

Who Do We Tip and Why? An Empirical Investigation

Ofer H. Azar*

Ben-Gurion University of the Negev

Abstract

An important question about social norms is whether they are created to increase welfare; I address it by examining the characteristics of tipped and non-tipped occupations. Tipping prevalence is negatively correlated with worker's income and consumer's monitoring ability and positively with consumer's income and closeness between the worker and the consumer. The results refute a common belief that tipping exists to improve economic efficiency by lowering monitoring costs. Tipping, however, is more prevalent when consumers feel empathy and compassion for workers and want to show gratitude for good service, suggesting that tipping might increase welfare if welfare includes psychological utility.

* Ofer H. Azar, Department of Business Administration, School of Management, Ben-Gurion University of the Negev, P.O.B. 653, Beer Sheva 84105, Israel. Tel.: +972-8-6472675; Fax: +972-8-6477691. E-mail address: azar@som.bgu.ac.il. I thank James Dana, Eddie Dekel, Ricky Lam, Michael Lynn, Ady Pauzner, Robert Porter, Michael Whinston and Asher Wolinsky for helpful discussions and comments. Financial support from The Center for the Study of Industrial Organization at Northwestern University is gratefully acknowledged.

1. Introduction

One of the main questions about social norms is why they are created. Some economists argue that social norms are created as a means of society to increase economic efficiency and social welfare in cases of market failure. Arrow (1971), 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.” Other economists, however, oppose this view and argue that social norms are created for various reasons that do not include improving economic efficiency and social welfare (see Elster 1989).

The social norm of tipping provides an interesting case study in this important debate. Because tipping is the norm in several occupations but not in others, examining the characteristics of the occupations in which tipping is the norm may provide insights about what creates social norms. For example, if tipping exists mainly in occupations in which the consumer can monitor service quality easily and accurately, this supports the conjecture that tipping (and maybe other social norms as well) is created to improve economic efficiency.

In addition to being a case study that can provide insights about social norms in general, tipping is an important social norm from an economic perspective. Tipping in US restaurants alone is about \$27 billion a year (Azar 2004a) and obviously the figure is much higher if we add

tips in other establishments and countries. In addition, millions of workers in the US alone derive most of their income from tips (Wessels 1997).

One of the most intriguing questions about tipping is why tipping is the norm in several occupations but not in others. Why is it common to tip waiters but not flight attendants? Why do we tip taxi drivers, but not bus drivers? If our lawyer makes a special effort and does extremely well for us, why don't we tip her? This article addresses these questions for the first time. Using several books about tipping practices, 37 tipped and non-tipped occupations were chosen, the prevalence of tipping in each occupation was ranked, and judges ranked various characteristics of these occupations. The empirical analysis tries to find how these various characteristics affect the prevalence of tipping in an occupation. The analysis refutes the common belief that tipping exists in occupations in which the consumer can monitor the worker more easily than the firm. The analysis suggests instead that tipping exists when the consumer wants to reciprocate and to show gratitude for good service or when he feels empathy and compassion for the worker. The implications of these results for the question whether the norm of tipping is created to increase social welfare are then addressed.

The rest of the article is organized as follows: Section 2 discusses the question what determines which occupations are tipped. Section 3 presents the data and explains how it was collected. Section 4 presents the results of the analysis and Section 5 concludes.

2. What Determines which Occupations Are Tipped?

2.1 Economic Efficiency

To understand why tipping exists only in some occupations but not in others we should

first answer why tipping exists at all. Lynn and McCall (2000) summarize the common beliefs very well:

Economists believe that tipping exists because it is the most efficient way of monitoring and rewarding the efforts of service workers (Bodvarsson & Gibson, 1994; Hemenway, 1984; Jacob & Page, 1980). The intangible and highly customized nature of many services makes it difficult for firms to monitor and control the quality of services delivered by their employees (Shamir, 1984; Zeithaml, Berry & Parasuraman, 1988). Tipping is thought to be a way of enlisting the customers' help in performing these quality control functions.

