Investigating the Impact of Economic Factors on the Import and Export of Sports Goods

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Abstract

Purpose: This research aimed to investigate the impact of economic factors on the import and export of sports goods.

Method: The study employed a research methodology based on the analysis of time series data, utilizing the VAR model for econometric analysis. The research results were estimated, focusing on time series variables such as GDP, liquidity volume, exchange rate, interest rate, trade balance, dollar rate, tax revenue, sports goods imports, and household sports goods exports from 1995 to 2021 in Iran. The EViews$_{TM12}$ software was used to validate the data.

Results: Based on the findings, economic factors such as the dollar rate, interest rate, liquidity, tax revenue, and trade balance affect exports. Additionally, inflation and liquidity impact the import of sports goods.

Conclusion: Therefore, policies, including financial, tax, monetary, and trade adjustments, should be implemented to regulate and manage these economic factors. The government can encourage sports goods exports by reducing the exchange rate and implementing facilitation and incentive policies, such as providing tax concessions and banking facilities for companies, producers, and exporters. These measures aim to stimulate production, facilitate trade and exports, reduce inflation, and strengthen market liquidity, ultimately contributing to the development of the country's sports industry and improving the trade balance for sports goods.

Keywords: Sports Industry, Export, Import, Tax Revenue.

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Introduction

Engaging in sports not only positively impacts health but also has the potential to decrease public health costs. Furthermore, sports can directly and indirectly foster economic development (Lera-López & Suárez, 2012). With sports enthusiasts worldwide, the significance of trading and exporting sports products and services cannot be overstated. The sports industry, as emphasized by Zhu & Zhao (2015), is pivotal in generating economic value and exerting a substantial influence on the national economy. Beyond furnishing sports products and services to society, this industry also contributes to enhancing physical activity and overall health. Sports play a dual role in promoting economic development and bolstering international influence. Job creation and prosperity across diverse economic sectors are notable outcomes of the sports industry's contribution to economic progress and growth (LU, 2021). As a burgeoning sector, sports not only offer job opportunities but also actively contribute to essential employment growth (Li et al., 2022). The remarkable strides in the sports industry have reverberated across various sectors. The configuration of the sports industry encompasses a network of companies involved in the production, distribution, and provision of sports-related products and services. The collaboration among these enterprises within the industrial chain plays a pivotal role in delivering sports products and services to consumers, thereby significantly influencing the development of the sports industry (Zhang & Mou, 2023).

Presently, a critical strategy for fostering economic growth revolves around advancing export and import activities (Ebrahimi et al., 2019). The pricing dynamics of imported goods are shaped by diverse factors, with the exchange rate being the primary driver. Alterations in the exchange rate of the importing country have a direct impact on goods prices, quantified as a percentage of the exchange rate change a phenomenon termed exchange rate pass-through (Sarlab, 2020). In instances of low inflation and price stability, there is reduced necessity to modify prices in response to exchange rate fluctuations. This results in a diminished impact of the exchange rate on imported goods prices, leading to a lower exchange rate pass-through. Furthermore, the implementation of credit increases as part of a country's monetary policies can foster stability in both the exchange rate and domestic goods prices. Strengthening the credit environment fortifies the country's currency, amplifying the purchasing power of foreign goods and contributing to a state of relative exchange rate stability. Consequently, there is diminished pressure to adjust domestic prices in reaction to exchange rate variations, further mitigating exchange rate pass-through. Therefore, elements such as minimal inflation, stability in the dollar price, and enhanced trustworthiness in monetary policies collectively play a role in alleviating the impact of exchange rate pass-through (Al-Abri & Goodwin, 2009).

Government expenditures on sports and the overall Gross Domestic Product (GDP) play a more substantial role than the added value of the sports sector (Saleh Nia et al, 2021). It is noteworthy that the impact of increased oil revenues on the sports sector's added value surpasses that of tax revenues. Essentially, the sports sector has gained more from oil revenues than from taxes, and the adverse effects of this policy should be taken into consideration during government budgeting and planning processes. Additionally, the most pivotal factor in the development of the sports sector in Iran is government spending on sports. Policymakers should express concern about the sports sector's added value heavily relying on government expenditure (Mehr Ara, 2018). The research by Sarlab et al. (2020) revealed a positive and significant relationship between the exchange rate and the price index of imported sports goods in Iran. Moreover, the

