Assessing and ranking the barriers and problems of implementation of VAT in Yazd manufacturing companies by using the elctre techniques

Fatemeh Ahmadi Eslamlo[1], Seyed Mahmmoud Zanjirchi[2] (corresponding author)

[1,2] department of Accounting, Yazd Branch, Islamic Azad University, Yazd, Iran.

Abstract: The aim of this research is evaluation and ranking of problems in value added tax running in production companies in Yazd. The methodology was usable and it was correlated by the research. We collected data by using questionnaire and scaling method. Statistical societies are experts about value added tax in Yazd and we used available judicial sampling. We collected 34 reasonable samples and analyzed data by Electra method. The ranking showed that these items were more effective and they had more importance in correct running of value added tax: (1) Lack of using of surtax and tax relief in running stage. (2) High tax breaks, large time of tax maturity until levy. (3) Tax incentive insufficient or tax exemption. (4) Tax gapping, inequity identify. (5) Existence of unreal companies. This research can be valuable for experts and the government by presenting of beneficial data in financial area (value added tax). Also, it presents some suggestions about improving and more effective in results.

Introduction

Because of financial incomes, that is most items for government incoming, can be effective tools for financial resources security for government essential costs and moderate in incoming distribution of economic activities in society. So it is important we use a financial effective system in economics. Value added tax is kind of multi-stage tax that is sold or taken in imports, production, and distribution chains based on value added percentage sold products or services in any stage but taxation in any stage of import, production, and distribution chains is transmission to next chain until it is paid by last customer. Value added tax should be offer by supplier and services (tax system clients) plus of production charge or service as sold cost percentage in production or services during in selling and settlement to tax affair organization in the end of terms (season).

Any value added tax paid by clients (importers, producers, distributers, exporters) is their willing of government in during of buying that are cash factor for taxation and it will be pay off seasonally to tax affair organization. Client claim settlement is done by tax affair department for tax in during of buying or claim deduction received from buyer (Ziaii Bigdeli and Tahmaseb Beldachi, 2005).

Value added= rent cost+ interest expense+ depreciation expense+ cost rights+ company's profits

Experience and considered research for this tax in different countries shows it was effective matter for solving current some problems such as financial incoming, client identify and data insufficient solving about it, time stopping reduction about financial paying, reduction of financial escaping, etc.

Literature

Kamalodin Sheikh Eslami (1989) considered value added tax system as one of tactics for increasing of financial incomes by using of the system for control and facility in levy by using of obtained experience in other countries that value added tax is run in there. He showed that value added tax, one the other hand, can be effective because of increase in financial incoming in government, reduction in time stopping for levy, responsible for clients in maintaining of transaction, self-control scores, more identifying possibility in identity and employee incoming in different economical area and more supervision on economic trends. On the other hand, because of some possible disadvantage about imposition of tax burden on final consumer and cost increasing and lack of social justice, it is said performance or non-performance of financial system on value added needs to serious discussion in Iran.

Soheila Parvin and Ali Asghar Peiro (2000) evaluated value added tax base for developing first program by using of production data method and by using of1989 data. The average of value added tax portion in gross domestic production is evaluated 57.5 % and suggested value added tax running in each country.

The aim of Saleh Nejad's research in 1998 was to identify of replacement effect instead of tax profit companies on tax incoming based on 48 companies accepted in Stock Exchange Organization in Iran.

Zivar Hatami Zade (2001) evaluated value added tax base by using of output data new chart in 1992. In this study, value added tax portion is evaluated 31.1 % gross domestic production. Aim of research by

Mohammad Javad Farahanian (2002) was evaluation in value added tax base in the country. He used input-output data in 2000 for evaluation of value added tax near to 20.8% gross domestic production.

" Considering of lack of knowledge financial clients by direct financial law and its effect on clients-study case in Semnan" that was studied by Rezaiian (2004) emphasis that one of financial problem in current position is they don't visit and pay tax by clients as punctual and this is caused by no knowledge about financial law and regulation and it causes expenses both of government and clients.

