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Estimating the optimal value added tax rate using the Laffer curve approach

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EXTENDED ABSTRACT

INTRODUCTION

In most countries, taxes are the most important source of government revenue. But in Iran, taxes have long provided a small share of government revenues. Perhaps the most important reason is the existence of oil revenue sources that have put the tax on the sideline. For this reason, the emphasis has been on reforming the tax structure. In this regard, the Law on Value Added Tax was implemented in Iran in the second half of 2008 to reform the tax structure. VAT is a new tax that was created to reduce the shortcomings of the traditional tax system and also to increase government revenue. VAT is a type of sales tax that is levied at various stages of production and distribution of goods and services. The average VAT rate in different countries is between 5% and 18%. In Iran, since the enactment of the VAT law, there has been a lot of controversy and debate among experts regarding the determination of tax rates. This rate was set at 3 percent at the time of implementation of the VAT law and was set to increase by one percent each year, so that in 2018 it reached 9 percent. As the tax rate increases, so does government revenue from tax collection. However, this increase in income is limited, and if tax rates exceed a certain point, tax revenues will decline, because due to high tax rates, people will lose motivation to work. Therefore, it is necessary to determine the tax rate that maximizes tax revenues. It is also necessary to determine the optimal rate of this type of tax so that the government's tax revenue is maximized but it does not hinder economic growth. The present study was conducted for this purpose.

METHODOLOGY

This research was conducted in the period of 2008-2018 using data from 24 provinces whose information was available. The research data related to VAT

rate and government tax revenue in the period of 2008-2018 was collected from the provincial yearbooks. The year 2008 is the beginning of the implementation of the VAT law and 2018 is the last year that information and statistics were available. Finally, the optimal VAT rate in Iranian economy was estimated using data panel method. In this method, first, using Lemmer test, panel data in model estimation was selected. Then, using Hausman test, the estimation with random effects was confirmed. All analysis and model estimations were performed using EViews 9 software.

FINDINGS

Findings from the statistical description of the data show that VAT rate in Iran in 2008 was set at 3% and remained at the same rate until the end of 2010. From 2010 onward, VAT rate increased so that in 1394 it reached 9%. From 1394 to 1396, it remained constant. Also, the results of model estimation show that VAT in Iran has lufferel effects; i. e, increasing VAT rate directly increases the government's tax revenue and indirectly reduces the government's tax revenue by reducing production incentive. Therefore, VAT rate has an optimal value at which the rate of government tax revenue is maximized.

CONCLUSION

The optimal VAT rate calculated in this study is 10.33%. Considering that VAT rate has been set at 9% in 1398, increasing this rate to 10.33% in the coming years is recommended. This will increase the government tax revenue. An increase in the tax rate above this amount will reduce the government tax revenue. Therefore, exceeding VAT rate over 10.33% is not suggested.

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