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Balance Between Giving and Receiving:
Tax Morality and Satisfaction with Fiscal Policy as They Relate to
the Perceived Just Distribution of Public Resources

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Abstract

Research on attitudes towards taxes, tax avoidance and evasion shows the importance of exchanges between the individual and the government and of the perceived fairness of taxes as determinants of tax behavior. It is assumed that a perceived imbalance in individual-government exchanges causes antitax sentiments.

Overall, 133 individuals completed a questionnaire covering tax morality, satisfaction with the tax system, perception of contributions to the state versus benefits from the states, perception of actual and desired public investments in various areas, and perception of actual and desired individual benefits. The results show that tax morality depends on satisfaction with the fiscal system and on the age of the respondents. Satisfaction with the fiscal system depends on the perceived balance in individual-government exchanges, the overall level of individual access to public goods, and the relationship between benefits of society in general and the individual in particular. Justice perceptions, defined as a balance between what is given to and what is received from the state, depend on the relationship between actual individual benefits and the public goods desired as well as on the income of respondents. The results demonstrate the importance of psychological variables in explaining attitudes towards taxes and, consequently, tax behavior.

Key words: Tax psychology, tax morality, distributive justice, individual-government exchanges, tax and public goods.

1. Introduction

On a national level, taxation serves various functions: the public provision of goods and services, governmental influence on economic developments, and overcoming some of the injustices typical of pure markets which determine individuals' wealth or poverty. On an individual level, the necessity of taxes is generally accepted but taxation is frequently perceived as unfair either because others contribute comparably less or have easier access to wel-

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fare services or because individuals are forced by the state to "sacrifice" without receiving what they perceive as adequate benefits in return (Lea, Tarry and Webley, 1987; Schmolders, 1975; Strümpel, 1968).

If taxation indeed helps to overcome some of the inequities in free market systems then some individuals have to contribute more than others by having less access to welfare services. Not only wealthy people but citizens in general complain about excessive tax burdens as well as unfair distribution of taxes and are convinced that their tax contributions far exceed the public services they receive in return (Markscheidt, 1982). Schmolders (1975) reports for Germany that two thirds of the respondents judge the tax burden as unjustly distributed among taxpayers and three quarters of the respondents do not think what they receive in return from the state is adequate. Especially entrepreneurs, low income persons and citizens between the ages of 30 and 50 complained about the unjust distribution of contributions and benefits. Similar results are reported by Haidenthaler (1971) for an Austrian sample: almost 90 percent of the respondents believed the tax system was unjust and more than three quarters felt that what they received from the state bore no relationship to what they contributed to it.

Research on antitax sentiments, tax avoidance and evasion shows the importance of individual-government exchanges and the perceived fairness of taxes as determinants of tax behavior. It is assumed that a perceived imbalance of individual-government exchanges increases antitax behavior. Spicer and Lundstedt (1976) report that tax resistance correlates with the perception of unbalanced exchange relationships between individuals and the state. Wärneryd and Walerud (1982) found taxpayers' admittance of tax evasion covaried with perceived inequity. Inequity was operationalized as disagreement with the statement: "taking into consideration what the citizens get from the state, our taxes are not too high". Further evidence comes from studies by Cowell (1990, 1992), Elffers, Weigel and Hessing (1987), Falkinger (1988), Lewis (1979), Scott and Grasmik (1981), and Spicer and Becker (1980). In contrast, some other studies did not find support for the forwarded hypothesis (de Juan, 1989; Laurin, 1986; Mason and Calvin, 1978; Webley, Robben, Elffers and Hessing, 1991).

Fairness and justice, respectively, are complex concepts which need further explanation. First, it should be clarified that fairness as it is conceived of in the present study relates to the perceived distribution of benefits and burdens rather than to the procedure and rules of distribution. Second, it can either relate to perceived exchange outcomes between individuals and the state or to an individual's perception of costs and benefits relative to perceived costs and benefits of other individuals and groups.