Taiebnia and Teymuri (2004) in their work (the considering of value added tax running on random effects on inflation or non-equality) one other hand reviewed the literature and the experience and the other hand, they considered random effects of value added tax performance on inflation and they resulted that value added tax effect on inflation rate is sudden effect and it can't increase the costs consistency. They expressed the result of value added tax effects on incoming distribution by their model and said " by attention to two complement policies of the government about more taxation concealing and indirect features and enormous exemption performance in item consuming baskets, the most effect of cost index will negate.

Tahmasbi et al. (2004) in their research for knowing of value added tax system and its effects, resulted that these tax system considered positive and negative characteristics and resulted that value added tax system has been performed in different countries by diverse goals and some countries want to receive informational comprehensive system in economical transaction despite of low incoming because of its performance.

Ahmad Jafari Samimi (2004) in his works for considering of tax role and economical firm's value added relationship in Mazandaran resulted that tax function in these firms isn't symmetric with their value added. Also, in large firms paying taxation rate is less dependent on their value added changes.

Arshadi et al (2011) have done the research work (considering of valuable effects of value added tax running in Iran) and have evaluated valuable effect of each item by using of valuable model of input-output and tax rates in law and merchandise exemption and the 12 article services and finally, export exemption applying the 13 article, Value added tax law and it has calculated valuable costs by using of each section of total outputs. The results show value added tax running has little valuable cost. Ike Alendait (1986) has done economic cooperation in considering of

value added tax substitution in development member countries and he resulted that most area of interesting of countries is in using of value added tax for substituting of other taxation, disagreement of dependency to direct tax increasing.

Methodology

About research category based on the aims, we must attention to direction use of data and generalization in other condition. Noticed research is applicable (the aim of research) and survey (for collecting data and research design). Also, it is correlated research by variables of relation considering.

Research Aim

The aim of this research is evaluation and ranking of problems in value added tax running in production units in Yazd. By research of these problems and solving them, tax office in Yazd can act in order to tax policies

The main aim of this research is:

1. Knowledge of comment clients about barriers proper running value added tax law

2. Considering of importance and priority of each problem in execution by seeing clients

Hypothesis

• Lack of knowledge of client in correct performance of value added tax law has negative and significant effect.

• Lack of suitable substructure in value added tax performance has negative effect.

Data Analyzing

Step 1

Decision matrix that is obtained from data collecting and it is obvious in table 1-4. Items are questionnaire sentences (row) and scale are expert comments (column). The importance of all the scale are the same as expert comments.

Step 2: producing of normalized decision matrix

Because of different scale each of scale (expert comments), it is necessary that we change data as no-dimension (no scale). It means we change it as zero and one data (0 and 1). If we get each data in below formula, matrix numbers will be between zero and one (table 2).

$$N = [n_{ij}]$$

$$n_{ij} = \frac{a_{ij}}{\left[\sum_{i=1}^{m} a_{ij}^2\right]^{1/2}}$$

So, we apply it as following steps:

1. Each items in top matrix will power
2. We obtain collecting items for each scale
3. We took square root of resulted data
4. We divided items for obtained square root

Table 1. Decision Matrix

	ex1	ex2	ex3	ex4	ex5	ex6	ex7	ex8	ex9	ex10	ex11	ex12	ex13	ex14
q1	5	4	3	3	3	4	4	3	3	3	3	4	4	3
q2	5	3	3	4	3	3	3	3	2	4	4	3	3	5
q3	4	3	3	3	2	2	3	3	3	3	3	3	3	2
q4	1	5	4	3	4	3	4	3	4	4	4	5	5	3
q5	3	3	2	3	3	2	2	2	1	3	3	2	2	3
	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .
W	0.029412	0.029412	0.029412	0.029412	0.029412	0.029412	0.029412	0.029412	0.029412	0.029412	0.029412	0.029412	0.029412	0.029412

