Tax Evasion, Taxation Inspection and Net Tax Revenue: from an Optimal Tax Administration Perspective

Bing Liu
School of Economics and Management/Anhui Normal University, Wuhu, China

Abstract— Tax evasion has always been an important topic to tax theory researchers and the department of government. However, existing research results are confined to the unilateral action of taxpayers, neglect the interaction between the tax declaration and taxation inspection. This paper, from an optimal tax administration perspective, builds a general equilibrium model, in which, taxation inspection cost, net tax revenue and taxpayers personal expected utility maximization, are included, to analyze the interaction between the tax declaration and taxation inspection. Then it proposes some policies and proposals about taxation inspection.

Index Terms—tax evasion, taxation inspection, net tax revenue

I. INTRODUCTION

Tax evasion is the economic activities that taxpayers through illegal channels to reduce their tax payable. Large-scale tax evasion will not only affect a government's fiscal revenue, lead to the failure of a government's macroeconomic indicators, distortion of resource allocation and income distribution out of control. Tax evasion is widespread in the world, according to the statistics, in developed countries, 22 high-income countries which per capita GNP more than 8626 U.S. dollars (such as Germany, Japan, Switzerland, United Kingdom, the United States and other countries), and 10 upper-middle-income countries which per capita GNP between 2786-8625 U.S. dollars (such as Argentina, Brazil, Chile and other countries), the tax loss is about 35%. 9 lower-middle-income countries which per capita GNP between 696-2785 dollar U.S. dollars (such as Colombia, the Czech Republic, Indonesia and other countries) and 5 low-income countries which per capita GNP below 695 U.S. dollars (including Egypt, India, Zambia and other countries) loss 30% and 60%. Such as the U.S. the tax loss between 30%-45%, the Netherlands, the tax loss between 22% -35%. Japan's tax loss vary according to the size of the taxpayer. Large, medium and small taxpayers, the loss around 20%, 40%, 60%.

In China, tax evasion is very serious and has become a well-known fact, according to the scholars calculation: in 1999, China's tax revenue loss was about 77.6 billion RMB(China yuan), if calculated with the amount that should be collected, the loss exceeded 100 billion RMB, if measurement by the combination of factors method, the loss will reach 320 billion to 430 billion, was the entire tax revenue’s 30% -40%. Experts conservatively estimated that, in 2004, tax loss was at least 450 billion, was the entire tax revenue’s 15%. in 2004, the National Audit Office audited 788 enterprises from 19 provinces and cities, found that in 2002 the tax should be collected was 117.35 billion, but actually the amount was 103.96 billion, pay less tax 13.38 billion, accounting for the tax that should be collected 11.41%; January to September, 2003, the tax should be collected 103.78 billion, 918.84 billion actually collected, less 118.94 billion, accounting for 11.46% of tax should be collected, in this way, tax wastage nationwide in 2007 up to 500 billion.

Tax evasion has been the important issues which theory researchers and government departments concerned about all the time. as China's economy development and the tax system improvement, more and more scholars research the issue. In this paper, based on Chinese and foreign scholars previous studies, from the point of tax audit cost and net revenue, study a general equilibrium model about tax evasion, tax inspection and tax net income, give some suggestions about the optimal behavior of tax collection for tax administration reference.

II. THEORY REVIEW

A. A-S model

The first use of modern methods of economics to study the problem of tax evasion is U.S. economist Kagan.P, he used the cash ratio method to estimate the scale of U.S. tax loss in "The total money supply and the corresponding currency demand" (1958). M G Allingham and A Sandmo constructed a theoretical model, it’s theory based on Gary Becker’s study on economics of crime and A Sandmo’s research on risk and uncertainty. Allingham and Sandem’s tax evasion model established the theoretical framework of tax evasion, is a classic model of tax evasion, often referred to as A-S model.