If perceived contributions of an individual to the state are not in balance with reciprocated benefits, the justness of the exchange relationships is called into question. Individuals who perceive their contributions to the state as being greater than what they receive in return may try to achieve a balance between inputs and outputs by reducing their contributions. Tax avoidance and tax evasion may be the consequences of what are perceived as unjust relationships. According to exchange theory, individuals can be assumed to perceive a relationship as being balanced and interaction as fair if their relative contributions to the common good correspond to their relative benefits. Reciprocity is a universally accepted rule

(Goulder, 1960). According to equity theory, individuals who perceive to receive less than they deserve, that is, less than they should proportionally to their contributions receive, might either reduce their contributions or try to get more benefits, distort their perceptions of inputs and outputs or leave the field by working less and paying less taxes for lower gains (Adams, 1966; Walster, Walster and Berscheid, 1978; Robbins, 1996). It should be added here that in this study it is not assumed that a clear and concrete criterion of social justice exists for each individual which can be detected and generalized to a population. Rather it is hypothesized that each individual keeps track of his or her contributions and benefits and if they are perceived as balanced or if one's own contributions and benefits are perceived as corresponding to the relationship of others' contributions and benefits individuals perceive their giving and receiving as just.

According to equity theory, justness is also compromised if individuals perceive their relative contributions and benefits as being unequal to other persons' relative inputs and outputs. Perceptions of unjust taxes may either derive from comparisons between individual-government exchanges or from comparisons between one individual and another's contributions and benefits. Besides studying subjective perceptions of individual contributions and governmental benefits it is necessary to consider also the relationship of an individual's contributions and benefits with others' contributions and benefits.

This study aims at investigating the importance of perceived justice as a determinant of satisfaction with fiscal policy and tax morality. Perceived justice is assumed to depend on the subjective evaluation of (a) the overall provision of welfare services by the government, (b) on the difference between actual welfare services and the desired amount of public investment in special welfare services, (c) on the overall level of individual benefits and (d) on the difference between the actual and the desired level of individual benefits as well as (e) on the difference between actual welfare services and actual individual benefits. Whereas overall levels of government welfare and individual benefits relate to individuals' perception of outcomes, differences between actual and desired public benefits relate to exchange relationships between individuals and the state. The relationship between the actual investment in public welfare programs available to all citizens and individual benefits, however, relate to how much one individual benefits from public goods as compared with other people.

Perceived justice is assumed to influence subjective satisfaction with fiscal policy whereas satisfaction is hypothesized to be correlated with tax morality.

Besides the above mentioned variables, influences of age and income as determinants of tax attitudes are controlled (Kirchler, 1996; in press; Strümpel, 1966).

2. Method

2.1. Participants

Overall, 157 individuals aged 23 to 73 participated in the study. Data of 23 participants were excluded from the analyses because of incomplete responses, leaving a sample of 133 participants. The respective socio-demographic data of the sample are presented in Table 1.

Table 1: Demographic characteristics of the sample

Characteristics	M	std	f	%
N			133	100.0
Sex				
female			57	42.9
male			76	57.1
Age	41.00	10.75		
Formal education				
primary school			0	0.0
vocational school			28	21.0
secondary school			75	56.4
college/university			30	22.6
Working status				
civil servant			47	35.3
white collar worker			45	33.8
entrepreneur			41	30.8
Net-income/month				
below ATS 20,000			48	36.1
ATS 20,001 - 25,000			44	33.1
ATS 25,001 - 30,000			19	14.3
above ATS 30,000			22	16.5

Note: (1US\$ = 10ATS)

2. 2. Material

A five-part questionnaire was developed (Table 2) containing several sets of questions to assess

(a) tax morality on the basis of questions developed by Schmolders (1966). Responses to five questions were averaged;

(b) one question assessed satisfaction with fiscal policy, and

(c) seven questions aimed at measuring attitudes towards contributing to and receiving benefits from the state. Responses to these items were aggregated to an index of justice.

(d) Perceptions of actual and desired public expenditures and actual and desired individual benefits, respectively, were measured by a set of four questions. Participants were asked, first, to indicate whether the state invested little or much money in twelve areas of public interest (school and education, science and research, health, industry, art and culture, agriculture, defence, social welfare, public security, public road construction, public transportation and traffic, public housing), and, second, how much money the state should spend. On the third set of questions, participants had to indicate whether they received small or large benefits from the twelve areas and, fourth, they were asked to indicate what level of benefits they desired.

