

Conference Paper

Indirect Auditing Methods for Individuals Subject to Income Tax

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Abstract

This paper provides a tax audit guide, gathering all indirect audit methods applied both in Greece and abroad. It also identifies the size of hidden tax base and of the amounts that could be revealed and taxed. The aim of the current study is to present the indirect audit methods, as this is the imperative future of tax audits. Indirect methods are applied mainly to individuals, as according to experience, money that has escaped taxation, always ends up in one or more individuals. There are references in the ways in which this fact can be discovered during a tax audit, how to be determined and how understated income will be converted to taxable matter. Problems, opportunities, legislative framework and the overall impact of indirect audit methods are being analyzed in order to reduce tax evasion, in combination with an empirical research conducted as part of this study. A questionnaire that is consisting of 31 questions was completed by 102 tax-employees of the region of Macedonia and Thrace between May 2017 and September 2017. A factor analysis with the method of principal components and with varimax rotation was applied. The relationship among a number of items by grouping them in factors was investigated. Thus, four factors based on 21 questions of our questionnaire, are used for factor analysis. The Kaiser-Meyer-Olkin measure of sampling adequacy (KMO) value and chi-square value for Bartlett's test of sphericity were checked whether data are suitable to continue the process of factor analysis. All statistical analysis is conducted with the application of the SPSS version 22 software package.

Keywords: Indirect audit, methods, tax audit, income tax, tax evasion.

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Received: 17 November 2019

Accepted: 6 January 2019

Published: 12 January 2020

Publishing services provided by
Knowledge E

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Selection and Peer-review under the responsibility of the EBEEC Conference Committee.

1. Introduction

The problems of the shadow economy, tax evasion and tax avoidance are considered as a plague for decades in Greek economy [3, 11, 14, 15]. They are considered among the root causes of the economical crisis we are experiencing nowadays [12, 13]. Any efforts proved futile to control and effectively address these thorny problems [22]. In order to assess whether the employment of audit services with the indirect audit techniques will be more efficient, it is necessary to see if it will surely be wholly beneficial according

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to the Greek economy structure, the distribution of the tax burden and identifying any teams with the tendency to tax evasion [18, 19, 21].

Given the change in both the organization and the functioning of businesses and public sector organizations on one hand and the state audit mechanisms on the other, it is easier and more efficient to address the problems of the shadow economy, tax evasion and tax avoidance [5, 8, 9, 17].

Direct techniques are based on the verification of income and expenses in the books and records kept by the taxpayer and transferred to their tax returns [1]. The tax revaluation is based on differences that arise, as regards to these books and the tax auditor's tax returns. Indirect techniques determine the tax liability through an analysis of financial transactions, using information from sources other than tax returns and official books and records. The tax assessment is usually based on detailed information indicating a reasonable determination of the correct tax liability.

Auditors on numerous further occasions cross-check only the figures of the books and records kept in relation to the taxpayer's statements [2, 15]. However, if tax inspectors rely solely on tax returns, accounting entries and accounting records in order to determine taxable amount, taxpayers can restrict their tax liability by creating records that do not fully reflect their financial situation or by choosing just not keeping their books and their data, even perhaps not submitting tax returns. Therefore, indirect audit techniques have been developed to help auditors to objectively identify taxable items when books and data are either unavailable or inadequately reflect the taxpayer's financial transactions [7]. Indirect income determining techniques may also be useful in risk analysis as a tool for verifying the truth of taxpayer claims. They are internationally recognized audit techniques used to determine the tax liability based on the amount of undeclared income.

The purpose of indirect audit techniques is to identify the hidden taxable item through a methodology that exploits data, information, and income data for each source, as well as costs of any kind that the tax administration has or collects for itself, his / her spouse and protected members, in order to issue a tax assessment [4].

For the purposes of determining whether the use of an indirect audit technique leads to the effective tax liability, is particularly appropriate, when the audit procedure reveals that the auditor's tax return as well as the books and data supporting it do not accurately reflect the total taxable income and-when the auditor reasonably substantiate the possibility of undeclared income [6].

Indirect audit techniques are as follows [4]:

- Source and application of funds method
- Net worth method
- Bank deposit and Cash expenditure method
- Unit and Volume method
- Mark-Up method

The choice of appropriate indirect audit technique is vital in order to determine effectively and efficiently the tax liability of the auditee. For example, while Bank deposit and Cash expenditure method and Source and application of funds method are being used in the long run, they are not the most effective methods if the cash is not deposited in a bank account, and / or the cash spent cannot be determined unless voluntarily disclosed by the taxpayer. In fact, it is difficult to identify important personal acquisitions or costs that the taxpayer has deliberately hidden [13].