Table2. Normalized Decision Matrix

	ex1	ex2	ex3	ex4	ex5	ex6	ex7	ex8	ex9	ex10	ex11	ex12	ex13	ex14
q1	0.235965	0.190693	0.153093	0.172345	0.154303	0.212899	0.21986	0.126886	0.170389	0.151911	0.160586	0.211702	0.211702	0.142695
q2	0.235965	0.143019	0.153093	0.229794	0.154303	0.159674	0.164895	0.126886	0.113592	0.202548	0.214115	0.158777	0.158777	0.237826
q3	0.188772	0.143019	0.153093	0.172345	0.102869	0.106449	0.164895	0.126886	0.170389	0.151911	0.160586	0.158777	0.158777	0.09513
q4	0.047193	0.238366	0.204124	0.172345	0.205738	0.159674	0.21986	0.126886	0.227185	0.202548	0.214115	0.264628	0.264628	0.142695
q5	0.141579	0.143019	0.102062	0.172345	0.154303	0.106449	0.10993	0.084591	0.056796	0.151911	0.160586	0.105851	0.105851	0.142695
q6	0.235965	0.190693	0.153093	0.229794	0.257172	0.106449	0.10993	0.211477	0.170389	0.151911	0.214115	0.105851	0.105851	0.237826
.	.	.	.	.	.	.	.	.	.	.	.	.	.	.

Step 3: producing of elegant no-scale matrix

In this step, we determine the weight for each scale. These weight have zero and one numbers and each scale weight has the same through expert comments. Actually, no-scale matrix is obtained from multiplying of standard amount in each scale in itself weight and it is obtained by bottom formula:

$v = N \times W\_(n \times n)$

Table3. Elegant Normalized Matrix

	ex1	ex2	ex3	ex4	ex5	ex6	ex7	ex8	ex9	ex10	ex11	ex12	ex13	ex14
q1	0.00694	0.005609	0.004503	0.005069	0.004538	0.006262	0.006466	0.003732	0.005011	0.004468	0.004723	0.006227	0.006227	0.004197
q2	0.00694	0.004206	0.004503	0.006759	0.004538	0.004696	0.00485	0.003732	0.003341	0.005957	0.006298	0.00467	0.00467	0.006995
.	.	.	.	.	.	.	.	.	.	.	.	.	.	.

Step4:

In this step, positive ideal (higher amount indicates higher ideal) and negative ideal (lower amounts indicates lower ideal) are identified based on the aim until we obtain consistent and inconsistent matrix.

As top explanations, we can get consistent matrix by collecting of positive matrix through table 4-4.

$$I_{kl} = \sum W_j, j = A_{k,l}$$

Table4. I_{kl} Matrix

	q1	q2	q3	q4	q5	q6	q7	q8	q9	q10	q11	q12	q13	q14	q28	q29	q30
q1	-	0.735294	0.911765	0.441176	0.941176	0.617647	0.735294	0.647059	0.764706	0.676471	0.823529	0.529412	0.441176	0.352941	0.676471	0.647059	0.411765
q2	0.5	-	0.882353	0.411765	0.941176	0.647059	0.647059	0.588235	0.764706	0.529412	0.705882	0.529412	0.323529	0.352941	0.617647	0.676471	0.411765
.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.

Step5: inconsistent matrix can get by collecting of weight negative scale. As below formula (table 5) and inconsistent matrix is:

$$NI_{kl} = \frac{Max|V_{kj} - V_{lj}|, j \in D_{k,l}}{Max|V_{kj} - V_{lj}|, j \in \text{ for all scales}}$$

Table5. NI_{kl} Matrix

	q1	q2	q3	q4	q5	q6	q7	q8	q9	q10	q11	q12	q13	q14
q1	-	0.887316	0.303782	0.512119	0.750076	0.70773	0.998837	0.720886	0.899612	1	0.766391	0.497669	1	1
q2	1	-	0.398024	0.768179	0.525226	1	1	0.757255	0.839435	1	0.512119	1	1	1
.	.	.	.	.	.	.	.	.	.	.	.	.	.	.

Step6:

We calculate effective consistent matrix. We determine it by H. The first, we must determine threshold limit. For determining of threshold limit ($\bar{I}$), we use past data and comment of make desicioner. General scale for determinig this limit is the average matrix for I ($\bar{I}$(:

$$\bar{I} = \sum_{l=1}^{m} \sum_{k=1}^{m} I_{kl} / m(m-1)$$

This matrix show priority of one item than other one.

By using of couple comparison between consistent matrix amounts and threshold matrix, we can produce consistent matrix. It means if consistent amount matrix is higher than threshold matrix, it will be 1 and if it is lower than threshold, it will be 0.

