain and increase their market share. If a competitor offers rewards and the products are fungible, competition leads the whole market to offer rewards as a defensive strategy. This is because of the psychological impact of rewards on consumers' decision-making. However, sellers also gather data thanks to loyalty programs. While consumers are reluctant to share their buying patterns with sellers, they are very happy to do so when there are miles or points on the table. And a good database is a crucial competitive advantage for sellers.

In addition, if consumers develop cravings, the market will tend to exploit those cravings. And consumers may develop cravings for rewards, as the Sainsbury case suggests. In my view, these are economic and psychological obstacles for the rise of "No Loyalty". I do not mean that "No Loyalty" is impossible since it can be the result of consumer learning and market competition. However, as long as consumers overestimate the value of rewards—and particularly the value of *media*—they will not buy from the sellers that do not offer rewards, unless a competitor offers a much cheaper product that overcomes the illusion of advantage that rewards tend to generate for consumers. Sellers can anticipate this. This behavioral market failure leads to a market equilibrium that includes rewards as part of it.

For example, if there are 4 firms in the market and all of them offer a homogeneous product that costs \$100 to produce without a reward (p), and \$102 with a reward ($p^r$), sellers need to decide which deal to offer. If consumers overestimate the value of the reward (*e.g.*, the value of the sole product is \$101 (v) and the value of the bundle is \$104 ($v^r$)), sellers will anticipate this and will offer the bundle. Any firm offering the same product at \$100 will lose market share. This is because consumers perceive a greater benefit with the bundle (\$1 compared to \$2 since v-p = 1; and $v^r - p^r = 2$). As long as consumers overestimate the reward and firms offer homogeneous products with similar cost structures, sellers will stick to the rewards model.

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[150] Michael T. Capizzi and Rick Ferguson, "Loyalty Trends for the Twenty-first Century," 73. ("In the UK, perhaps the most mature loyalty market in the world, a new loyalty coalition program, Nectar, launched in 2002 to challenge the established reign of the UK's version of Air Miles. When UK grocery giant Sainsbury's, a long-time Air Miles sponsor, switched their coalition allegiance to Nectar, their main competitor, Tesco, immediately entered the Air Miles program. Research estimates that tens of thousands of UK grocery shoppers have since switched to Tesco, in part because of their infatuation with collecting miles.").

[151] Blattberg and Neslin, *Sales Promotion*, chap. 2.

However, such burden is not impossible to overcome if firms face different cost structures. Given consumers' misperception, sellers can offer cheaper products and steal market share from their rivals that offer rewards as long as the lower price provides greater value (for example, $v - p = 3$ and $v^r - p^r = 2$). Nonetheless, firms offering the no-rewards model would face higher marketing costs. Indeed, they would need to find alternative mechanisms to gather data and segment the market for marketing purposes. This competitive disadvantage is more important in some markets than others. For example, grocery stores and pharmacies gather data to enhance sells reallocating their products according to their consumers' purchase habits.[152] However, airlines use consumers' information to target particular promotions to different types of consumers, and this might be a crucial matter to stay in a market where price discrimination is the most effective way to spread fixed costs among different consumers.[153] Even when firms have some access to consumers' buying patterns (*e.g.*, airlines without a FFP gather information about the routes, date, and time each passenger flies) it seems reasonable to assume that a FFP member is more willing to answer a post-flight survey indicating what the airline can do better and how the airline might provide better service in future flights.

Consumers can certainly learn that some rewards provide less benefit than expected. However, it is important to distinguish this situation from rewards in general. System 1 tends to overestimate rewards' worth.[154] Given consumers' imperfect rationality, it seems reasonable to assume that such misperception is greater when it is hard to calculate the real exchange value of *media* and the reward itself is of considerable significance (recall the design of rewards, particularly the features of cash value and aspirational value). In principle sellers can change the reward and inform consumers that rewards are more convenient than before (*e.g.*, airlines and currently advertise miles come with "no black-out dates.") Nonetheless, competition can also lead to drastic moves, such as cash-back in the credit card market. This is basically a case in which issuers started offering a discount rather than a reward (although, as I develop below, "conditions apply.") And once an actor in the market takes the lead, competition makes sure that the alternative spreads over the market—particularly if there was no effective lock-in.

Consumers can learn that *particular rewards* are not convenient. Consumers will not look for the cheapest periodic transaction, but for *the one that appears to be more valuable*. As long as rewards create an illusion of advantage that leads consumers to overestimate their value, they will tend to choose the bundle. In markets where gathering information about consumers is important and costly, sellers will have strong incentives to offer rewards as a cost-effective strategy to obtain such information, in addition to the possibility to create barriers to exit (which are stronger in some markets than others).

In the following (and last) section of this work I survey the rewards' evolution in the credit card market and the airline industry. The general observation is that market competition

[152] Matthew Brogie, "Merchandising Shelves: Shelf Location & Retail Merchandising."
[153] Michael E. Levine, "Price Discrimination without Market Power," *Yale J. on Reg.* 19 (2002): 22–25.
[154] van Osselaer, Alba, and Manchanda, "Irrelevant Information and Mediated Intertemporal Choice"; Hsee et al., "Medium Maximization."

has led sellers to incorporate loyalty programs. Rewards lead to particular problems in each market.

# 4. Rewards Trends in The Credit Card Market and The Airline Industry

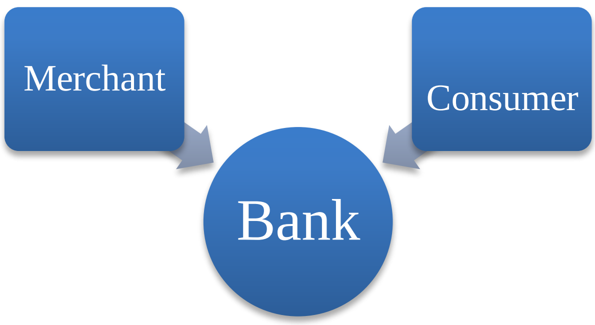
## 4.1.Credit Cards

### 4.1.1. The Credit Card Market and Why Rewards Emerged

Rewards emerged as a defensive competitive strategy in the credit card market.[155] American Express (Amex) started offering miles due to the competitive pressures of other issuers in the U.S. This move allowed Amex not only to offer a more attractive product for consumers but also to acquire information about different types of consumers and segment the market, determining which consumers were more profitable. This strategy was facilitated and encouraged by the two-sided nature of the market in which both final consumers and merchants pay to the issuer for the use of credit cards. Interchange fees are still the source of funding for rewards.