extent of the exchange rate's impact on the price index of imported sports goods in Iran and its influence on business partners is incomplete. Saleh Nia et al. (2021) identified six general factors—human, legal, economic, commercial, technical, and financial—that affect the development of Iranian sports goods exports. There is evidence supporting a two-way short term causal relationship between the growth of sports product exports and GDP growth (Ebrahimi et al., 2019). Jacob et al.'s (2021) findings suggested that all variables have a statistically significant positive effect on export performance. Sarlab et al (2022) conclude that economic factors such as economic growth, exchange rates, trade policies, and financial stability play a significant role in determining the openness of sports trade in MENA countries. The research suggests that a favorable economic environment, characterized by stable financial conditions and supportive trade policies, can enhance these countries' participation in the global sports trade. Conversely, economic instability or restrictive policies may hinder their ability to fully integrate into the global sports market. Ahmad et al.'s (2021) research indicated that the effects of extreme fluctuations in exchange rates are of limited importance. The trade balance in Pakistan remains unbalanced due to low market prices for primary exports, emphasizing that relying solely on the exchange rate is an ineffective strategy for improving the trade balance. Sarlab (2020) investigated how inflationary environments and exchange rate regimes affect the pass-through of exchange rates to the import price index of sports goods in Iran and its major trading partners from 1993 to 2015. The study found a positive but incomplete exchange rate pass-through, influenced by factors like nominal exchange rates, GDP, and trade openness. Inflation targeting and fixed exchange rate regimes showed higher pass-through rates compared to floating systems. The research concluded that while economic variables significantly impacted import prices, the pass-through remained partial, measured at 0.76 for sports goods. Ganjkhanlou (2018) examined how monetary and fiscal policies influenced Iran's sports industry (1993-2016). Results showed government spending significantly boosted sports GDP, while liquidity had a minor impact. Exchange rates positively affected the sector, highlighting that fiscal policies are more effective than monetary measures in developing the sports industry. Mansour & Taskeen (2019) delved into the dynamic relationship between inflation, exchange rates, foreign direct investment, and GDP, revealing a positive correlation between GDP and dependent variables. To conclude, the development of sports product exports contributes to Iran's economic growth, enhancing productivity in production sectors and facilitating the efficient utilization of resources in society.

Examining the economic factors that affect the export and import of sports in a country is crucial. This analysis helps countries and policymakers determine appropriate strategies for the development and growth of this sector. Through this review, opportunities can be leveraged, existing problems identified and improved, and trade balance in this sector achieved. If the factors influencing sports imports outweigh those for exports, identifying these cases enables the formulation of programs to boost exports and achieve fairer trade in the sports sector. Ultimately, it allows the country to develop the domestic industry and the production of sports goods. Understanding the needs and demands in both domestic and foreign markets helps capitalize on the capacities and potentials in the country, fostering the development of the industry and businesses related to sports. The export and import of sports goods, as part of the sports industry in countries, have a significant impact on economic growth and development. In the case of Iran, one of the advanced countries with a long history in the sports industry, examining

the effect of economic factors on sports exports and imports seems vital and necessary. Numerous economic factors can affect the export and import of sports goods in Iran. Analyzing these factors and their impact on sports exports and imports can assist the country in choosing and applying appropriate policies for the development and growth of this industry. The study aims to investigate the impact of economic factors on the export and import of sports goods in Iran. Examining this issue can provide practical knowledge for policymakers, decision-makers, and the sports industry in Iran to achieve economic growth and development through the development of export and import of sports goods.

The challenges identified in the import and export of sports goods during the specified years include significant exchange rate fluctuations, which affect pricing and competitiveness in global markets. Additionally, high-interest rates increase financing costs, leading to elevated retail prices and reduced demand. Issues related to liquidity limit businesses' capacity to invest in production and marketing, further impacting competitiveness. Regulatory barriers, such as tariffs and trade policies, complicate the import process and raise costs. Moreover, a persistent trade deficit indicates a greater volume of imports than exports, hindering domestic production. These interconnected challenges necessitate a thorough investigation into the factors influencing trade in sports goods to inform strategies for enhancing competitiveness and sustainability in the sector.

