

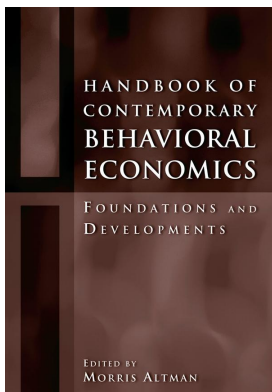
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Morris Altman

### **Tipping in Restaurants and around the Globe**

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## TIPPING IN RESTAURANTS AND AROUND THE GLOBE

### An Interdisciplinary Review

MICHAEL LYNN

On an average day, approximately 10 percent of the U.S. population eats at sit-down/family restaurants. In an average month, approximately 58 percent do so (Media Dynamics 2001). After completing their meals, almost all of these restaurant diners leave a voluntary gift of money (or tip) for the server who waited on them (Speer 1997). These tips, which amount to approximately \$21 billion a year, are an important source of income for the nation's two million waiters (Lynn 2003b). In fact, tips sometimes represent 100 percent of waiters' take-home pay, because tax withholding eats up all of their hourly wages (Mason 2002).

Of course, tipping is not confined to restaurant servers or to the United States. In the United States, consumers also tip barbers, bartenders, beauticians, bellhops, casino croupiers, chambermaids, concierges, delivery people, doormen, golf caddies, limousine drivers, maître d's, massage therapists, parking attendants, pool attendants, porters, restaurant musicians, washroom attendants, shoeshine boys, taxicab drivers, and tour guides, among others (Star 1988). Although not as common as in the United States, tipping is also practiced in most countries around the world (Putzi 2002). In fact, national differences in tipping are a source of uncertainty for many international travelers, and local tipping practices are a topic covered in most travel guides.

Tipping is an interesting economic behavior, not only because it is widespread and practically important, but also because it is an expense that consumers are free to avoid. Although called for by social norms, tips are not legally required. Furthermore, since tips are not given until after services have been rendered, they are not necessary to get good service in establishments that are infrequently patronized. For this reason, many economists regard tipping as "mysterious" or "seemingly irrational" behavior (e.g., Ben-Zion and Karni 1977; Frank 1987; Landsburg 1993). The present essay explores this behavior and its implications for economic theory and public policy.

The essay is divided into four sections. The first two sections provide more detail about the phenomenon of tipping by summarizing and discussing the results of empirical research on the determinants and predictors of restaurant tipping and of national differences in tipping customs, respectively. Then economic theories about tipping are reviewed in light of the previously summarized empirical literature. Finally, the public welfare and policy issues raised by tipping are discussed.

## DETERMINANTS AND PREDICTORS OF RESTAURANT TIPPING

Restaurant tips in the United States vary substantially across dining occasions, dining parties, servers, and restaurants. Numerous studies attempting to explain this variability in restaurant tipping have appeared in the psychology and hospitality management literatures, and a few such studies are beginning to appear in the economics literature (e.g., Bodvarsson and Gibson 1994; Bodvarsson, Luksetich, and McDermott 2003; Conlin, Lynn, and O'Donahue 2003; Lynn and McCall 2000a; McCrohan and Pearl 1991). This research has generally relied upon one or more of the following three methodologies:

1. Researchers have stood outside restaurants and conducted exit surveys of departing patrons about their just-completed service encounters and tipping behaviors.
2. Researchers have created panels of consumers who agreed to keep diaries of their restaurant dining experiences and tipping behavior.
3. Researchers have recruited restaurant servers to record information about their own behavior, their customers' characteristics, and the tips those customers leave.

Among the variables whose effects on restaurant tipping have been studied using these methodologies are bill size, payment method, dining party size, service quality, server friendliness, server sex, customer sex, customer patronage frequency, customer ethnicity, and various interactions between these variables. The results of this research are briefly reviewed in the paragraphs below.

### Bill Size

Social norms in the United States call for tipping restaurant servers 15 to 20 percent of the bill, so it should not be surprising that dollar tip amounts are positively related to bill size. What may be surprising is how strong this relationship is. In a quantitative review of thirty-six studies involving 5,016 dining parties from over forty restaurants, Lynn and McCall (2000b) found that 69 percent of the average within-restaurant variability in dollar tip amounts can be explained by bill size alone. This suggests that bill size is twice as powerful as all other factors combined in determining dollar tip amounts within restaurants.

Of course, the effects of bill size are not invariant. Research suggests that bill size predicts dollar tip amounts better when the tipper is a regular patron of the restaurant (Lynn and Grassman 1990), the tipper has higher income and education (Lynn and Thomas-Haysbert 2003), and the tipper is Asian or white as opposed to black or Hispanic (Lynn and Thomas-Haysbert 2003). It is possible that these variables moderate the relationship between dollar tip amount and bill size because they reflect differences in awareness of the restaurant tipping norm. Supporting this possibility, one study found that blacks are half as likely as whites to know that the customary restaurant tip is 15 to 20 percent of the bill, and additional, unreported analyses of that study's data indicated that awareness of the norm increases with income and education (Lynn 2004b).