Returning to the question why tipping exists only in some occupations, these beliefs imply that tipping exists when consumers can monitor the worker more easily than the firm can. This implication suggests that tipping (which is a form of consumer monitoring since the tip can be determined according to service quality) is created in the cases where it improves economic efficiency and social welfare. If this common belief is true, we should observe tipping in occupations where the consumer can monitor workers relatively easily.

To compare monitoring by the firm to consumer monitoring, it is useful first to distinguish between the two main components of service quality. One component is personal: how friendly the worker is, whether he relates well with the customer and so on. The second component is professional – how well the worker performs his professional task. To clarify this idea, take the example of a waiter: the personal part of service quality is determined by how

friendly he is, and the professional part includes how well he can describe items on the menu, and how efficient he is in taking orders, bringing dishes, taking used dishes and so on.¹

When is the consumer likely to have lower monitoring costs than the firm? Obviously, the consumer is in a better position than the firm to evaluate the quality of the personal part of the service. The consumer knows immediately how friendly the worker is, while the firm, if it can obtain this information at all, has to incur costs to do so. Consequently, the more important is the personal part of the service, the more advantage the consumer has over the firm in evaluating service quality.

Another important issue is how much the consumer can evaluate the professional part of the service. The consumer, for example, can evaluate well whether his barber did a good job, but he finds it much harder to evaluate the quality of the professional component of the service provided by his accountant or his lawyer. For example, the customer does not know whether his accountant could use certain rules to lower his taxes and did not do so. Consequently, the more the consumer can evaluate the professional part of the service, the more likely he is to have lower monitoring costs than the firm.

Obviously, the importance of the consumer's ability to evaluate the professional part of the service depends on what portion of service quality is attributed to the professional part. A natural measure of how easy it is for the consumer to monitor the worker overall is to take a

¹ Another example for the distinction between the two service components appears in the questionnaire in the Appendix (see question 4). Other scholars have proposed additional ways in which servers' roles can be divided: Israeli and Barkan (2004) stress the division between the technical and functional aspects of service, while Barkan and Israeli (2004) emphasize that servers have two roles with regard to tipping behavior: the role of expert and the role of manager.

weighted average of the consumer's abilities to monitor the professional component and the personal component. Assuming the consumer can accurately evaluate the personal component, the measure for the consumer's monitoring ability on a 0-10 scale can be computed as:

$$(1) \quad \text{MON-ABI} = 10p + m(1 - p),$$

where p is the portion of overall service quality that stems from the personal component and m is how well the consumer can evaluate the professional part of the service (on a 0-10 scale). This leads to the first hypothesis:

Hypothesis 1: If tipping is created where it can improve economic efficiency then tipped occupations should have a relatively high value of MON-ABI.

2.2 Future Service, Empathy, Compassion, and Showing Gratitude

What else, other than economic efficiency, can be the reason why tipping exists? One potential reason may be that people tip to get better service. Since tipping occurs after the service has already been provided, this can apply only to customers who intend to receive service from the same worker in the future. But we see travelers who tip in places they never intend to come back to and people often tip taxi drivers although their chances of meeting the same driver again are negligible. Moreover, future service seems not to be a reason for tipping by repeated customers as well (see Kahneman, Knetsch and Thaler 1986; Bodvarsson and Gibson 1994; Azar 2002).