Materials and methods

The objective of this study was to examine the influence of economic factors on the import and export of sports goods. To achieve this, we employed the vector autoregression (VAR) model, incorporating instantaneous response functions (IRF), variance decomposition (VD), and an accumulation test. This methodology enabled us to explore both short-term and long-term relationships among variables. We analyzed the connection between economic factors and government and household sports expenditures over the period from 1995 to 2021. This timeframe was selected for its methodological and contextual significance. It covers key developments in Iran's economy, including sanctions and policy changes, which had direct implications for the trade of sports goods. Moreover, this period coincides with global trends in the sports industry, technological advancements, and shifts in consumer behavior. The availability of time-series data on crucial economic indicators, such as GDP, exchange rates, and trade balance, facilitated the econometric analysis of these relationships. Household sports expenditures, based on the Statistics Center’s framework, form part of spending on recreation, entertainment, and cultural services, as well as durable goods in the non-food category. These expenditures include clothing, footwear, sports training, tickets, membership fees, equipment rentals, and various sports items. To calculate total household sports expenditure, we used data from the urban and rural household income and expenditure surveys conducted from 1984 to 2021. We determined the average sports expenditure for both urban and rural households, then estimated the total expenditure by multiplying the per-household expenditure by the number of households. The national budget is divided into four main sectors: public affairs, defense, social, and economic affairs. Physical education and youth affairs fall under the social sector. To assess government spending in this area, we reviewed available budget data, although discrepancies between approved and actual government spending, and missing data for certain years, required us to supplement our analysis with economic reports from the Management and Planning Organization. Key economic indicators, including GDP, tax rates, money supply, exchange rates, inflation rates, interest rates, trade balance, unemployment, and the

stock market index, were obtained from time-series data provided by the Central Bank of Iran. These indicators were crucial for understanding the broader economic context influencing the import and export of sports goods.

EViews$_{TM12}$ was the software utilized for data validation. This section aims to elucidate the theoretical foundation of statistical and econometric tests essential for estimating the model.

When conducting multivariate time series analysis, it is essential to explore the internal connections within the time series. If the number of model variables exceeds two, there might exist multiple integration vectors among these variables. In such scenarios, alternative methods need to be employed to comprehensively address the relationships among all variables. One traditional approach for handling such situations involves utilizing the simultaneous equations model. To illustrate a basic instance of a vector autoregression model, consider two-time series, X_t and Y_t. In this instance, the VAR model for both variables would be formulated as follows.

$$X_t = \alpha_t + \sum_{t=1}^{m} \beta_t X_{t-1} + \sum_{j=1}^{m} \gamma_t Y_{t-1} + \varepsilon_{1t}$$

Where, have a normal distribution with zero mean and constant variance. The above model can be shown with k endogenous variables and m intervals, matrix notation as below.

$$X_t = \alpha + A_1 X_{t-1} + \varepsilon_t$$

$$Y_t = \alpha_2 + \sum_{t=1}^{m} \delta_t X_{t-j} + \sum_{j=1}^{m} p_j Y_{t-j} + \varepsilon_{1t}$$

Where: xt-1 is its interval values and ε_t-vector 1k and A1, A2, ..., Ap are constant coefficients kk matrices. To understand the topic, we rewrite the above two-variable system in terms of the L-interval function as below, and for simplicity, we have not considered the width work from the origin. We will solve the above model by inverse method.

$$\Delta = (1-a_{11}L)(1-a_{22}L) - (1-a_{12}L)(1-a_{21}L)$$
$$= 1-(a_{11}+a_{22})L + (a_{11}a_{22} - a_{12}a_{21})L^2$$
$$= (1-\lambda_1 L)(1-\lambda_2 L) \rightarrow \lambda_2 - (a_{11}+a_{00})\lambda_1 + (a_{11}a_{22} + a_{12}a_{22}) = 0$$

According to the VAR process, a system is stable when the absolute value of the eigenvalues of the matrix of coefficients is smaller than one. (that is, matrix A should be smaller than one).

In the following, we will introduce the two models used in the current research:

EXPORT = B_0 + B_1 GDP + B_2 INFLATION_IRN + B_3 INTEREST + B_4 LIQUIDITY + B_5 STOCK + B_6 TRADE_BALANCE + B_7 DOLLAR_H+ B_8 TAX

IMPORT = B_0 + B_1 GDP + B_2 INFLATION_IRN + B_3 INTEREST + B_4 LIQUIDITY + B_5 STOCK + B_6 TRADE_BALANCE + B_7 DOLLAR_H+ B_8 TAX

Results

At first, the Jarque-Bera test was used to check the normality of the distribution of the dependent variable. This test was performed for the dependent variable of the research, and the result indicated that the distribution of the dependent variable was not normal. The image of the output of the Jarque-Bera test in Evioz software for this variable is as described in Table 1:

Table 1. Jarque-Bera Test

Variable	Import	Export
Jarque-Bera Test P_value(sig)	862/2	0.341

	0.239	0.843

The first step in the experimental estimations of the research is to check the significance of the research variables. In this part, the Dickey-Fuller unit root test was used to check the meanness or stationarity of the research variables. Because the P value for all variables is less than 0.05, as a result, the research variables were at a stable level during the research period.