While dollar tips increase with bill size, percentage tips decrease with bill size (Green, Myerson, and Schneider 2003). This effect—known as the “magnitude effect in tipping”—is due to a positive intercept in the relationship between dollar tips and bill sizes rather than to a marginal decrease in the positive relationship between these two variables (Lynn and Sturman 2003). The positive intercept has been attributed to:

1. A tendency to leave a minimum tip when bill size is very small (Lynn and Bond 1992)
2. A tendency to add a constant amount for the mere presence of the server to the standard percentage tip (Green, Myerson, and Schneider 2003)
3. A tendency for some people to be “flat dollar tippers” while others are “percentage tippers” (Lynn and Sturman 2003)
4. A tendency to round up tip amounts (Azar 2003)

Of these explanations, however, only the “flat dollar tipper” explanation has received any empirical support. National surveys indicate that about 20 percent of restaurant tippers leave a flat dollar amount rather than a percentage of the bill (Paul 2001; Speer 1997), and a computer simulation by Lynn and Sturman (2003) demonstrated that this fact is sufficient to produce the magnitude effect in tipping.

### **Payment Method**

Restaurant patrons paying with credit cards generally leave larger bill-adjusted or percentage tips than do those paying with cash (Feinberg 1986; Garrity and Degelman 1990; Lynn and Latane 1984; Lynn and Mynier 1993). These credit card effects on tipping could be due to:

1. The reduced psychological cost of delayed payments
2. Preexisting differences between cash and credit-card customers
3. Conditioned responses to credit-card stimuli (Feinberg 1986)

Consistent with the last of these explanations, McCall and Belmont (1996) found that people tipped more when the bill was presented on tip trays embossed with credit card insignia than when it was presented on plain tip trays and that this effect occurred even when people paid the bill with cash.

### **Dining Party Size**

Large dining parties leave smaller percentage tips than do small dining parties (Freeman et al. 1975; Lynn and Latane 1984; May 1980). This effect has been attributed to:

1. A diffusion of the shared responsibility that each group member has for the server (Freeman et al. 1975)
2. An equitable adjustment for the smaller per-person effort involved in waiting on larger tables (Snyder 1976)
3. A cost-reducing adjustment for the larger bill sizes acquired by larger tables (Elman 1976)
4. A statistical artifact produced by a positive intercept in the relationship between dollar tips and bill sizes (Lynn and Bond 1992)

Of these explanations, only the statistical artifact explanation has been empirically supported (see Lynn and Bond 1992).

### **Service Quality**

Dining parties that rate the service highly leave larger tips than those who rate the service less highly (Lynn and McCall 2000a). Furthermore, this relationship remains statistically significant

even after controlling for customers' food ratings, customer patronage frequency, and many other variables (Conlin, Lynn, and O'Donahue 2003). The robustness of the effect after controlling for many potential confounds suggests that it is causal—that is, receiving better service causes people to leave larger tips. Despite its reliability and robustness, however, the service-tipping relationship is weak (see Bodvarsson and Gibson 1999; Bodvarsson, Luksetich, and McDermott 2003; Lynn 2000b, 2003a, 2004c). Customer service ratings account for only 1 to 5 percent of the within-restaurant variability between dining parties in tip percentages (Lynn and McCall 2000a). Similarly weak relationships between service and tipping have been observed at the server and restaurant levels of analysis (Lynn 2003b).

Several studies have examined potential moderators of the service-tipping relationship. A quantitative review of those studies testing the service by patronage frequency interaction found that the effects of service on tipping do not vary with the tipper's frequency of restaurant patronage (see Lynn and McCall 2000a). However, studies testing other interactions have found that the effect of service on tipping is moderated by customer ethnicity (Lynn and Thomas-Haysbert 2003) and day of the week (Conlin, Lynn, and O'Donahue 2003). Changes in service ratings are associated with larger changes in tip percentages among Asians and Hispanics than among blacks and whites. Changes in service ratings also have a bigger effect on weekday tip percentages than on weekend tip percentages. This latter effect may be attributable to the greater control over service delivery that servers have on weekdays (which are comparatively slow) than on weekends. Supporting this logic, Seligman and colleagues (1985) found that pizza delivery drivers received larger tips for faster deliveries, but only when the tipper believed the driver was personally responsible for the delivery time.

### Server Friendliness

Although service ratings are only weakly related to tip percentages, server friendliness is a moderately strong predictor of tipping. Studies have typically found that servers' verbal and nonverbal signals of friendliness increase tip percentages by 20 to 40 percent or more (Lynn 1996, 2003b). For example, servers receive larger percentage tips when they:

1. Introduce themselves by name (Garrity and Degelman 1990)
2. Repeat customers' words when taking food orders (van Baaren et al. 2003)
3. Touch customers lightly on the arm, hand, or shoulder (Crusco and Wetzel 1984; Hornik 1992; Lynn, Le, and Sherwyn 1998; Stephen and Zweigenhaft 1986)
4. Give customers big, open-mouthed smiles (Tidd and Lockard 1978)
5. Squat down next to the table during interactions with customers (Davis et al. 1998; Lynn and Mynier 1993)
6. Entertain customers with games or jokes (Guéguen 2002; Rind and Strohmets 2001b)
7. Draw smiley faces or other pictures on the back of checks (Guéguen and Legohérel 2000; Rind and Bordia 1996)
8. Write "thank you" or other messages on the backs of checks (Rind and Bordia 1995; Rind and Strohmets 1998)
9. Call customer by name when returning credit card slips to be signed (Rodrigue 1999)

All of these studies involved random assignment of dining parties to the different treatments, so they provide fairly strong evidence that tipping is affected by servers' rapport with customers.