Another reason for the existence of tipping is that people may derive psychological utility from tipping in certain conditions.² Tipping allows the tipper to reciprocate and show gratitude, or to express compassion or empathy, improving his self-image and increasing his utility.³ In a study that asked people what their reasons for tipping were (Economic Development Committee for the Hotel and Catering Industry 1970), several potential reasons for tipping were given and respondents chose one or more that applied to them. 53 percent reported “It is a good way of showing gratitude for good service or cooking,” and 19 percent agreed with “Staff need the extra income from tips.” In the same study, another question asked people why they sometimes tip on top of service charges. 67 percent claimed “When service is really good,” 50 percent agreed with “It is a way of saying ‘thank you’,” 20 percent reported “You suspect that not all the service charge will be given to the staff,” and 7 percent mentioned “You feel generous.” These answers suggest that people are willing to pay to show gratitude for good service and to supplement low wages of workers. Additional support for low income of workers as a reason for tipping appears in Crespi (1947), who presents poll results that suggest that most people approve of tipping “by and large” but only because wages are inadequate for certain service workers.

If tipping is created because people want to reciprocate and to show gratitude for good service, in which occupations do we expect tipping to emerge? People are likely to be more

² Once tipping becomes the social norm in a certain situation, people may suffer a disutility from disobeying the norm (and they may derive a positive utility from conforming to the norm). This is not the source of utility I refer to above, however; rather, I mean a utility that one derives regardless of tipping being the social norm.

³ The idea that self-image may affect utility is not common in economics, but is not new either: 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.

concerned about reciprocating and showing gratitude to someone they feel close to. The closer the relationship established during the provision of the service, the more we can expect to see tipping.

In what cases consumers are likely to feel more empathy and compassion for the worker, and want to express these feelings by tipping him? First, these feelings will be stronger when the consumer feels close to the worker. Second, consumers feel more empathy and compassion for the worker and therefore are more willing to tip him the lower his income is, as the answers to the survey mentioned above suggest. Another reasonable conjecture is that people feel more compassion for the worker the higher is the difference between their income and the worker's; we can therefore expect to see more tipping in occupations that are associated with high-income customers, other things being equal. This discussion leads to the second hypothesis:

Hypothesis 2: If tipping is motivated by psychological utility due to the willingness to reciprocate and to show gratitude and due to empathy and compassion for the worker, we would expect tipping to be higher in occupations in which the customer feels close to the worker after the service is provided, and when the worker's income is low and the customer's income is high.

3. The Data

To test the hypotheses presented in the previous section, we should examine how the norm to tip certain occupations and not others is related to several characteristics of the occupations: the consumer's monitoring ability, the closeness between the worker and the consumer, the worker's income, and the consumer's income. I compiled a list of tipped

occupations, using several books about tipping practices: Schein, Jablonski and Wohlfahrt (1984), Star (1988), and Post (1997).

Several types of occupations were excluded from the list of tipped occupations: the first type is occupations in which tips represent the price of the service rather than an incentive for better service. For example, tipping skycaps is more a form of paying for their services than a means of inducing them to provide better service, since the service they offer is quite homogenous. In these occupations the monitoring ability of the customer is irrelevant because tipping is no longer a way to monitor the worker, so it is better to leave those occupations outside the dataset rather than to get results that cannot be interpreted because they come from two completely different types of tipping.

The second group of occupations not included in the list is when tips are given in the form of holiday gifts or bonuses, because it is not clear whether to treat these holiday gifts/bonuses as tips. Clearly, an annual bonus is not the same as tips that follow each interaction in the incentives and monitoring that it provides, yet it offers more incentives than no tipping at all.

To the list of tipped occupations (23 in total) I added 14 service occupations of various types that are not tipped. Since all tipping takes place in service occupations and when the service is provided to people (i.e., not to firms), the non-tipped occupations chosen are also of services provided to people (so they could potentially be candidates for tipping). The complete list of occupations appears in Table 1.

To evaluate to what extent tipping is prevalent in each occupation, I consulted three books on tipping: Schein, Jablonski and Wohlfahrt (1984), Star (1988), and Post (1997). Star discusses tipping practices around the globe, while Post and Schein, Jablonski and Wohlfahrt

focus on tipping in the United States. According to the tipping practices reported in the books, I ranked on a 0-5 scale how common is tipping in each occupation, that is, a measure of what percentage of service encounters will be tipped (denoted by COMMON). For example, it is well known that waiters should be tipped and almost everyone tips them. It is less unanimous whether hotel chambermaids should be tipped – for example some sources suggest that they should be tipped only by those staying more than one night. Therefore, waiters have a higher score than chambermaids.