Table 2. Dickey-Fuller unit root test

Symbol	Chi-square statistics	Sig	Stationary type	Result
EXPORT Export of sports goods	-505/4	0.001	First difference	Stationary
IMPORT Import of sports goods	3/363	0.021	First difference	Stationary
GDP	-161/4	0.003	First difference	Stationary
INFLATION IN Iran's inflation rate	-392/3	0.019	Stationary on the level	Stationary
INTEREST Interest rate	-616/3	0.013	First difference	Stationary
LIQUIDITY Amount of liquidity	–845/3	0.008	First difference	Stationary
STOCK Overall Index	836/1	0.009	Twice difference	Stationary
TRADE BALANCE Trade balance	–642/4	0.000	First difference	Stationary
DOLLAR H dollar price	–249/4	0.003	First difference	Stationary
TAX	–195/3	0.002	First difference	Stationary

That is, $|\lambda_1|\langle 1, |\lambda_1|\langle 1$, and this is exactly equivalent to the condition that the roots of $|A-\lambda I|=0$ are smaller than one in absolute value, in which case A is the matrix of coefficients of variables with a break and t is a one matrix.

In the current research, we use the Akaike information criterion to determine the optimal number of breaks, the result of which is summarized in the table below.

Table 3. Akaike information benchmark output

Lag	The maximum logarithm of the study	Maximum correctness	Final production error	Akaike	Schwartz-Bazin	Hanan - Queen
0	-2631.021	N.A	5.99e+66	182.1394	182.6109	182.2870
1	-2239.416	486.1300	1.65e+58	162.0287	167.2150	163.6530

According to the above table, it is clear that the model with 1 break is the best model according to Akaik, Schwartz-Bazin, and Hanan-Coin criteria, so in fitting the vector auto regression model and other tests, fitting the model with 1 break is used. If the variables do not directly have time independence but have cointegration relationships, cointegration or cointegration tests can be used to ensure the absence of independence of variables in the VAR model.

Table 4. Output of the Engle-Granger coefficient test

Lag	z statistic	Sig
DOLLAR_H	-133.0805	0.0001
EXPORT	-48.60183	0.0001
IMPORT	-52.58506	0.0001
INFLATION_IRN	-78.49157	0.0001
INTEREST	-66.13438	0.0001
LIQUIDITY	-34.31462	0.1670
UNEMPLOYMENT	-22.99446	0.0069
TRADE_BALANCE	-29.78959	0.0022
TAX	-80.08850	0.0001
STOCK	-68.68312	0.0001

According to the significance level obtained for the variables is less than 0.05, therefore the null hypothesis is rejected and the opposite hypothesis is confirmed. In other words, the linear relationship between the variables in the long term has co-accumulation.

Table 5. The results of fitting the regression equation of sports goods export

Independent variables	Variable coefficient S.D t	Result
ZEXPOER (-2)	0.494774 (0.20750) [2.38448]	Effective
DOLLAR_H(-1)	0.000124 (6.0E-05) [2.08242]	Effective
INFLATION_IRN (-1)	0.006216 (0.01682) [0.36960]	Ineffective
INTEREST(-1)	-0.311146 (0.08331) [-3.73487]	Effective
LIQUIDITY (-1)	3.85E-07 (1.0E-07) [3.77990]	Effective
STOCK(-1)	-1.85E-06 (2.2E-06) [-0.85176]	Ineffective
TAX (-1)	-3.07E-06 (1.5E-06)	Effective

	[-2.03361]	
TRADE_BALANCE(-1)	-5.63E-05	Ineffective
	(2.7E-05)	
	[-2.06101]	
UNEMPLOYMENT (-1)	0.023906	Ineffective
	(0.08609)	
	[0.27770]	
GDP(-1)	0.001240	Ineffective
	(0.00106)	
	[1.17043]	
C	2.941617	--------
	(1.66113)	
	[1.77085]	
83.7%		Coefficient of determination
1/74		Adjusted coefficient of determination
757/8		Statistics f

Sig= .95

In summary, the probability level in this regression analysis is set at 95%, meaning the alpha (α) value is 0.05. Variables with absolute t-statistics greater than 1.96 are statistically significant at this level, indicating the rejection of the null hypothesis. The F-statistic value of 8.757 confirms the overall significance of the model, as the p-value is less than 0.05, supporting the model's reliability at the 95% confidence level.

