Innovative Techniques used to Prevent Tax Evasion: A Critical Analysis

Amarendra Bhuyan
Assistant Professor, Department of Commerce, KISS DU
ORCID-0000-0002-0117-6572
amarendra.bhuyan@kiss.ac.in

Snigdharani Panda
Associate Professor & Chairperson Council of Deans, KISS DU
ORCID-0000-0002-4469-0811
snigdharani.panda@kiss.ac.in

DOI : https://doi.org/10.65901/KIJEIS.2025.v1i1.47-57

Abstract

A tax is a mandatory fee or financial charge levied by any Government upon the public or organization to collect revenue for public works or public benefit. It is a compulsory extraction made by the Government from the public. But the assessed want to save tax because he thinks it is his/her hard-earned money so he wants to save it. Generally, there are two ways to save tax. One is tax avoidance and another is tax evasion. Where the former is legal and as per the provisions of the tax law and the latter is illegal. Tax avoidance is the use of legal mechanisms available in the tax laws to avoid the payment of tax. There are many provisions in the tax law where a person can invest his/her money so that he/she does not have to pay the tax or he/she can avoid the payment of tax. Whereas tax evasion is illegal because in case of tax evasion the method adopted to not to pay tax is not according to law. So, where tax avoidance is legal way but tax evasion leads to fine, penalty and it is a criminal offence also. Tax avoidance is not taken as harmful and illegal because in case of tax avoidance the assessee have to invest his/her money in to some prescribed investment in which the society or country is benefited but in case of tax evasion the assessee have taxable income and he suppress the taxable income either by way of under reporting the sale or over reporting the deductions in which the county loses the amount of tax to be payable. Tax evasion and tax fraud not only defrauds the Government but it also acts an un-level playing field for compliant tax payers. Now days there are various technologies available by adopting which the tax evasion can be prevented or it can be minimized. These technologies help in data recording technology in electronic cash register electronic sales machines and automated reporting and it curbs the tax evasion techniques adopted by the assesses to a great extent. This topic tends to critically analyses the tax evasion and suggest the techniques to be used by Government agencies to prevent tax evasion by the general public.

Keywords: Tax avoidance, Tax evasion, Tax incidence

1. Introduction

Some taxpayers are adamant about not paying their taxes, even though the majority do. Tax evasion and fraud are still a problem, and they can cost many billions of dollars annually. This is illegal, not only because it defrauds the government of tax dollars, but also because it unfairly disadvantages law-abiding taxpayers. There are two specific methods of tax evasion that are being observed by several tax authorities throughout the world: underreporting of income through electronic sales suppression and over reporting of deductions through fake invoicing. The cash economy and the sharing (or internet) economy can help to further promote tax evasion and fraud. Nevertheless, tax authorities can currently use affordable technology solutions to prevent and detect various sorts of tax evasion and tax fraud.

2. Review of literature

Sharma and singh (2007) studied the perception of tax professionals with regard to Indian Income System. They found that presence of incompetent tax collectors were due responsible for high tax evasion in India. The problem arises at the time of tax collection, during which the person or an entity may unlawfully and intentionally avoid tax by not paying it. This act is referred to as tax evasion.

The causes and solutions for tax fraud in India and fraud in the Indian Tax System were investigated by Arora R.S. and Rank Vanita (2010). The main causes of tax evasion in India, according to their argument, are high tax rates, easily bribed tax collectors, social acceptability of tax payment default, a low likelihood that tax evasion will be discovered, and a lack of morals. Another factor contributing to tax evasion in emerging nations is an ineffective tax collecting mechanism.

Dr. Devarajappa (2017) investigated the magnitude of tax fraud in India as well as its effects on government revenue. He discovered that the biggest amount of tax evasion was reported in the years 2008 and 2009, while the least amount was recorded in the years 2002 and 2003. Utilizing legal means to lessen one's financial situation in order to pay less in taxes, particularly income taxes, is known as tax avoidance. Claiming realistic and legal deductions and tax credits usually achieves this. People frequently mix up tax avoidance and evasion.

