



Position of Pakistani Basmati Rice in International Markets (A Comparative Analysis)

Rubeena Asghar^{1*}, Sabeela Asghar², Hafsa Batool³

^{1*}Department of Biotechnology, University of Central Punjab, Lahore

²Department of Space Science, University of the Punjab, Lahore.

³Department of Geography, F.C.College, (A Chartered University), Gulberg, Lahore

*Rubeena Asghar Email: rubeenaasghar512@gmail.com

Citation | Rubeena Asghar, Sabeela Asghar, and Hafsa Batool, “Position of Pakistani Basmati Rice in International Markets (A Comparative Analysis)”, IJASD, vol. 3, no. 4, pp. 94-98, Dec. 2021.

Received | Nov 07,2021; **Revised** | Dec 15,2021; **Accepted** | Dec 19,2021; **Published** | Dec 24,2021

Competitive products meet or exceed national and international quality requirements while also providing a reasonable return on the resources needed to produce them. The nominal protection coefficient (NPC) will be tracked as a dependent variable in this study. Several macroeconomic variables are estimated to impact the competitiveness of basmati exports. Inflation in Pakistan's trade partners has a favorable and considerable impact on Pakistan's basmati export competitiveness. The export of basmati rice is influenced by Pakistan's currency rate, which is high compared to other trading countries. The first set of high-potential markets includes three countries including Iran, Turkey, and Saudi Arabia. All have mid-range prospective markets. There is little hope for Yemen, Poland, and Qatar in the third category of markets. It is recommended that Pakistani basmati exporters concentrate on increasing their basmati export shares to the UK, Canada, and the US, as these markets provide significant potential and competition. Basmati exporters could also consider Oman, Saudi Arabia, Iran, Turkey, and the United Arab Emirates as potential markets, rather than Yemen, Poland, and Qatar. Pakistani Basmati rice is considered as the best throughout the world however it is a need to enhance bilateral coordination.

Keywords: Bilateral Coordination, Competitiveness, International Markets, Basmati Rice.

Introduction

Agricultural output accounted for 18 percent of Pakistan's GDP in 2017 and employed 43 percent of the workforce. The development of this industry will directly impact economic growth, food security, and poverty alleviation. In 2017, Pakistan's exports totaled \$ 24.6 billion. In 2011, Pakistan's exports totaled US\$29.88 billion; by 2017, that figure had declined to US\$ 24.6 billion. Five years ago, Pakistan's export sales fell by 4.1 percent on annual basis. Pakistan is the world's third-biggest exporter of rice and the 12th-largest producer [1]. As of 2017, Pakistan was the world's 49th-largest importer of goods and services, with \$47.1 billion in imports. Pakistan's imports increased from \$ 44.8 billion in 2011 to \$48.1 billion in 2016. In 2017 [2], 80 percent of Pakistan's 2016 exports were with the United States, 70 percent went with China, 59 percent with Germany, and 15 percent to the United Kingdom. The Islamic Republic of Pakistan imports the majority of its goods from China, UAE, the US, Indonesia, and Japan. One-third of Pakistan's exports are transported to China, with the rest to the United Arab Emirates (12.9 percent), Saudi Arabia (3.6 percent), and the United States (4.1 percent) [3]. Refined petroleum and palm oil rank high on Pakistan's import and export lists. Pakistan's major exports are laundry and rice, along with non-knitted clothing and cotton yarn. Last year, Pakistan's trading account was in deficit because of the country's net imports. The type of rice, which has a distinct flavor and aroma, is popular worldwide because of its wide range of flavors and variants. About 60 to 70 percent of rice exports from India, Pakistan, Vietnam, and Thailand come from these countries. About a 19 percent drop in Pakistani rice exports was recorded in 2013. The United Arab Emirates is the third-largest importer behind Iran and Saudi Arabia in terms of rice imports. In terms of rice production, Iran and Saudi Arabia both account for 6.9% or 6% of global totals [4].