According to the I.R.S. - International Revenue Service of USA, these weaknesses can be addressed by applying an indirect technique based on the taxpayer's business to determine precisely the tax liability. Such techniques are, for example, Technique of the Authority of Proportions and Value of Sales Price to Total Turnover Volume [23].

The following factors should be taken into account when selecting an indirect audit technique [19]:

- i. The sector in which the taxpayer operates
- ii. If inventory is a primary activity for income generation
- iii. Suppliers are known and / or the commodity is purchased from a limited number of suppliers
- iv. The commodity and / or service is priced at a relatively constant price
- v. The volume of production and the variety of products
- vi. Availability and accuracy of books and records
- vii. The taxpayer's banking practices
- viii. Using cash to pay for expenses
- ix. If spending exceeds income
- x. Stability of assets and liabilities
- xi. Stability of net worth in multiple audited uses.

2. Method

In the context of this study a survey on indirect audit techniques was carried out. This empirical study aims to ascertain the use and effectiveness of indirect audit techniques within the tax audit mechanism in order to draw conclusions about the theoretical part of the work. The purpose of the research is to understand the problems arising from the implementation of indirect audit techniques and to propose solutions to them.

For this reason, primary data were used, which were collected using the questionnaire method. The questionnaire was addressed to employees of the Ministry of Finance and primarily to auditors. The survey was conducted between October and November 2016.

As the respondents are at risk of responding arbitrarily to the questions posed to them, questions have been included to confirm the answers indirectly.

The questions used are of the closed type and the respondent can choose in a range of values. Dichotomic questions are also included, where the respondent can choose between two possible answers, multiple choice questions and questions with significance scales, where the respondent has the opportunity to be placed on the subject matter. In addition, there are questions with Likert five-scale, which record with a proposal the degree of agreement.

The questionnaire is structured. It has a strict set of questions and consists of three parts.

The first part of the questionnaire includes the respondent's demographic data. The second part deals with the general knowledge and use of indirect audit techniques, while the third relates to the respondent's personal views regarding the indirect techniques and the general tax environment that surrounds them.

The survey involved a total of 102 audit officers, who were asked to answer a series of questions concerning both demographic data but mainly questions related to the knowledge, use and results of the application of indirect audit techniques.

Thus, as little as 1 in 10 respondents, 9.8% is a secondary school graduate, while the majority of respondents, 51%, hold a postgraduate degree. Also, 13.7% of people surveyed are graduates of technological education, while almost 1 in 4 participants, 25.5% have university education.

Table 2 below shows the years of service in the current position of the officials who took part in the survey and the years of service of the employees who took part in the private sector research before their current position.

TABLE 1: Sociodemographic characteristics of the respondents.

Age	Percentage
<35	15.7%
36-45	43.1%
46-50	17.6%
51-60	23.5%
Total	100.0%
Education	Percentage
Secondary	9.8%
Technological	13.7%
University	25.5%
Postgraduate	51.0%
Total	100.0%

TABLE 2: Work experience.

Years of service in this position	Percentage
<=3	55.2%
Between 4 and 10	30.8%
>10	14.0%
Total	100.0%
Years of service in the private sector	Percentage
0	20.4%
Between 1 and 5	47.0%
>5	32.65%
Total	100.0%

Thus, the majority of respondents, 55.2%, work in their current position from 1 to 3 years, while almost 1 in 3 employees, 30.8% work in the current position from 4 to 10 years. It is interesting that 14.0% of the respondents, ie almost 1 in 5, have been in the same position for more than 10 years. Nevertheless, the majority of employees, 38.8%, are in their current position for 3 years.

It is noticed that 1 out of 5 employees, 20.4%, have zero working experience in the private sector and 1 in 2 employees, 47.0% have a service in the private sector from 1 to 3 years. Also, 1 out of 3 employees, 32.65% have been serving the private sector for more than 5 years.

The chosen scale in this research, for the second part of the questionnaire, was the 5-point Likert scale where 1= strongly disagree, 2= disagree, 3= neutral, 4= agree and 5= strongly agree.

To ensure the appropriateness of the questionnaire, it has been tested for Content validity, Construct validity and Reliability.