The credit card market is what economist call a two-sided market.[156] Credit cards are issued by banks. The bank has a buyer on each side of the market. On one side of the market, the buyer is the consumer who holds a credit card and can use it as a payment method. On the other side of the market, the buyer is the merchant, who accepts payments with credit cards. The bank profits in both sides of the market. This two-sided nature of the market gives issuers extra incentives to expand their penetration in the market. Indeed, the benefit of every extra consumer generates profits not only from the extra consumer but also from the merchants with whom the consumer deals.

The credit card market as a two-sided market




[155] O'Brien and Jones, "Do Rewards Really Create Loyalty?," 76–79.
[156] "Broadly speaking, a two-sided market is one in which 1) two sets of agents interact through an intermediary or platform, and 2) the decisions of each set of agents affects the outcomes of the other set of agents, typically through an externality". Marc Rysman, "The Economics of Two-Sided Markets," *Journal of Economic Perspectives* 23, no. 3 (2009): 125.

American Express (Amex) introduced its Membership Miles program expecting to increase profits on both sides of the market.[157] It emerged as a defensive strategy due to competitive pressures from other card issuers in the U.S. While it was costly for Amex to purchase miles from the airlines and offer them to loyal customers, the firm realized that its (former) higher penetration in the market[158] allowed it to charge higher fees to merchants. Higher fees from merchants as well as higher usage of the credit cards ultimately yielded more profits for Amex.

At that time, there was a considerable number of customers who had an Amex credit card and were paying the annual fee but did not use the card. This was depriving Amex from the revenue they would get from the merchant side of the market (in addition to the late fees, and other type of fees that inevitably trigger for some consumers). Amex realized this was either because those consumers (i) could not afford much discretionary spending, or because (ii) they were using a credit card from a competitor, or just preferred to pay by cash. O'Brien and Jones explain Amex's strategy was tailored to *segment the market*, after acquiring information about different types of consumers. Accordingly, Amex offered two tickets for free for heavy card usage during 6 months. By doing this, they attracted consumers who had the highest potential value.[159] And once a seller detects who are the most profitable consumers, it is easier for the seller to develop particular marketing strategies to keep those consumers loyal to the brand and incentivize them to become more intensive users of her products.

### 4.1.2. From Miles to Miles, Points and Cash-Back

Given the psychological impact of rewards, once a firm introduces them into the market, competitors have to follow the lead or look for another strategy to remain competitive. Concerning credit cards, miles became the industry standard. However, over time miles became less convenient. Several sources have documented the restrictions consumers faced when they tried to redeem the miles.[160] A lack of flexibility and availability deteriorated consumers' trust in the "medium" miles. As a response to this—and greater competition in the market—issuers created new types of rewards, such as cash-back and points. Nonetheless, issuers still offer miles as a reward and many highlight that miles come today with "no blackout dates" to entice consumers and perhaps regain their trust. Miles became more flexible: Today they also allow to redeem hotel services and car rentals. The following diagram summarizes this evolution.

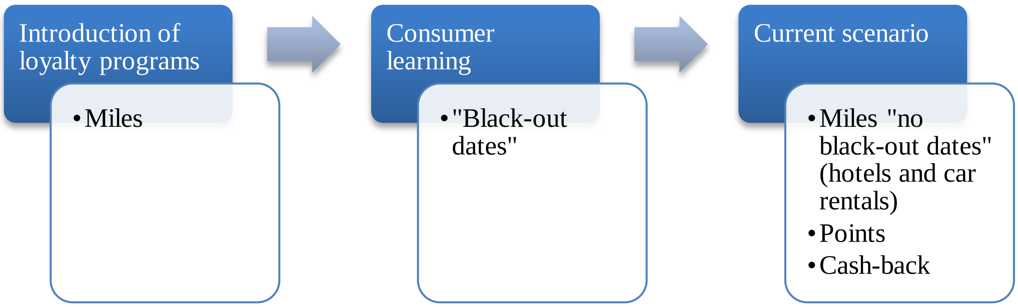
[157] O'Brien and Jones, "Do Rewards Really Create Loyalty?," 76–79.

[158] Nowadays Visa is the dominant actor in the market in terms of charge volume and credit extended, followed closely by MasterCard. American Express and Discover hold the third and fourth places, respectively. Bar-Gill, *Seduction by Contract*, 64.

[159] O'Brien and Jones, "Do Rewards Really Create Loyalty?," 78.

[160] *See, e.g.*, Ann Morales Olazábal, Howard Marmorstein, and Dan Sarel, "Frequent Flyer Programs: Empirically Assessing Consumers' Reasonable Expectations," *Am Bus Law J* 51, no. 1 (March 1, 2014): 175–250. As Investopedia note, "The airline industry has "blackout dates", which means that on certain days, flights do not offer any seats to rewards program members. Hotels and cruise lines have blackout dates as well. http://www.investopedia.com/articles/pf/08/frequent-flyer.asp#ixzz41ONz8YYa

Consumer Learning and The Evolution of Rewards in The Credit Card Market




The trend towards more flexible rewards is remarkable. As discussed in Section II.1, firms prefer to lock-in consumers with delayed rewards. Immediate rewards, by contrast, do not impose a barrier to exit. They are mere promotions. Cash-back, the current standard in the market, tends to be an immediate reward. Casual observation in one of the main online comparison shopping sites,[161] and a revision of the fine print of the most popular cash-back cards, reveal that most cash-back cards charge no annual fee and transfer the reward to the card holder's bank account promptly after the transaction is processed. It is no surprising that 60% of affluent Americans prefer cash-back cards.[162] Despite some issuers offering cash-back in the form of a delayed reward (*e.g.*, Amex's cash-back is credited toward the card's statement[163] and other issuers send checks once a year or every quarter, locking consumer in), there is an ample supply of cards that provide real and prompt cash-back.