Stuart P. Green (2009) investigated the psychological and moral implications of tax evasion, as well as the role that an individual's fundamental morality may have played. He discovered that although the public rationalized their reasons for not paying taxes, such as high tax rates and the government's ineffective use of tax dollars, it was still morally wrong to do so.

Vivendra Pal and Laliwadhwa (2012) investigated about tax evasion reasons and they came to the conclusion that the approach to lower the amount of money evaded is through the simplicity of tax legislation and closing of legal loopholes.

Nishant Ravindra Ghuge and Vivek Vasantrao Katdare(2016) contrasted the Indian and Australian tax systems. They concluded that the Indian tax system is woefully deficient and out-of-date, and they recommended a number of steps the Central Government should take to improve it.

Objectives

Objective 1: To discuss the reasons for tax evasion
Objective 2: To prescribe the Technologies that can prevent tax evasion
Objective 3: To outline the other actions those are needed to support to prevent tax evasion.

3. Research Methodology and Analysis

The paper uses the data from the secondary sources such as the research articles of various authors regarding tax evasion and various books available regarding this. Also, the data available in various magazines, e- books, and not the least the data from various sources from the internet also.

Two major sections make up this Topic:

- Automated sales reduction and counter-technology: the issue, important technological solutions, benefits, and costs that have been established, and supplementary steps required to put such solutions into practise;
- False invoicing: the issue, important technological solutions, outcomes, advantages, and supplementary steps required to put such solutions into practise;

Table 1: Examples of Tax evasion and Penalties in India

Some examples of tax evasion and penalties in India	
Tax evasion	Penalties
Non filing of income tax return	Penalty of Rs 5000
Concealing income to avoid tax	100 % to 300% of tax evaded
Not getting accounts audited as per sec 44ab	0.5% of total sales or Rs 150000 whichever is more
Non comliance with tds regulations	Penalty of Rs 10000
Wilful attemt to avoid tax	Minimum imprisonment of six months which can goes up to seven years with fine
Providing incorrect pan	Penalty of Rs 10000
Not providing pan	In this scenario, higher Tds will be deducted. e.g: deductor will deduct 20% Tds instead of 10%.

Source: Income Tax Act1961 as amended by Finance Act 2024

3.1. Electronic Sales Suppression

At its most basic, sales reduction can be as easy as ignoring some cash sales in order to report sales that are less than they actually were and, thus, declare tax liabilities that are less than they actually were. On the other hand, more advanced techniques are now widely used. Sales suppression is being carried out through electronic tools that can alter transactional evidence, whether it was paid for with cash or a card, without leaving any evidence of the alteration, in response to the growing prevalence of technology in businesses and electronic payment methods like debit cards. Utilizing the cash register in learning mode or stopping activities after they have started can also result in under reporting of these transactions. Tax officials cannot calculate the correct tax without accurate data.

In the past, you could easily decrease sales by putting money directly into your pocket or altering the financial records. Through the use of technology, sales suppression is becoming more sophisticated, making it much more difficult for administrations to catch it. Phantom ware and zappers are the two primary electronic sales suppression devices that are employed.

Phantom ware refers to the software that is installed as a component of the sales record. It enables a programme to run on the cash register that can change the reported data. The programme can only be accessed through a secret menu, allowing the company owner to secretly alter the sales data after the sale has taken place.

3.2. Techniques to prevent Sales Suppression

Phantom ware refers to the software that is installed as a component of the sales record. It enables a programme to run on the cash register that can change the reported data. The programme can only be accessed through a secret menu, allowing the company owner to secretly alter the sales data after the sale has taken place.

An online-accessed zapper is an outside programme or gadget that may be connected to the cash register. It may manipulate transaction data when attached to a cash register, serving a similar purpose as phantom ware.

Phantom ware and zappers both provide users the option to completely remove individual sales records and to replace the original sales figures with lower ones, which lowers aggregate sales. The cash register looks to users to work normally since they are disguised, making them difficult to spot by tax auditors.