3. Results

Next to be covered are the questions about indirect audit techniques. The following table 3 provides an overview of the results to questionnaire questions from those who participated in the survey, whether or not they are performing audit work, whether they are aware of the indirect audit techniques, whether the participants have compiled the indirect audit techniques, and whether the duration of their work has made use of Indirect Audit Techniques.

TABLE 3: Gutman questions for indirect audit.

Item	Yes	No
Are you carrying out audit work?	96.1%	3.9%
Do you know what Indirect Audit Techniques are?	92.2%	7.8%
Have you been trained in Indirect Audit Techniques?	37.3%	62.7%
During your work have you used the Indirect Audit Techniques?	31.2%	68.8%

As a result, almost all participants, 96.1%, are performing an audit work, with just 3.9% of them doing so. This does not mean that 3.9% is not entitled to have an opinion on the questions asked, as it may supervise or oversee the audit work, or even have served in the past.

In addition, all the participants in the survey were asked to respond to their knowledge of indirect audit techniques. And in this case the yes is the majority. Thus, almost 9 out of 10 respondents, 92.2% answered that they know indirect techniques, while only 7.8% answered negatively to this question. The result of these replies is that approximately 8% of the auditors are totally ignorant of indirect audit techniques.

The following are the results of the question as to whether the participants have been trained in indirect audit techniques, such as through seminars. As a result, nearly 3 out of 5 employees who participated in the survey, 62.7% have not been established in indirect audit techniques. On the contrary, just 2 out of 5, 37.3% say they have some kind of training in indirect audit techniques. The answers to this question are very important for this research. It is typical that around 63% of the respondents have absolutely no training on the subject of indirect audit techniques, when they are called upon to implement them and produce results through them.

Participants were then asked to respond whether or not they used indirect audit techniques during their work. Thus, 7 out of 10 employees who participated in the

survey, 68.8% say they have not used indirect audit techniques during their work, while only 3 out of 10, 31.2% say they have used indirect audit techniques. From the answers to this question it appears that until now the indirect audit techniques are not widely used by the majority of the auditors.

An effort is then made to identify the type of taxpayer in whose cases the employees who participated in the survey have dealt with and implemented indirect audit techniques. The results are shown in the table 4 below.

TABLE 4: For cases you have dealt with and applied indirect audit techniques, taxpayers were primarily.

Type of taxpayer	Percent
Tradesmen	25.0%
Self-employed	25.0%
Farmers/Breeders	6.8%
Pensioners	6.8%
Public servants	18.2%
Private employees	6.8%
Different	11.4%
Total	100.0

Hence 1 out of 4 taxpayers, 25% of whom indirect techniques were applied, were tradesmen, while the same number of freelancers appears as regards their audit using indirect techniques. In addition, almost 1 in 5, 18.2% of those surveyed by indirect techniques, were civil servants, while private employees with 6.8%. Similarly, small percentages are shown for farmers / breeders and pensioners, where both 6.8% have been tested by indirect techniques. Finally, 1 in 10 taxpayers, 11.4% checked by indirect techniques belonging to another category than those mentioned above.

Subsequently, the participants in the survey had to answer which or what indirect techniques they applied in the above cases.

TABLE 5: Indirect audit techniques used.

Indirect audit techniques	Total
Source and application of funds method	26.1%
Networth method	8.7%
Bank deposits and cash expenditure method	52.2%
Unit and volume method	4.3%
None	8.7%
Total	100.0%

Thus, the most applied technique is bank deposit and cash expenditure, with 52.2%, almost 1 in 2 cases tested indirectly, as a method of implementation. Also 1 in 4 cases, 26.1% were examined with the Source and application of funds method, while only 8.7%

of cases were examined with the Net Worth method. Still lower is the percentage of the Unit and Volume method to the total turnover, which reaches 4.3%. Finally, in 8.7% of all cases investigated using indirect techniques, another technique was used, different from the ones already mentioned.

The following table gives an overview of whether the survey participants have finalized a certificate by indirect audit techniques, whether the audited has lodged an in-court appeal, whether the audited has appealed to the administrative courts and whether the case has been handed down by the administrative courts and if so, what was its outcome.

The results of their answers are shown in Table 6 below.

TABLE 6: Gutman questions for indirect audit.