Nevertheless, some consumers still prefer miles. A survey reported that "more than half (55 percent) of credit cardholders own a rewards credit card, with cash-back rewards being the most popular choice, held by nearly two-out-of-three rewards card holders (63 percent); 47 percent own credit cards offering points toward merchandise, followed by airline miles (39 percent) and gas, dining or other forms of rewards (39 percent)."[164] The lock-in problem in this market is less serious than before. Yet it is still present and it is not the only problem rewards cause, as I will describe in the following paragraphs.

### 4.1.3. Current Issues with Rewards in the Credit Card Market

Miles are still a powerful marketing tool. Issuers, taking advantage of the artificial advancement and the endowed effort effects, tend to offer a significant number of miles as an

[161] "NerdWallet. Cash Back Credit Cards | Up to 5% Rewards (Compare 223 Offers)."
[162] Tony Mecia, "Poll: Wealthy Cardholders Prefer Cash-Back Rewards," *CreditCards.com*.
[163] "Cash back is received in the form of Reward Dollars that can be redeemed as a statement credit. Cash back is earned only on eligible purchases". *See* https://www.nerdwallet.com/blog/credit-cards/american-express-blue-cash-review/
[164] "Are You Making the Most of Your Cash Rewards This Holiday Season? Fidelity® Customers Have Earned More Than $845(1) Million Using Fidelity Rewards Credit Cards," *Reuters*, December 22, 2014.

initial promotion after the consumer reaches a certain threshold of expenditures over a limited period of time, often two to three months. Once consumers are on the loyalty loop looking forward to their next trip, they tend to exercise greater effort towards redemption.[165] Thus, the loyalty loop may lead people to over consume.[166] The medium maximization effect is a good explanation for this (*e.g.*, people buy unnecessary products just to accumulate more miles). In addition, dissatisfied consumers think twice about switching, since switching to a different supplier comes at the cost of losing part of their plane tickets for their next holiday—probably also special status with their favorite airline.

Unlike miles and points, cash-back is a direct reward. However, despite money having a nominal value, people perceive cash-back as a promotion. People also maximize promotions and discounts, which leads them to choose a different outcome to what they had preferred absent the discount or promotion.[167] This is consistent with financial studies that analyze why banks offer cash-back. Agarwal et al explain that cash-back not only allows issuers to steal business from competitors, but also to increase spending, and debt.[168] Issuers benefit with more revenue from interchange fees when consumers increase their spending. Moreover, while the salient features of cash-back credit cards look quite appealing, they tend to include higher interest rates and higher late fees. For forgetful buyers, cash-back comes at a high price. There is in fact evidence that cash-back indeed increases credit cards holders' debt.[169]

In addition to lock-in and over-spending, rewards cause a general increase in prices and cross-subsidization between different types of consumers—usually from those with limited financial means to the most-affluent. Rewards were born in this industry thanks to the two-sided nature of the market. This feature still plays a main role in their funding; studies indicate that 44% of interchange fees fund rewards programs. [170] Merchants pay a fee to the issuer (interchange fee) every time a consumer pays by card. This fee varies according to the type of card. Generally, the more generous the card, the higher the fee charged to merchants.[171] Merchants not only transfer this cost to those consumers who benefit from

[165] Nunes and Drèze, "The Endowed Progress Effect."
[166] This is different to the psychological effect of paying by plastic. See Drazen Prelec and Duncan Simester, "Always Leave Home Without It: A Further Investigation of the Credit-Card Effect on Willingness to Pay," *Marketing Letters* 12, no. 1 (February 2001): 5–12.
[167] Leenheer et al., "Do Loyalty Programs Really Enhance Behavioral Loyalty?," 33.
[168] Agarwal, Chakravorti, and Lunn, "Why Do Banks Reward Their Customers to Use Their Credit Cards?," 18.
[169] *Ibid. at 14.* ("On average, a consumer increases her debt by $115 per month during the first quarter of the cash-back program. Our results confirm that cardholders not only increase spending but also their debt. The increase in monthly spending and change in debt remains relatively constant and continues during the first nine months after the beginning of the cash-back program.").
[170] Amy Dawson and Carl Hugener, "A New Business Model for Card Payments," *Diamond Management & Technology Consultants, Inc*, 2006, 9. ("Rewards are very useful as a competitive weapon in the fight for issuer market share, but … they also account for as much as 44% of interchange costs—costs paid for by merchants without directly benefiting them or their customer relationships. In fact, these rewards programs drive consumers to payment choices that are the most expensive for merchants."). Alan Frankel, "Towards a Competitive Card Payments MarketPlace," Reserve Bank of Australia, Proceedings of Payments System Review Conference, 2007, 8. ("Even when card usage generates rewards, moreover, the value of the rewards is generally significantly less than the amount of interchange fees collected by the issuing bank.").
[171] Andrew T. Ching and Fumiko Hayashi, "Payment Card Rewards Programs and Consumer Payment Choice," *Journal of Banking & Finance* 34, no. 8 (August 2010): 1775. ("The total annual interchange fee revenue of MasterCard and Visa card issuers was estimated at around $30 billion in 2006, and it is reported that rewards

rewards, but spread the costs among all consumers. This occurs because merchants do not price discriminate between different payment methods. Indeed, Schuh, Shy and Stavins found that uniform prices in the U.S. cause cross-subsidization between cash buyers and credit card buyers and between low-income and high-income households.[172]

