



# The implications of tipping for economics and management

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**Abstract** *Tipping is a phenomenon that illustrates the importance of social norms and psychological reasons in motivating economic behavior. People tip because this is the social norm and disobeying the norm results in psychological disutility. Tipping is also economically important: in the USA alone, millions of workers derive most of their income from tips, and annual tips amount to dozens of billions of dollars. Tipping is also prevalent in numerous other countries around the globe. While tipping has been studied extensively by psychologists, it has received very little attention from economists. In order to encourage other economists to research this interesting phenomenon, the author discusses the implications of tipping for several areas in economics: social economics, behavioral economics, labor economics, and economics of information/management strategy. Also many ideas are provided for future research both as part of the discussion and in the concluding section.*

## Introduction

Tipping is a phenomenon that illustrates vividly that economic behavior is often motivated by social norms and psychological reasons. The observation that one-time customers tip suggests that future service is not a major reason for tipping. It follows that people tip because this is the social norm and, when they disobey the norm, they suffer a psychological disutility because of social disapproval, embarrassment, and feeling guilty and unfair.

But tipping is an important phenomenon to study not only because it shows the importance of social norms and psychological motivations in economic behavior, but also because the magnitude of tipping justifies a serious study of this phenomenon. Hundreds of millions of people around the globe give money voluntarily to strangers on a regular basis. The total amount of annual tips in US restaurants alone is estimated at about \$26 billion[1]. Clearly, adding tips in other establishments and in other countries results in a much higher figure.

Moreover, millions of workers in the USA alone derive a significant portion of their income, often most of it, from tips. For example, servers in full course restaurants earn 58 percent of their income from tips; those in counters earn 61 percent of their earnings in tips (in fact, the true percentages are likely to be much higher, because tips are often unreported). In the USA, for over two million workers, the primary occupation is being servers; the estimate for the number of servers, including those who are servers as a secondary occupation,

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is over three million (Wessels, 1997). In addition, tipping is common in many establishments apart from restaurants: Lynn *et al.* (1993), for example, considered 33 service professions that are tipped.

While tipping was the subject of many studies in psychology, economists for some mysterious reason hardly explored the economic implications of tipping (for a review of the literature in both disciplines, see Azar (2002a)). To encourage other scholars to contribute to the literature about tipping in economics, the author provides a summary of the implications of tipping for different areas in economics and management. He also presents the important questions that are still unanswered, and provides many ideas for future research.

In the following sections, the author claims that tipping has implications for four main areas in economics and management. First, since tipping is a social norm, it has implications for social economics. Second, people tip because they feel unfair and embarrassed if they do not tip, suggesting implications for behavioral economics. Third, tips being a major part of income for millions of workers, tipping is closely related to labor economics. Finally, tipping can be considered as a form of consumer monitoring, and it provides incentives for the worker to provide good service. This also implies that the firm should monitor tipped workers differently from non-tipped workers, and that the choice of managers between tips and service charges is important. These issues can be categorized as economics of information/management strategy. The following sections discuss the implications of tipping for economics in more detail.

### **Economics and social norms**

Clearly, social norms affect our economic behavior; in fact, tipping is a good example: the usual explanation of why people tip is that they want to conform with the social norm of tipping (Bodvarsson and Gibson, 1999). Psychologists suggest that we conform with social norms “so that we will be liked and accepted by other people” (Aronson *et al.*, 1999, p. 294). When we disobey the norm of tipping, we suffer an emotional disutility: we feel embarrassed, guilty and unfair, and our self-image is hurt. The idea that self-image may affect utility is not common in economics; nor, however, is it new: Akerlof and Kranton (2000), for example, propose a utility function that incorporates identity as a motivation for behavior, where identity includes both the category to which a person belongs and his self-image. Similarly, Loewenstein (1999) argues that self-esteem often motivates behavior.

