Evaluating Competitive Advantages and Market Dynamics in the Global 1 **Raisin Industry** 2 Morteza Majidian¹, and Esmaeil Pishbahar^{1*} 3 Abstract 4 Raisins are a key export commodity due to their nutritional value and global demand. This 5 study evaluates the worldwide raisin industry's competitive advantages and market structure using 6 data from the International Trade Center (2004-2023). Employing Revealed Comparative 7 Advantage (RCA), Revealed Symmetric Comparative Advantage (RSCA), Concentration Ratio 8 9 (CR), Herfindahl-Hirschman Index (HHI), and Trade Competitiveness Index (TCI), the analysis identifies Turkey, the United States, Iran, and Chile as leading exporters, accounting for 64.5% of 10 the market share. Results indicate an oligopolistic market structure with concentrated competition 11 among a few nations. Turkey, the United States, Afghanistan, Uzbekistan, and Iran exhibit strong 12 RSCA values (near 1), reflecting expertise in raisin exports, while Turkey, Iran, Uzbekistan, 13 Afghanistan, and Argentina show high TCI scores, indicating robust competitiveness. The study 14 highlights shifts in market dynamics, with emerging exporters like Afghanistan challenging 15 traditional leaders. To enhance their global position, exporters should improve production 16 efficiency, diversify markets, and invest in branding. These findings contribute to understanding 17 trade competitiveness and market evolution in agricultural exports, offering strategic insights for 18 policymakers and industry stakeholders. 19

20 Keywords: Global Raisin Trade, Market Structure Analysis, Global Competitiveness Index,

21 Leading Raisin Exporters, Revealed Comparative Advantage

22 **JEL Classification:** F14, Q17, L11, Q13, L13.

24 1. Introduction

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Dried fruits, particularly raisins derived from grape desiccation, are widely consumed globally and hold significant economic value. The global raisin industry contributes substantially to production and trade, with worldwide grape output exceeding 77 million tons in 2018 (OIV, 2022), of which 7% yielded 1.21 million tons of raisins (USDA, 2019). As a key agricultural commodity, raisins enhance the grape value chain and bolster exporting nations' economies (Soltani and Saghaian, 2012). However, competitiveness in this market is shaped by grape production

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- 31 fluctuations, market structure, and trade policies (Aminizadeh et al., 2015). Traditional exporters
- 32 like Turkey, the United States, and Iran face challenges such as declining market share and price
- 33 volatility, necessitating a detailed analysis of market dynamics and strategic opportunities.
- 34 Global grape production rose 20.1% from 72.9 million tons in 2004 to 87.6 million tons in
- 2022, peaking at 93.8 million tons in 2018 before declining (FAO, 2024; Fig. 1). Climate change
- and economic factors drive these shifts (Protzman, 2022). Raisin exports grew 44% from 713.7
- thousand tons in 2004 to 1 million tons in 2021, dropping to 946.4 thousand tons in 2022 (ITC,
- 38 2024; Fig. 2). Post-2015 stability (9% growth) highlights the need for robust trade policies to
- 39 sustain market share amidst rising competition.



Figure 1. Global Grape Production Volume (2004–2022).





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46	Competitiveness, rooted in theories by Smith, Ricardo, and Balassa (Maneschi, 1992; Balassa,
47	1965), is assessed via the Revealed Comparative Advantage (RCA) index, where values above 1
48	indicate export strength (Borodin, 2006). Recent studies (e.g., Majidian et al., 2022; Israrullah et
49	al., 2023) analyze raisin trade but often focus narrowly. This study advances prior work by
50	integrating RCA, RSCA, HHI, CR, and TCI across a 20-year dataset (2004–2023), offering a
51	global perspective on market structure and competitiveness (Tables $1-2$). Unlike single-country
52	analyses, it compares leading exporters and identifies strategic shifts, aiding policymakers and

- exporters in enhancing market position and fostering sustainable trade development.

Table 1. Overview of Methods and Approaches in Previous Studies.