A-S model is a model of expected utility maximization, the basic assumptions are: (1) taxpayer’s cardinal utility maximization as objective function, and cardinal utility is a single function of income; (2) the taxpayer's marginal utility is positive and decreasing; (3) the taxpayer's actions are consistent with Von Neumann
and Morgenstern action rules under uncertainty; (4) proportional tax system; (5) tax authorities’ net income maximization with the budget constrained; (6) tax inspectors discovered a constant probability; (7) penalty based on the difference between taxable income and reported income, rather than the tax evasion, and the penalty ratio is higher than tax rate. In addition, tax audit will not add cost to taxpayers, and the taxpayer's real income after checking can be drawn. With these strict assumptions, the taxpayer's objective function can be expressed as:

\[ E(U) = (1 - p)U(W - tX) + pU(W - T - X(rW - X)) \]  

(1)

Here, U is taxpayer’s disposable income utility, E (U) is expected utility; W is taxpayer’s real income, an exogenous variable, in the cases of incomplete information, the tax authority can not accurately grasp it; X for the taxpayer’s taxable income declared to the tax authority, a endogenous variable, 0 ≤ X ≤ W; p for the probability of taxpayer seized by the tax authority; t for the tax rate set by the tax authority, r is the penalty ratio when be investigated, 0 < t < 1 < r. The expected utility function, if there being the optimal solution 0 < X* < W, under the optimal solution existing conditions, there are:

\[ \frac{dE(U)}{dX} = -\lambda - (1 - r)pU'W - \lambda X - rW + X \] \[ \frac{d^2E(U)}{dX^2} = -r(1 - p)U' - 1 + r(1 - r)pW - 2X - 2XrW + X^2 < 0 \]  

(2)

(3)

A-S model is a comparative static research model, conclusions are a series of comparative static results:

1. The affection of individual income W's change to taxpayer's declared amount X is uncertainty, depending on the individual taxpayer's relative risk aversion increasing or decreasing, and the individual taxpayer’s attitude to risk.

2. The affection of tax rate t’s change to taxpayer’s declared amount X is uncertainty, Allingham and Sandmo’s explanation to the uncertainty was that: to the taxpayer’s declared amount, the increasing of tax rate would have two effects, which were income and substitution effect. Income effect refers to that the tax rate increase will lead to the taxpayer's real disposable income reduced, narrowing the space for the taxpayer to plan, and increasing the taxpayer’s risk sensitivity, this would induce taxpayers to be more cautious, at last would reduce tax evasion phenomenon, the income effect has a positive effect to inhibiting tax evasion. Substitution effect refers to that the tax rate increase will lead to taxpayers get more marginal benefits of tax evasion of taxpayer’s taxable income, taxpayers evade more will bring more of its income, or tax rate rising will lead to, compare with tax evasion, tax in law will assume greater opportunity cost, the substitution effect has a negative effect to inhibiting tax evasion. Because it is uncertainty that which kind of the two effects is greater, therefore the impact of tax rate’s change on tax evasion is not sure

3. Seized probability p and penalty rate r increasing will reduce the taxpayer's tax evasion, this shows that tax evasion can be curbed by tightening tax collection and increasing the penalty rate.

A-S model provides a theoretical framework for the analysis of the factors what impact tax evasion, the seized probability and penalty rate’s impact on tax evasion rate are widely accepted, and provide a theoretical basis for strengthening the management of tax evasion. However, uncertainty about the impact of tax rates on tax evasion is not realistic, the usual view is that high tax rates will lead to the tax evasion occurring on a large scale, which many scholars have done empirical research, and these empirical results support the popular view. To this issue, Yitzhaki (1974) gave the A-S model a little improvement, assuming that the tax authorities penalize the tax evasion based on the amount of the taxpayers escaped, the penalty was r(W-X), then, under the conditions that the taxpayers’ absolute risk aversion decreases, tax rates raises will reduce tax evasion.