- Overall public provision of welfare services was operationalized as the average response to the first set of questions regarding all twelve areas.
- The difference between actual welfare services and desired amounts of public investment in welfare services was computed as the absolute difference between

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responses to the first and second set of questions.

- Overall level of individual benefits was computed as the average response to the third set of questions.
- The difference between the actual and the desired level of individual benefits was computed as the absolute difference between responses to the third and fourth set of questions.
- The difference between actual welfare services and actual individual benefits was computed as the absolute difference between responses to the first and third set of questions.

(e) Finally, demographic characteristics such as sex, age, school education, profession, and net monthly income were recorded. The statistical analysis of the questions is presented elsewhere (Miserka, 1996)

Table 2: Questions to assess (a) tax morality with regard to tax offenses, (b) satisfaction with the tax system, (c) attitudes towards giving to and taking from the state, (d) perception of actual and desired public expenditures and actual and desired individual benefits

- (a) Moral attitudes toward tax offenses (answers on 5-point scales ranging from disapproval to approval)
 - Person K buys something to be used in part privately. Subsequently, the person sells the items to special clients without officially reporting the profit.
 - Person S used his or her telephone for personal and business calls. However, the monthly bill is entered in the books in full as a business expenditure.
 - Person D buys curtains for his or her home but enters the entire amount in the books as a business expense.
 - Person H doctors the accounts by underreporting his or her income.
 - Person Z earns some money through moonlighting (e. g., seminars, publications). This income is rarely less than 10 percent of his or her officially reported annual income. This extra income is not reported in his or her tax returns.
- (b) Satisfaction with the tax system (answers on 5-point scales ranging from disagreement to agreement)
 - I am satisfied with the Austrian tax system.
- (c) Attitudes towards giving to and taking from the state (answers on 5-point scales ranging from very low to very high)
 - The tax amount which I have to pay is...
 - My contribution to financing government spending is...
 - My contribution to supporting socially disadvantaged people is...
 - The government benefits I receive are...
 - My possibilities for demanding benefits from the state in return are...
 - The security the state guarantees me is...
 - The social welfare benefits that I can claim for myself are...

(d) Perception of actual and desired public expenditures and actual and desired individual benefits (answers on 5-point scales ranging from very low to very high)

- The state spends very little/very much money for the following areas...
- The state should spend very little/very much money for the following areas...
- I myself receive very few/a lot of benefits in the following areas...
- I myself should receive very few/a lot of benefits in the following areas...

(Areas: School and education, science and research, health, industry, art and culture, agriculture, defense, social welfare, public security, public road construction, traffic, public housing construction)

2. 3. Procedure

Questionnaires were distributed in autumn and winter 1995. Completion took about 20 to 30 minutes.

3. Results

3. 1. Provision of public goods

Before the influence of justice perceptions on satisfaction with the fiscal system and tax morality is analyzed, participants' judgments of actual and desired public spending and actual and desired individual benefits, respectively, are presented. An analysis of variance with (a) actual and desired public expenditures and (b) twelve areas as independent variables and subjective evaluations of public investments as dependent variables yielded significant effects: Actual public expenditures were judged to be significantly lower ($M = 3.21$) than desired public investments ($M = 3.43$; $F(1,132) = 22.18$; $p < .001$). There were also significant differences in the perception of expenditures across categories ($F(11,1452) = 30.87$; $p < .001$). The interaction effect turned out to be significant at $F(11,1452) = 26.62$; $p < .001$. The results are presented in Table 3. Differences between averages in columns and rows greater than .50 are significant at $p = .05$ level. Investments in social welfare, health and public road construction were perceived as being higher than any other. Public investment in science and research, agriculture, school and education were judged to be relatively low. Whereas school and education, science and research, health, agriculture, social welfare, public security, public transportation and traffic, and public housing were cited as areas which should receive more financial support, the areas of defense, industry, art and culture, and public road construction were cited as having more financial resources than the participants thought should be the case.