Item	No	Yes	Not completed
Have you finalized the amounts of certification through indirect audit techniques?	5.3%	73.7%	21.1%
Has the auditee brought an appeal in court?	42.1%	31.6%	26.3%
Has the auditee resorted to the Administrative Courts?	50.0%	41.7%	8.3%
Was the case heard by the Administrative Courts and, if so, what its outcome?	83.3%	16.7%	

It follows from the above that 7 out of 10 employees, 73.7%, stated that they had finalized a certificate by indirect audit techniques, while 1 in 5 employees, 21.1% said the audit was not yet completed. Finally, there is a small percentage of 5.3% that did not finalize the amounts of attestation through indirect audit techniques. These answers demonstrate the following conclusions: (1) audit using indirect techniques is particularly time-consuming. (2) indirect audit techniques result in a large percentage (approximately 74%) of hidden taxable material

Table 6 therefore shows that nearly 1 in 4 audited, 26.3% await the completion of their audit, while only 3 out of 10 audited, 31.6% have filed an intra-corporate appeal. On the other hand, the majority of those under audit are 42.1% who have not filed an appeal.

Thus, 1 in 2 audited, 50% did not appeal to the administrative courts, while 2 out of 5 audited, 41.7% fled to them. There is also a small percentage of 8.3% where either the audit has not been completed or the court decision has not been issued. There is, therefore, a large proportion of the audiences who are using the administrative courts to try to change the outcome of the audit.

Subsequently, the paper will consider how the case was handled by the administrative courts, and if so, what was its outcome. The conclusion is that in the vast majority of

cases, the case was not considered by the administrative courts at 83.3%. Therefore, 4 out of 5 cases where the auditee has appealed to the administrative courts, his case has not yet been examined. This fact demonstrates the high proportion of audits that end up accumulating in administrative courts is pending and is not easily manageable by the judiciary. Finally, only in 16.7% of the cases, the cases were examined by the administrative courts and their decision was in favor of the tax administration.

Finally, the respondents were asked to answer on the course of the collection of the audit case through indirect techniques. Their answers are presented in Table 7 below.

TABLE 7: What is the progress of the audit case collection through indirect techniques?

Progress of the collection of the audit case through the indirect techniques	Percent
The full amount	8.3%
Part of the certified amount	33.3%
The debt was included in a partial payment arrangement	25.0%
Debt is in suspension	8.3%
No amount was paid	16.7%
Other	8.3%
Total	100.0

It follows from the above table that in the majority of cases, 33.3%, ie 1 in 3 cases, the established amount was partially repaid, while 1 in 4 cases, 25% of the debt was part of a settlement arrangement. Similarly, almost 1 in 10 cases, 8.3% of the established amount, was fully paid out, while with a similar rate of 8.3% there are cases in which the debt is in the suspension of recovery. Finally, there is a relatively large proportion of 16.7% of cases where no amount has been paid. The results of these replies demonstrate the low level of collection of checks and the reasons why they exist.

Following the statistical analysis, a series of correlations and independence tests are presented for the purpose of conducting conclusions on indirect audit techniques. It first examines whether the employees who participated in the survey - whether they practice audit work or not - know what the indirect audit techniques are. The results are shown in Table 6 below.

It's worth noting that the total number of non-audit employees, 100%, knows what the indirect audit techniques are, indicating that the employees in question are aware of some techniques, even though it is an object that does not concern the position served. Also, 9 out of 10 employees, 91.8% of the auditors, know what the indirect techniques are, and only 8.2% of the auditors do not know what they are. The chart accompanying the table above is characteristic.

The independence check was carried out with Pearson Chi-Square. The conclusion is that auditing does not depend on having knowledge of indirect audit techniques at materiality level 5% ($\chi^2(1)=0.177$, p-value = 0.674 > 0.05).

Therefore, the error that will occur if the zero hypothesis is rejected, is too large, so the null hypothesis must be accepted. Thus, the two questions examined above are independent of each other. Therefore, the fact that an employee knows what the indirect audit techniques are, does not depend on whether or not he performs audit work. The following table 8 examines the exercise of audit activity, in relation to the extent to which the employees are trained in indirect audit techniques.

TABLE 8: Compatibility of audit engagement with training in indirect audit techniques.

	Have you been trained in Indirect Testing Techniques? (eg Seminars)			Total
		No	Yes	
Are you carrying out audit work?	No	61.2%	38.8%	100.0%
	Yes	62.7%	37.3%	100.0%

With respect to employees who do not carry out audit work, the obvious, that is 100% of them, is that they have not been established in indirect audit techniques. Unlike auditors, only 2 out of 5, 38.8% have some kind of training in indirect audit techniques. It is noteworthy that 3 out of 5 employees, 61.2% auditing, have not been drawn up in indirect audit techniques.