### **Server and Customer Sex**

Men sometimes leave larger tips than do women (e.g., Crusco and Wetzel 1984; Lynn and Latane 1984), and waitresses sometimes receive larger tips than do waiters (e.g., Davis et al. 1998), but these sex effects on tipping are not always found (Lynn and Graves 1996; Lynn and Simons 2000). It appears that the effect of customer sex on tipping depends on server sex and vice versa. In an unpublished quantitative review of the tipping literature, Lynn and McCall (2000b) found that men tipped more than women in studies where the server was female, while women tipped more than men in studies where the server was male. Furthermore, Conlin, Lynn, and O'Donahue (2003) found a significant interaction between server and customer sex such that women tipped more than men when the server was male but not when the server was female. These findings suggest that tipping is affected by the dynamics of sexual attraction.

### **Customer Patronage Frequency**

The regular patrons of a restaurant base their tips on bill size more than do new or infrequent patrons (Lynn and Grassman 1990; Lynn and McCall 2000b), perhaps because they are more familiar with the 15 to 20 percent restaurant tipping norm. They also tend to leave larger average tips than do infrequent patrons (Lynn and McCall 2000a). This latter effect remains significant even after controlling for customers' ratings of the food and service (Conlin, Lynn, and O'Donahue 2003; Lynn and Grassman 1990), so regular customers do not tip more merely because they perceive the food and service more positively than do infrequent customers. Instead, regular patrons may tip more because they are more likely to identify with servers or because they value servers' approval more than do infrequent patrons.

### **Customer Ethnicity**

Black restaurant patrons are more likely than white patrons to tip a flat amount rather than a percentage of the bill. Blacks also leave smaller average restaurant tip percentages than do whites (Willis 2003). This latter effect remains sizable and statistically significant after controlling for education, income, and perceptions of service quality, so black-white differences in tipping are not due solely to socioeconomic differences or to discrimination in service delivery (Lynn and Thomas-Haysbert 2003; Lynn 2004a). Instead, they may be due to ethnic differences in familiarity with the restaurant tipping norm. Consistent with this possibility, Lynn (2004b) found that whites were twice as likely as blacks (71 versus 37 percent) to know that the customary restaurant tip in the United States is 15 to 20 percent of the bill amount.

### **Miscellaneous**

Among the other variables positively related to bill-adjusted tip amounts in at least some studies are:

1. Alcohol consumption (Conlin, Lynn, and O'Donahue 2003; Lynn 1988; Sanchez 2002)
2. Sunny weather or forecasts of sunny weather (Cunningham 1979; Crusco and Wetzel 1984; Rind 1996; Rind and Strohmets 2001a)
3. Metropolitan area size (Lynn and Thomas-Haysbert 2003; McCrohan and Pearl 1983, 1991)
4. Customer income (Lynn and Thomas-Haysbert 2003; McCrohan and Pearl 1983)

5. Customer youth (Conlin, Lynn, and O'Donahue 2003; Lynn and Thomas-Haysbert 2003; McCrohan and Pearl 1983)
6. Customer ratings of food quality (Lynn and McCall 2000a)
7. Server personality—i.e., self-monitoring (Lynn and Simons 2000)
8. Server physical attractiveness (Hornik 1992; Lynn and Simons 2000; May 1980)
9. Server adornment—i.e., wearing flowers in hair (Stillman and Hensley 1980)

## **PREDICTORS OF NATIONAL DIFFERENCES IN TIPPING NORMS**

Tipping varies across nations in terms of whom it is customary to tip and how much it is customary to tip them. A handful of studies in the psychology and hospitality management literatures have attempted to measure these national differences in tipping norms and to examine their relationships with other variables. The most commonly studied measure of national tipping norms is the number of different service providers (out of a list of thirty-three) that it is customary to tip in a nation. I shall refer to this measure as the national prevalence of tipping. Two other measures of national tipping norms are the amounts—in percentages of the bill or fare—that it is customary to tip restaurant servers and taxicab drivers. I shall refer to these measures as national restaurant and taxicab tip rates, respectively. All of these measures of national tipping norms are based on content analyses of international tipping guidebooks.

Research on the predictors of these measures has generally focused on national character—that is, national values, motives, and personality traits. This focus rests on the assumption that tipping norms are primarily determined by consumers. Consumer acceptance of these norms is theorized to vary with the value that consumers place on the consequences or functions of tipping. Thus, researchers have examined the relationships between national tipping norms and national character traits relevant to those consequences and functions. The results of this research are briefly reviewed in the paragraphs below.