A-S model is recognized as general and well-structured, as a starting point, most follow-up reach in the field of tax evasion, such as adopting a progressive tax rate instead of a fixed rate, including the tax compliance costs, introducing the concept of self-insurance, etc. and proposed some valuable ideas.

B. Tax evasion model based on prospect theory

Prospect theory (Kahneman and Tversky 1979) holds that, relative to the wealth’s final value, people are more concerned about the wealth’s change compared to a reference value. to differentiate with expected utility theory, prospect theory using value function instead of the utility function. Value function is S type, is concave to revenue, convex to loss, changes in both directions showed a decreasing trend of sensitivity. The general form of value function is as follows:

\[ v(x) = \begin{cases} x^\beta, & x \geq 0 \\ 0, & x \leq 0 \end{cases} \] \[ \beta \in [0,1], \beta > 1 \]  

(4)

Based on Kahneman's prospect theory, set the taxpayer's taxable income for W, whose declared income to the tax department for D, D ∈ [0, W], hided income for E, D = W−E, tax rate for t, 0 < t < 1, if a taxpayer evade then 0 ≤ D≤ W, the probability he was being seized for p(D) ∈ [0,1], here assumed that p(D) is continuous, and p(D) = 0, that is, taxpayers more tax evasion, the greater the probability of being seized. s for the psychological burden tax evasion behavior exert on the taxpayers, and is assumed proportional to the underreporting income. λ for the penalty rate, but a light difference with the A-S model above, is a multiple of tax. According to prospect theory, decision-makers concerned about the wealth change relative to a reference value, that is, the wealth changes to a referent point for relative to a reference value, that is, the wealth's change compared to a reference value. to differentiate with expected utility theory, prospect theory using value function instead of the utility function. Value function is S type, is concave to revenue, convex to loss, changes in both directions showed a decreasing trend of sensitivity. The general form of value function is as follows:

\[ v(x) = \begin{cases} x^\beta, & x \geq 0 \\ 0, & x \leq 0 \end{cases} \] \[ \beta \in [0,1], \beta > 1 \]  

(4)

Based on Kahneman's prospect theory, set the taxpayer's taxable income for W, whose declared income to the tax department for D, D ∈ [0, W], hided income for E, D = W−E, tax rate for t, 0 < t < 1, if a taxpayer evade then 0 ≤ D≤ W, the probability he was being seized for p(D) ∈ [0,1], here assumed that p(D) is continuous, and p(D) = 0, that is, taxpayers more tax evasion, the greater the probability of being seized. s for the psychological burden tax evasion behavior exert on the taxpayers, and is assumed proportional to the underreporting income. λ for the penalty rate, but a light difference with the A-S model above, is a multiple of tax. According to prospect theory, decision-makers concerned about the wealth change relative to a reference value, that is, the wealth changes to a referent point for relative to a reference value, that is, the wealth's change compared to a reference value. to differentiate with expected utility theory, prospect theory using value function instead of the utility function. Value function is S type, is concave to revenue, convex to loss, changes in both directions showed a decreasing trend of sensitivity. The general form of value function is as follows:

\[ v(x) = \begin{cases} x^\beta, & x \geq 0 \\ 0, & x \leq 0 \end{cases} \] \[ \beta \in [0,1], \beta > 1 \]  

(4)

Based on Kahneman's prospect theory, set the taxpayer's taxable income for W, whose declared income to the tax department for D, D ∈ [0, W], hided income for E, D = W−E, tax rate for t, 0 < t < 1, if a taxpayer evade then 0 ≤ D≤ W, the probability he was being seized for p(D) ∈ [0,1], here assumed that p(D) is continuous, and p(D) = 0, that is, taxpayers more tax evasion, the greater the probability of being seized. s for the psychological burden tax evasion behavior exert on the taxpayers, and is assumed proportional to the underreporting income. λ for the penalty rate, but a light difference with the A-S model above, is a multiple of tax. According to prospect theory, decision-makers concerned about the wealth change relative to a reference value, that is, the wealth changes to a referent point for relative to a reference value, that is, the wealth's change compared to a reference value. to differentiate with expected utility theory, prospect theory using value function instead of the utility function. Value function is S type, is concave to revenue, convex to loss, changes in both directions showed a decreasing trend of sensitivity. The general form of value function is as follows:

\[ v(x) = \begin{cases} x^\beta, & x \geq 0 \\ 0, & x \leq 0 \end{cases} \] \[ \beta \in [0,1], \beta > 1 \]  