H matrix

Threshold amount

$$\bar{I} = \frac{603.8824}{870} = 0.694118$$

Table 6. H Matrix

	q1	q2	q3	q4	q5	q6	q7	q8	q9	q10	q11	q12	q13	q14
q1		1	1	0	1	0	1	0	1	1	1	0	0	0
q2	0		1	0	1	0	0	0	1	0	1	0	0	0
q3	0	0		0	1	0	0	0	0	0	0	0	0	0
q4	1	1	1		1	1	1	1	1	1	1	1	0	0
q5	0	0	0	0		0	0	0	0	0	0	0	0	0
.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
.	.	.	.	.	.	.	.	.	.	.	.	.	.	.

Step7:

In this step, we get inconsistent matrix, too. We show it by G and it can obtain as effective inconsistent matrix (table 7).

$$\overline{NI} = \sum_{l=1}^{m} \sum_{k=1}^{m} NI_{kl} / m(m-1)$$

By comparison of the couple of consistent amount matrix and threshold matrix, we can get effective consistent matrix. It means if consistent amount matrix is higher than threshold, we will have 0 and it will be 1 if inconsistent amount matrix is less than threshold.

Threshold amount: threshold limit will calculate as below:

$$\overline{NI} = \frac{713.398}{870} = 0.824595$$

Table 7.

	q1	q2	q3	q4	q5	q6	q7	q8	q9	q10	q11	q12	q13	q14
q1		0	1	1	1	1	0	1	0	0	1	1	0	0
q2	0		1	1	1	0	0	1	0	0	1	0	0	0
q3	0	0		0	0	0	0	0	0	0	1	0	0	0
q4	0	0	0		1	0	0	1	1	0	1	0	0	0
q5	0	0	0	0		0	0	0	0	0	0	0	0	0
q6	0	0	1	0	1		0	1	0	0	1	0	0	0
.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
.	.	.	.	.	.	.	.	.	.	.	.	.	.	.

Step8:

In this step, we can obtain effective total matrix by crossing of effective harmonic matrix (H) and effective no harmonic matrix. Calculation of this matrix will be:

$F_{kl} = H_{kl} \times G_{kl}$

This matrix demonstrate sequence different strategy than each other; it means if it is as following:

$F_{kl} = 1$, A_k is prior on A_l (table 6).

According to the top table, the ranking will be as follow: we count 1 number in each column and the column has less 1 will be more important and it will be higher ranking and the columns will have the same amount of 1 number, they are in same ranking.

q13> q14 >q1 >q10 >q4 > q7=q12 >q2=q6> q8> q9 >q3>q11>q5

Obtained ranking demonstrate that in the hypothesis, the problems in law (1-9 questions) are the

most effective and they have more important in correct   running of Value added tax

Table 8. F Matrix

	q1	q2	q3	q4	q5	q6	q7	q8	q9	q10	q11	q12	q13	q14
q1		0	1	0	1	0	0	0	0	0	1	0	0	0
q2	0		1	0	1	0	0	0	0	0	1	0	0	0
q3	0	0		0	0	0	0	0	0	0	0	0	0	0
q4	0	0	0		1	0	0	1	1	0	1	0	0	0
q5	0	0	0	0		0	0	0	0	0	0	0	0	0
q6	0	0	1	0	1		0	1	0	0	1	0	0	0
.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
.	.	.	.	.	.	.	.	.	.	.	.	.	.	.

- Complete no-performance of surtax and tax relief most part of fine in running step

- increasing of tax gapping (high distance between tax maturity and levy)

- insufficient encourage or exemption

- tax gapping and injustice in tax client determination

- lack of transparency tax law and complexity and multiplicity in law

Based on lake of knowledge hypothesis in 1-14 questions, ranking basis is:

- representing of unreal declaration for tax evasion and levy prolongation

- non-issuance of selling factor by some companies because of on-identifying and tax evasion

- lack of knowledge of clients about their rights

- existence of unreal company

Results

For identifying of factors and item ranking, we done Elktre method.

