Quarterly Journal of Quantitative Economics(JQE)(2026) **23(1) 171-200**

Shahid Chamran University of Ahvaz

Quarterly Journal of Quantitative Economics

Journal Homepage: www.jqe.scu.ac.ir
Print ISSN: 2008-5850
Online ISSN: 2717-4271



An Analysis of Factors Affecting Value-Added Tax: A Spatial Econometric Approach

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ARTICLE HISTORY	JEL CLASSIFICATION	KEYWORDS
Received: 18 January 2024 revision: 27 February 2024 acceptance: 27 July 2024	***H71, C21, H27***	***Value added tax Value, added tax revenue, Economic factors***

Further Information:
The present article is taken from the doctoral dissertation of Sayedeh Fatemeh NajafiZAdeh with Supervisor of Mohammad Alizadeh at the University of Lorestsn.

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Acknowledgments: Acknowledgments may be made to individuals or institutions that have made an important contribution.
Conflict of Interest: The authors declare no conflict of interest.
Funding: The authors received no financial support for the research, authorship, and publication of this article.

How to Cite:
Najafi Zadeh., Sayedeh Fatemeh, Mohammad, Alizadeh and delfan, Mahbobeh (2026). An Analysis of Factors Affecting Value-Added Tax: A Spatial Econometric Approach . *Quarterly Journal of Quantitative Economics(JQE)*, 23 (1), 179-208.
10.22055/jqe.2024.2401.2605

EXTENDED ABSTRACT

INTRODUCTION

Value-added tax can be considered one of the most necessary and important taxes because it has proven to be a very important financial tool for countries, and one of the most efficient taxes for reducing the budget deficit during financial crises. Several factors, either directly or indirectly affecting the economy, can influence the income from value-added tax. Based on the studies of economic growth, imports, unemployment, inflation, consumption, and trade openness are potential factors that have a great impact on the level of value-added tax revenues. Besides, the effect of tax revenues, especially value added tax, from neighbors and business partners is undeniable. Most of the conducted studies have focused on the identification of factors affecting value-added tax alone, and very few actions were taken regarding the effects of various factors along with the effect of proximity on value-added tax revenue. This research aims to examine the factors affecting the receipts of value-added tax from a broader perspective, consisting of the economic conditions and proximity of the countries. Therefore, in this study, the effect of important economic factors on value-added tax revenues in selected Asian countries is investigated with a spatial econometric approach, and their spatial dependence during the period of time is considered (1995-2021).

METHODOLOGY

This study aims to investigate the factors affecting value-added tax in selected Asian countries using the panel spatial econometric method during the period (1995-2021). The statistics and information required for the variables of GDP, trade openness as the sum of exports and imports divided by GDP, urbanization, household consumption, and unemployment rate have been

extracted from the World Bank website and geographical distance from the CEPII website.

FINDINGS

First, to check the spatial dependence of Moran, Gray, Jettis and Ord tests, the spatial dependence of the countries was confirmed, and based on the significance of the tests, the research model was estimated in the spatial framework of a panel. Then, based on the logarithm of likelihood test, the SAC model was selected as the optimal model. The estimation results using the geographical distance matrix and SAC model show that the variables of trade openness, economic growth, and consumption have a positive and significant effect, and unemployment has a negative and significant effect on value-added tax revenues. Furthermore, the urbanization variable has no effect on the dependent variable among studied group during this period.

CONCLUSION

Value-added tax, as one of the main pillars of government budgets, plays a significant role in countries' growth and development. Therefore, it is crucial to identify the effective and significant factors that influence this tax structure. On the other hand, the imposition of taxes in a country is not only affected by internal factors, but other factors are also influential under the title of spatial dependence that occurs in terms of the proximity of one region to other regions. In general, it can be stated that the effectiveness of the VAT revenues of the countries in a region is undeniable due to trade relations, and the effects of proximity and neighborhood. Gross domestic production and consumption have a positive and significant impact on value-added tax. Therefore, the countries in the group should continuously implement measures to enhance the performance of various economic sectors and facilitate the successful evolution of the economy. These measures could include the introduction of new technologies, fostering innovation in production, and implementing policies that support the use of sustainable resources. Trade openness had a positive effect on value-added tax, so it can be stated that business openness can have an effect on domestic income, and consequently, value-added tax revenues through spillover effects, such as the introduction of new technologies and the increase of human capital. Moreover, unemployment had a negative effect on value-added tax revenues, so governments should have appropriate economic policies in the field of creating new jobs and employing labor in their country.

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