### **Achievement, Materialism, and Status**

The national prevalence of tipping, the national restaurant tip rate, and the national taxicab tip rate all increase with Hofstede's (1983) measure of national commitment to traditionally masculine values such as achievement, materialism, and status over traditionally feminine values such as caring and relationships (Lynn and Lynn 2004; Lynn, Zinkhan, and Harris 1993). The national prevalence of tipping also increases with related measures such as national need for achievement, national value placed on recognition/status, and national extroversion (Lynn 1997, 2000a, 2000c). These findings are consistent with the idea that tipping functions as a reward for server performance and as a form of consumer status display (Shamir 1984).

### **Anxiety and Uncertainty Avoidance**

The national prevalence of tipping and the national restaurant tip rate, but not the national taxicab tip rate, increase with Hofstede's (1983) measure of national desire to avoid uncertainty (Lynn and Lynn 2004; Lynn, Zinkhan, and Harris 1993). The national prevalence of tipping also increases with a national personality trait, called "neuroticism," that is associated with heightened anxiety and nervousness (Lynn 1994, 2000a). These findings are consistent with the idea that tipping functions as a guarantee of good and friendly service (Lynn and Lynn 2004). That uncertainty avoidance is unrelated to national taxicab tip rates may mean that people are less concerned



about variability in the behavior of taxicab drivers than they are about variability in the behavior of waiters and other service providers.

### **Power**

The national prevalence of tipping increases with McClelland's (1961) measure of national need for power (Lynn 2000c). This finding supports the idea that tipping is valued as a source of consumer power over servers (Hemenway 1993). On the other hand, national tipping customs are unrelated to Hofstede's (1983) measure of national acceptance of hierarchical power structures in analyses that statistically control for other national values (Lynn and Lynn 2004; Lynn, Zinkhan, and Harris 1993). These latter findings suggest that the power implications of tipping are not an impediment to its appeal among egalitarian-minded people. Perhaps the power over servers that tipping confers on consumers is seen by most people as benign or legitimate.

### **Individualism Versus Collectivism**

National taxicab tip rates increase with Hofstede's (1983) measure of national emphasis on individual—as opposed to group—identity and motivation (Lynn and Lynn 2004). However, national prevalence of tipping and national restaurant tip rates are unrelated to national individualism after controlling for Hofstede's other values (Lynn and Lynn 2004; Lynn, Zinkhan, and Harris 1993). These inconsistent findings are difficult to explain, but the failure to find that communalistic nations tip more service providers or larger amounts than do individualistic nations is meaningful. It suggests that the communalistic benefits that tipping provides are not an important determinant of the development and spread of tipping norms (Levmore 2000).

### **Psychoticism**

The national prevalence of tipping decreases with the average psychoticism score within nations (Lynn 2000a). Psychotic people tend to be aggressive, antisocial, and unempathetic, so this finding substantiates the idea that tipping norms are supported as a way to benefit or help servers.

### **Tax Burden**

The national prevalence of tipping decreases with the percentage of national GDP collected in taxes (Schwartz and Cohen 1999). This relationship has been attributed to the lower disposable income associated with heavier tax burdens. However, this explanation assumes that higher national spending power leads to a greater prevalence of tipping and my own unpublished analysis indicates that the reverse is true. In a sample of thirty-two nations, I found that the national prevalence of tipping was negatively correlated with national purchasing power parity ( $r = -.49, p < .004$ ).

Another potential explanation for the negative relationship between national tax burdens and tipping customs is that national attitude toward taxes affects both the tax burden and the support for norms, such as tipping, that facilitate tax evasion. However, an unpublished analysis I conducted does not support this explanation. I found that national attitudes toward tax evasion via underreporting of income was unrelated to both the national tax burden ( $r = -.16, n = 17, p = .55$ ) and the national prevalence of tipping ( $r = -.05, n = 16, p = .85$ ). Thus, additional explanations for the relationship between national tax burdens and tipping norms are needed.



## ECONOMIC THEORIES OF TIPPING

The empirical literature on tipping reviewed above is dominated by psychologists. Only recently have economists begun to collect and analyze data on this phenomenon. However, tipping has intrigued economists for some time and has been the subject of several economic models, theories, and speculations, most of which address one of two questions: why rational individuals leave tips, and how the custom of tipping evolved. Economists' answers to these questions are critically reviewed in the paragraphs that follow.

### Individual Motives for Tipping

Tipping is a voluntary activity. Although guided by social norms, compliance with those norms is not compulsory. This raises a question about why rational people leave tips. Economists have generated six different answers to this question. According to them, people tip in order to:

1. Buy future service from servers they will encounter again
2. Increase servers' incomes
3. Experience positive feelings such as pride or avoid negative feelings such as guilt
4. Receive social approval/status or avoid social disapproval
5. Build an honest character
6. Support the rule of tipping

Each of these explanations is critically evaluated in the paragraphs below.