(4)
in the income areas, $\Delta Y^+ \geq 0$, Otherwise, in the loss areas and $\Delta Y^- \leq 0$, $\Delta Y^+$ can be understood as the wealth value changes relative to the reference point. By (5), (6) we have:

$$\Delta Y^+ = Y^+ - Y^0 = Y^+ - (1-t)W = t(W - D) \geq 0$$

$$\Delta Y^- = Y^0 - Y^- = Y^0 - (1-t)W = -(s + \lambda)(W - D) \leq 0$$

(7)

To (7), (8) into (4) can be obtained

$$F_D(x) = \left[ \lambda x - \rho \right] = \left[ \lambda (W - D) - \rho \right]$$

(8)

Here, $\Delta Y$ is the amount of gain or loss relative to the reference point, $\rho$ is the aversion coefficient, seized probability $p(D)(gain)$, not being seized probability $1-p(D)(loss)$. According to the Prospect theory, People tend to give objective probability a lower or higher subjective probability. Therefore, with the prospect theory, weighting function for the loss state (being seized) is $W^{-p(D)}$, weighting function for the gain state (not being seized) is $W^{1-p(D)}$. According to (9) and weight function, the value function of taxpayer as follow:

$$V = \frac{W - tX - mR + \lambda}{1 - (1-p(D))}$$

(9)

In prospect theory, the taxpayer's goal is to maximize the function $V$ of (10). With boundary conditions, the relationship between variables can be gotten. The relationship between tax rates and less declaring income, the relationship between variables can be gotten. The value function $V$ of (10). With boundary conditions, the relationship between variables can be gotten.

$$V = \frac{W - tX - mR + \lambda}{1 - (1-p(D))}$$

(10)

The prerequisites of taxpayer choosing to evade tax must be that the interests of tax evasion are greater than the cost of the tax evasion. That is $B > C$, the results of inequality is:

$$t > mP + a + s$$

(14)

That is, when taxpayers expect that tax evasion penalty (mp) suffered when being seized plus the operating costs (a) of tax evasion and psychological costs (s) are less than the taxes paid in accordance with the statutory tax rate, then the taxpayer will choose to evade. Formula (12), (13) are derived with R respectively, then, relative to the concealed income, the marginal benefit (MB) and the marginal cost (MC) of tax evasion are get:

$$MB = t$$

(15)

$$MC = a + mP + s + R P m l (R) + R s (R)$$

(16)

To maximize taxpayers’ expectation, in accordance with the principles of economics, the marginal benefit must equals to the marginal cost, it is $MB = MC$. If R is the horizontal axis, the marginal benefit curve MB can be expressed as a t height horizontal line, the marginal cost curve MC is a tilting curve up the right. By formula (16) and the known conditions, when $R = 0$, MC has the minimum a + mP + s, so the starting point of MC curve (R = 0, MC = a + mP + s) is lower than the MB curve, the two curves intersect at E, the R* corresponding to the intersection E is the best concealing amount where the tax escaper’s expected income maximization, and the best amount of tax evasion is R*t.