Study	Data	Findings	Methods
<u>Yu et al.,</u>	export value, import	Iran, Uzbekistan, and Kazakhstan mainly export raw	MS, TC, AEP
<u>2022</u>	value, export	liqcorice materials, while China, with its processing and	
	quantity, (2010–	trade capabilities, plays a key role in the global market.	
	2019)	The United States, France, and Germany are among the	
		main consumers of this product.	
<u>Israrullah et</u>	Export volumes	Afghanistan demonstrated significant growth in its	NPC, RCA,
<u>al., 2023</u>	(2006–2021)	comparative advantage for raisin exports and	Direction of
		maintained a high level. The transition probability	Foreign Trade
		matrix shows that Russia, UAE, India, and Turkey	
		retained /2.03%, 4/.33%, 35.83%, and 13.11% of their	
Han at al	Even and immediate	The USA hold the largest member share and Devealed	MC DCA
$\frac{\operatorname{main}}{2022}$ et al.,	Export and import	Summetric Comparative Advantage (PSCA) for	MS, KCA, PSCA TC
2022	(2010, 2010)	laicorice extract exports followed by China and France	KSCA, IC
	(2010-2017)	with moderate competitiveness, while Germany faced	
		challenges due to lower RSCA and competitiveness	
Tian et al	Export/import	Vietnam surpassed China in agricultural product	RCA. TC
2024	volumes (2012–	competitiveness. Chinese exports to Vietnam matched	,
	2021)	Vietnam's imports in category 0, while Vietnam's	
	,	exports to China showed more complementarity in	
		category 2.	
<u>Nabi et al.,</u>	Export volumes	India demonstrated comparative export advantages in	RCA, RSCA
<u>2019</u>	(1995–2017)	fish, fish products, fruits, vegetables, sugar, sugar	
		products, miscellaneous foods, wood, and metals	
		against the USA, UK, UAE, Singapore, and China.	
Montes	Export volumes and	Peru's fresh grape exports grew at a compound annual	RCA, HHI
<u>Ninaquispe</u>	values (2013–2022)	growth rate of 12.02% and 12.13% in value and volume,	
<u>et al., 2024</u>		respectively. Exports reached an average of 151.2	
		destinations, with the highest export share to Mexico (2200) and (1000) T	
		(65.2%) and the lowest to the Netherlands $(1.6%)$. The	
		Herindani index indicated market concentration in the	
		USA and stability in the number of destinations.	

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Source	Dataset Size	Global Scope	RCA	RSCA	нні	Market Structure	CR	ТС	MS
<u>Yu et al., 2022</u>	Insufficient	\checkmark	×	×	×	×	×	\checkmark	\checkmark
<u>Nabi et al., 2019</u>	Insufficient	\checkmark	\checkmark	\checkmark	×	×	×	×	×
<u>Han et al., 2022</u>	Insufficient	\checkmark	\checkmark	\checkmark	×	×	×	\checkmark	\checkmark
Israrullah et al., 2023	Intermediate	×	\checkmark	×	×	×	×	×	×
<u>Tian et al., 2024</u>	Intermediate	×	\checkmark	×	×	×	×	\checkmark	×
Montes Ninaquispe et al., 2024	Intermediate	×	\checkmark	×	\checkmark	×	×	×	×
Present Study	Large	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark

Table 2. Comparison of This Study with Existing Research.

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62 2. Materials and Methods

The international competitiveness of a given industry or product is typically evaluated using a 63 range of indicators, including international market share, trade competitiveness, revealed 64 symmetric comparative advantage, and market concentration. In the present study, five principal 65 indicators- RCA, RSCA, Concentration Ratio (CR), Herfindahl-Hirschman Index (HHI), and 66 Trade Competitiveness Index (TCI)- were systematically selected to facilitate a comprehensive 67 and multidimensional assessment of the export performance of raisins. Collectively, these 68 indicators provide valuable insights into static comparative advantage (RCA, RSCA), the strength 69 of trade balance (TCI), and structural characteristics of the market (CR, HHI). By integrating these 70 indices, the study endeavors to capture both the depth of individual countries' competitiveness and 71 72 the broader structural trends prevailing in the global raisin market. This methodological approach is closely aligned with the study's overarching objective of analyzing long-term trade 73 competitiveness and the evolving dynamics of a strategically significant agricultural sector. 74

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2.1. Market Share (MS)

Market share reflects a country's export proportion of a product in global trade, indicating its
 competitive capacity. A higher MS suggests stronger competitiveness. It is calculated as (Sajid &
 Ertz, 2024):

$$MS_{ij} = \frac{X_{ij}}{X_{wj}} \times 100 \tag{1}$$

80 where X_{ij} is the export quantity of raisins (product *j*) from country *i*, and X_{wj} is the global export 81 quantity of raisins. This study analyzes *MS* for leading raisin exporters.