A second analysis of variance with (a) actual and desired individual benefits and (b) twelve departments areas as independent variables and estimation of individual benefits as dependent variable yielded significant effects as well: the difference between actual benefits ($M = 2.45$) and desired benefits was highly significant ($M = 3.19$; $F(1,132) = 197.94$; $p < .001$). Differences in the perception of expenditures across areas were also significant ($F(11,1452) = 34.49$; $p < .001$) and so was the interaction effect ($F(11,1452) = 9.95$; $p <$

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.001). Participants felt that they should have more access to all services provided in twelve areas, especially public housing construction, science and research, social welfare, school and education, health, and public security. Services provided by ministries engaged in public road construction, agriculture and defense were judged as being very close to satisfying personal needs.

Separate correlations between actual and desired public expenditures for the twelve areas ranged between $-.17 < r > .37$. Besides judgments of actual and desired expenditures for national defense (participants who judged expenditures as being high demanded extensive cuts; $r(133) = -.37$; $p < .01$), perceptions of the actual and desired investments across all areas did not covary (average $r(133) = .01$). Also, the correlation of averaged judgments of actual and demanded public investments across the respective categories was close to zero ($r(12) = -.09$).

The picture that emerged for correlations was in contrast with correlations between judgments of actual individual benefits and desired benefits: subjects who judged their actual benefits as being high, desired more. The more the respondents perceived that the state was providing them with public goods, the more goods the respondents desired. Correlations between actual and desired individual benefits ranged between $.30 < r > .61$. The average correlation across all areas amounted to $r(133) = .44$; $p < .01$. Averaged judgments also correlated highly ($r(12) = .78$; $p < .01$).

Table 3: Average perception of actual and desired public expenditures, and actual and desired individual benefits

Areas	Actual public expenditures		Desired-public expenditures		Actual individual benefits		Desired individual benefits	
	M	std	M	std	M	std	M	std
School and education	2.99	1.10	4.16	.77	2.62	1.31	3.54	1.36
Science and research	2.38	1.03	3.87	1.00	2.08	1.16	3.27	1.18
Health	3.74	1.25	4.08	.89	3.17	1.24	3.99	.92
Industry	3.21	1.07	2.89	.99	2.11	1.13	2.75	1.20
Art and culture	3.37	1.12	2.67	.94	2.47	1.25	3.10	1.18
Agriculture	2.85	1.04	3.23	.99	2.12	1.12	2.61	1.32
Defense	3.26	1.43	2.42	1.15	1.74	1.00	2.23	1.25
Social welfare	3.90	1.10	3.67	.93	2.31	1.14	3.29	1.10
Public security	3.06	.90	3.65	.89	2.81	1.07	3.53	1.03
Public road construction	3.46	1.27	3.13	.96	3.17	1.14	3.33	1.04
Transportation	3.14	1.04	3.38	.90	2.72	1.14	3.35	1.09
Public housing construction	3.20	1.10	3.68	1.10	2.05	1.27	3.26	1.32
Total	3.21	.38	3.43	.41	2.45	.65	3.19	.63