#### *Future Service*

The hypothesized motive for tipping most consistent with traditional economic theory is that people tip in order to buy future service. This explanation retains the assumption of rational economic man who derives utility only from economic goods and services. The strong version of this explanation is that frequent patrons can ensure good future service by leaving tip amounts that are contingent on service quality (Ben-Zion and Karni 1977; Lynn and Grassman 1990). Servers who are aware of this contingency and want to improve their tip incomes will then be motivated to deliver good service. This reasoning is similar to that underlying the tit-for-tat strategy in iterated prisoner's dilemma games (Axelrod 1984), and it suggests that the relationship between service and tipping should be stronger for regular customers than for infrequent patrons. However, as mentioned earlier, tests of the service quality by patronage frequency interaction have failed to support this expectation. At the very least, these null results suggest that tippers are poor game theorists.

A weak form of the future service explanation is that frequent patrons can ensure good future service by tipping generously, because servers will be happier to wait on those known to be good tippers (Bodvarsson and Gibson 1994; Frank 1988; Sisk and Gallick 1985). This explanation preserves the traditional models of rational consumers, but assumes that servers have irrational desires to repay customers for past generosity by supplying good current service. This version of the future service explanation does have the advantage of predicting only a positive effect of patronage frequency rather than a service quality by patronage frequency interaction. As previously mentioned, researchers have found substantial evidence that regular customers do tip more than infrequent customers, so this weak version of the future service explanation is more consistent with the empirical literature than is the strong version. However, regular patrons may tip

more than non-regular patrons for many reasons other than the desire for future service. Furthermore, a national survey asking respondents for the best explanation of why they do or do not tip found that only 3 percent of respondents indicated that they tip for future service (Market Facts 1996). Thus this explanation for tipping needs additional testing.

### *Helping Servers*

The traditional economic theory of consumer behavior cannot explain consumers' motives for tipping in restaurants that are infrequently patronized (Ben-Zion and Karni 1977). To explain tipping in this situation, several economists have expanded their assumptions about consumers' utility functions. One frequently considered idea is that consumers derive utility from increasing servers' incomes (Azar 2004b; Frank 1988; Schotter 1979). In other words, people tip out of feelings of empathy for servers. This idea is consistent with the previously reviewed findings that:

1. Tips increase with patronage frequency (because familiarity increases empathy)
2. Tips increase with server friendliness (because friendliness increases empathy)
3. The number of tipped service professions decreases with national psychoticism (because psychoticism decreases empathy)

It is also consistent with the results of a national survey in which 30 percent of respondents indicated that the main reason they tip is "because I feel people depend on the money to make a living" (Market Facts 1996).

### *Feelings of Pride and Guilt*

Consumers' utility functions have also been broadened to include feelings of pride and guilt, which are theorized to accompany conformity and nonconformity with internalized tipping norms (Azar 2004a, 2004b; Bodvarsson and Gibson 1997; Conlin, Lynn, and O'Donahue 2003; Ruffle 1999). This idea is consistent with the previously reviewed findings that dollar tips increase with bill size and that percentage tips increase with service quality, because the restaurant tipping norm identifies these variables as important determinants of the appropriate tip amount. However, compliance with tipping norms is not evidence that those norms are internalized or that feelings of pride or guilt motivate compliance with those norms. Thus, more direct assessments of the relationships between tips and anticipated feelings of pride or guilt are needed to evaluate this explanation for tipping.

### *Social Approval and Status*

Allowing consumers' utility functions to include social approval and status has also been suggested as a way to explain tipping (Azar 2004a, 2004b; Conlin, Lynn, and O'Donahue 2003; Ruffle 1999). Although sometimes lumped together with feelings of pride and guilt by economists trying to explain tipping, the desire for social approval is distinct because it varies with the visibility of the tip and the characteristics of observers in a way that feelings of pride and guilt do not (see Azar 2004a; Bodvarsson and Gibson 1997). In fact, the previously reviewed findings that tips increase with patronage frequency, server friendliness, server physical attractiveness, and differences between the customers' and servers' sex provide support for the social approval explanation of tipping, because all these variables should increase the tippers' concern with the servers' approval. Also supporting this motivation for tipping are the previously reviewed effects on tip-

ping customs of national values and personality traits associated with status seeking, because these national-level effects are difficult to explain if they do not stem from corresponding individual-level relationships. However, more direct assessments of the relationship between desire for social approval and tipping are needed to further test this explanation.

### *Character-Building Exercise*

The most novel explanation for tipping advanced by an economist is that tipping is done as a character-building exercise. According to Robert Frank (1988), the motive behind tipping is “to maintain and strengthen the predisposition to behave honestly.” He also suggests that cultivating an honest character is a choice that people make because others detect and reward those with an honest character. Although no empirical tests of this motivation for tipping currently exist, the novelty and creativity of the idea seem to argue against its validity. If the desire to cultivate an honest character truly motivates tipping, then it should have been apparent to others thinking and writing about tipping.