### 4.1.4. A Brief Account of Other Payment Methods

An overview of the evolution of the payment methods market shows that more modern payment methods, such as PayPal, mobile wallets, and even prepaid cards have recently incorporated rewards. Prepaid cards are a very interesting case. Emerging as an alternative for lower-income consumers who were ineligible for bank-baked credit, prepaid cards are now becoming mainstream.[173] According to a recent survey of TD Bank, "one-quarter of Americans (25 percent) either currently use or have used a reloadable prepaid card in the past two to three years, but among millennials (ages 18 – 34), this proportion jumps to one in three (33 percent)."[174] Analysts note that "the vast majority of prepaid card owners use them as a complement to their regular checking account, not an alternative."[175] Prepaid cards offer greater independence, and do not require customers to have a checking or banking account. "Unlike with traditional checking accounts, prepaid users can make deposits at a wide range of retailers including convenience stores. Additionally, unlike traditional banks, prepaid cards usually belong to a large network of ATMs that allow users to withdraw cash for free."[176]

The complexity and multi-dimensional nature of the credit cards contracts offers a complimentary explanation of the expansion of prepaid cards.[177] Consumers lack the ability to evaluate all these dimensions and focus on those that are more salient to them.[178] Behavioral economics theory predicts low prices on salient dimensions and high prices on less salient

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account for 44% of the inter- change fees (Dawson and Hugener, 2006). MasterCard and Visa credit card interchange fee rates vary by product category. Their non-rewards credit card products have the lowest interchange fee rates (1.43–1.58% for retail stores), while their high-end rewards credit card products have the highest rates (1.53–2.2% for retail stores). In contrast, the interchange fee rates for debit card transactions do not vary by whether the issuer of the card offers rewards or not. The interchange fee rates for a signature-debit transaction is generally higher (ranging between 0.62% and 0.75%) than those for a PIN-debit transaction (ranging between 0.3% and 0.75% with a cap around 65 cents). The differences in the interchange fee rates may reflect the rewards levels: Signature-debit card rewards are less generous than credit card rewards but more generous than PIN- debit card rewards.").

172 Scott Schuh, Oz Shy, and Joanna Stavins, *Who Gains and Who Loses from Credit Card Payments? Theory and Calibrations*, (Federal Reserve Bank of Boston, August 2010), 44.

173 Todd J. Zywicki, "The Economics and Regulation of Network Branded Prepaid Cards," *Fla. L. Rev.* 65 (2013): 1502. Colloquy, "The 2015 Loyalty Census, Big Numbers Big Hurdles," 9. ("The explosion of prepaid cards, the proliferation of store credit cards and the unprecedented threat to the traditional retail banking industry from non-traditional players, such as mobile wallets, will all keep the financial services sector on its toes. The number of prepaid cards in the United States grew by nearly 50% from 2010 to 2014, with more than $500 billion now spent through them, and most prepaid cards don't have loyalty initiatives or benefits attached.").

174 T. D. Bank, "New Survey Signals Rising Popularity of Prepaid Cards, Led By Millennials."

175 Michael Gardon, "Best Prepaid Debit Cards of 2016," *The Simple Dollar*, 01.22.16.

176 *Ibid.*

177 Bar-Gill, *Seduction by Contract*, 2.

178 *Ibid. at 91.*

dimensions.[179] After facing the "bill-shock" of less salient terms, a subgroup of consumers may have developed an averseness towards the complexity of credit card contracts. Thus, the simplicity and independence of prepaid cards may look particularly appealing to them. To be clear, prepaid cards are not necessarily a good substitute of credit cards. Credit cards allow consumers to borrow money and build a credit history, which are features prepaid cards cannot offer. Nonetheless, consumers who do not need to borrow or build a credit history may find prepaid cards (or debit cards) more attractive.

As a result of their expansion, prepaid cards are becoming more heterogeneous and more complex in order to reach a larger audience. The more convenient features the card offers, the higher prices.[180] In some cases, prepaid cards are more expensive than debit cards—the most appropriate competitor.[181] As merchants also pay a fee for prepaid card transactions, issuers compete for the most profitable consumers. Accordingly, Amex[182] and PayPal[183] already offer prepaid cards with rewards.[184] In other words, competition in the market is leading sellers to either include rewards to steal market share from competitors or defend current market share holdings.

PayPal offers rewards for its credit card (operated by MasterCard), as well as for its own credit line.[185] Apple Pay has recently started integrating its network system with merchants' loyalty programs.[186] To be clear, Apple Pay does not offer a loyalty program. Since Apple Pay uses a credit card to issue the payment, consumers benefit from their normal credit card's rewards. However, mobile wallets had compatibility issues with retailers' loyalty programs, which has caused concerns for both buyers and sellers. According to an expert interviewed by the The Wall Street Journal, "[customers] are not specifically demanding new mobile payment offerings … *having access to loyalty program points and rewards within a mobile wallet is the number one feature they are interested in.*"[187]

### 4.1.5. Conclusions

The credit card market shows that rewards emerged as a result of increased market competition. Today, rewards are the industry standard in a heterogeneous marketplace. Consumer learning can indeed play a role in identifying restricted or sham rewards, such as miles subject to "black-out dates." However, when consumers learn that a reward is a sham,

[179] *Ibid. at 94.*
[180] Gardon, "Best Prepaid Debit Cards of 2016." ("But that convenience [deposits and withdrawals] comes at a cost. In most cases, prepaid cards come with higher fees than traditional checking accounts, and those fees can add up quick.").
[181] "Prepaid Cards: What You Should Know," *Nerdwallet*. ("A prepaid card functions much like a debit card. Users have access only to the money in the account linked to the card. Prepaid cards offer a convenient alternative to cash, and they don't require a credit check or a bank account to apply.").
[182] Amex offers "cash-back", under the following terms: It may take up to 90 days to get the reward and it can only be redeemed and used for future purchases with the card.
[183] Paypal offers cash-back rewards from specially selected stores and restaurants.
[184] http://www.thesimpledollar.com/best-prepaid-debit-cards/
[185] https://www.paypal.com/webapps/mpp/paypal-extras-mastercard-faq
[186] The Wall Street Journal http://blogs.wsj.com/cio/2015/01/26/the-next-step-for-the-mobile-wallet-loyalty-programs/
[187] The Wall Street Journal http://blogs.wsj.com/cio/2015/01/26/the-next-step-for-the-mobile-wallet-loyalty-programs/ Emphasis added.

sellers may look for another reward that helps them to offer a greater perceived value. This provides sellers with the informational and retention advantages that are key to segment the market. This argument is functionally context dependent. It may well be the case that a seller starts offering a better and more flexible reward to gain market share. This is what happened with credit cards after consumers realized the difficulties with redeeming miles. Nowadays the lock-in of miles is less prevalent in the market, though still present. Nonetheless, the problems of over-consumption, price increases, media overestimation, and cross-subsidization raise efficiency and distributional concerns in this market.