However, look at the existing research results, the starting point confined to the consideration of unilateral acts of the taxpayer, ignored the interactive relationship between the behavior of declaration and tax audition. In fact, the conditions of risk selection taxpayers facing, such as penalty amount and the seized probability, are closely related to the behavior of the tax authorities’ audition. If only consider the risks to taxpayer regardless the conditions of risk, the findings will be unconvincing. Based on this, to maximize the government’s net tax revenue, this article, including the variable of tax audit expenses, construct a general equilibrium model which cover the utility’s net tax revenue maximization and the taxpayer’s expectation maximization, to analyze the interaction between the tax inspection and the tax evasion.
III. MODEL CONSTRUCT

Based on the A-S model’s parameters setting, assume, in a tax year, the taxpayer’s reported less taxable income audited by the tax authorities for \( b(W-X), 0 \leq b \leq 1 \). From the perspective of tax authorities, taxpayer’s tax evasion is \( b(W-X) \), accordingly, the taxpayer to pay the fine by \( rtb(W-X) \). Expenditures for the tax department’s inspection for \( C \), the relationship between \( b \) and \( C \) can be expressed as \( b = b(C) \), it certainly has:

\[
\frac{db}{dC} = \frac{db}{dC} > 0
\]

That is, with the spending of the tax department inspection increased, the higher the taxpayer’s taxable income which being inspected out.

\[
b_C = \frac{d^2b}{dC^2}
\]

With the increase in audit expenses, \( b \) into decline by the increase, \( b \) turned negative from positive, indicating that the maximum value \( b \) exists.

To the interaction between tax audit and the taxpayer’s behavior, here should be noted that, on the choice of the tax department’s policy instruments, in order to curb tax evasion, seeking to maximize the tax revenue, tax inspection (inspection expenses), the tax rate adjustment and penalty rates and other policy tools are available, but in the specific application, these tools are different. Tax and penalty rates are legal areas, generally not free to change, relatively speaking, tax inspection efforts and configuration of inspection project, can have a moderate change based on the subjective views of the tax department, so check expenditures are choice variables, the tax rates and punishment rate systematic exogenous variables.

To be consistent with the A-S model, here set the actual income of the taxpayer for \( W \), an exogenous variable, under the conditions of incomplete information, the tax authorities cannot accurately grasp; \( X \) for taxable income the taxpayer declare to the tax authorities, an endogenous variable, \( 0 \leq X \leq W; p \) for the seized probability taxpayers seized by the tax authorities; \( t \) for the tax rate set by the tax authorities, \( r \) is the ratio of fine when being investigated, \( 0 < t < 1 < r; T \) for the government net tax income’s function, which includes the taxable income \( TX \) declared by the taxpayers, fine revenue \( prtb(W-X) \), and inspection expenditures \( C \) which should be deducted. If the government is risk neutral, seeking to maximize net tax revenue rather than maximizing tax revenue, its objective function of net tax revenue maximization is:

\[
Max_T = (TX + prtb(W-X)) - C
\]  

(17)

Formula (17) is derived for the first order and second order with \( C \), According to the conditions of the maximization of \( T \), there are:

\[
prtb_C - 1 = 0
\]

(18)

\[
prtb_{cc} < 0
\]

(19)

Equation (18) means that, when the last one dollar of inspection expenditures is equal to its relative seized tax evasion’s penalty revenue, the inspection cost is optimal.

To the government’s view, the objective function of the taxpayer’s expected utility maximization is:

\[
MaxU = (1-p)U(W'_1) + pU(W'_2)
\]

\[
W_1 = W - tX
\]

\[
W_2 = W - tX - rtb(W-X)
\]

Equation (20) is derived of \( X \) for first and second order, according to condition of the taxpayer’s expected utility maximization, can be obtained:

\[
-(1-p)U'(W'_1) + p(r-1)U'(W'_2) = 0
\]

(21)

\[
(1-p)U'(W'_1) + p(r-1)^2U''(W'_2) < 0
\]

(22)

Equation (21) means that, the paying less tax’s expected benefits the taxpayer obtained by reducing a unit of reported taxable income, must be equal to the expected marginal cost of paying an overdue tax and being punished when the tax evasion to be checked out.

The simultaneous equations of formula (17), (18), (19), (20), (21), (22), constitute a general equilibrium model of government’s net tax income and taxpayer’s expected utility maximization.