The F statistic value (8.757) also indicates the significance of the regression model. The coefficient of determination in the mentioned model stands at 84%. Hence, it can be deduced that, in the provided regression equation, specifically within the first model, around 84% of the variations in the export of sports goods can be explained by the specified independent and control variables. Additionally, the absolute t-statistic values for the variables—exchange rate, interest rate, liquidity, tax revenue, and trade balance—are 2.082, 3.735, 3.780, 2.034, and 2.061, respectively, exceeding 1.96, which aligns with the standard normal distribution at the 95% confidence level. Consequently, at the 95% confidence level, the null hypothesis is dismissed, indicating that, among the identified economic factors, the exchange rate, interest rate, liquidity, tax revenue, and trade balance significantly impact the export of sports goods.

Table 6. The results of fitting the regression equation of sports goods import

Independent variables	Variable coefficient	Result
	S.D	
	t	
IMPORT (-1)	0.671458	Effective
	(0.14045)	
	[4.78062]	
DOLLAR_H (-1)	7.035067	Ineffective

	(23.5976) [0.29813]	
INFLATION_IRN (-1)	-17296.11 (7915.41) [-2.18512]	Ineffective
INTEREST (-1)	-37974.57 (38131.3) [-0.99589]	Ineffective
LIQUIDITY (-1)	0.131603 (0.04624) [2.84591]	Effective
STOCK (-1)	0.861783 (1.07271) [0.80337]	Ineffective
TAX (-1)	0.760163 (0.85022) [0.89407]	Ineffective
TRADE_BALANCE (-1)	1.138576 (11.9944) [0.09493]	Ineffective
UNEMPLOYMENT (-1)	-48008.26 (38626.0) [-1.24290]	Ineffective
GDP(-1)	-446.4596 (466,817) [-0.95639]	Ineffective
C	1739582. (779205). [2.23251]	––––––––
96.7%		Coefficient of determination
94.9%		Adjusted coefficient of determination

578/53	Statistics f

Sig= .95

Based on the results, the determination coefficient for the mentioned model is computed at 97%. Thus, it can be deduced that, in the given regression equation, particularly in the first model, approximately 97% of the variations in the import of sports goods can be explained by the specified independent and control variables. As per the findings, the absolute t-statistic values for the inflation rate and liquidity variable are 2.185 and 2.846, respectively, exceeding 1.96, which corresponds to the standard normal distribution at the 95% confidence level. Consequently, at the 95% confidence level, the null hypothesis regarding the identified economic factors, specifically the impact of inflation and liquidity on the export of sports goods, is dismissed.

Discussion

In light of the research findings, the absolute T-statistic values for the variables—exchange rate, interest rate, liquidity, tax revenue, and trade balance—are 2.082, 3.735, 3.780, 2.034, and 2.061, respectively. These values surpass 1.96, which corresponds to the standard normal distribution at the 95% confidence level. Hence, at the 95% confidence level, the null hypothesis regarding the impact of identified economic factors—specifically, the exchange rate, interest rate, liquidity, tax revenue, and trade balance—on the export of sports goods is validated. The research outcomes also suggest that the exchange rate can be identified as one of the influential factors in the export of sports goods. In the research by Sarlab et al. (2019), Sarlab et al. (2018), Jacob et al. (2021), and Ahmed et al. (2021), the pricing dynamics of imported goods are influenced by various factors, with the exchange rate identified as the primary driver. Changes in the exchange rate of the importing country have a direct impact on the prices of goods, which is quantified as a percentage of the exchange rate change. This phenomenon is known as Exchange Rate Pass-Through (Sarlab et al., 2020). Given Iran's economic dependency on oil and the inherent volatility of oil prices in global markets, significant fluctuations in currency values occur. As a result, the exchange rate impacts the expenses associated with importing sports goods into Iran. The framework of Iran's economy, covering sectors such as production, consumption, import, export, and investment, relies heavily on oil revenues. The resultant exchange rate, influenced by oil sales, exerts effects on various sectors, including the sports industry and sports goods. Additionally, it shapes individuals' interest in sports, their demand for sports goods, and the integration of sports as a consumer product within Iran's household portfolio. Consequently, the exchange rate emerges as a pivotal factor influencing both the volume and price fluctuations of exported sports goods. Depending on whether the exchange rate rises or falls, it can have either a positive or negative impact on the sports industry.