83 2.2. Concentration Ratio (CR_n)

- 84 The CR_n measures export concentration among major countries, revealing market structure
- 85 (perfect competition to monopoly). It is defined as (<u>Schaen & Maijoor, 1997</u>):

$$CR_n = MS_1 + MS_2 + \dots + MS_n = \sum_{i=1}^n MS_{i_{2,\dots,k}}$$
 (k > n (2)

where *k* is the total number of raisin exporters, *n* is the number of top exporters, and MS_i is the market share of exporter *i*. This index assesses concentration among key raisin exporters.

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89 2.3. Herfindahl-Hirschman Index (HHI)

90 The *HHI* addresses *CR_n* limitations by summing squared market shares of all exporters
91 (Straume et al., 2024):

$$HHI = MS_1^2 + MS_2^2 + \dots + MS_n^2 = \sum_{i=1}^{K} MS_i^2$$
(3)

where *k* is the number of raisin exporters globally, and MS_i is the market share of exporter *i*. Low *HHI* values indicate competition, while values near 1 suggest monopoly. Combined with CR_n (Table 3), *HHI* evaluates raisin market concentration.

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Table 3. Types of Market Structure Based on CRn and HHI Indices.

Main Feature Market	Herfindahl- Hirschman Index (HHI)	Concentration Ratio (Percentage)	Market Type
More than 50 competing firms exist without any single firm holding a significant market share.	HHI $\rightarrow 0$	$CR_1 \rightarrow 10$	Perfect Competition
No competing firm holds more than 10% of the market share.	$(1/\text{HHI}) \rightarrow 10$	CR ₁ < 10	Exclusive Competition
Four firms collectively hold a monopoly of up to 40% of the market.	$6 < (1/\text{HHI}) \le 10$	$CR_4 < 40$	Open Multilateral Monopoly
Firms collectively hold at least 60% of the market share.	$3 < (1/HHI) \le 6$	$CR_4 > 60$	Closed Multilateral Monopoly
One firm monopolizes more than 50% of the market.	$1 < (1/\text{HHI}) \le 3$	$CR_1 \ge 50$	Dominant Enterprise
One firm monopolizes the entire market.	HHI $\rightarrow 1$	$CR_1 \rightarrow 100$	Monopoly

- 99 **2.4. Trade Competitiveness (TC)**
- 100 TC measures a country's net export capacity relative to total trade, ranging from -1 (weak) to
- 101 +1 (strong) (<u>Han et al., 2022</u>):

$$TC_{ij} = \frac{X_{ij} - M_{ij}}{X_{ij} + M_{ij}} \tag{4}$$

where X_{ij} and M_{ij} are export and import values of raisins (product *j*) for country *i*. This study uses *TC* to compare competitiveness among major raisin exporters.

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105 2.5. Revealed Comparative Advantage (RCA)

106 Introduced by Balassa (<u>1965</u>), RCA quantifies export advantage:

$$RCA_{ij} = \frac{\frac{X_{ij}}{\sum_{i} X_{ij}}}{\frac{\sum_{j} X_{ij}}{\sum_{i} \sum_{j} X_{ij}}}$$
(5)

where X_{ij} is the export value of raisins from country i, $\sum_i X_{ij}$ is country i's total exports, $\sum_j X_{ij}$ is global raisin exports, and $\sum_i \sum_j X_{ij}$ is total world exports. Values > 1 indicate advantage (Panico et al., 2024).

The Revealed Symmetric Comparative Advantage (RSCA) adjusts RCA asymmetry (<u>Dalum</u>
et al., 1998):

$$RSCA_{ij} = \frac{RCA_{ij} - 1}{RCA_{ij} + 1}$$
(6)

RSCA ranges from -1 (no advantage) to +1 (strong advantage). Data on raisin exports, imports,
and grape production (2004–2023) were sourced from FAO and ITC databases, with indices
calculated using Excel.

The 2004–2023 period was selected based on the availability of consistent and complete trade data from international databases. A 20-year span allows for the detection of structural patterns, long-term shifts in competitiveness, and the evaluation of market concentration dynamics over time.

124 **3. Results**

125 **3.1. International Raisin Trade Status**

126 3.1.1. Global Raisin Trade Status

Figure 3A shows global raisin export values from 2004 to 2023. Exports rose 147.2% from \$822 million in 2004 to \$2,032.6 million in 2012, then declined 24.6% to \$1,531.9 million by 2023, with fluctuations noted in 2018–2019 (ITC, 2024).