While the importance of social norms in motivating economic behavior seems obvious, there is a debate whether the causality goes also in the opposite direction – are social norms created to address inefficiencies of the economic system and to improve social welfare? Arrow (1971, p. 22), for example, wrote, “I want, however, to conclude by calling attention to a less visible form of social action: norms of social behavior, including ethical and moral codes. I suggest as

one possible interpretation that they are reactions of society to compensate for market failures.” Two paragraphs below, Arrow adds “There is a whole set of customs and norms which might be similarly interpreted as agreements to improve the efficiency of the economic system (in the broad sense of satisfaction of individual values) by providing commodities to which the price system is inapplicable.” Others, however, oppose this view (Elster, 1989).

From the many social norms that exist, tipping is particularly suitable for economic analysis, both theoretical and empirical, for several reasons. First, it is economic in nature. Most other norms are not: the norm of dressing in a certain way for certain occasions, for example, has little to do with economics. Second, it is an important norm, as it affects millions of workers and totals tens of billions of dollars annually. Finally, it is measurable: we can collect data on tips and bill size, compute the tip as a percentage of the bill, discuss which percentage or dollar amount is the norm for a tip, measure deviations of actual tips from the norm and so on. Measuring how far from the social norm are one’s table manners or dressing habits is much more difficult.

One way to gain deeper understanding about whether social norms improve social welfare is to examine specific norms and evaluate whether they promote efficiency and welfare. Azar (2002b) divides tipping occasions into six different categories: reward-tipping, price-tipping, tipping in advance, bribery-tipping, holiday-tipping, and gift-tipping. His analysis of the economics of each category suggests that in many cases tipping solves some inefficiency and improves social welfare.

The question of whether tipping improves social welfare is intriguing but has not been addressed yet in a published paper.

Conlin *et al.* (2002), however, address a related question: they look at whether the implicit contract that tipping establishes between the consumer and the worker exhibits the characteristics of an efficient contract. They analyze empirically data about restaurant tipping and conclude that, while there may be elements of efficiency in the norm of tipping, it is not fully efficient.

Social norms are sometimes interpreted as a form of equilibrium selection (Sugden, 1989). Tipping provides an excellent example for such a norm, since we can observe at least two different equilibria at the same time, either across occupations or across countries. For example, while the equilibrium in US restaurants is that everyone tips, the equilibrium in the USA is that no one tips lawyers, and the equilibrium in Japan is that people do not tip in restaurants.

Another intriguing question about social norms is how they evolve: how a social norm becomes established, how it changes over time, why it sometimes disappears, and how norms move from one country to another. Tipping is a social norm that had a particularly interesting evolution both geographically and across occupations. Azar (2002c) reviews the history of tipping: tipping started in England about 500 years ago, moved to other countries in Europe, but did not become established in the USA until the late nineteenth century.

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Affluent Americans who wanted to show that they were familiar with the latest customs in Europe were often blamed for bringing the tipping custom to the USA. In the twentieth century, however, tipping was replaced in several European countries by service charges, while in the USA tipping has become prevalent in many occupations. The percentage of tips also changed over the years in several industries. Analyzing how the tipping custom evolved not only is interesting, but also provides insights about the evolution of social norms more generally.

### **Tipping and behavioral economics**

Tipping is a challenge to standard economic modeling. Why do consumers leave money to strangers when they are not legally obligated to do so and do not derive a material benefit from it? The answer to this puzzle is important not only for understanding why people tip, but also because of the insights it may suggest about other economic phenomena that result from social norms and feelings, such as donations and gift giving. Recently, economists became more receptive to the idea that the utility of individuals may depend on social norms and feelings (Elster, 1989, 1998; Rabin, 1998). Moreover, the tendency to consider emotions more seriously is likely to continue (Thaler (2000) suggests “*Homo economicus* will become more emotional” in the title of one section.) Nevertheless, models that incorporate social norms or feelings in the agent’s utility are still controversial. Many economists criticize such models by the claim that, if we allow agents to care about social norms and feelings, everything can be explained.

Tipping, however, suggests that ignoring norms and feelings may lead to false predictions: non-repeated customers should not tip (Ben-Zion and Karni, 1977); yet, most people tip even when they are not repeated customers. The lesson is that we should not ignore social norms and feelings where they may be important, for example, in explaining consumer or worker behavior.