To enhance the practicality and specificity of the recommendations, it is essential to provide detailed strategies and potential impacts for stakeholders involved in the sports goods trade. For example, exporters could benefit from implementing specific hedging mechanisms, such as forward contracts or options, to protect against exchange rate volatility. This would help mitigate potential losses due to currency fluctuations. Additionally, importers could consider adopting fixed-rate financing options or utilizing interest rate swaps to better manage the impact of interest rate fluctuations on their purchasing costs, ensuring more stable financial planning. Policymakers could be encouraged to introduce targeted financial policies, such as preferential tax rates or subsidies for sports-related businesses, to foster investment in the

sector. Furthermore, implementing liquidity-enhancing measures, like low-interest loans or guaranteed credit lines for sports businesses, could help ensure the sector's resilience in times of economic uncertainty. By offering tailored recommendations with clear implementation strategies and measurable outcomes, this research can provide actionable insights that empower stakeholders to make informed decisions and support the growth of the sports goods market amid economic challenges.

The results suggest that the export of sports goods is influenced by the interest rate. These rates are usually set by banks and other financial institutions for various financial transactions like loans, advances, and credit facilities. When an individual borrows from a bank or financial institution, the most noticeable fee imposed on the borrower is the interest rate. As per the findings, the interest rate can impact the export of sports products. A high-interest rate results in increased borrowing costs, subsequently elevating the prices of sports products. This can adversely affect the competitiveness of products in the global market, leading to a decline in the export of sports goods. Conversely, when the interest rate is low, the cost of borrowing for the production of sports products decreases, making product prices more competitive globally. This, in turn, can facilitate the export of sports products, including sports goods, and foster the growth and development of the sports industry. Therefore, the interest rate emerges as one of the influential factors influencing the export of sports products, contributing to alterations in both the volume and price of exported sports goods.

The research findings indicate that liquidity can impact the export of sports products, consistent with Ganjkhanlou's study (2018). Liquidity pertains to the amount of cash in circulation and available for transactions and business. Having sufficient liquidity in a country can create avenues for growth and development in the sports industry. When the sports industry experiences expansion in production and export, ample liquidity enables manufacturers to cover the costs of production, marketing, and export. This, in turn, allows them access to premier resources, equipment, and technology, enhancing the quality and innovation of their products. Ultimately, this can lead to an upswing in the export of sports products. Conversely, insufficient liquidity can negatively impact the export of sports products. Challenges such as a lack of liquidity or limited access to financial resources in business transactions may hinder producers' ability to adapt to foreign market demands and cover expenses related to exports. This scenario can result in a decrease in the export volume of sports products and a missed opportunity for competitiveness in the global market.

Based on the results, tax revenue can have a considerable influence on the export of sports products, aligning with the findings of Mehrara et al. (2018). The income generated through taxes on exported sports products can support investments in the advancement of the sports industry. These funds can be directed towards research and development initiatives, improving sports technologies, and raising production standards. As a result, the quality and competitiveness of sports products can rise, potentially resulting in an increase in their export volume. The introduction of export taxes on sports products can strengthen the superiority of domestic production and reduce reliance on imports.

The research findings highlight that the trade balance holds significant sway over the export of sports products in Iran, corroborating the outcomes observed by Ebrahimi et al. (2018). A favorable trade balance, characterized by exports surpassing imports, directly contributes to the expansion of sports product exports in Iran. By addressing domestic needs through local production, the potential for exporting to

foreign markets is heightened, resulting in substantial growth in sports product exports. Conversely, an unfavorable trade balance, where imports outpace exports, may negatively impact the export of sports products in Iran. In such circumstances, there is a risk of heightened reliance on imports and diminished competitiveness of domestic industries. Consequently, this impedes the export of sports products and adds complexity to the industry's development. The trade balance plays a role in shaping the purchasing power of a country in international markets. A positive trade balance, where exports exceed imports, elevates the country's purchasing power in the international arena. This heightened purchasing power enhances the competitiveness of Iranian sports products in foreign markets, thereby stimulating export activities.