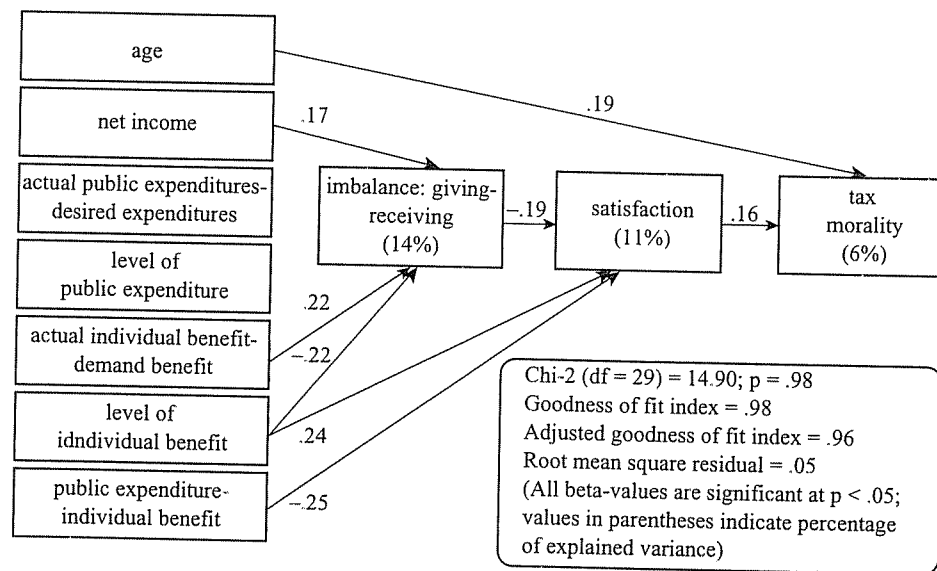
3. 2. Tax morality

It was assumed that tax morality would be influenced by satisfaction with the tax system. Satisfaction should depend on the perceived balance of individual-government exchanges. It was hypothesized that the perceived balance between and fairness of contribu-

tions to the state versus benefits from the state would depend on the perceived actual returns from the state and the desired returns, both on a societal level and on the individual outcome level. Moreover, age and income were indicated as control variables.

The set of hypotheses was combined in a structural model and tested by LISREL. The exogene variables were age, income, and the five variables resulting from respondents' judgments of the actual versus the desired provision of public goods. The endogene variables were the perceived balance of give and take, satisfaction with the fiscal system, and tax morality. The theoretical model was confirmed as fitting well with the data. Overall, 96% of variance can be explained: the adjusted goodness of fit index amounted to .96; the root mean square residual, which indicates non explained variance and should be close to zero, was .048. The results are presented in Figure 1.

Figure 1: Linear structural model



The LISREL-analysis revealed that tax morality depends significantly on satisfaction with the fiscal system and on the age of the respondents. The explained variance, however, is low. Satisfaction, on the other hand, was found to be dependent on the perceived balance of exchanges, the absolute level of the perceived individual benefits from the state, and the relationship between the actual government benefits available to all citizens and to the individual. The balance between inputs and outputs depends on the actual and the desired individual benefits, the absolute level of individual benefits, and net income. The higher the income of respondents, the greater the perceived difference between actual and desired public goods whereas the smaller the amount of individual benefits provided by the state, the greater the likelihood of a perceived imbalance in individual-government exchanges. Interestingly, the overall provision of public goods to citizens and the relationship between the actual provision of public goods to all citizens and the desired provision of these goods had no influence

on perceived imbalance, satisfaction, and morality.

4. Conclusion

The law of reciprocity is a universal rule underlying human interaction (Gouldner, 1960). If somebody offers something to someone else, that person has to reciprocate the favor, either by offering similar resources or by providing benefits of an equivalent value. Exchange theoreticians, like Blau (1964), Homans (1961), and Thibaut and Kelley (1959) have formulated widely accepted models which define human interaction as a process of mutual giving and taking. Adams (1965) formulated a hypothesis according to which giving and taking is perceived as just if mutual contributions are in balance.

In this study, the relationship between citizens and the state is conceived of as an exchange relationship. Individual-government exchanges are defined as tax contributions, on the one hand, and the government provision of goods, on the other hand. If perceived contributions of an individual to the state are in balance with his or her perceived reciprocated benefits, the exchange relationships should be perceived as fair. It was hypothesized that individuals who perceive their contributions to the state as being higher than their public returns would be dissatisfied with the fiscal system and would develop negative attitudes towards taxes, that is, they would develop low tax morality.

Despite some exceptions, previous studies have repeatedly shown that a perceived imbalance in individual-government exchanges increases antitax attitudes and behavior (e.g., Cowell, 1990; Elffers, et al., 1987; Falkinger, 1988; Lewis, 1979). A detailed investigation of the determinants perceived imbalance, satisfaction with the tax system, and tax morality has not been conducted.

In the present study it is assumed that perceptions of unjust taxes may derive from comparisons between individual-government exchanges and also from one individual comparing his or her perceived contributions and benefits with another individual's. Participants were asked to assess the overall government provision of welfare services, and the government provision of goods to the participant in particular. Moreover, participants indicated how much the state should invest in various areas of interest and how much they themselves should receive.