## 4.2. Airlines and FFPs

FFPs are a current common feature in the airline industry. They were born in 1981 with the creation of American Airlines' A Advantage program. A few months afterwards, United Airlines, Delta, and Trans World Airlines followed. Despite refusing initially, Southwest also joined the FFP trend shortly after.[188] "More than 30 years later, most estimates suggest that there are at least 130 airline loyalty programs and more than 150 million members."[189] Notably, 8 out of the 10 biggest low-cost airlines also operate FFPs.[190] In this final section, I will briefly show the ubiquity of this trend. I will succinctly refer to the results of a recent survey assessing loyalty in the market, noting how the lock-in effect of FFPs is less relevant than one might expect.

The main conclusions of this section are: (i) FFPs are the result of competitive pressures and an essential device for airlines to remain competitive in the market; and (ii) in general, consumers prefer a deal with miles—even when they are irrelevant. However, FFPs appear to be less important for consumers than other features, such as price and schedule. The lock-in here can exist, however this is not the only issue with FFPs. They can also lead consumers to make poor choices when prices are relatively similar, but the higher price comes with more miles. FFPs can also work as an entry barrier in the market, perpetuating market power in geographic regions where there is only one carrier dominating an airport.[191]

### 4.2.1. Why FFPs emerged

Until the 1980s, the regulator determined the airline industry's prices. Accordingly, airlines had to look for features other than price on which to compete. One feature consumers valued was frequency (or schedules), so airlines invested in excess capacity to be competitive on this dimension. As a result of this, there were many planes taking off every day, but most

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188 IATA, "Special Report - The Price of Loyalty," August 1, 2012. ("AAdvantage was very much a child of its time, benefiting from deregulation and computerization. Without the former, an FFP was unnecessary, while the latter made it possible. Within months of the launch of A Advantage, United Airlines, Delta Air Lines and Trans World Airlines (TWA) had implemented their own versions and FFPs became a mainstay of airline marketing, particularly for the high-yield business traveler. Even Southwest Airlines, which originally resisted the temptation to have its own scheme, joined the party.").

189 *Ibid.*

190 Evert De Boer and Ralph Browning, *The Legacy Effect Rethinking Loyalty for Low-Cost Carriers,* (AIMIA, 2013), 7.

191 Mara Lederman, "Are Frequent-Flyer Programs a Cause of the 'Hub Premium'?," *Journal of Economics & Management Strategy* 17, no. 1 (March 1, 2008): 35–66.

of them did not carry a considerable passenger load.[192] After deregulation, however, airlines started competing on price, but lower prices did not enhance consumer demand enough to fill the planes completely. This excess capacity was one of the main reasons why American Airlines introduced its FFP in 1981. Notably, after deregulation low-fare airlines became a competitive threat to traditional airlines and thus FFPs probably *also* emerged as a defensive strategy against these new entrants.[193]

As one of the most distinguished airline experts noted in 1987, during the initial years after their introduction, FFPs were considered as a "marketing "gimmick" of only peripheral importance.[194] However, they later proved to be a key to competitive viability. Almost every single airline adopted them—even those that expected not to need an FFP because of their low-prices and less discriminatory fares.[195] The reason for this is two-fold. The first relates to the psychological impact of rewards. As one commentator puts it, "across the different airline brands FFPs became successful because they appeal to the same instincts that induce people to save coupons or buy lottery tickets."[196] According to Murali Subbarao, CEO of Billeo—a company that assists consumers to make cost effective decisions when shopping and paying bills online—"online shoppers are almost six times more likely to use an offer that includes miles, compared to one that does not … The rising cost of airfare has turned earning miles into a significant motivator for consumers who are shopping online."[197]

The second reason is that FFPs are a convenient instrument to obtain data about passengers. Before the emergence of these programs, airlines could only utilize two sources of information: (i) travel agents; and (ii) the firm's computational reservation system, which held limited details in the database.[198] The rise of FFPs "expanded the range of options available for marketing departments to enable the larger carriers to gain advantage over the smaller airlines."[199] FFPs allowed airlines to obtain information about travel patterns and target special promotions to the FFP members. In other words, this information allowed airlines to segment the market and offer tailored promotions to the most valuable consumers to the airline. And in the airline industry consumer retention of frequent flyers is crucial since "roughly 5 to 6 percent of all flyers account for about 40% of all trips taken annually."[200] Furthermore, it is important to recall that for airlines with excess capacity FFPs are a relevant profit center.[201] Indeed, 60% of airlines' ancillary profits come from FFPs and the largest FFP in the U.S. generates more than US$1 billion in annual payments.[202]