Using the data in the books I also ranked on a 0-5 scale how important are tips as a source of income in each occupation, that is, a measure of the part of total income of workers in each occupation that comes from tips (denoted by IMPORTANCE). Both of these scores were based primarily on the tipping practices in the United States, but with some consideration of tipping practices in other countries. Thus, lawyers (who are not tipped at all) received a lower score than gas station attendants (who are not tipped in the United States but are tipped in several other countries). I also computed the sum of COMMON + IMPORTANCE and denoted it as TIPPING (so TIPPING is on a 0-10 scale). While COMMON and IMPORTANCE are obviously correlated, summing them gives a better measure of “how much tipped” is each occupation than each of them separately.

To evaluate all the other characteristics of each occupation, I asked six judges to grade several variables regarding each of the occupations. The judges were heterogeneous in terms of ages (21 – 56) and occupations. The questionnaire given to the judges is presented in the Appendix.⁴ While in principle one could use a single judge to get data on characteristics of

⁴ The only variable on which I could hope to have formal data is the worker’s income. There are two important reasons why I used ranking by the judges for this variable. First, I did not find any formal data about the income of

occupations and use it to run regressions of tipping prevalence on occupation characteristics, using six different judges and averaging their responses creates more accurate measures of the occupation characteristics. It ensures that even if a certain judge has a biased perception about one of the occupations, his effect on the relevant score is small.⁵ The average responses to questions 1, 2, and 3 were coded as the variables CLOSE, WORKER-INC, and CONS-INC, for closeness, worker's income, and consumer's income.

The answers for questions 4 and 5 were combined to create a single score of the consumer's ability to monitor the worker based on equation (1) and the discussion preceding it.⁶ There are two different ways to create an average for the consumer's monitoring ability, however. One way is to take the average response for questions 4 and 5, and use equation (1) on the averages (the variable created is denoted MON-ABI1). A second way is to compute for each judge his monitoring ability for each occupation based on equation (1), and then take the average result across all judges, yielding the variable denoted MON-ABI2. Formally, if P_i is the response of judge i to question 4 divided by 10 (to yield a number between 0 and 1), M_i is his response to question 5, and n is the number of judges (six in this case), then the two variables are defined as follows:

$$\text{MON-ABI1} = 10(\sum_i P_i/n) + (\sum_i M_i/n)[1 - (\sum_i P_i/n)], \text{ and}$$

many occupations in the list. Second, the perception of consumers about the worker's income is more important than the true income, because this perception is what (potentially) affects the consumer's willingness to tip the worker. The rankings by the judges represent the perception of various consumers.

⁵ Increasing the number of judges further could decrease more the effect of any single judge on the scores, but the mean response and therefore the results are not likely to be significantly affected by such an increase.

⁶ The answer to question 4 is $10p$ and the answer to question 5 is m in terms of equation (1).

$$\text{MON-ABI2} = \sum_i [10P_i + M_i(1 - P_i)]/n.$$

Table 1 presents the value of COMMON, IMPORTANCE, TIPPING, CLOSE, WORKER-INC, CONS-INC, MON-ABI1, and MON-ABI2 for the 37 occupations. As can be seen in Table 1, there are differences between MON-ABI1 and MON-ABI2, but they are relatively small.

Insert Table 1 about here

4. Estimation and Results

To test the hypotheses discussed before, several specifications were estimated using OLS regressions. The dependent variable is one of the measures for tipping prevalence –COMMON, IMPORTANCE, or TIPPING. For COMMON and IMPORTANCE I report the main regression which takes MON-ABI2 as the monitoring ability score and uses the entire sample. For the dependent variable TIPPING, I also report the results of using MON-ABI1 instead of MON-ABI2, and of a regression that looks only on tipped occupations (therefore with 24 observations instead of 37).