Figure 3B details the top 12 exporters' trends. Turkey's exports grew 148% from \$231.4 130 million (2004) to \$574.2 million (2019), dropping to \$508.2 million in 2023 (11.5% decline). The 131 U.S. peaked at \$409.7 million in 2014 (107% rise from 2004), falling 57.4% to \$174.6 million by 132 2023. Iran's exports surged 228% to \$354.4 million in 2012, then fell 78.5% to \$76.2 million in 133 2023. Chile, South Africa, and Afghanistan showed varied trends, with Afghanistan rising since 134 2016. Post-2015 declines reflect economic recessions, production issues, and supply chain 135 disruptions, though emerging exporters offset some losses, signaling market appeal and 136 opportunities (ITC, 2024). 137

Figure 3C highlights 2023 trade flows: Turkey exported to the UK, Netherlands, Germany, Italy, France, and Australia; South Africa to Germany and Russia; Afghanistan to India and Pakistan; Iran to Iraq and UAE; and Argentina to Brazil. The top five (Turkey, Iran, Afghanistan, South Africa, Argentina) held 58% of exports, with Turkey at 35.1%. Top importers (UK, Netherlands, Germany, India, Iraq) accounted for 27.4%, with Germany and Netherlands at 14.35% each, reflecting concentrated exports and diverse imports (ITC, 2024).





Figure 4 shows average import/export volumes (2004–2023). The UK led imports at 12.6%,
followed by Djibouti (9.4%) and Germany (9%) (Fig. 4A). Turkey dominated exports at 28.4%,
with Iran (14.5%) and the U.S. (14.2%) next (Fig. 4B), underscoring key players in the supply
chain.



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Figure 4. (A) Average Import Volumes of Top Importers; (B) Average Export Volumes of Top
Exporters (2004–2023).

Table 4 analyzes market structure via CR1, CR4, HHI, and 1/HHI. Turkey's share ranged from
25%–35%, with CR4 (Turkey, U.S., Iran, Chile) averaging 56%–75%. HHI (0.12–0.17) suggests

- moderate concentration, with slight increases in competition in 2021–2023. The 1/HHI indicates 159
- 6-9 active exporters, with new entrants like Afghanistan, forming a multi-oligopoly structure. 160

Table 4. Export Market Structure of Dried Grapes (HS 080620) Worldwide (2004–2023). 161

Year	CR ₁	CR ₄	HHI	1/HHI	Active business competitors	Market structure
2004	0.30	0.75	0.17	5.74	Turkiye, USA, Iran, Chile	Closed Multilateral monopoly
2005	0.29	0.73	0.16	6.06	Turkiye, USA, Iran, Chile	Closed Multilateral monopoly
2006	0.31	0.72	0.16	6.09	Turkiye, Iran, USA, Chile	Closed Multilateral monopoly
2007	0.29	0.70	0.16	6.42	Turkiye, Iran, USA, Chile	Closed Multilateral monopoly
2008	0.25	0.63	0.13	7.46	Turkiye, USA, Iran, Afghanistan	Closed Multilateral monopoly
2009	0.31	0.70	0.16	6.35	Turkiye, USA, Iran, Chile	Closed Multilateral monopoly
2010	0.26	0.68	0.14	7.02	Turkiye, USA, Iran, Chile	Closed Multilateral monopoly
2011	0.27	0.69	0.15	6.81	Turkiye, USA, Iran, Chile	Closed Multilateral monopoly
2012	0.27	0.67	0.14	7.22	Turkiye, Iran, USA, Chile	Closed Multilateral monopoly
2013	0.27	0.66	0.14	7.33	Turkiye, USA, Iran, Chile	Closed Multilateral monopoly
2014	0.28	0.68	0.15	6.83	Turkiye, USA, Iran, Chile	Closed Multilateral monopoly
2015	0.26	0.61	0.13	7.93	Turkiye, USA, Iran, Uzbekistan	Closed Multilateral monopoly
2016	0.26	0.63	0.13	7.75	Turkiye, Iran, USA, Uzbekistan	Closed Multilateral monopoly
2017	0.31	0.65	0.15	6.75	Turkiye, USA, Iran, Uzbekistan	Closed Multilateral monopoly
2018	0.31	0.60	0.14	7.14	Turkiye, Iran, USA, Uzbekistan	Closed Multilateral monopoly
2019	0.29	0.60	0.13	7.43	Turkiye, Iran, USA, Uzbekistan	Closed Multilateral monopoly
2020	0.28	0.62	0.14	7.22	Turkiye, Iran, USA, South Africa	Closed Multilateral monopoly
2021	0.25	0.56	0.12	8.60	Turkiye, Iran, Djibouti, USA	Between closed Multilateral monopoly
2022	0.29	0.57	0.13	7.61	Turkiye, Iran, Uzbekistan, USA	Between closed Multilateral monopoly
2023	0.35	0.58	0.16	6.27	Turkive, Chile, South Africa, Afghanistan	Between closed Multilateral monopoly