The export of agricultural products is a significant source of foreign exchange revenue for Pakistan[5][6]. Rice exports were critical to the country's economic well-being. The Gulf countries received more than 30% of Pakistan's rice exports in the last three decades. A country's capacity to compete internationally is harmed because of the lower operating costs of importing than of exporting[7][8]. Global basmati rice consumption has decreased by 15% due to Pakistan's dependence on a few key markets. The key reason for this drop in exports is Pakistan's inability to preserve its competitive advantage in basmati rice and to basmati rice markets and seek out new markets. Pakistani basmati rice is more competitive than non-basmati rice in the UAE market since its net export margin of 25 percent is lower than the United Kingdom's[9], [10]. Using comparative advantage, various[11][12] studies explained the export of Pakistan's most important agricultural goods to the United Arab Emirates (UAE). With a focus on Basmati rice, Adhikari et al. (2016)[13] investigated the rise in Indian rice exports in 2016. This study predicted a regression model for Indian rice export that requires competitive export pricing and advancements in quality and standardization on the global market. In this study, Javed et al. employed a gravity model to analyze the impact of different factors on Pakistan-UAE trade (2017). According to this study, there is a correlation between the amount of distance between countries and the amount of trade between those countries. According to [14][15], Pakistan's trade-to-GDP ratio and population have a positive and substantial impact on bilateral trade with its key trading partners.

There is a steady flow of Basmati imports from the United Kingdom and Turkey, followed by those from the United States and Canada as well as countries in the Middle East and North Africa. Analysis of Basmati Export Competitiveness and Impact on Significant Basmati Trade Partners is the primary goal of this research.

Methods

The International Trade Centre (ITC) recorded Pakistan's most major trading partners for basmati rice exports from 2006 to 2017. To collect local and international price data, the International Trading Centre and Pakistan's statistical yearbook were employed. Pakistan's statistical department provided the data on currency exchange rates. A dummy variable is used in the current study's models.

This study examines the export competitiveness of Pakistani basmati using the notional protection coefficient (NPC). To be competitive, a country must be able to create things that meet domestic and international quality requirements while at the same time making a sufficient profit on the resources needed [16][17]. Another way to describe one's competitiveness is to say that one can overcome adversity [18][19]. One of the most widely-used metrics for measuring global competitiveness is called the Nominal Protection Coefficient (NPC)[17][20]–[26]. The local-to-global price ratio of a commodity is known as the NPC.

Pakistani basmati export competitiveness to international markets was studied which examines a range of macroeconomic variables. Using a panel of data from 11 major basmati markets, the NPC of Pakistani basmati shipments to various countries was used as a dependent variable. Panel data can be subjected to a variety of complex error patterns. Since most standard panel data estimators cannot manage both autocorrelation and cross-sectional dependency at the same time, it has long been recognized as a possible hazard for panel data [27]. [28]. One may utilize it if the total number of cross-sections is more than or equal to the total number of times [27].

NPC (National Price Competitiveness Index) can be used to measure rice competitiveness in global markets (National Protection Coefficient). Basmati exports' competitiveness was estimated which considers many macroeconomic indicators.

NPC was calculated the competitiveness of Pakistani Basmati rice. According to the NPC, Pakistani basmati rice exports are competitive in international markets. For domestic goods, the NPC value analyses the incentives and disincentives that are offered to encourage or discourage them from being exported or imported. The NPC value can estimate how much a commodity's domestic price differs from its international price. As a result of increased border fees and taxes, consumers who import goods will be forced to pay more. To put it another way, the less competitive a product or service is when its nominal protection value is 1, the higher its notional protection coefficient is. NPC values for the UAE, the United Kingdom, Yemen, and Oman markets, respectively.