There are new methods for reducing sales. This technique, often known as “sales suppression as a service,” enables a taxpayer accomplishes sales reduction using a foreign zapper that runs over the internet. The service offers remote hard drive

crashes as well as sales data erasure, modification, and replacement. Since it otherwise seems genuine or doesn't seem to be related to the taxpayer's conduct in any way, this can be exceedingly challenging for the tax authorities to identify. It is sometimes difficult for local authorities to pursue enforcement action since the service providers is located in a foreign country.

There are new methods for reducing sales. This technique, often known as "sales suppression as a service," enables a taxpayer accomplish sales reduction using a foreign zapper that runs over the internet. The service offers remote hard drive crashes as well as sales data erasure, modification, and replacement. Since it otherwise seems genuine or doesn't seem to be related to the taxpayer's conduct in any way, this can be exceedingly challenging for the tax authorities to identify. It is sometimes difficult for local authorities to pursue enforcement action since the service providers is located in a foreign country.

3.3. Features of Techniques

Cash register certification and regulation ensures that only cash registers with the necessary functionality are approved for usage (and do not have any forbidden features that permit sales suppression). Isolating certain market sellers that sell cash registers through licensing is one way to do this. Another option is to enact laws that specify the standards that must be met by cash registers, then leave it to the market to supply the appropriate solutions.

3.4. Data content requirements

It is ensured that the information is helpful to the tax department for verification and for compliance action by prescribing the specifics of what data must be entered and displayed on the purchase receipt.

The amount of the sale, the amount of VAT or sales tax that is owed, the time, date, invoice number, the mode of functioning that the register was in (such as training mode), and the kind of receipt (such as a refund or a non-final bill at a restaurant) are all examples of what is referred to as fiscal data.

Keeping data To prevent tampering or hacking, data must be kept secure and apart from the till in a place that cannot be tampered with. The transaction's place of occurrence should be where the data is kept.

The information can be kept in a "black box" that is an external device that is attached to the cash register, completely housed inside the register itself or the receipt printer (such a microchip or sim card), or connected to and kept in cloud-based solutions.

3.5. Online data accessibility: The tax administration's remote access

The ability of the tax office to access information remotely at any moment discourages taxpayers from subsequently changing records. The tax authority may be able to use the data more effectively for compliance and audit case selection as it is already accessible without the need to send a special request or appear at an on-site audit inspection. This helps tax agencies where data may otherwise be housed abroad, making auditing more difficult.

3.6. Remote access by the tax administration to online data

Taxpayers are discouraged from later changing records when the revenue agency has remote control of the data at any time. Additionally, it enables tax authorities to choose audit cases and perform compliance tasks using the data, which may make these tasks more efficient since the data is already accessible without requiring a special request or an on-site audit check. Additionally, this helps tax authorities in cases when data may normally be kept abroad, making an audit more difficult.

3.7. Data transmission: Reporting to the tax authority

Taxpayers are discouraged from modifying records by the regular data transfer of the documents to the revenue agency since they know the tax administration will have direct data. Real-time or recurrent information exchanges are both acceptable with the tax office. Because online automated transmission requires Ethernet or GSM net access, periodic uploading through mobile internet devices with safe data buffering abilities may be appropriate in locations without stable connectivity, and may even be simpler for the tax authorities in some circumstances. Additionally, it enables the taxing agency to use the data for audit case choice and compliance operations, which may make these processes more efficient because the data is already accessible.

4. Methods adopted to implement solution

4.1. Sending information to the tax department

Regular data transfers of the papers to the revenue department deter taxpayers from making changes to records because they are aware that the department of taxation will have access to direct data. With the tax office, information exchanges that happen often or in real time are both appropriate. Online automatic transmission needs Ethernet or GSM network access, so occasional uploading via mobile internet

devices with secure data buffering capabilities may be suitable in places without consistent connectivity—and in certain cases, it may even make things easier for the tax authorities. Furthermore, it allows the taxation authority to use the data for compliance and audit case selection, which might make these procedures more effective as the data is already available.