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The emergence of new exporters such as Afghanistan and Uzbekistan introduces significant 163 competitive pressures for traditional market leaders like Turkey, the United States, and Iran. These 164 newcomers, often benefiting from lower production costs, favorable climatic conditions, and 165 166 growing governmental support, are capable of capturing market share in price-sensitive regions. This trend not only intensifies competition but also compels established exporters to innovate and 167 adapt, particularly in areas of quality differentiation, technological modernization, and supply 168 chain efficiency. Additionally, the entry of emerging players contributes to market fragmentation, 169 170 potentially leading to price volatility and reduced profit margins for dominant suppliers. As these markets gain a foothold, their sustained presence could alter long-standing trade flows and 171 necessitate strategic repositioning among global leaders. 172

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3.1.2. Raisin Trade Status in Iran

As shown in Figure 5, Iran serves as a major exporter of raisins, with minimal imports of this 175 product. This chart underscores Iran's significant role as one of the key producers and suppliers of 176 raisins in global markets. The primary importing countries of Iranian raisins include both regional 177 and extra-regional nations, such as Iraq, Russia, the UAE, and Turkey, which are pivotal to the 178

Iranian raisin market. Additionally, exports to European countries like Germany and the Netherlands are noteworthy, reflecting robust demand for Iranian raisins in international markets. Moreover, Iran's lack of reliance on raisin imports not only signifies adequate domestic production but also highlights its competitive advantage in producing high-quality raisins in substantial volumes. This positioning enables Iran to leverage high demand in global markets, enhance its share of global raisin exports, and boost its export revenues.



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190 **3.2.** Competitive Analysis of International Raisin Trade

191 Given the relative stability of major raisin-supplying countries over an extended period, this 192 study analyzes the international competitiveness of the twelve leading exporting nations in this 193 sector. To achieve this, five prominent countries have been selected from the following: Turkey, 194 the United States, Iran, Chile, South Africa, Afghanistan, China, Greece, Argentina, Uzbekistan, 195 the Netherlands, and Germany, covering the period from 2004 to 2023.

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197 **3.2.1. Market Share**

Figure 6A shows Turkey's share consistently above 25%, peaking at 35% in 2023. The U.S.
dropped from 19.7% (2004) to 6.5% (2023), and Iran from 19.3% to 6.1%. Chile, South Africa,

and Afghanistan grew, with South Africa at 7.2% in 2023, indicating rising competition.

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202 3.2.2. Revealed Symmetric Comparative Advantage

Figure 6B reveals Afghanistan's top RSCA (1), followed by Turkey, Iran, Uzbekistan, and Chile (>0.9). Argentina and Greece (~0.8) show stable competition, while China, Germany, and the Netherlands have negative values, indicating weak advantage.

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207 3.2.3. Trade Competitiveness

Figure 6C shows Iran's TC at 1, with Afghanistan (0.989), Uzbekistan (0.99), Argentina
(0.984), Chile (0.97), and Turkey (0.93) also high. The U.S. and Greece are moderate, while China
(0.21), Netherlands, and Germany are low, reinforcing import-focused roles.

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Figure 6. (A) Market Share; (B) Average RSCA; (C) Average TC (2004–2023).

As detailed in Table 5, this analysis examines market share, trade competitiveness, and revealed symmetric comparative advantage (RSCA) for the top four raisin-exporting countries from 2004 to 2023. Turkey has consistently maintained a market share exceeding 25% during most of this period, solidifying its leadership in the global market. The country's sustained export advantages and competitiveness reflect its capacity to meet global demand and effectively manage exports.