The main explanation for tipping without referring to behavioral motivations is consideration of future service, namely that the consumer fears that stiffing today will result in poor service in the future. One piece of evidence that suggests that future service is not a reason for tipping has already been mentioned: non-repeated customers also tip, and they clearly have no future service considerations. Moreover, there are several papers that suggest that even the behavior of repeated customers is inconsistent with future service as a major reason for tipping.

Kahneman *et al.* (1986) interviewed people over the phone with two alternative questions. One question was “If the service is satisfactory, how much of a tip do you think most people leave after ordering a meal costing \$10 in a restaurant that they visit frequently?” and the other question started the same but ended “. . . in a restaurant on a trip to another city that they do not expect to visit again?” The mean responses were \$1.28 and \$1.27. These

answers indicate that people do not think that frequent patrons tip more, suggesting that future service is not one of the reasons for tipping.

Other studies, however, found that frequent patrons tip more (Conlin *et al.*, 2002; Lynn and McCall, 2000). Nevertheless, tips of frequent patrons are not more sensitive to service quality than tips of non-frequent patrons (Bodvarsson and Gibson, 1994; Conlin *et al.*, 2002; Lynn and Grassman, 1990). This finding is not consistent with future service being a reason for tipping. The intuition is that, if people tip because of future service, frequent patrons' tips should be more sensitive to service quality, because this sensitivity is what gives the waiters incentives to provide good service in the future.

Since future service is not a reason for tipping, it follows that the reasons for tipping are that tipping is a social norm and that disobeying the norm is associated with a disutility caused by feelings of unfairness and embarrassment. In addition, tipping may result in a positive utility from feeling generous and because consumers often feel empathy for the worker who serves them, and want to show their gratitude by leaving him a tip (for a detailed discussion about the reasons for tipping, see Azar (2002d)).

### **Tipping and labor economics**

Since tips are the major source of income for millions of workers, and an important portion of income for many others, tipping clearly has implications for labor economics. One of the major issues is what should be the policy toward minimum wages for tipped employees. Should tipped employees receive the same minimum wage, or can they be paid lower wages since they also earn tips? Servers alone represent at least 20 percent of minimum wage workers in the USA (Wessels, 1997), implying that minimum wage laws should consider seriously the problem of tipped workers. In the USA, for example, the minimum wage for tipped employees is lower than for other employees. The federal law requires employers to pay \$5.15 per hour in general. Tipped workers should also have total income (from wages and tips) of at least \$5.15 per hour, but their wages can be reduced up to \$2.13 per hour, using what is called "tip credit" towards the \$5.15 minimum wage. Some states, however, adopted different laws.

What are the effects of raising minimum wages for tipped employees? Wessels (1997) suggests that in the restaurant industry this can actually increase employment. When a restaurant increases employment of waiters, each waiter serves fewer tables and earns fewer tips. Therefore, waiters require higher wages and the firm faces a rising supply curve. The firm can be thought of as a monopsony, even if it is fully competitive in the labor market. Empirical analysis performed using data on changes in minimum wages of tipped employees in different states found the full "reverse C" monopsony pattern of employment for restaurants, with employment first going up and then down as the minimum wage is increased.

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However, an increase in minimum wage for tipped employees may have other results. In Israel, a large increase in this wage occurred when a court decision ruled that servers should receive minimum wages in addition to their tips (Sinay, 2001). Before the ruling, the common practice in restaurants was not to pay servers at all. As a result of the ruling, many restaurants replaced tipping with service charges. Then, the restaurants can pay the servers minimum wages out of these service charges, and retain the entire menu price; with tipping, they do not get the tips, and also (after the ruling) have to pay from the menu price minimum wages to the servers.