Insert Table 2 about here

The estimation results are reported in Table 2. Surprisingly, Hypothesis 1 is not supported by the data. There is a negative coefficient for monitoring ability in all five regressions, while Hypothesis 1 predicts a positive coefficient. This implies that economic efficiency does not seem to be the reason for the creation of tipping. Tipping is not more prevalent in those occupations in which consumers can easily monitor workers, as opposed to the common wisdom to date. This does not mean that tipping reduces economic efficiency or that

tipping exists when the consumer has higher monitoring costs than the firm. What it means is that if tipping was created according to economic efficiency considerations (lowering monitoring costs), the set of occupations in which tipping exists would have been very different from what it is today.

The worker's income is negatively correlated with tipping, a result which is statistically significant at the 1-percent level in all regressions. The coefficient of the worker's income is also large.⁷ The closeness established between the worker and the consumer is positively correlated with tipping, a result which is statistically significant at the 1-percent level in 3 out of the 5 regressions. The consumer's income is positively correlated with tipping at a significance level of 10 or 5 percent in 3 out of the 5 regressions. Thus the results are consistent with the predictions of Hypothesis 2, suggesting that tipping exists in those occupations in which consumers have psychological utility from tipping due to a desire to reciprocate and show gratitude, and to empathy and compassion for the low-income worker.

As was mentioned in the introduction, one of the interesting and controversial issues about social norms is whether they are created to increase social welfare. What can we say about tipping based on the empirical results? At first, it seems that since tipping was not created where consumers have low monitoring costs, tipping was not created to increase social welfare. But if people derive utility from showing gratitude for good service, or if they enjoy tipping a low-income worker because it allows them to feel generous and kind and thus improves their self-

⁷ The smaller coefficients of the independent variables when COMMON and IMPORTANCE are the dependent variables follow naturally from the narrower scale of these variables (0-5) compared to the scale of TIPPING (0-10).

esteem, then these sources of utility should also be included in social welfare.⁸ Once we take these sources of utility into account, it is certainly possible that the creation of tipping increased social welfare. Tipping is created in these occupations in which consumers derive the most psychological utility from it, because they are the most likely to feel empathy and compassion and to be willing to show their gratitude; this happens when they feel close to the worker, the worker receives low wages, and the consumers have high income. Consequently, while the results undermine the common wisdom that tipping is created where it improves economic efficiency by lowering monitoring costs, the results can still support the view that tipping is created where it improves social welfare.

5. Conclusion

A common belief about tipping is that tipping is created in these occupations in which consumers can easily monitor the worker and therefore can do so at a lower cost than the firm. Indeed, looking at a few prominent examples seems to justify this belief: we tip waiters and taxi

⁸ Since tips are voluntary payments and people tip also when they never intend to see the worker again, they obviously derive some kind of utility from tipping. Once tipping certain workers becomes a social norm, one may argue that the only utility is derived from conforming to the norm (or avoiding the disutility associated with disobeying the norm). But two observations suggest that people tip not only to conform to the norm: first, people often tip more than required by the norm. Second, the first people to tip in a situation that was not tipped before clearly did not conform to any social norm; on the contrary – they did something unique and uncommon. So they too had a reason for tipping other than conforming to the social norm. Azar (2004b) and the answers given in the survey mentioned earlier (Economic Development Committee for the Hotel and Catering Industry 1970) also support the view that people derive utility from tipping beyond the conformity to the social norm.

drivers because we can easily evaluate their service quality, we do not tip lawyers and accountants because we lack the professional knowledge required to evaluate them.