Iran, the second-largest raisin exporter in this group, has shown strong competitiveness but has faced more pronounced fluctuations in market share and RSCA. The United States has

experienced declines in market share, trade competitiveness (TC), and RSCA, reflecting aweakening global position, especially in recent years.

Although Chile holds a smaller market share, it has demonstrated steady improvement in TC and RSCA, enhancing its role in the global market. This analysis underscores that each country has adopted distinct strategies to strengthen its position, offering valuable insights for policymakers and exporters aiming to boost international competitiveness.

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Table 5. MS, TC, and RSCA of Turkey, USA, Iran, and Chile (2004–2023).

Year		Turkiye	!		USA			Iran			Chile	
	MS	TC	RSCA	MS	TC	RSCA	MS	TC	RSCA	MS	TC	RSCA
2004	29.69	0.98	0.95	19.73	0.86	0.46	19.32	1.00	0.93	6.27	0.97	0.90
2005	29.18	0.98	0.95	19.57	0.70	0.46	17.54	1.00	0.91	6.79	0.94	0.92
2006	30.81	0.98	0.95	14.70	0.73	0.42	18.68	1.00	0.92	7.49	0.96	0.89
2007	28.92	0.98	0.95	14.62	0.67	0.40	19.31	1.00	0.92	7.37	0.98	0.88
2008	24.86	0.98	0.94	20.30	0.80	0.46	9.80	0.98	0.87	8.15	0.98	0.91
2009	30.86	0.98	0.94	17.73	0.81	0.38	12.05	0.99	0.93	9.06	0.97	0.90
2010	25.72	0.98	0.94	19.08	0.80	0.39	15.65	1.00	0.92	7.70	0.98	0.90
2011	26.58	0.98	0.94	18.42	0.84	0.43	15.59	1.00	0.91	8.72	0.99	0.90
2012	26.68	0.98	0.94	15.47	0.84	0.38	16.43	1.00	0.92	8.73	0.96	0.91
2013	26.64	0.86	0.94	15.84	0.83	0.40	15.83	1.00	0.94	7.96	0.96	0.92
2014	28.18	0.86	0.93	18.13	0.87	0.42	13.91	1.00	0.93	7.84	1.00	0.92
2015	26.19	0.96	0.93	13.96	0.76	0.35	13.06	1.00	0.95	7.24	0.98	0.90
2016	26.23	0.97	0.93	13.20	0.80	0.33	15.04	1.00	0.94	6.17	0.95	0.89
2017	30.80	0.97	0.93	14.55	0.81	0.38	11.06	1.00	0.90	5.94	0.95	0.90
2018	30.59	0.99	0.94	9.36	0.53	0.29	12.47	1.00	0.89	6.89	0.96	0.91
2019	29.47	0.83	0.94	8.66	0.72	0.21	13.42	1.00	0.94	7.31	0.98	0.91
2020	27.73	0.82	0.93	8.61	0.76	0.21	18.77	1.00	0.96	6.17	0.96	0.89
2021	25.04	0.83	0.93	7.50	0.72	0.24	14.02	1.00	0.94	6.17	0.96	0.89
2022	29.44	0.84	0.93	7.15	0.60	0.24	11.40	1.00	0.94	6.76	0.97	0.90
2023	35.11	0.82	0.94	6.50	0.54	0.14	613	0 99	0.98	9.00	0.98	0.91

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232 **4. Discussion**

The findings indicate that the global raisin market is significantly influenced by key countries in the supply chain. The United Kingdom, Djibouti, and Germany are the largest importers, while Turkey, Iran, and the United States are the primary exporters. This distribution underscores the strategic roles of these nations in fulfilling global raisin demand and shaping the international market.

In 2023, global raisin trade exhibited a greater concentration among exporting countries, whereas importers displayed increased diversity. This scenario underscores the importance of producing regions, particularly in Asia, Europe, the Americas, and Africa. The export

concentration in countries, such as Turkey and Iran, reflects their robust production capabilities
 and established presence in global markets, while the diversity among importers signifies an
 expanding demand and their essential role in shaping the supply chain.
 The 20-year trend in raisin exports reveals a market concentration around a limited number of

The 20-year trend in raisin exports reveals a market concentration around a limited number of leading countries, alongside the emergence of new exporters. The decline in export values from major countries like Turkey, the United States, and Iran, coupled with the growth of emerging exporters such as Afghanistan, highlights the necessity for diversification among global suppliers. These shifts present an opportunity to create a more balanced global supply chain and enhance

249 international cooperation.