Ironically, the servers were hurt as a result of the ruling that tried to protect them. To see why, assume for simplicity that service charges are the same amount as tips. Income of servers from tips usually exceeded the minimum wage and often also their reservation wage. So the restaurant is not likely to offer them a wage that exceeds the service charges, which is what they received also before the ruling (in the form of tips). The restaurant, however, can pay them less than the service charges when service charges are higher than the maximum between the minimum wage and the servers' reservation wage. Therefore, the servers' gross income may be lower. In addition, in the past, servers usually did not report their tip income for tax purposes, but income tax is deducted automatically when they receive wages, so their net income is reduced even further.

A related issue that arises if there is no imposition of minimum wages on tipped workers is whether it is legal for the restaurant to charge its servers for the privilege to work (that is, do we allow negative wages?). The history of tipping provides examples of such cases in Europe and the USA about 100 years ago (Segrave, 1998). Since the income from tips may exceed the reservation wage of the worker, he might be willing to pay to obtain the job. Seligman (1998), for example, mentions that servers in the upper tier of restaurants can make about \$70,000 a year. Given the much smaller salaries that servers can receive in alternative occupations with similar attributes (required education and effort on the job, for example), it is clear why such wages can exceed the servers' reservation wages significantly.

Another issue is that of tip-outs, which are tips that are redistributed to non-serving staff. A policy question that arises is whether to allow tip-outs and, if so, to what extent. Taking the restaurant case, if servers derive large economic rents because their tip income exceeds their reservation wages, restaurants may want to distribute part of their tip income to other workers, to minimize labor costs. One extreme view is that anything should be allowed, since no one is forced to retain his job. If a server thinks that too much of his income is taken away from him, he can take a job at a different restaurant or in a different occupation. Another extreme approach is not to allow at all taking tips from the employee who received them. In the USA, the Fair Labor Standards Act states that tipped employees cannot be forced by employers to



share tips with employees who do not ordinarily participate in tip-pooling arrangements (such as janitors and dish-washers). Moreover, if a pooling agreement goes above 15 percent of the tips, the Department of Labor will investigate to assure that the pooling agreement is “customary and reasonable”. In addition, several states accepted laws that prohibit tip pooling (Wessels, 1997).

### **Tippling and economics of information/management strategy**

The existence of tipping raises several issues that are related to economics of information and management strategy. One is the choice of compensation schemes for different workers. If the firm observes that certain workers obtain economic rents because of tipping (their tip income plus the minimum wage the firm has to pay them exceeds their reservation wages), it might want to try to extract this rent from them. One way to do so is to impose tip-out agreements in which these workers have to share their tips with other workers who are not tipped. Such agreement reduces the wages that the firm has to pay these other workers. In the USA, however, the firm is limited in how much it can use tip-outs (as discussed earlier). Another way, also mentioned before in another context, is to charge workers for the right to work and earn tips, if such action is legal.

A third method is to have the workers who enjoy the rent (e.g. waiters) perform tasks of other workers (e.g. dish-washers), and fire these other workers (Wessels, 1997). Yet another option is to increase the number of workers who enjoy the rent. Tips will be shared by more workers, reducing the rent enjoyed by these workers. The firm can gain from doing so because more workers can provide better service quality; this might enable the firm to increase its sales and to charge higher prices.

A related issue is whether to allow (or even impose) tip pooling between the workers in the same occupation. In the example of a restaurant, tip pooling between waiters means that they split their tips regardless of who earned them. The advantage from the management perspective of such arrangement is that it encourages cooperation between the waiters. Such cooperation may be important for the restaurant’s reputation. If one waiter is busy, and another of his tables requires attention, the restaurant would like another waiter to assist him.

On the other hand, tip pooling reduces the incentive of each waiter to provide good service and creates problems of free riding. These problems are stronger when more waiters are in the arrangement. The problem may be mitigated if the waiters observe one another and therefore can make sure that no one shirks. The optimal strategy of the restaurant may be some intermediate approach: to encourage tip pooling in small teams, of two to three waiters in each, where each team is responsible for a certain area of the restaurant. Such arrangement can promote cooperation and mutual help between the waiters in the same team, while not inducing a significant free-riding problem.

Another issue is the choice of the firm between tips and service charges. Which choice maximizes profits? Does tipping enable the firm to cut down its monitoring cost? What is the optimal level of monitoring by the firm, given that tipping serves as a consumer-monitoring mechanism? These questions have not been addressed yet in the literature.