The independence check was carried out with the Pearson Chi-Square test. The conclusion is that auditing does not depend on whether or not it carries out audit work at materiality level 5% ($\chi^2(1)=0.236$, p-value = 0.266 > 0.05).

Therefore, the error that will occur if the zero hypothesis is rejected is too large, so the null hypothesis must be accepted. Thus, the two questions examined above are independent of each other, ie whether or not someone has developed the indirect audit techniques, does not depend on whether or not he performs audit work. The following table 8 examines whether the exercise of the audit work during the employee's work is associated with the use of indirect audit techniques.

TABLE 9: Relation of audit engagement with the use of indirect audit techniques.

	During your work have you used the Indirect Technical Audits?			Total
		No	Yes	
Are you carrying out audit work?	No	61.2%	38.8%	100.0%
	Yes	62.7%	37.3%	100.0%

And in this case for the total number of individuals, 100% who do not carry out audit work is the expected one, that they have not used the indirect techniques during their work. In addition to auditing employees, only 2 out of 5, 38.8% have used indirect audit techniques. Notable is the fact that 3 out of 5 employees, 61.2% auditing, have not used indirect audit techniques. At this point, it should be noted that this table is identical in terms of its numerical part with the corresponding table above. This is because people who have used indirect techniques are the same people who have been trained to do it, and those who are not trained in indirect audit techniques do not apply them.

The independence check was carried out with the Pearson Chi-Square test. The conclusion is that the use of indirect audit techniques does not depend on whether or not he performs audit work at a materiality level of 5% ($\chi^2 (1) = 1.236$, $p\text{-value} = 0.266 > 0.05$). Therefore, the error that will occur if the zero hypothesis is rejected is too large, so the null hypothesis must be accepted. Thus, the two questions discussed above are independent of each other, ie whether one uses indirect audit techniques, does not depend on whether or not he performs audit work.

The following table 10 examines the use of indirect audit techniques in relation to what these techniques were.

TABLE 10: An association of use of indirect audit techniques with what these are

		Do you know what Indirect Testing Techniques Are?	
		No	Yes
Which or what indirect audit techniques have you applied?	Technique of Stability Analysis (source and application of funds method)	28.6%	26.1%
	Net Position Technique (networth method)	9.5%	8.7%
	Banking Deposit and Banking Techniques (bank deposits and cash expenditure method)	57.1%	52.2%
	Sale Value Technique to Total Turnover Volume (unit and volume method)	4.8%	4.3%
	None	7.8%	92.2%

Interest is only shown in the column for employees who have used indirect audit techniques during their work. Thus, in 28.6% of the cases, the liquidity analysis technique was applied, while almost 1 in 10 cases, 9.5%, used the net equity technique. In the majority of cases, 57.1% made use of the bank deposit technique and cash expenses. Finally, the technique of the sales price relationship to the total turnover volume was applied only to 4.8% of all cases where indirect audit techniques were used.

The independence check was carried out with the Pearson Chi-Square test. The conclusion is that the use of indirect audit techniques during work depends on the type of technique used at significance level of 5% ($\chi^2 (4) = 23.0$, $p\text{-value} = 0 < 0.05$).

Therefore, the error that will occur if the zero hypothesis is rejected is small, so the zero hypothesis is discarded. So the two questions examined above are dependent on each other, ie the use of indirect audit techniques during work is related to the type of technique used.

The following table 11 examines whether the auditee has lodged an in-court appeal in relation to whether the amounts of the certificate were finalized through indirect audit techniques.

TABLE 11: Correlation between finalization of amounts of attestation and appeal.

	Has the audited brought an appeal in court?			Audit has not been completed	Total
		No	Yes		
Have you finalized the amounts of certification through indirect audit techniques?	No	100%	0%	0%	100.0%
	Yes	50.0%	42.9%	7.1%	100.0%
	Audit has not been completed	0%	0%	100%	100.0%

As regards the cases where the amount of certification was finalized through indirect audit techniques (50% of the cases), the auditee did not appear in court, while in 42.9% of the cases, the auditee filed an appeal.

The independence check was carried out with the Pearson Chi-Square test. The conclusion is that whether or not the auditee will exercise an intra-corporate appeal depends on the finalization of amounts of attestation by means of indirect audit techniques at a materiality level of 5% ($\chi^2 (4) = 15.302$, $p\text{-value} = 0.004 < 0.05$).