The analysis of the global raisin market structure indicates a relatively concentrated market, with Turkey, along with three other major countries (the United States, Iran, and Chile) holding the largest market shares. Despite this concentration, competition among smaller exporting countries, such as Afghanistan and Uzbekistan, is on the rise. This trend suggests that while the raisin market remains competitive, it is still influenced by key players. For the global market, these findings emphasize the importance of fostering competition and diversification within export markets.

The findings indicate that Iran, as a leading exporter of raisins in global markets, plays a crucial role in fulfilling the raisin demand across various countries. Its capacity to produce substantial quantities of raisins, combined with minimal reliance on imports, strengthens its competitive advantage in raisin production. With significant demand in international markets, particularly from neighboring countries and select European nations, Iran has the potential to expand its share of global raisin exports, thereby increasing its export revenues.

263 The findings indicate that Turkey dominates the global raisin market; however, recent years have witnessed increased competition from emerging countries such as South Africa and 264 Afghanistan. The decline in market share of key players, including the United States and Iran, 265 alongside the rise of Central Asian and Middle Eastern nations—particularly Afghanistan and 266 267 Uzbekistan—has resulted in significant shifts in market structure. These developments point to heightened competition and greater diversification within the global raisin market. Central Asian 268 and Middle Eastern countries like Iran, Afghanistan, and Uzbekistan possess substantial 269 competitive advantages in raisin production and exports, consistently exhibiting strong 270 competition on the global stage. In contrast, European nations such as Germany and the 271

Netherlands have a diminished role in raisin exports due to relatively lower competitive 272 advantages. These trends suggest that countries with favorable natural resources and climatic 273 conditions, when combined with investments in infrastructure and enhanced competitiveness, can 274 increase their market share in the global raisin market. Furthermore, nations with lower 275 competitiveness must prioritize the development of export capacities and the improvement of 276 product quality to effectively compete. Overall, developing countries and smaller exporters can 277 strengthen their presence in the global market through the implementation of effective policies, 278 which will also bolster their resilience to economic crises and market fluctuations. These results 279 underscore the necessity for exporters to adopt coherent strategies to maintain and enhance their 280 positions in the global market, drawing on the successful experiences of other nations. 281 282 Strategies for Enhancing Exporters' Position 283 To strengthen their position in the global raisin market, exporting countries must implement 284 285 targeted strategies that align with market dynamics and trade competitiveness indicators. Improving production efficiency through modern agricultural technologies, such as precision 286 irrigation and enhanced grape varieties, can increase yields while reducing costs. Streamlining 287 288 post-harvest processes and optimizing supply chain logistics will minimize losses and ensure consistent quality, which is essential for maintaining competitiveness in international markets. 289 Furthermore, reinforcing trade agreements with emerging markets such as East Asia and Africa 290 can reduce reliance on traditional buyers and create new growth opportunities. Lowering tariff 291 barriers and simplifying export regulations will further facilitate market expansion and enhance 292 global reach. 293 Differentiating products through quality enhancement, branding, and innovative packaging is 294 essential. Offering premium varieties, such as organic and seedless raisins, alongside advanced 295 packaging solutions that extend shelf life, can attract high-value consumers. Furthermore, 296 investing in digital marketing and e-commerce platforms can enhance visibility and provide direct 297 access to international buyers, thereby reducing reliance on intermediaries. Aligning with global 298 food safety standards, such as HACCP and ISO 22000, will ensure compliance with regulatory 299 requirements in key importing countries. By implementing these strategies, raisin-exporting 300 nations can strengthen their competitive advantage, expand market presence, and secure long-term 301 302 sustainability in international trade.