This article takes for the first time a more systematic approach to examine this common belief, by consulting several books about tipping practices, listing 37 tipped and non-tipped occupations, and asking judges to rank various characteristics of these occupations. Surprisingly, the common belief turns out to be false: economic efficiency does not explain why tipping exists in some occupations and not in others. The hypothesis that tipping is created where it gives the most psychological utility to consumers is supported by the data, as reflected in the prevalence of tipping being higher when the worker's income is lower, when the worker establishes closer relationship with the consumer, and when the consumer's income is higher. These results suggest that tipping was created in those occupations in which consumers felt empathy and compassion toward the worker because of his low income or their high income, and in which they wanted to reciprocate and to show gratitude for good service. Including the utility derived from improved self-esteem and the ability to show gratitude in the definition of social welfare, the results are consistent with the view that social norms are created where they improve social welfare, even though tipped occupations are not those where the consumer can most easily monitor service quality.

Appendix: Instructions Given to the Judges

We would be grateful if you can answer the following questionnaire for a research conducted about tipping.

Please look at the attached list of occupations to get a first impression. Think a little about the

type of service given by each of the workers listed before answering the questions. It is recommended to answer each time a single question for all the workers listed, and only then to proceed to the next question and so on.

1. Rank on a 0-10 scale how close you would feel to the worker, after he provided you the service (10 being the highest closeness).
2. Rank on a 0-10 scale what you think is the worker's income not including tips (10 being the highest income).
3. Rank on a 0-10 scale what you think is the income of the typical customer that uses this service (10 being the highest income).
4. Service quality often consists of two components: personal and professional. Take the example of a lawyer: the personal component means how friendly he is to the client, while the professional component is how knowledgeable the lawyer is in the law and how hard he works to promote the client's interests. First, try to think about each occupation what you would consider good service and what would be bad service. Then, think about the relative magnitude of the personal component and the professional component in each occupation. What percentage of the worker's overall service quality stems from the personal component in your opinion? Divide this number by 10 and write the result in the column 4, "Importance of personal component" (This number should be between 0 and 10).
5. To what extent do you think you can evaluate the professional part of the service provided by the workers in the list? Rank it on a 0-10 scale, where 0 means that you cannot evaluate the quality of the professional part of the service at all and 10 means that you can evaluate it accurately. Ignore the personal part of the service

when answering this part. In the lawyer’s case, for example, the question means how much you can evaluate whether the lawyer gives a lot of attention to your case, is knowledgeable in relevant laws, and is doing everything possible to promote your interests.

	1. Closeness to worker after service is provided	2. Worker’s income not including tips	3. Income of typical customer	4. Importance of personal component	5. Ability to evaluate the professional component
Restaurant waiter					
...					

The rest of the occupations in the questionnaire are the same as in Table 1, and in the same order. They are not included here in order to preserve space.

References

- Akerlof, George A. and Rachel E. Kranton (2000), "Economics and Identity," *Quarterly Journal of Economics*, 115, 715-753.
- Arrow, Kenneth (1971), "Political and Economics Evaluation of Social Effects and Externalities," in M. Intriligator (Ed.), Frontiers of Quantitative Economics, Amsterdam: North-Holland, 3-25.
- Azar, Ofer H. (2002), "Is Future Service a Reason for Tipping? Theory and Evidence," Working Paper, Northwestern University.
- Azar, Ofer H. (2004a), "Optimal Monitoring with External Incentives: The Case of