Therefore, the error that will occur if the zero hypothesis is rejected is small, so the zero hypothesis is discarded. Thus, the two questions discussed above are dependent on each other, ie whether or not the auditee will bring an action in a court of law depends on the finalization of amounts of attestation through indirect audit techniques (in addition, no appeal could be lodged if it had not been completed the audit).

The following table 12 examines whether the auditee has appealed to the administrative courts, whether the case was finally dealt with and what the outcome of the case was.

TABLE 12: Relation of refugees to administrative courts and the outcome of the case.

	Was the case heard by the Administrative Courts and, if so, what was its outcome?			Total
		No	Yes	
Has the auditee resorted to the Administrative Courts?	No	80.0%	20.0%	100.0%
	Yes	83.3%	16.7%	100.0%

Interest is only available in cases where the auditee has resorted to administrative courts. Thus, 4 out of 5 cases, 80% where the auditee resorted to administrative courts, his case was not heard. Only one in five cases, 20% of those who have been appealed to the administrative courts have been dealt with by a decision in favor of the tax administration.

The independence check was carried out with the Pearson Chi-Square test. The conclusion is that the question whether the auditee has resorted to administrative courts does not depend on whether his case has finally been dealt with at a materiality level of 5% ($\chi^2 (1) = 0.240$, p-value = $0.624 > 0.05$).

Therefore, the error that will occur if the zero hypothesis is rejected is too large, so the null hypothesis must be accepted. Thus, the two questions examined above are independent of each other, ie whether he has appealed to the administrative courts does not depend on whether his case has finally been dealt with.

The following table 13 examines the finalization of the amounts of the certificate and the course of recovery of the case.

TABLE 13: Correlation between finalization of the amount of the certificate and the course of recovery of the case.

		Have you finalized the amounts of certification through indirect audit techniques?	
		No	Yes
What is the process of collecting the audit case through indirect techniques?	The amount certified was fully paid.	0%	100.0%
	The amount certified was partially reimbursed.	0%	100.0%
	The debt was included in a partial payment arrangement.	0%	100.0%
	Debt is in suspension	0%	100.0%
	No amount was paid	50.0%	50.0%
	Other	0%	100.0%

Table 13 shows that 1 in 2 cases, 50% for which no amount was paid, finalization of amounts of attestation was finalized, while in the other cases there was no finalization of the amount of the certificate. For all other cases covered by the aforementioned table, full or partial redemption, debt settlement or suspension, 100% of all cases were finalized.

The independence check was carried out with the Pearson Chi-Square test. The conclusion is that the finalization of the amounts of the certificate does not depend on the progress of the case at a 5% significance level ($\chi^2(5) = 5.455$, $p\text{-value} = 0.363 > 0.05$).

Therefore, the error that will occur if the zero hypothesis is rejected is too large, so the null hypothesis must be accepted. Thus the two questions examined above are independent of each other, ie the course of the collection of the audit case through indirect techniques, does not depend on the finalized amounts of the attestation.

4. Discussion and Conclusions

Another reason why it is imperative to check the available lists is that other taxpayers who are in one way or another are linked to those who have checked these lists are also emerging. This reveals additional tax deductible material and further broadens the tax base. As mentioned above, the amounts charged as a surplus of property are particularly high, the audited take various actions to avoid them. In addition to the legitimate methods used, there are also unfair practices in a small percentage. These are the mostly unfounded complaints to the persons carrying out the audit in order to delay the verification process. Moreover, most of the audiences who contest the actions of the tax authorities request their case to be re-examined by appealing to the Dispute Settlement Division of the General Secretariat of Public Revenue. This process is aimed at resolving tax differences in short deadlines, at no cost to the taxpayer and consolidating trust between taxpayers and the tax administration.

The tax administration must encourage taxpayers to keep adequate and accurate books and data so that the auditors are at all times able to accurately determine the resulting tax liabilities. Indirect techniques are costly and time-consuming in their application and should be used only when the audited has significantly underestimated the taxable amount.

However, indirect audit techniques provide the tax administration with a valuable tool to substantiate the accuracy or otherwise of the taxpayer's statements. They also

enhance tax compliance and determine the tax liability of the audited when his books and records do not accurately reflect its true financial position.

Problems hampering the widespread use of indirect audit techniques are mainly limitations on the accuracy of the results, the lack of legislative support, the required resources and the lack of understanding by the judiciary. In order to ensure their effectiveness, indirect audit techniques must be applied with great precision. Therefore, the tax administration must ensure the appropriate legislative framework, business plan, as well as provide appropriate training and guidance to the entire audit capability.

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