### *Support the Rule of Tipping*

A final economic explanation for why individuals leave tips is based on game theory. Essentially, the argument is that one person’s tipping or stiffing behavior causes others to behave likewise. Furthermore, an equilibrium in which everyone tips is preferable to an equilibrium in which no one tips because tipping improves service quality. Under these conditions, tipping is motivated by the desire to ensure a preferred equilibrium (Bodvarsson and Gibson 1997; Schotter 1979). As Bodvarsson and Gibson (1997) write: “The act of tipping . . . is irrational, but supporting the rule of tipping by leaving tips is rational.” Unfortunately, this explanation of tipping is founded on an untenable assumption—namely, that an individual’s behavior can influence the behavior of enough other people to affect the societal equilibrium. People can and do stiff servers without bringing down the whole custom of tipping (see Paul 2001), so “supporting the rule of tipping by leaving tips” is not rational from a self-interested perspective. Also undermining this explanation is the previously reviewed finding that the prevalence of tipping does not increase with national collectivism, because collectivists should be more inclined than individualists to contribute to public goods.

### **Social Functions of Tipping**

Tipping is guided by social norms that specify whom and how much to tip. This raises a question about why tipping norms exist. This question is related, but not identical, to the question about why individual consumers tip. Some of the benefits that motivate individuals to leave tips may also induce societies to adopt tipping norms. For example, the desire for status probably affects individual tipping decisions and national tipping customs (see Lynn 1997). However, norms that induce many people to tip may provide benefits that no individual act of tipping can provide. In fact, economists’ explanations for tipping norms have focused on this latter type of benefit. The specific benefits mentioned by economists are numerous but can be traced to just five basic consequences of tipping:

1. Tipping reduces the costs of monitoring and motivating server effort.
2. Tipping provides a nonlitigious means of addressing problems that arise from failures in service delivery (this is a version of the preceding consequence but is distinct enough to warrant separate discussion).

3. Tipping attracts good waiters to the restaurant industry.
4. Tipping facilitates tax evasion.
5. Tipping increases profits through price discrimination.

Each of these consequences of tipping is discussed below.

### *Efficient Incentive*

The most common economic explanation for the custom of tipping is that it functions as an efficient means of monitoring and rewarding server effort (see Ben-Zion and Karni 1977; Bodvarsson and Gibson 1997; Conlin, Lynn, and O'Donahue 2003; Hemenway 1993; Jacob and Page 1980; Schotter 1979). The highly customized and intangible nature of services means that customers are in a much better position than managers to evaluate and reward server effort, so these tasks are given to consumers via the norm of tipping. This reasoning suggests that tipping reduces transaction costs, motivates servers to work hard, and enables restaurants to provide more customized levels of service (see economic models in Ben-Zion and Karni 1977 and Schotter 1979). The previously reviewed evidence that restaurant tips are positively related to service quality means that tipping has some elements of an efficient contract (Conlin, Lynn, and O'Donahue 2003). However, the fact that the service-tipping relationship is weaker on weekends than on weekdays and weaker for some ethnic groups than others means that tipping is not fully efficient (Conlin, Lynn, and O'Donahue 2003). More importantly, the average service-tipping relationship is smaller than the correlation of .3 that Cohen (1992) argued is “visible to the naked eye of a careful observer.” This means that the relationship is too weak to be noticed by restaurant servers, so it seems doubtful that tipping can provide the hypothesized incentive for server effort (Lynn 2001; Lynn and McCall 2000a).

### *Enforcement Mechanism*

Sisk and Gallick (1985) do not believe that tips are “used to reward marginal increments in service.” Rather, they argue that tipping is an enforcement device that protects customers against pressures to eat and leave quickly and that protects restaurants from unscrupulous complaints about the service. The custom of tipping accomplishes this by allowing customers to withhold payment for inadequate service while still requiring those customers to pay for the meal (see Schotter 1979 for a similar argument). Thus, tipping acts like a guarantee and provides two benefits—it motivates servers to provide adequate service (Sisk and Gallick 1985) and it reduces the need for costly arguments and litigation when the service is inadequate (Schotter 1979). This explanation for tipping is supported by the previously reviewed relationships of tipping customs with national uncertainty avoidance and neuroticism, because neurotic and uncertainty-avoidant people should value guarantees of good treatment more than others (Lynn 2000a; Lynn and Lynn 2004).

### *Selection Device*

Andrew Schotter (1979, 2000) argues that tipping is a selection device that separates good waiters from bad ones. He defines good waiters as those who can wait on many customers per work shift and poor waiters as those who can wait on only a few customers per work shift. Given this definition, the prospect of low tip income will keep poor waiters from deciding to work for tips. Thus,

Schotter claims that tipping disproportionately attracts good waiters to the restaurant industry and helps to solve the problem of adverse selection in employment that restaurant managers face. This explanation for tipping could easily be broadened to include more traditional definitions of good and poor waiters as long as customers give good servers more tips than they give poor servers. As previously mentioned, however, individual differences in servers' performance are only weakly related to their average tip percentages, so such a broadening of the explanation is not supported by the available data. Note that this weak empirical relationship is not inconsistent with Schotter's original explanation, because he assumes that good waiters earn larger dollar (not percentage) tips than do poor servers. That assumption has yet to be empirically tested.