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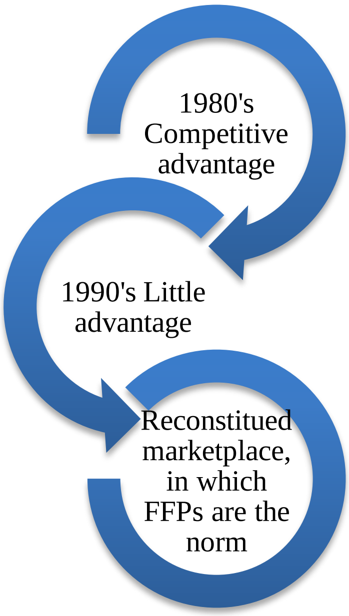
[192] Michael E. Levine, "Airline Competition in Deregulated Markets: Theory, Firm Strategy, and Public Policy," *Yale Journal on Regulation* 4 (1987): 393–494.
[193] Nawal K. Taneja, *Designing Future-Oriented Airline Businesses* (Ashgate Publishing, Ltd., 2014), 128.
[194] Levine, "Airline Competition in Deregulated Markets: Theory, Firm Strategy, and Public Policy," 414.
[195] *Ibid.*
[196] Gilbert, "Airlines," 134.
[197] "Loyalty Miles Go a Long Way With Online Shoppers," March 22, 2012.
[198] Gilbert, "Airlines," 135.
[199] *Ibid.*
[200] John G. Wensveen, *Air Transportation : A Management Perspective*, 8th ed. (Farnham, UK: Ashgate Publishing Ltd, 2015), 301.
[201] Nunes and Dréze, "Your Loyalty Program Is Betraying You," 3. ("Some loyalty programs can even function as profit centers. Consider American Airlines' AAdvantage program. Even as the airline racks up billions of dollars in debt, the AAdvantage program turns a tidy profit selling miles to other businesses to use as rewards for

### 4.2.2. Trends

Nowadays FFPs are pervasive. After emerging in the U.S. in the 80s, FFPs developed in Europe a decade later.[203] This occurred because firms competed for trans-Atlantic travelers and many European travelers had joined American FFPs.[204] As David Gilbert puts it "[d]evelopment [of FFPs] was rapid in the light of the prospect of losing valuable high-yield traffic to US competitors and by the 1990s most European carriers, with British Airways in the vanguard, developed a variety of FFPs to counter this threat."[205] Thereafter, FFPs expanded throughout the world.[206] Once almost every airline has an FFP, the competitive advantage provided by FFPs decreases.

Cycle of FFP programs[207]




Today FFPs even dominate the low-cost niche of the market. As reported by AIMIA, 8 out of the 10 biggest low-cost airlines already offer a loyalty program (the two exceptions are Ryan Air and Easy Jet).[208] There are two main explanations for this: (i) increased

their customers. AAdvantage clients range from huge concerns like Citibank to small businesses like Ariake, a sushi restaurant in Los Angeles. Consumers of Kellogg's breakfast cereals get thanked with American Airlines miles; so do subscribers to USA Today. Together, U.S.-based airlines sell nearly $2 billion worth of miles to more than 22,000 businesses.").

202 "Why Frequent-Flyer Programs Are an Effective Marketing Tool - Market Realist."

203 Gilbert, "Airlines," 136.

204 *Ibid.*

205 *Ibid.*

206 *Ibid. at 137.*

207 *Ibid. at 139.*

208 De Boer and Browning, "The Legacy Effect Rethinking Loyalty for Low-Cost Carriers." This might indicate these firms do not need to segment the market, which shows their customer base is less heterogeneous. I owe this point to Michael E. Levine.



competition between low-cost carriers; and (ii) the convergence between the two sectors.[209] As Taneja puts it, "[t]he need for viable loyalty programs continues to solidify as the business models of the two sectors converge (as a result of the low cost carriers' desire to penetrate the business market in the domestic, regional, and intercontinental sectors."[210]

FFPs are a marketing tool that develops the appearance of a better deal and allows airlines to collect valuable information. When low-cost carriers started offering a service for a very specific price sensitive niche in the market, the need for expansion led many of them to operate closer to a traditional airline, serving traditional airports, and adopting FFPs.[211] The general adoption of FFPs responds to the target of traditional airlines' consumers, but also once a low-cost carrier adopts a FFP, the others need to follow the move to keep their market share since a deal with miles tends to look more appealing to consumers. And the informational advantage of FFPs also applies for low-cost carriers. As previously indicated, FFPs allow airlines to build a consumer database that is essential to remain competitive in the market.

### 4.2.3. Problems

FFPs influence frequent flyers' decision-making; however, they are not the most important feature consumers take into account at the time they purchase a plane ticket. A recent survey has found consumers engage in FPP "polygamy" in the airline sector.[212] Nearly 50% of air travelers are members of more than one loyalty program.[213] Taking into account only business travelers, the number raises to roughly 60%. Between high frequency travelers, more than 50% are members of 4 or more loyalty programs.[214] Why is this? Because travelers take into account FFPs after finding convenient flights in terms of price and schedule.[215] According to this survey, the loyalty program ranked 19 in the list of most important features for consumers. For high-frequency business flyers, however, the loyalty program ranked second. This is consistent with results provided by IATA, which reports loyalty programs are the second most important attribute for consumers (after schedule) at the moment they make

[209] As one commentator notes, "[w]ith increased competition not only between low cost carriers and full service carriers, but also among the low cost carriers themselves, loyalty programs began to emerge even within the low cost sector…" Taneja, *Designing Future-Oriented Airline Businesses*, 130.
[210] Ibid. at 130–31.
[211] De Boer and Browning, "The Legacy Effect Rethinking Loyalty for Low-Cost Carriers."
[212] Adam Weissenberg and Jonathan Holdowsky, *Rising above the Clouds Charting a Course for Renewed Airline Consumer Loyalty*, (Deloitte, 2013).
[213] *Ibid.*
[214] *Ibid. at 12.* ("A further measure of loyalty program effectiveness resides in enrollment and participation exclusivity. According to our overall survey respondents, 78 percent are loyalty program members, while nearly 50 percent of overall survey respondents are enrolled in two or more loyalty programs. This unfaithful behavior is even more pronounced with the nearly one quarter of overall survey respondents who are business travelers. Of these, some 60 percent are members of two or more programs. Among high-frequency business travelers, slightly more than half are members of *four* or more programs.").
[215] Dr John G. Wensveen, *Air Transportation: A Management Perspective* (Ashgate Publishing, Ltd., 2015), 301.

their decision to purchase a ticket.[216] AIMIA ranks loyalty rewards in the third place, after schedule and price.[217]

Loyalty to a specific airline is not insignificant, though. This survey framed the result as "polygamous," for "only 44 percent of airline travelers fly more than 75 percent of air miles on their self-identified preferred airline [and]... [a]mong the highly coveted business traveler … only 40 percent fly more than 75 percent of air miles on their preferred airline while nearly one third fly fewer than half of air miles on their preferred airline."[218] However, these statistics show that a significant percentage of consumers stay loyal to their perceived favorite airline. A retention rate of 40-44% of customers in 75% or more of their flights can hardly upset the airlines.