Limitations and Suggestions for Future Research 303 This study focuses on quantitative indicators of international competitiveness but does not fully 304 address non-economic factors influencing the global raisin trade. Elements such as institutional 305 frameworks, product quality, sanitary standards, and trade regulations significantly shape market 306 dynamics yet remain underexplored. Future research should incorporate comparative analyses of 307 import/export tariffs and the timeline of sanitary regulations in key importing countries. 308 Additionally, climate conditions, adherence to international quality standards, and trade policy 309 impacts deserve further investigation for a more holistic view of competitiveness. A further 310 limitation is the absence of econometric modeling. Applying methods like panel data regression, 311 ARDL, or VAR in future studies could better capture the influence of exchange rates, tariffs, and 312 313 transport costs, enhancing the accuracy of competitiveness evaluations. 314 **References** 315 Aminizadeh, M., Rafiee, H., Riahi, A., Shangayi, R., & Mehrparvar Hosseini, E. (2015). Formulate 316 priorities for raisin exports to Iran in the world market. Iranian Journal of Agricultural 317 *Economics and Development Research*, 46:(2), 363–373. 318 Balassa, B. (1965). Trade liberalization and "revealed" comparative advantage. The Manchester 319 School, 33:(2), 99–123. 320 Borodin, K. G. (2006). Evaluation of product competitiveness in the context of modern trade, 321 Studies on Russian Economic Development, 17:(3), 289–297. 322 Cho, D. S., & Moon, H. C. (2000). From Adam Smith to Michael Porter: Evolution of 323 competitiveness theory, (Vol. 2). World Scientific. 324 Dalum, B., Laursen, K., & Villumsen, G. (1998). Structural change in OECD export specialization 325 patterns: De-specialization and 'stickiness', International Review of Applied Economics, 326 12:(3), 423-443. 327 FAO. (2024). Food and Agriculture Organization of the United Nations. https://www.fao.org 328 Han, Y., Pang, X., Zhang, X., Han, R., & Liang, Z. (2022). Resource sustainability and challenges: 329 Status and competitiveness of international trade in licorice extracts under the Belt and Road 330 Initiative. *Global Ecology and Conservation*, 34:e02014. 331 Trade Centre. (2024). Trade Map: 332 International International trade statistics, https://www.intracen.org 333

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375	ارزیابی مزیتهای نسبی و پویایی بازار در صنعت کشمش در جهان
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377	مرتضی مجیدیان، و اسماعیل پیش بهار
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379	چکیده
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381	کسمس به دلیل از رس عدایی و نقاضای جهانی یکی از کالاهای صادرانی کلیدی است. این مطالعه مریث های نسبی مرزحت کثیمش در سر اسر جمان مرساختان راز از در ارا استفاده از دادههای مرکز بتجاریت درزامال (2004-2003) از زران
383	صلعت مشمس در سراسر جهان و ساختار بارار را ب استفاده از دادهای مرکز تجارت بین استی (RSCA) از ریابی مهاکند. این مطالعه با استفاده از شاخص های مزیت نسب آشکار (RCA)، مزیت نسب متقارین آشکار (RSCA)، نسبت
384	تمرکز (CR)، شاخص هر فیندال-هیر شمن (HHI) و شاخص رقابت بذیری تجاری (TCI)، کشور های ترکیه، ایالات متحده،
385	اير آن و شيلي را به عنو آن سهم صادر كنندگان اصلي اين محصول معرفي ميكند. نتايج نشان دهنده يك ساختار باز ار انحصاري
386	با رقابت متمرکز در میان چند کشور است. ترکیه، ایالات متحده، افغانستان، ازبکستان و ایران مقادیر بالای RSCA (نزدیک
387	به 1) را نشان می دهند که نشاندهنده تخصص در صادرات کشمش است، در حالیکه ترکیه، ایران، ازبکستان، افغانستان و
388	ارژانتین امتیازات TCI بالایی را نشان میدهند که نشان دهنده رقابت قوی بین این کشور ها در سطح جهانی است. این مطالعه
389	تغییرات در پویایی بازار را برجسته میکند و نشان میدهد که صادرکنندگان نوطهوری مانند افغانستان رهبران سنتی در این انا با با بالاه بی که در بار کنندگان با در اسان میدهد که صادرکنندگان نوطهوری مانند افغانستان رهبران سنتی در این
390	باز از از ابه چالس میدسند. صادر صندی این محصول برای ارتفای جایجاه جهایی خود، باید خار ایی تونید را بهبود بخست، بازار ها با بازیم کنند برد. به زدنداز مرسد مارهگذارم، کنند. ارت رافته ما به درکی دقارت تجارم برد تحریک براز از م
305 221	بارارها را منتوع کند و در بردساری سرمایخداری کند. این یک ما به درک روبت نجاری و نخو دے بارار کنادر، کشاه در یک کمک میکند و بدنش های استر اتثریک را در ای سیاستگذار آن و سیامدار آن این صنعت از آئه می دهد
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