### *Tax Evasion*

Bodvarsson and Gibson (1997) argued that tipping is supported in part because it facilitates tax evasion. Tipping allows servers to pay lower income taxes because underreporting of tip income is more difficult for the government to catch than is underreporting of standard wages. In fact, a study by the Internal Revenue Service found that underreporting of tip income exceeds underreporting of income from all other legal sources (Internal Revenue Service 1990). In addition, tipping allows customers to pay lower sales taxes because (by lowering restaurants' labor costs) it reduces the prices restaurants charge for meals. Together, these tax evasion opportunities benefit customers, servers, and restaurateurs by reducing the costs of supplying services (Bodvarsson and Gibson 1997; Schwartz and Cohen 1999). However, the previously reviewed finding that tipping is more prevalent in countries with lower tax burdens casts doubt on the idea that tipping exists as a means of evading taxes. The motivation to evade taxes should be greater the higher those taxes, so if tipping customs are actively supported because they are a means of evading taxes, then tipping should be more (not less) prevalent the greater a nation's tax burden.

### *Price Discrimination*

Finally, Zvi Schwartz (1997) developed a demand-supply model of tipping in segmented markets and showed that tipping increases firm profits under many (but not all) conditions. Basically, he argued that tipping is a form of price discrimination that allows restaurants to charge high prices for the food without losing business from price-sensitive customers as long as those customers are willing and able to reduce the total cost of eating out by leaving smaller tips. Unfortunately, no empirical data that could be used to test this model are currently available.

## **PUBLIC POLICY ISSUES CONCERNING TIPPING**

Tipping is a private exchange between a customer and a service provider. Nevertheless, it raises important public policy issues. Among the tipping-related questions that public policy makers must address are the following: Should tipping be banned or not? How can underreporting of cash tip income be detected and/or reduced? Should mandated minimum wages be lower for tipped jobs than for nontipped jobs? Each of these questions is discussed in the paragraphs below.

### **Ban on Tipping**

Tipping is widespread but is not universally loved. For over a hundred years, people in the United States have disliked the practice and tried to stop it (Azar 2004a). In the early 1900s, for example,

Arkansas, Mississippi, Iowa, South Carolina, Tennessee, and Washington state all passed laws prohibiting tipping (Segrave 1998). Although tipping is currently legal throughout the United States, one national survey indicates that 24 percent of U.S. adults still think the practice is unfair to consumers (Roper 2002), and another indicates that 34 percent of U.S. adults wish they were not expected to tip (Mills and Riehle 1987). Dissatisfaction with tipping also extends beyond the borders of the United States. Europeans have largely replaced tipping with automatic service charges (Segrave 1998), and the practice of tipping is actually illegal in Argentina and Vietnam (Magellan's 2003). This negative sentiment raises a question about whether tipping increases or decreases social welfare and, therefore, should be permitted or banned.

As described in the previous section, economists have argued that the institution of tipping provides numerous social benefits, such as increasing service quality, increasing profits, reducing transaction costs, reducing litigation, and reducing tax burdens. Economists have also argued that tipping must provide some individual benefits to consumers apart from avoidance of the guilt and social disapproval brought on by noncompliance with tipping norms (Azar 2004b; Schlicht 1998). Otherwise, they argue, self-interest would lead to slight undertipping, which would eventually erode the tipping norm itself. Social scientists in other disciplines have identified a number of candidates for those individual benefits—including a reduction of consumer anxiety about servers' envy of their customers (Foster 1972; Lynn 1994), a reduction of consumer guilt about the inequality between servers and customers (Shamir 1984), an increase in the consumer's social recognition and status (Lynn 1997; Paules 1991), an increase in the consumer's self-perceived freedom (Shamir 1984), and an increase in the consumer's psychological rewards from helping servers (Shamir 1984).

Balanced against the hypothesized benefits of tipping described above are several potential negative consequences of this custom. Tipping is thought to demean servers (Hemenway 1993; Segrave 1998), and it does increase the income uncertainty and role conflict experienced by servers (Butler and Skipper 1980; Shamir 1983). Tipping also encourages servers to rush customers in order to turn tables quickly, give customers food and drink items free of charge, spend little time or effort on customers considered poor tippers, and evade taxes by underreporting their tip incomes. More importantly, tipping norms put unwelcome social pressure on consumers to part with money they would rather keep (Crespi 1947; Segrave 1998).

Given the prevalence of tipping, it is tempting to assume that the benefits of this custom must outweigh its costs, but that assumption is not justified. Many of the hypothesized collective benefits of tipping have not been empirically demonstrated. In fact, the principal benefit attributed to tipping—that it increases service quality—is doubtful because tip amounts are only weakly related to service quality (Lynn and McCall 2000a). Of course, the previously reviewed relationships between tipping customs and national values and personality traits suggests that some of the hypothesized *psychological* benefits actually do contribute to the evolution and maintenance of tipping norms (see Lynn 2000a, 2000c; Lynn and Lynn 2004). However, it is possible that these benefits accrue to only a small subset of consumers and that most tippers unhappily follow the lead of this subset only to avoid social embarrassment. Thus, it is unclear if the benefits of tipping outweigh its costs; more theoretical and empirical work is needed to answer that question.