- Tipping,” *Southern Economic Journal*, 71(1), 170-181.
- Azar, Ofer H. (2004b) “What Sustains Social Norms and How They Evolve? The Case of Tipping,” *Journal of Economic Behavior and Organization*, 54(1), 49-64.
- Barkan, Rachel and Aviad Israeli (2004), “Servers’ Roles as Experts and Managers of Tipping,” *Service Industries Journal*, forthcoming.
- Bodvarsson, Orn and William Gibson (1994), “Gratuities and Customer Appraisal of Service: Evidence from Minnesota Restaurants,” *Journal of Socio-Economics*, 23(3), 287-302.
- Crespi, Leo P. (1947), “The Implications of Tipping in America,” *Public Opinion Quarterly*, 11 (Fall), 424-435.
- Economic Development Committee for the Hotel and Catering Industry (1970), Why Tipping?, London: National Economic Development Office.
- Elster, Jon (1989), “Social Norms and Economic Theory,” *Journal of Economic Perspectives*, 3, 99–117.
- Hemenway, David (1984), Prices and Choices: Microeconomic Vignettes, Cambridge, MA: Ballinger.
- Israeli, Aviad A. and Rachel Barkan (2004), “Developing a Framework for Rewards in Combined Production/Service Businesses: The Case of Tipping in the Restaurant Industry,” *International Journal of Service Industry Management*, forthcoming.
- Jacob, Nancy and Alfred Page (1980), “Production, Information Costs, and Economic Organization: The Buyer Monitoring Case,” *American Economic Review*, 70 (June), 476-478.
- Kahneman, Daniel, Jack L. Knetsch, and Richard Thaler (1986), “Fairness as a Constraint

- on Profit Seeking: Entitlements in the Market,” *American Economic Review*, 76(4), 728-741.
- Loewenstein, George (1999), “Because it is There: The Challenge of Mountaineering ... for Utility Theory,” *Kyklos*, 52, 315–343.
- Lynn, Michael and Michael McCall (2000), “Gratitude and Gratuity: A Meta-Analysis of Research on the Service-Tipping Relationship,” *Journal of Socio-Economics*, 29, 203-214.
- Post, Peggy (1997), Emily Post’s Etiquette, 16th edition, New York, NY: HarperCollins.
- Schein, John E., Edwin F. Jablonski, and Barbara R. Wohlfahrt (1984), The Art of Tipping: Customs & Controversies, Wausau, WI: Tippers International.
- Shamir, Boas (1984), “Between Gratitude and Gratuity: An Analysis of Tipping,” *Annals of Tourism Research*, 11, 59-78.
- Star, Nancy (1988), The International Guide to Tipping, New York, NY: The Berkeley Publishing Group.
- Wessels, Walter John (1997), “Minimum Wages and Tipped Servers,” *Economic Inquiry*, 35, 334-349.
- Zeithaml, Valarie A., Leonard L. Berry, and A. Parasuraman (1988), “Communication and Control Processes in the Delivery of Service Quality,” *Journal of Marketing*, 52(2), 35-48.

Table 1
Characteristics of Various Occupations

	COMMON	IMPORTA NCE	TIPPING	CLOSE	WORKER- INC	CONS-INC	MON- ABI1	MON- ABI2
Restaurant waiter	5	5	10	5.33	1.50	6.00	8.70	8.60
Taxi driver	5	3	8	3.67	4.67	6.33	8.10	8.33
Hotel chambermaid	2	2	4	2.00	3.17	6.67	7.83	8.02
Movers (when moving to a new apartment)	4	4	8	4.67	3.67	5.17	8.25	8.30
Pizza delivery person	4	4	8	2.17	3.33	5.00	6.61	6.68
Barber	4	2	6	5.67	5.67	5.00	8.97	9.12
Tour guide	3	2	5	6.67	6.83	6.67	8.70	8.72
Cabin steward on a cruise	4	4	8	3.17	3.83	7.50	7.52	7.60
Plumber	0	0	0	2.50	6.33	5.17	6.80	6.83
Doctor	0	0	0	5.67	8.67	4.33	7.64	7.65
Accountant	0	0	0	5.17	9.17	8.17	7.04	6.90
Lawyer	0	0	0	6.17	9.50	7.50	7.26	7.17
Flight attendant	0	0	0	4.67	6.50	7.00	8.39	8.32
Nurse	0	0	0	6.00	5.83	3.67	8.08	8.02
Bus driver	0	0	0	2.00	5.83	2.50	7.44	7.48
Lifeguard (in the beach/swimming pool)	0	0	0	1.33	5.50	3.00	5.66	5.75
Seller at McDonald	0	0	0	1.17	3.17	4.33	7.62	7.77
Dentist	0	0	0	5.33	8.67	6.33	7.89	7.87
Wine steward in a restaurant	4	5	9	4.33	5.00	7.67	7.66	7.57
Car wash worker	3	4	7	3.50	2.83	6.50	7.57	7.72
Casino dealer	2	3	5	4.83	5.83	7.17	6.64	6.68