In accordance with the results, the absolute t-values for the inflation rate and liquidity variables are 2.185 and 2.846, respectively, exceeding 1.96, which corresponds to the standard normal distribution at the 95% confidence level. Thus, at a 95% confidence level, the null hypothesis related to identified economic factors—specifically, the influence of inflation and liquidity on the import of sports goods—is refuted. These findings align with the conclusions drawn by Jacob et al. (2021), Ahmed et al. (2021), and Mansour and Taskeen (2019). An increase in both the inflation rate and liquidity can have positive impacts on the import of sports goods. Firstly, heightened liquidity enables a greater number of individuals to purchase sports goods, thereby fostering growth in the sports industry and contributing to job creation. Secondly, an elevation in the inflation rate can render the export of sports goods more economically feasible. If the local currency depreciates and inflation rates rise, exports from the country of origin become more attractive. This, in turn, can bolster the export value of sports goods and enhance the overall income of the country. Consequently, in summary, enhancing both the inflation rate and liquidity concerning the import of sports goods can generate positive effects on the economy and the sports industry

Limitations and External Factors Affecting Study Results

Acknowledging the limitations of a study is crucial for providing a balanced and accurate interpretation of the findings. In the context of investigating the impact of economic factors on the import and export of sports goods, several external factors must be considered. One significant limitation is the impact of economic sanctions, particularly in countries like Iran, where sanctions have caused fluctuations in exchange rates, trade barriers, and restricted access to global markets. These sanctions could distort the results, as they limit the free flow of goods and financial resources, affecting both the import and export of sports goods. Additionally, changes in the global sports market, such as shifts in consumer preferences, technological advancements, or the global economic environment, could also influence the findings. For instance, the rise of e-commerce and online retail has significantly altered the dynamics of sports goods trade, which may not be fully captured in the analysis. It is also important to consider the potential limitations of the time-series data used in the study. Gaps in the availability of complete data for certain years, especially concerning household expenditure and the national budget, might introduce biases in the analysis. Furthermore, macroeconomic factors like inflation rates, global trade policies, and regional economic trends could have an unpredictable impact on the results. Acknowledging these limitations enhances the study's transparency, allowing readers to understand the potential influences that may have affected the research outcomes. This consideration can provide a more accurate context for the findings and offer valuable directions for future research that may explore these external factors in greater detail.

Conclusion

The study has provided valuable insights into how economic factors influence the import and export of sports goods in Iran. Employing a rigorous methodology, the research utilized the vector auto regression (VAR) model for econometric analysis and conducted theoretical tests to explore the relationship between economic factors and government and household sports expenses from 1995 to 2021. The findings indicate that economic factors, encompassing the dollar rate, interest rate, liquidity, tax revenue, and trade balance, have a substantial impact on the export of sports goods, while inflation and liquidity play a role in affecting the import of sports goods. The study also emphasizes the significance of government expenditures on sports and the overall Gross Domestic Product (GDP) in shaping the added value of the sports sector. The study's conclusions stress the necessity for policies, covering financial, tax, monetary, and trade adjustments, to effectively regulate and manage these economic factors. This, in turn, aims to promote the development of the country's sports industry and improve the trade balance for sports goods. Additionally, the research findings have implications for policymakers, decision-makers, and the sports industry in Iran, offering guidance on crafting appropriate policies for industry development and growth. By understanding the impact of economic factors on sports imports and exports, the study seeks to facilitate the growth of the domestic industry and the production of sports goods, contributing to overall economic growth and development in Iran.

References

[1] Ahmad, S., Ali, M., & Hussain, I. U. (2021). The exchange rate and its impact on Pakistani exports: An ARDL approach. Journal of Management, Economics, and Industrial Organization, 5(3), 62-69.

[2] Al-Abri, A. S., & Goodwin, B. K. (2009). Re-examining the exchange rate pass-through into import prices using non-linear estimation techniques: Threshold cointegration. International Review of Economics & Finance, 18(1), 142-161.

[3] Dai, J., & Menhas, R. (2020). Sustainable development goals, sports and physical activity: The localization of health-related sustainable development goals through sports in China: A narrative review. Risk Management and Healthcare Policy, 13, 1419-1430.