Furthermore, miles can influence consumers' decision making at the time of purchase when they overestimate their value. For example, if there are two flights available at the same time and airline A offers more miles than airline B, how should a consumer decide? If airline A's price is cheaper, then the decision is a no brainer. However, it may well be the case that airline B's price is cheaper and this consumer needs to tradeoff the difference in price against the miles. In this case, experimental evidence suggests the consumer will tend to overestimate the value of those miles and might end up overpaying.[219]

If consumers have accumulated miles with an airline that dominates a local market and this monopolist has built a good consumer database, then the FFP can act as a barrier to entry to newcomers. This barrier is hard to overcome for small carriers, nevertheless even large carriers can face difficulties where they do not have a presence and an inventory of FFP.[220] This issue, however, has escaped antitrust scrutiny around the world. But there are two notable exceptions: Sweden and Norway.[221] These jurisdictions prohibited FFPs in their

[216] IATA, "Special Report - The Price of Loyalty."
[217] De Boer and Browning, "The Legacy Effect Rethinking Loyalty for Low-Cost Carriers."
[218] Weissenberg and Holdowsky, "Rising above the Clouds Charting a Course for Renewed Airline Consumer Loyalty," 5.
[219] It is important to recall that the irrelevant points effect was tested in this choice context (students chose more expensive flights because they included more miles, but they knew miles had no value). *See* van Osselaer, Alba, and Manchanda, "Irrelevant Information and Mediated Intertemporal Choice."
[220] Gilbert, "Airlines," 142.
[221] "Eight competition authorities have conducted formal investigations in relation to loyalty programmes in the field of air transport (in particular corporate discount schemes or travel agents agreements/commissions) in the last five years (Finland, Germany, Ireland, Italy, Spain, Norway, Sweden and the European Commission). Only the Swedish and the Norwegian competition authorities have intervened against loyalty programmes in relation to FFPs. European Competition Authorities, "Loyalty Programmes in Civil Aviation," *European Competition Journal* 2, no. 1 (2005): 384, http://www.bwb.gv.at/SiteCollectionDocuments/ECA_LoyaltyPaperCivilAviation.pdf. As Bruce Kobayashi has noted, in the U.S. antitrust intervention has not focused on the switching costs of the FFP itself, rather on attempts to change the terms of the program *e.g.*, *American Airlines v. Wolens*, 513 U.S. 219 (1995) or attempts to prevent the resale of miles *See TransWorld Airlines v American Coupon Exchange, Inc.*, 689 F. Supp. 1476 (1988) (airline's actions to prevent the brokering of frequent flyer miles did not violate the Sherman Act); *Haas, et al., v. Delta Airlines, et al.*, U.S. District Court, SDNY 03 Civ. 0589, Complaint filed 01/27/2003 (class action complaint alleging that restrictions on the brokering of frequent flyer miles violate the antitrust laws). Bruce H. Kobayashi, *The Economics of Loyalty Discounts and Antitrust Law in the United States*, Rochester, NY, SSRN Scholarly Paper ID 794944 (Social Science Research Network, September 7, 2005), 11–12. In Europe,

internal markets because they were thought to impose an entry barrier that discouraged potential entrants to compete with national monopolists. According to the antitrust authorities, the prohibition of FFPs encouraged subsequent entry to the market.[222] Entry resulted in the lift of the prohibition.

### 4.2.4. Conclusions

FFPs are pervasive in the airline industry. They emerged after the deregulation of the American market as a competitive response, taking advantage of excess capacity. FFPs are important marketing tools not only because of their psychological effect, but also because of the information airlines can obtain through such programs. Price discrimination is part of the essence of the airline business and FFPs allow airlines to obtain information to segment the market and target particular promotions to the most valuable consumers. For most U.S. traditional carriers, FFPs work as a profit center as well. Low-cost carriers also incorporated FFPs. Increased competition in the market not only between low-cost airlines but also between low-cost and traditional carriers led to the general incorporation of FFPs in the industry. FFPs do generate switching costs, however consumers take FFPs into account after price and schedule. If prices are similar, miles can lead consumers to overpay because of the noise media generates in consumers' decision-making and also the difficulty to determine their exchange value (even for rational and calculative consumers). FFPs can also operate as an entry barrier when an airline dominates an airport.

## 5. Summary and Conclusions

Loyalty programs are ubiquitous. Firms lure consumers with rewards in exchange for loyalty so that they can retain and increase their market share. Consumers face a switching cost every time they switch from provider, since they forego the opportunity to advance towards their habitual sellers' rewards. This lock-in leads to similar issues as termination fees: risks of abuse, softer competition between incumbents, and barriers to entry. Despite this, as Professors Bar-Gill and Ben-Shahar have recently noted, loyalty rewards have escaped public scrutiny. A persuasive reason to explain this is that "loyalty rewards" are framed as "rewards." It seems counterintuitive to think that a gift can be harmful. Loss aversion can also explain this different perception towards loyalty rewards. Yet, loss aversion can also boost the switching cost—when consumers think they have worked hard for points or miles they do not want to waste (loss aversion with respect to their endowed effort).