Schwartz (1997) raises another implication of tipping: tipping may change the profits of the firm, when consumer segments differ in their demand functions and their propensity to tip. He argues that the policy of the firm toward tipping might enable price discrimination between different consumer segments, thus increasing profits.

Another question is whether the firm should invest in screening workers and training them, or let the strong survive using tipping as a natural screening device. The good workers will provide good service, earn large tips, and retain their jobs; the bad workers will earn smaller tips and choose to quit. An additional managerial concern is whether it is a good idea for the firm to base the promotion or evaluation of workers on their tips. Lynn (2001), for example, cites an internal document that announced a servers' contest at Houston's Guadalajara Restaurant, which says "This program will be monitored by your charge tip averages. Tip averages are the most effective way to measure a server's capabilities and progress within the restaurant."

A recent idea suggests using tips as a payment mechanism for intellectual property posted on the Internet, in particular music and books (Woodhead, 2000). The idea is that musicians and authors will post on the Internet music and books, and ask consumers who enjoy them to tip. Based on a Web site that was funded for more than two years mainly by such tips paid by users, Woodhead believes that people would tip for the use of intellectual property, especially if they tip a person (a musician or an author) and not a corporation. This idea can be extended to other sorts of intellectual property, and should be considered seriously, at least as an experiment, by managers in the relevant industries[2].

### **Future research**

Tipping is an important economic phenomenon with implications for different areas in economics and management, including social economics, behavioral economics, labor economics, and economics of information/management strategy. Although tipping has received a lot of attention from psychologists, economists have not yet addressed many economic questions related to tipping. Some ideas for future research were mentioned in the previous sections, but there are many other promising research opportunities in this field.

First, almost all the empirical research so far has dealt with tipping in restaurants. While tipping in restaurants is the most common form of tipping, tips are often given in taxis, hotels, barber shops, valet parking and on dozens of other occasions. Sometimes the tip takes place once a year, such as tipping



the newspaper boy in the holidays. In other cases, we do not give a monetary tip, but rather give gifts, which can be thought of as another form of tipping. Examining holiday tipping, non-monetary tipping and tipping in establishments other than restaurants is interesting and can add to our understanding of tipping and of economic behavior more generally.

Another promising subject for future research is the efficiency of tipping as a mechanism that promotes excellent service. Is service in countries where tipping is common better than in countries without tipping? Do waiters give better service when they serve a table of four diners (who are likely to tip) than when they serve a table of eight diners (who usually have fixed gratuity added to their bill as a substitute for a tip)?

Also interesting is how the norm of tipping evolves. How is a norm created to tip in a situation that was not tipped before? How does a norm to tip certain workers cease to exist? How does the norm of tipping move from one country to another? When and why was tipping in many European countries replaced by service charges?

Some policy questions arise as well. Should tips be taxed, or are they like a gift from a customer to a worker and should not be taxed? Should tipped workers be paid a minimum wage in addition to their tips? Should their total income (from tips and wages) be at least equal to the minimum wage, or should tipped workers be treated as independent workers who might earn less than a minimum wage? What should be the law, if at all, about tip-outs? The author hopes that the paper will encourage others to contribute to the research in this fascinating subject.

#### Notes

1. Sales in the USA in 2001 of food and alcoholic beverages to consumers in full-service restaurants, bars and taverns, and lodging places, were \$143.3, \$12.5 and \$20.1 billion, respectively (US Census Bureau, 2001, Table No. 1268; the numbers for 2001 are a projection). Summing the three numbers and multiplying by an average tip of 15 percent yield annual tips of \$26.4 billion. The need for estimation arises because tips are often unreported to tax authorities: Hemenway (1993), for example, reports that the only income with a lower compliance rate in the USA is illegal income.
2. One interesting experiment may be to ask readers to tip the author when they like a working paper that she wrote. Not only will this serve as an incentive to write better papers, but also it will give valuable feedback to authors about which of their papers are interesting and worth additional effort.

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