[4] Ebrahimi, A., Khatibi, A., Mehdi Pour, A., & Marashian, H. (2020). Investigation of the performance of Iran's sports goods export industry and some developing countries. Strategic Studies on Youth and Sports, 18(46), 159-180.

[5] Ganjkhanloo, J., Askariyan, F., & Tahmasebi, F. (2020). The effects of government costs on sports budget for Iranian households. Sport Management and Development, 9(3), 126-137. https://doi.org/10.22124/jsmd.2020.4563

[6] Ganjkhanlou, J. (2018). *Analysis of the effects of monetary and fiscal policies on Iran's sports industry* (Doctoral dissertation). Faculty of Physical Education and Sport Sciences, Management in Sports Department, Tabriz University.

[7] Jacob, T., & Raphael, R. (2021). Impact of exchange rate and inflation on the export performance of the Indian economy: An empirical analysis. BIMTECH Business Perspectives, 3.

[8] Lera-López, F., & Suárez, M. J. (2012). Deporte activo y pasivo: ¿Una relación de conveniencia? Estudios Económicos Aplicados, 30, 489–511.

[9] Li, J., Huang, S., Min, S., & Bu, T. (2022). Modeling the driving factors of the value added in the Chinese sports industry: A ridge regression. Sustainability, 14(12), 7170.

[10] Lu, H. (2021). Enhancing university student employability through practical experiential learning in the sport industry: An industry-academia cooperation case from Taiwan. Journal of Hospitality, Leisure, Sport & Tourism Education, 28, 100301.

[11] Mansour, A., & Taskeen, B. (2019). Dynamic relationship between inflation, exchange rate, FDI, and GDP: Evidence from Pakistan. Acta Universitatis Danubius. Œconomica, 15(2), 1-14.

[12] Mehr Ara, M., & Mikaeeli, S. V. (2018). Investigating the effect of revenues and government sport expenditure on the added value of the sports sector: The approach of autoregressive distributed lag model. Sport Management Studies, 9(46), 69-90. https://doi.org/10.22089/smrj.2017.4094.1796

[13] Mohammadi, F., Kalateh Seifari, M., Razavi, S. M. H., & Farsijani, H. (2021). Identify and classify export performance capabilities with a world-class approach with emphasis on sports export strategies. Sport Management and Development, 10(3), 164-188. https://doi.org/10.22124/jsmd.2021.5064

[14] Poorghorban, M. R. (2021). Investigating short and long run impacts of inflation uncertainty on sport production: GARCH and ARDL approach. Sport Management Studies, 12(64), 109-132. https://doi.org/10.22089/smrj.2020.9174.3115

[15] Ratten, V., da Silva Braga, V. L., & da Encarnação Marques, C. S. (2021). Sport entrepreneurship and value co-creation in times of crisis: The COVID-19 pandemic. Journal of Business Research, 133, 265-274.

[16] Saleh Nia, R., Bakhsandeh, H., & Hakakzadeh, M. (2021). A study and analysis on the factors affecting the export of Iranian sports goods. Sports Management Journal. https://doi.org/10.22059/jsm.2021.326427.275

[17] Sarlab, R. (2020). *The impact of inflationary environments and exchange rate regimes on the pass-through of exchange rates to the import price index of sports goods: Iran and major trading partners* (Doctoral dissertation). Faculty of Physical Education and Sports Sciences, Tabriz University.

[18] Sarlab, R., Askariyan, F., & Asgharpour, H. (2020). The effect of inflationary environment on the rate of exchange rate passage on the index of prices of imports of sports goods of Iran and business partners. Sport Management and Development, 9(1), 44-59.

[19] Sarlab, R., Gholami Heidariani, L., & Sarlab, M. (2022). Economic Factors affecting on the Sports trade openness in Mena member countries. *Sport Management Journal*, *14*(2), 163-151. doi: 10.22059/jsm.2021.303679.2496.

[20] Zhang, W., & Mou, C. (2023). Analysis and improvement of sports industry development and public health strategy under low-carbon economic structure. Frontiers in Public Health, 11, 1152452. https://doi.org/10.3389/fpubh.2023.1152452

[21] Zhu, L., & Zhao, Y. (2015). Research on structural and management optimization of Chinese sport industry based on multi-factor analysis and hierarchy model. In Proceedings of the 5th International Conference on Education, Management, Information and Medicine (EMIM 2015).