As confirmed by previous studies, taxpayers wanted the government to invest more in many areas and, above all, they desired the government to provide more services in any area which had to do with their own personal convenience. Most people are convinced that they contribute more to the state than they get and that is their reason for demanding an increase in the amount of public goods provided (Haidenthaler, 1971; Markscheidt, 1982; Schmölders, 1975). Whereas participants called for higher public investments in science and research, school and education, agriculture, and public security, they felt the money spent for defense and art and culture could be cut. When respondents were asked about differences between personal access to public goods and desired access, the results were significant for all areas except public road construction: the participants desired more from the state, and as correla-

tions between actual and desired individual benefits show, the more they already perceive to be receiving, the more they want. In short, it seems that citizens are not aware of the limits of government finances: People claim that taxes are too high and that cuts are necessary yet at the same time demand, investments in almost all areas of public interest (Tyszka, 1994).

Contributions to the state and benefits from the state are rarely perceived as being in balance. A perceived balance of tax payments and returns from the state was found to depend on the absolute level of the actual individual benefits and the difference between actual and desired individual benefit. The more a person gets and the more his or her perception of giving and taking are in balance, the more likely it is that individual-government exchanges will be perceived as balanced. Wealthier persons who pay high taxes are more likely to perceive imbalance than low income earners. Since public investments and the provision of public goods to the society in general had no effect on the perceived balance between giving and taking, it can be concluded that taxpayers do not take into account public investments and provision of goods to all citizens or governmental endeavors to reach a fairer distribution of wealth in society through taxation. Tax morality was found to be independent of the provision of public goods on a societal level. Individuals seem to be rather selfish, perceiving themselves to be in an isolated exchange relationship with the state and focusing only on personal contributions and benefits.

Collective benefits are taken into consideration only as they relate to personal benefit. If the outcome for others is similar to one's own personal benefit, satisfaction with the actual tax system is likely to increase. However, again perceived personal benefits play an important role in determining satisfaction and so does the perceived balance between giving and receiving.

Tax morality was found to depend on satisfaction with fiscal policy. The relationship is small: satisfaction accounts for about three percent of the variance in tax morality. This result confirms the significance of perceived exchange relationships in explaining tax morality and consequently tax behavior. However, a perceived balance between contributions and benefits accounts for little variance; other personal and situational, psychological and economic determinants such as tax pressure, financial strain, social norms, probability of detection of tax evasion and sanctions, etc. (Weigel, et al., 1987) may be more important.

Finally, the importance of age in explaining attitudes towards taxation has been confirmed. As in previous studies, the older the participants were, the more positive were their sentiments towards taxation, (Kirchler, 1996; in press; Strümpel, 1966).

This study shows the importance of social psychological factors in explaining citizens' attitudes towards fiscal policy and their views about taxation. It also shows the importance of multi-causal influences: exchange perceptions and fairness judgments account for a significant but small amount of the variance in sentiments towards taxation. However, a word of caution is in order at this point: As is often the case with psychological and social variables modeling causal models may lead to undesired shortcomings. In this study, tax morality was hypothesized and tested as being dependent on fairness perceptions and satisfaction. It could also be argued, that after adopting antitax behavior, people seek for rationalizations. That is

they describe their tax morality as being relatively low and then justify this by indicating that individual-government exchanges are not in balance. The causal connection would be opposite to the paths model in this study. Falkinger (1988), in fact, reports that claims of a lack of fairness are often used to justify tax avoidance. In conclusion, a variety of social instigations and constraints as well as psychological conditions, as formulated by Weigel et al. (1987), influence citizens' attitudes towards taxes and their behavior toward the state.