Busboy (cleans tables etc.) on a cruise	3	4	7	2.33	3.33	7.50	7.91	8.15
Facials (cosmetic treatment)	3	4	7	6.50	5.83	6.83	8.58	8.62
Car mechanic	0	0	0	4.50	6.17	5.67	6.54	6.58
Manicure/pedicure	3	4	7	6.50	5.33	7.17	8.39	8.37
Masseuse/Masseur	2	3	5	6.33	5.83	8.33	8.17	8.13
Newspaper boy (brings the paper every morning)	2	4	6	1.50	3.00	6.50	6.39	6.20
Bartender	4	4	8	5.50	4.83	6.33	7.85	7.77
Washroom attendant in a restaurant	2	4	6	0.67	2.50	6.00	7.71	7.78
Diving instructor	1	1	2	7.33	6.33	7.17	8.33	8.28
Ski instructor	1	1	2	6.67	6.50	8.33	8.40	8.43
Tennis instructor	0	0	0	7.17	6.83	8.83	8.53	8.55
Theater/concert ushers	0	0	0	1.50	3.83	7.00	7.67	7.72
Room service waiter	4	4	8	2.67	3.67	7.83	7.78	7.80
Golf caddy	4	4	8	4.17	3.33	9.00	8.36	8.22
Cashier in a store	0	0	0	3.17	3.83	4.50	8.49	8.45
Gas station attendant	1	2	3	1.17	2.83	5.33	8.11	8.13
Average	1.89	2.08	3.97	4.15	5.12	6.32	7.77	7.79
Standard deviation	1.75	1.75	3.51	1.96	1.94	1.55	0.74	0.74

The variables COMMON, IMPORTANCE and TIPPING are based on various sources about tipping practices. CLOSE, WORKER-INC, and CONS-INC are the mean response of the judges to questions 1, 2, and 3 (see Appendix), respectively. MON-ABI1 and MON-ABI2 are computed as explained in the text.

Table 2**The Effect of Various Characteristics on the Prevalence of Tipping**

Dependent variable	TIPPING (0-10 scale)	TIPPING (0-10 scale)	TIPPING (0-10 scale)	COMMON (0-5 scale)	IMPORTANCE (0-5 scale)
N	37	37	23	37	37
Intercept	12.23** (5.36)	11.26** (5.35)	13.10** (4.65)	3.77 (3.04)	7.49*** (2.55)
CLOSE	1.02*** (0.35)	0.97*** (0.34)	0.62* (0.36)	0.47** (0.17)	0.50*** (0.18)
WORKER-INC	-1.74*** (0.19)	-1.71*** (0.20)	-1.21*** (0.26)	-0.78*** (0.11)	-0.94*** (0.10)
CONS-INC	0.53* (0.29)	0.52* (0.29)	-0.01 (0.32)	0.18 (0.16)	0.33** (0.14)
MON-ABI1	-0.89 (0.70)				
MON-ABI2		-0.75 (0.68)	-0.50 (0.62)	-0.13 (0.39)	-0.62* (0.32)
R ²	0.58	0.58	0.29	0.50	0.62
F Value	48.14	49.08	6.43	51.96	38.97

Robust standard errors in parentheses.

* Represents statistically significant at the 10-percent level.

** Represents statistically significant at the 5-percent level.

*** Represents statistically significant at the 1-percent level.