### **Undeclared Tip Income**

The Internal Revenue Service (IRS) estimates that 50 percent of tip income is unreported, which results in the loss of tax revenue and a lowering of the perceived fairness of the income tax system (Internal Revenue Service 1990). In order to identify cheaters, tax auditors need accurate esti-



mates of servers' actual tip incomes (McCrohan and Pearl 1991). Two approaches to this task have been analyzed in the economics literature and are briefly discussed below.

The approach to estimating tip income currently used by the IRS is to adjust the credit card tip rate in a restaurant by some amount and to apply that rate to a restaurant's and its servers' cash sales. This approach, known as the McQuatters formula, has been upheld by the courts (Newman 1988). However, Macnaughton and Veall (2001) have demonstrated that use of this formula can make the marginal tax rate on credit card tips exceed 100 percent, and they argue that this may undermine the formula's acceptability to the public. Furthermore, Newman (1988) suggests that estimating tip income on a restaurant by restaurant basis is cumbersome and that alternative approaches should be sought.

In the mid-1980s McCrohan and Pearl (1991) worked on such an alternative approach to predicting tip income. They used data from diaries kept by consumer panels to predict tipping rates from restaurant-level variables such as geographic location, metropolitan area size, restaurant practices, and restaurant type. They found that "*effective tipping rates were highest in Middle Atlantic and New England States and Lowest in North and South Central States; highest in large metropolitan areas; highest in restaurants that accept credit cards and lowest in those that do not accept credit cards, accept reservations, or serve alcoholic beverages; and highest (of major restaurant categories) in full menu and hotel restaurants and lowest in pizza restaurants*" (p. 230; italics mine). Their regression models represent one alternative approach to estimating tip income that tax authorities could use in auditing restaurants and servers (Newman 1988). Coming up with still more means of predicting tip income or of increasing tip reporting is one potentially fruitful direction for future economic research.

### **Tipped Minimum Wages**

Tips represent taxable income in the United States and elsewhere. As a governmentally recognized part of income, tips raise a question about how much they should be counted toward legally mandated minimum wages. Not surprisingly, low-income workers tend to oppose the crediting of tips against minimum wage requirements (see MacKenzie and Snyder 2001). However, this is a complex issue whose merits rest on more than workers' preferences. For example, Wessels (1997) theorized that "the labor market for tipped restaurant servers is monopsonistic" and that the employment of these servers first increases and then decreases with a rise in the tipped minimum wage. The basic idea is that tipping constrains how many servers a restaurant can hire because more servers per customer mean fewer tips, and fewer tips must be offset with higher wages. Increasing the tipped minimum wage allows restaurants to improve service by hiring more servers even though it reduces servers' tip incomes because the higher wages compensate for the reduced tips. Of course, the benefits to restaurants of hiring more servers are marginally declining, so at some point further increasing the tipped minimum wage merely increases the costs of labor and reduces employment. Wessels tested this model with two different data sets and found strong support for it. Thus, a lowering of the tipped minimum wage by allowing tip credits can reduce employment over at least some range of minimum wages. This counterintuitive finding illustrates the complexity of the issues concerning tip credits and tipped minimum wages and, in so doing, illustrates the need for more theoretical and empirical work on these issues.

### **CONCLUSION**

In conclusion, tipping is a widespread and practically important economic behavior. Moreover, it is a behavior that is difficult for neoclassical theory to explain. At the individual level of analysis,



people leave tips even when they are infrequent patrons of a service establishment and are unlikely to encounter the same service worker again. Furthermore, individuals' decisions about how much to tip are affected by a host of variables unrelated to service levels. Thus, explanations for this behavior must go beyond the neoclassical idea that people base tips on service quality to ensure good service in the future. Adequately explaining individuals' tipping decisions requires a more behavioral approach—one that broadens the traditional consumer utility function to include desires to avoid guilt, obtain social approval, obtain status, treat others equitably, and help others as well as one that recognizes cognitive capacity, knowledge, mood, and cognitive processes as having a causal impact on economic decision making and behavior.

At an aggregate level of analysis, tipping norms vary across nations and appear to be affected by national variables unrelated to transaction costs or supply and demand for services. Thus, explanations for tipping norms must go beyond the idea that they are efficient means of monitoring and rewarding server performance. Adequately explaining tipping norms requires a behavioral perspective that encompasses national character and values as well as social learning and conformity.

Scholars in hospitality management and psychology have made numerous contributions to our understanding of tipping behavior, and a few economists have begun to explore this topic. However, more economists should study tipping because it promises to shed light on the content of consumers' utility functions, the role of social norms in the economy, and the evolution of economic institutions. Furthermore, economists should study tipping because it has an impact on important public policy issues of concern to economists. Rational or not, most economists leave tips; it is time they begin to study them as well.

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