IV. ANALYSIS OF INTERACTION BETWEEN THE MODEL PARAMETERS

A. Tax rate \( t \) changes

The impaction of tax rate change on the taxpayers can get from formula (18) and (21) being derived of \( t \):

\[
\frac{dc}{dt} = -\frac{b_C}{tb_C}
\]

(23)

Equation (23) means that, due to higher tax rate will increase the marginal income of tax audition spending, raising tax rates will stimulate ax audition spending to increase. According to the formula (20) to determine the formula (24) \( Z \)'s sign is negative, and thus the tax rate adjusting impaction on the taxpayer's declared income \( X \) depends on the symbol of the molecule of the formula (11). In general, the tax rate increases, tax evasion will be expanded. However, the increasing of tax rate will promote inspection efforts to be enhanced, and only when the marginal benefit of tax inspection expenditures is 0, then the degree of tax audit is optimal. Therefore, Whether or not the taxpayer evade tax depends on the flexibility of tax audition expenses to marginal tax base and the degree of risk of their being seized.

\[
k = \frac{Cb_{cc}}{b_C}
\]

Set \( k \) for the flexibility of tax audition expenses to marginal tax base, R2, R1 for tax evasion being seized or not respectively,
\[
R_2 = \frac{U'(W_2)}{U'(W_1)} < 0, \quad R_1 > R_i, \text{ only the follow equation being established, the tax rate increases will lead the taxpayer to reduce the reported income.}
\]

\[
k < \frac{rCR_b}{rR_b(W - X) - X(R_i - R_t)}
\]

(25)

Discussion above show that, when the flexibility of tax audition expenses to marginal tax base is not high, the tax department can not further improve the performance of tax inspection, raising tax rates will induce taxpayers to increase tax evasion, thus reducing tax compliance.

B. The income of taxpayer W changes

The impaction of taxpayer’s income changes on the changes in taxpayer’s reporting income depends on taxpayer’s utility maximization behavior, the X of formula (21) is derived of W:

\[
\frac{dX}{dW} = \frac{1}{IZ} \left[ (1 - p) U'(W_i) (1 - rb) R_2 - R_i \right]
\]

(26)

When \( \frac{R_t}{R_i} > (1 - rb) \), set up the sign of formula (26) is positive, that is, the higher taxpayers’ income, the higher the income of its report.

Formula (26) means that, the higher taxpayers’ income, the higher its probability of being audited. When there is tax evasion, the probability of its being seized and the cost of being punished are higher, too. Therefore, the higher the taxpayers’ income, the more likely an honest declaration.

As for the proportion of declared income accounted for reported real income, according to the definition, there is:

\[
\frac{\delta}{\delta W} = \frac{1}{W} \left( W \frac{\delta X}{\delta W} - X \right)
\]

(27)

Formula (27) means that, if the conclusion that the taxpayer’s real income W and reported income X change in the same direction is right, whether the proportion of the declared income accounted for reported real income increases with the rising of the real income depends on the flexibility of declared income, it is, if the flexibility of the reported income greater than 1, then the proportion of declared income accounted for reported real income will increase with the rising of the real income, or if less than 1, it will fall.

C. Penalty rate and seized probability change

The punitive rate and the seized probability change, its impaction to the taxpayers’ compliance can get by deriving equation (21) with r and p respectively:

\[
\frac{\delta X}{\delta r} = \frac{1}{IZ} \left[ -pU'(W_i) + pW (r - 1) U'(W_i) \left( \frac{X}{b_x} - b(W - X) \right) \right] > 0
\]

(28)

\[
\frac{\delta X}{\delta p} = \frac{1}{IZ} \left[ U'(W_i) + (r - 1) U'(W_i) + (r - 1) U'(W_i) \frac{rb^2}{b_x} \right] > 0
\]

(29)

Formula (28) and (29) shows that, the penalty rate and the rate of seizures increased, both mean adverse to tax evasion, thereby, the taxpayer will increase the reported income people, and increase tax compliance at last.