From the consumers' perspective, the main explanation for the proliferation of rewards is their psychological impact. Consumers tend to overestimate rewards and this can

[222] In the words of Christine Meyer, "We have had a recent review of Norway's ban on frequent flyer programs. *This ban has been important to secure competition in the Norwegian market and was key to get entry into the market when there was only one player*. Our recommendation to the government was to partially lift the ban, upholding the ban on routes to and from smaller destinations. The government first decided to uphold the ban for all destinations, then changed its decision due to disputes with the EFTA surveillance authority, lifting the ban altogether." Christine Meyer and Dan Sjöblom, Interview with Dan Sjöblom and Christine Meyer, Directors General of the Swedish and Norwegian Competition Authorities, http://www.americanbar.org/content/dam/aba/publishing/antitrust_source/jun13_nordic_intrvw.authcheckdam.pdf interview by Antitrust Source, June 2013. Emphasis added.

trigger a behavioral market failure. Sellers create an appearance of better deals and exploit consumers' misperceptions. Notably, this misperception is so salient for business people that today firms offer to issue checks on consumers' behalf when consumers cannot pay a particular firm by credit card. The issuer of checks charges a fee for this[223] and consumers accrue more points, miles, or get cash-back.

Sellers know that rewards have a strong psychological effect. They are aware that not offering rewards puts them at a competitive disadvantage because the bundle product/reward appears to be more convenient than it really is. In addition, sellers know that rewards can lock-in consumers and allow them to collect information in a consumer-friendly fashion. Thus, sellers benefit from rewards and have strong incentives to stick to the current model.

Rewards can have short-term or long-term effects. Short-term effects imply rewards worked as mere promotions. Long-term effects reveal consumers increased consumption after redemption. An increase in purchases can be rational if consumers demand more because they realized the product was of better quality than competing alternatives. However, studies indicate that such "rewarded behavior effect" can stem from behavioral and cognitive processes. Indeed, rewards can affect consumers' memories, satisfaction and patience, increasing the switching threshold.

In addition, rewards benefit from the medium effect. Imperfectly rational consumers tend to miss the maximization of their preferences when there is a medium involved. The medium effect has not only the power to create loyalty, but also to distort people's decisions towards—as Akerlof and Shiller put it—a "good-for-me/bad-for-you"[224] outcome. This is an important finding, which adds another reason to be critical of loyalty rewards—particularly about those that involve *media*. Loyalty rewards not only increase prices, limit exit from contract, and hinder competition, but also give opportunities to manipulate consumers with the allocation of points. Medium maximization helps to explain consumers' overspending. If consumers overestimate the value of rewards either because of the medium effect, asymmetries of information (*e.g.*, not reading the fine print of a cash-back credit card that states there is no cash-back if the consumer carries a balance), or optimism, then the market produces a suboptimal outcome. One in which sellers exploit consumers' biases, misperceptions, and imperfect information producing efficiency and distributional concerns.

The analysis of the credit card industry and FFPs indicates that loyalty programs emerge as a result of market competition.[225] The credit card market shows the emergence of

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[223] Stephanie Rosenbloom, "How to Earn Miles and Points Without Leaving Home," *The New York Times*, April 12, 2016. ("Another tool [to earn miles without leaving home] is Plastiq, which allows consumers to pay any business with a credit card, even those that do not accept credit cards. Plastiq charges your rewards card and then sends a check or bank transfer to the company you wish to pay. You pay a fee (1 to 2.5 percent), but the idea is that you're earning miles, which can be worth paying the fee in certain circumstances. For instance, this can come in handy if, say, your power company doesn't accept credit cards."). See https://www.plastiq.com/ I owe this reference to my friend David Seidler.

[224] George A Akerlof and Robert J Shiller, *Phishing for Phools: The Economics of Manipulation and Deception* (Princeton, NJ: Princeton University Press, 2015), 150. ("Free markets produce good-for-me / good-for-you's; but they also produce good-for-me / bad-for-you's. They do both, so long as a profit can be made. The free market may be humans' most powerful tool. But, like all very powerful tools, it is also a two-edged sword.").

[225] Akerlof and Shiller, *Phishing for Phools: The Economics of Manipulation and Deception*. Arguing that if business people behave in the purely selfish and self-serving way that economic theory assumes, the very nature

cash-back as a predominant "reward," which is basically a promotion. This was a response to consumer learning and followed what Professors Bar-Gill and Ben-Shahar predicted. Consumer learning led sellers to offer a promotion that does not lock-in consumers. However, the market still functions in quite imperfect conditions that can hardly self-correct. One of the main problems with rewards (both, delayed rewards and cash-back) in the credit card sector is the price-effect and the cross subsidization from low-income consumers to high-income consumers. No-rewards cards are available, but they are targeted at the low-end of the market. Nonetheless, some consumers still prefer airline-credit-cards and face a switching cost because of calculative commitment and loss aversion to the endowed progress. Medium maximization affects not only airline credit card holders, but also to those who save points, and receive cash-back—since consumers perceive cash-back as a discount and tend to overspend.

Emerging 30 years ago, FFPs became ubiquitous in the airline industry. Traditional carriers see them not only as a consumer retention strategy, but also as important profit centers and major sources of information that allow them to segment the market and economize marketing costs. To compete in equal conditions with traditional incumbents, low-cost carriers incorporated FFPs. Once a low-cost carrier took the lead, the rest of the actors in the market had to follow the move. FFPs can lock-in consumers, but miles can also lead consumers to make poor choices.

With respect to consumer learning, this article argues that it is certainly possible that consumers learn some rewards do not provide extra value. Cash-back is a good example of consumer learning. Some consumers learnt that miles were not a convenient reward. However, airlines' co-branded credit cards are still present in the market. As long as consumers value rewards, any competitor offering a no-rewards deal would face a competitive disadvantage. This disadvantage is double: (i) a no-rewards deal looks less convenient; and (ii) rewards allow sellers to gather information in a cost-effective manner. Overall, the economic and psychological reasons abovementioned impose a high burden on any seller that may want to compete without a loyalty program. This explains why increased market competition leads to markets with more loyalty programs.

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of the free-market system leads to manipulation and deception, taking advantage of consumers' cognitive and emotional failures. Basically, if there is a opportunity to take advantage of those failures, sellers will do it led by the competitive pressures of markets. "We sell, or else". *Ibid. at 53.*