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References

- Adams, J. S., 1965. Inequity in social exchange. In L. Berkowitz (ed.), *Advances in Experimental Social Psychology*, 2, 267-299.
- Blau, P. M., 1964. *Exchange and Power in Social Life*. New York: Wiley.
- Cowell, F. A., 1990. Cheating the Government. *The Economics of Evasion*. Cambridge: MIT Press.
- Cowell, F. A., 1992. Tax evasion and inequity. *Journal of Economic Psychology*, 13, 521-543.
- De Juan, A., 1989. *Fiscal Attitudes and Behavior. A Study of 16-35 Year old Swedish Citizens*. The EFI Research Report 285. Stockholm: Stockholm School of Economics.
- Elffers, H., Weigel, R. H. & Hessing, D. J., 1987. The consequences of different strategies for measuring tax evasion behavior. *Journal of Economic Psychology*, 8, 311-337.
- Flakinger, J., 1988. Tax evasion and equity; a theoretical analysis. *Public Finance*, 3, 388-395.
- Gouldner, A. W., 1960. The norm of reciprocity; a preliminary statement. *American Sociological Review*, 25, 161-178.
- Haidenthaler, K., 1971. *Die Steuermentalität und Steuermoral im österreichischen Einzelhandel. Eine empirische finanzpsychologische Analyse*. University of Freiburg, Germany: Unpublished doctoral thesis.
- Homans, G. C., 1961. *Social Behavior: its Elementary Form*. New York: Harcourt, Brace & Javanovich.
- Kirchler, E., 1996. Reactance to Taxation: Employers' Attitudes towards Taxes. Paper presented at the 12th IAREP Annual Colloquium, Paris, France. September 1996.
- Kirchler, E., in press. The burden of new taxes: tax acceptance as dependent on affectedness and egoistic versus altruistic orientation. *Journal of Socio Economics*.
- Laurin, U., 1986. *Upon my honor: the causes and extent of tax evasion*. Stockholm: Norstedts.
- Lea, S. E. G., Tarpy, R. M. & Webley, P., 1987. *The Individual in the Economy*. Cambridge: Cambridge University Press.
- Lewis, A., 1979. An empirical assessment of tax mentality. *Public Finance*, 34, 245-257.
- Markscheidt, K., 1982. *Die Grenzen des Steuerstaates*. Report of the Institute of Finances and Tax Law, 120.
- Mason, R. & Calvin, L. D., 1984. Public confidence and admitted tax evasion. *National Tax Journal*, 37, 489-496.
- Miserka, B., 1996. *Gerechtigkeitswahrnehmung und Steuermoral*. University of Vienna: Unpublished master's thesis.
- Robbins, S. P., 1996. *Organizational Behavior. Concepts, Controversies, Applications*. Englewood Cliffs: Prentice Hall.
- Schmölders, G., 1996. *Psychologie des Geldes*. Reinbeck bei Hamburg: Rowohlt.
- Schmölders, G., 1975. *Einführung in die Geld- und Finanzpsychologie*. Darmstadt: Wissenschaftliche Buchgesellschaft.
- Scott, W. J. & Grasmick, H. G., 1981. Deterrence and income tax cheating. Testing interaction hypotheses in utilitarian theories. *Journal of Applied Behavioral Science*, 17, 395-408.
- Spicer, M. W. & Becker, L. A., 1980. Fiscal inequity and tax evasion: an experimental approach. *National Tax Journal*, 33, 171-176.
- Spicer, M. W. & Lundstedt, S. B., 1976. Understanding tax evasion. *Public Finance*, 2, 295-305.

- Strümpel, B. 1968. *Steuersystem und wirtschaftliche Entwicklung. Funktion und Technik im sozio-ökonomischen Wandel.* Tübingen: Mohr.
- Strümpel, B., 1966. *Steuer-moral und Steuerwiderstand der deutschen Selbständigen.* Köln: Westdeutscher Verlag.
- Thibaut, J. W. & Kelley, H. H., 1959. *The Social Psychology of Groups.* New York: Wiley.
- Tyszka, T., 1994. *Cognitive representation of economics.* Paper presented at the IAREP/SABE conference, Rotterdam, The Netherlands, July 10-13.
- Walster, E., Walster, G. W. & Berscheid, E., 1978. *Equity: Theory and Research.* Boston: Allyn & Bacon.
- Wärneryd, K. -E. & Walerud, B., 1982. *Taxes and economic behavior. Some interview data on tax evasion in Sweden.* *Journal of Economic Psychology*, 2, 187-211.
- Webley, P., Robben, H. S. J., Elffers, H. & Hessing, D. J., 1991. *Tax Evasion: An Experimental Approach.* Cambridge: Cambridge University Press.

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