The ranking show that troubles in law (1-9 questions) are very important and it has the most effect on correct performance of value added tax

- complete applying of punishment and relief most part of fines in running step

- enhancing of tax gapping (high distance in tax maturity until levy)

- insufficient tax encourage or tax exemption

- tax gapping and injustice in tax client identify

- insufficient technical supervision on identify process

- no-tax transparency regulations and mentioned complicated law

Based on lack of knowledge for clients that they were asked in 10-14 questions, we ranked it as below:

- Demonstrating of unreal declaration for tax evasion and lengthy levy

- Lack of selling factor by some companies because of they don't know and they want to escape from it

- Lack of knowledge clients about their rights

- Existence of unreal company

The explanation about top cases is:

- Lack of complete performance in surtax and fine relief the most part of fines in running step: because of the most fine are relief in performance step, it causes on-time levy is faced with high gapping and clients delay their tax because they suppose that fine in tax paying will be relief. These punishment don't have preventing role unless clients believe that lawmaker (or administrative) can punish the offender. So, client should select whether it is valuable he/she pay tax or pay fine?

The strategy for this problem

• fine relief should be systemic

• Better notification to clients about fine relief if they pay it on-time

• Existence of the system about clients transaction as online

• On-time considering about tax cases from tax office and shortening in attendance process

• Getting punishment for employer that don't act their commitment

• Giving scores for clients pay their tax on-time or encourage for clients that have acts on their commitment and pay their taxation

The Suggestions for the research

We represent bottom suggestion according to the research results:

- Giving prize for clients that have honesty in filling the declaration

- Identification of unreal companies and the companies don't send out bill. Also, punishment for offender and conceal financial exemption for the companies that don't performance regulations

- Tax office can hold educational meeting for answering about value added tax clients questions

- Because of fund sells is one of the items in structural factors in economical companies, this process should be followed faster.

- Other structural factor is underground economy and unreal jobs. It is suggested to government and tax office try to develop financial justice in society through deleting of underground economy and unreal jobs, correct using of tax sources, etc.

Reference

1. Abbaszadeh, MR (1992), how to determine the value added tax and its application, Thesis School of Economics, University of Madras.
2. Desai, M. A. & J. R. Hines. (2002). Value Added Tax and International Trade: The Evidence. Financial Support from the International Tax Policy Forum is Gratefully Acknowledged.
3. Ebril, Liam & Associates. "The Allure of the Value-Added Tax ", Finance & Development, Vol. 39, No. 2, (2002).
4. Hatamzadeh, Zivar (2001), based on estimates of value added tax and the effects of inflation, the quarterly research and economic policies, in the ninth, (2).
5. Harrison,Graham. And Krelove, Russell, 2005, VAT Refunds:A review of country experience.
6. Hessami Azizi, B. (2002), replacing the VAT to the tax impact on government tax revenues of the companies in Golestan province, MSc thesis, Mazandaran Mazandaran University.
7. Jafari Samimi, A. (2005), accounting systems and the implementation of VAT for companies and businesses in the province.
8. Jenkins, Glenn P., and Rub Khadka,(1997)," Value-Added Tax Policy and Implementation in Singapore, "International VAT Monitor, vol.9,pp.35-47.
9. Keen, M. & T. Bansgard. (2009). Tax Revenue and Trade Liberalization. IMF, Washangton DC 20431.
10. Keen, M. & S. Murtaza. (2006). Domestic Taxes and International Trade: Some Evidence. IMF Working Paper, WP/04/76.
11. Khalilzadeh Shirazi, J; and A. Shah(1991),Tax Reform in Developing Countries, Finance And Development.
12. Laim Ebril & Micheal Keen & Yean-paul Bodin & Victoria summers, (2001), "The moder n VAT, international monetary fond (IMF) Washington, DC.
13. Rezaeaian, M.t., (2004), aims to analyze the causes of the lack of knowledge of tax law direct tax Ian mode and its effect on the income of the province mode Ian studied state, parliament and Research Quarterly, No. 45.
14. Rnjbaraki, AS., Naderan, or, (2007), article consequences of the implementation of VAT and preparation for successful execution in Iran, the parliament and the Research Quarterly, No. 56.
15. State Taxation Affairs Organization, organizing publication, No. 12 and 61.
16. Tait, Alan A. Value-Added Tax: Administrative and Policy Issues. Reprinted, Washington, D.C., The International Monetary Fund Publication, 1995.
17. Tayeb Nia Ali, Ali Reza Rfiei Mohsen Yazdanpanah. (2005). The potential effects of the implementation of VAT in inequality. Economic Research, 86: 633- 503.

7/23/2015