4.2. Working with the tax department

It is advantageous to consult and work together with taxpayers and cash register manufacturers when deciding on the right criteria. Govt. should collaborate with the sector to create a set of "quality marks" that serve as indicators of trustworthy cash registers. To get feedback on technological options that might alleviate electronic sales suppression while minimizing the cost on industry, a survey of the public with companies and other stakeholders should be conducted .

4.3. Incentives

Incentives for companies to voluntarily use data-recording equipment, such as improved tax deductions, cost-sharing arrangements, or associations between the usage of compliant cash registers and a lower risk of audit. Examples: When the taxpayer notifies the tax administration that they have put in the necessary gadget, Govt. should offers a specific tax discount. Experience has shown us that even in cases when the government purchases systems that are meant to be utilized, the cost is soon recovered in the money generated.

4.4. Awareness among the customers

Consumers' knowledge of compliance, as in a receipt lottery. As a result, there is a greater public awareness of the hazards of tax evasion and fraud in taxes through the abuse of invoices, and they can serve as an enforcement tool, incentivizing taxpayers to comply. Customers may also receive an additional incentive in the form of a chance to win a prize by entering their receipt into a lottery or accruing points for each receipt they submit.

4.5. Monitoring

Keeping an eye on the adoption of the new technologies. In order to verify that their goods fit the requirements, providers of cash registers may be obligated to submit reports to the tax authorities. Taxpayers may also be required to notify after they have installed the appropriate data recording software device. The tax authorities might then keep a database or register to help with follow-up audits. Anybody in

possession of a cash register should be required to notify the tax department, and each cash register is assigned a specific identification number.

4.6. Enforcement

To discourage and punish both the use and the distribution of sales suppression technology, enforcement measures such as laws and fines for using or supplying electronic sales suppression devices are used.. This has to be backed up by efficient auditing techniques that can spot requirements violations and impose fines.

4.7. False Invoicing

False invoicing aims to misrepresent deductions while sales suppression tactics aim to understate income. False invoices are created to pass off non-deductible personal costs as legal deductions. When a company produces or raises invoices that list the company as the debtor, such practice is known as false invoicing. As a result, it is able to fraudulently claim costs for taxes that it hasn't actually incurred. Although it is theoretically possible for a tax authority to confirm the legitimacy of each invoice by comparing it to the counterparty's records for the transaction, doing so takes time and resources.

5. Technology Solution to curb false invoicing

5.1. Establishing uniform standards

Establishing uniform standards for electronic invoice requirements Quality assurance and simplicity of audit are provided by defining the requirements, such as the content or format, or by certifying the suppliers of electronic invoicing systems. Additionally, it clarifies for businesses the broad adoption of computerized invoicing. When only one uniform format is required, the tax authorities may find it simpler to handle and analyze bulk data automatically.

5.2. Digital receipt signature

Digital receipt signature The transaction's specifics, including the date, time, and transaction amount, are included in the signature as a special identifier. With a compatible key to decipher the signature, the tax authorities may assess whether the receipt is full and genuine. A separate digital signature identification will be produced, leaving a record of the alteration, if the transaction's details is afterwards changed. Therefore, using a digital signature is crucial if you want to be able to authenticate invoices as well.

5.3. Connection of a sales recording device to an electronic invoice

This ensures that the data is appropriately kept and tamper-proof and that the invoices are accurate when they are produced. Information about invoices is provided to the tax authority. The tax authority may be sent the information produced by electronic invoicing. This can be done by requesting the delivery of all invoices or by outlining the necessary summary data. This might happen either periodically or in real time by connecting online to the tax authorities.

6. Other actions needed to implement solution

6.1. Legislation

Legislation mandating electronic invoicing, including penalties for non-compliance. Legislation enabling the tax authorities to obtain data from third parties to match the flow of payments to taxpayers may enable this.