V. CONCLUSIONS

To the taxpayer, the tax evasion should pay the relative cost, that is, will face the possible punitive price. The tax department is no exception, to increase taxes, prevent tax evasion, also must spend a lot of manpower and resources, tax inspection and tax evasion are against each other and influence each other. The net revenue of the government and the utility of the taxpayer maximize respectively, in the cases there exist an optimal equilibrium solution, whereby the paper establish a general equilibrium model in which the net revenue of the government and the utility of the taxpayer maximize respectively. By analyzing the model, can draw the following conclusions:

(1) The equilibrium solution to the government’s optimal inspection expenditures, is defined as spending one dollar of audit costs, must be equal to the overdue tax and penalty when the tax evasion to be checked out. The equilibrium solution to the maximization of the taxpayer’s utility is, the paying less tax’s expected benefits the taxpayer obtained by reducing a unit of reported taxable income, must be equal to the expected marginal cost of paying an overdue tax and being punished when the tax evasion to be checked out.

The behavior of the government and the taxpayer is the opposite: the taxpayer increase (decrease) the tax evasion, would enable the government to increase (decrease) tax audit expenditures; on other hand, with the government’s tax audit expenditures increase (decrease), would enable the taxpayer to increase (decrease) their tax compliance correspondingly.

(2) In general, the tax rate increase, the tax evasion will be expanded. However, the tax rate increase will increase the marginal income of the tax audit expenditures, incentive the tax audition spending go up, and promote to enhance inspection efforts. Only when the marginal benefit of tax inspection expenditures is 0, then the degree of tax audition is optimal. Therefore, Whether or not the taxpayer evade tax depends on the flexibility of tax audition expenses to marginal tax base and the degree of risk of their being seized. When the flexibility of tax audition expenses to marginal tax base is not high, the tax department can not further improve the performance of tax inspection, raising tax rates will induce taxpayers to increase tax evasion, thus reducing tax compliance.

(3) The higher the taxpayers’ income, the higher its probability of being audited. When there is tax evasion, the probability of its being seized and the cost of being punished are higher, too. Therefore, the higher the taxpayers’ income, the more likely to declare honestly.

As for the change direction of the proportion of declared income accounted for reported real income, if the conclusion that the taxpayer’s real income and reported income change in the same direction is right, whether the proportion of the declared income accounted for reported real income increases with the rising of the real income depends on the flexibility of declared income, it is, if the flexibility of the reported income greater than 1, then the proportion of declared income
accounted for reported real income will increase with the rising of the real income, or if less than 1, it will fall.

(4) Penalty rate and the detected rate increase means that the tax evasion will assume greater costs once being detected, which raise more awareness of the risk management of the taxpayer, the taxpayer will increase the reported income, thereby increasing tax compliance.

Practical significance of this study is, view China’s tax reality, the tax loss has the characteristics of wide range, large number, diversity. With the diversification of economic entities and the diversification of mode of operation, the means of illegal and crime tax-related has become increasingly complex. In short, with the ever-changing tactics of corporate tax evasion, tax means more and more hidden, tax audit work has become increasingly difficult. In addition, as for the power of the tax audit and the inspection level, the seized probability of current tax authorities on tax evasion cases is very low, usually not more than 50% [7]. For the above, if to improve the seizure rate is bound to increase a large number of tax officials and the huge audit costs, the result will not necessarily bring about the increase in net revenue. As for the tax and punishment rates increase, not only to revise the relevant laws, but also will increase corporation’s tax burden, causing social dissatisfaction, in fact, it is feasible, too. Therefore, how to adjust the structure of the tax audit and expenditure, under the conditions of the existing human and material resources of the tax authorities, to achieve the maximum of the net tax revenue would be the optimal orientation of the tax administrative act.

REFERENCES