6.2. Tools for online verification.

For instance, the taxpayer must request authorization from the tax office after the transaction has been accepted. The invoice is recognized as legitimate and has financial consequences against third parties if it contains the necessary information. The data is stored in the tax authority's database, which may then be used for verification of other tax reports and collection.

6.3. Record keeping and reporting

The burden of compliance for businesses can be reduced by coordinating the specifications for the structure and content of electronic invoices with other tax record-keeping and reporting requirements or by utilizing them to pre-fill returns. Another strategy that has been employed is to offer protection from tax fines in the case of an audit, providing the company has put the necessary invoicing technology in place.

6.4. Rewards for tax payers

Rewards for taxpayers, such as assistance from software. Examples: The Revenue Agency should provide software to businesses that will enable them to perform electronic billing for business to business transactions. This software will allow operators, particularly micro-small firms, to produce, transmit, and store electronic invoices. The government should offers small enterprises internet accounting software that enables them to record activities and produce ready-made tax reports.

7. Conclusion

Technology may be used to identify and stop tax fraud and tax evasion, and the results speak for themselves. Better crime detection, more revenue collection, and synergies that make tax compliance simpler for businesses and tax administrations are all possible benefits of these technologies. This brief research demonstrates that there are frequently already effective solutions in place, and that many nations are already able to exchange information about their implementation experiences. It is anticipated that this succinct analysis would motivate all nations to think about the dangers in respective taxpayer segments and to use the experiences of others to build on the lessons previously discovered. Although there is no one technology solution that can solve the issue of tax fraud and tax evasion, if used properly, significant progress may be made in high risk sectors. The other essential instruments accessible to tax authorities, including as legislative actions, efficient enforcement, consultation with taxpayers, and international cooperation, should always be used in addition to these options.

References

Akerlof, G. A. (1978). The economics of" tagging" as applied to the optimal income tax, welfare programs, and manpower planning. *The American economic review*, *68*(1), 8-19.

Allingham, M. G., & Sandmo, A. (1972). Income tax evasion: A theoretical analysis. *Journal of public economics*, *1*(3-4), 323-338.

Alm, J. (1988). Compliance costs and the tax avoidance-tax evasion decision. *Public Finance Quarterly*, *16*(1), 31-66.

Alm, J. (2019). Tax compliance and administration. In *Handbook on taxation* (pp. 741-768). Routledge.

Alm, J., Bahl, R., & Murray, M. N. (1991). Tax base erosion in developing countries. *Economic Development and Cultural Change*, *39*(4), 849-872.

Alm, J., Jackson, B. R., & McKee, M. (1992). Estimating the determinants of taxpayer compliance with experimental data. *National tax journal*, *45*(1), 107-114.

Alt, J. E. (1983). The evolution of tax structures. *Public Choice*, *41*(1), 181-222.

Andreoni, J. (1992). IRS as loan shark tax compliance with borrowing constraints. *Journal of Public Economics*, *49*(1), 35-46.

Andreoni, J., Erard, B., & Feinstein, J. (1998). Tax compliance. *Journal of economic literature*, *36*(2), 818-860.

Atkinson, A. B., & Stiglitz, J. E. (2015). Lectures on public economics: Updated edition.

Baldry, J. C. (1979). Tax evasion and labour supply. *Economics Letters*, *3*(1), 53-56.

Baldry, J. C. (1987). Income tax evasion and the tax schedule: Some experimental results. *Public Finance= Finances publiques*, *42*(3), 357-383.

Baldry, J. C. (1984). The enforcement of income tax laws: efficiency implications. *Economic Record*, *60*(2), 156-159.

Balke, N. S., & Gardner, G. W. (1991). Tax collection costs and the size of government. In *Mimeo*. Southern Methodist University.

Beck, P. J., & Jung, W. O. (1989). Taxpayer compliance under uncertainty. *Journal of Accounting and Public Policy*, *8*(1), 1-27.

Beck, P. J., & Jung, W. O. (1989). Taxpayer compliance under uncertainty. *Journal of Accounting and Public Policy*, *8*(1), 1-27.