Compared to the UAE and Yemen, Pakistani rice in the UK had an NPC value of 0.76, whereas, in Oman, it had an NPC value of 0.84. As a result, Pakistani rice is now more competitive in the United Kingdom and Oman than in the United Arab Emirates and Yemen. As of 2017, Pakistani basmati rice was more expensive than basmati rice from the UAE, Oman, and Yemen.

Pakistani Basmati rice (NPC) was around 1, it began to decline after 2010, making it less competitive in Qatar. Pakistani basmati rice was less competitive in Poland between 2008 and 2015 than in Saudi Arabia and the United States throughout that period. In comparison to Saudi Arabia, Poland, and Qatar, the US market's linear trajectory of NPC value over the period under consideration shows that it is very competitive in this area.

According to the linear trend, Pakistani basmati is losing market share in Canada, Iran, and Turkey. As opposed to Iran's and Turkey's, Canada's market was more competitive.

NPC competitiveness is growing in markets such as Saudi Arabia, UAE, United Arab Emirates, Oman, Poland, and Canada; but, basmati export competitiveness is improving over time in markets such as Yemen and Qatar, and it is declining in countries like Iran and Turkey. Pakistani basmati exports are competitive in the United Kingdom, Canada, and the United States, with a competitiveness of 0.61 and 0.79, respectively, however, Pakistani basmati exports are less competitive in Yemen, Poland, and Qatar.

We found three distinct types of basmati markets and these divisions are based on our findings. The first set of high-potential markets includes these three countries. The Gulf States of Saudi Arabia and the United Arab Emirates and Iran, Turkey, and Saudi Arabia all have mid-range prospective markets. There is little hope for Yemen, Poland, and Qatar in the third category of markets. These three countries have a lot of potentials and are extremely competitive for Pakistani basmati exports. Increasing Pakistani basmati exports to these countries is suggested." Basmati

exporters could also consider Oman, Saudi Arabia, Iran, Turkey, and the United Arab Emirates as potential markets, rather than Yemen, Poland, and Qatar.

The competitiveness of basmati exports can be calculated by considering several macroeconomic aspects.

Macroeconomic considerations have an impact on competitiveness. Pakistan's exchange rate has a negative impact on the competitiveness of Pakistani basmati exports, although the exchange rates of Pakistan's trading partners are favorable. Pakistan's basmati export competitiveness is also enhanced. Strategies should be devised to maintain and improve the competitiveness of basmati exports in overseas markets.

References

- [1] G. Kennedy and B. Burlingame, "Analysis of food composition data on rice from a plant genetic resources perspective," vol. 80, pp. 589–596, 2003.
- [2] M. H. Saleem et al., "Jute: A Potential Candidate for Phytoremediation of Metals — A Review," pp. 1–14, 2020.
- [3] M. H. Saleem et al., "Flax (*Linum usitatissimum* L.): A Potential Candidate for Phytoremediation? Biological and Economical Points of View," 2020.
- [4] M. H. Saleem et al., "Influence of phosphorus on copper phytoextraction via modulating cellular organelles in two jute (*Corchorus capsularis* L.) varieties grown in a copper mining soil of Hubei Province, China," *ECSN*, p. 126032, 2020, doi: 10.1016/j.chemosphere.2020.126032.
- [5] I. E. Zaheer et al., "Zinc-lysine Supplementation Mitigates Oxidative Stress in Rapeseed (*Brassica napus* L.) by Preventing Phytotoxicity of Chromium, When Irrigated with Tannery Wastewater," 2020.
- [6] W. Akhtar, M. Sharif, and N. Akmal, "Analysis of Economic Efficiency and Competitiveness of the Rice Production Systems of Pakistan's Punjab," *Lahore J. Econ.*, vol. 12, no. 1, pp. 141–153, 2007, doi: 10.35536/lje.2007.v12.i1.a7.
- [7] M. Hamzah et al., "Appraising growth, oxidative stress and copper phytoextraction potential of flax (*Linum usitatissimum* L.) grown in soil differentially spiked with copper," *J. Environ. Manage.*, vol. 257, no. December 2019, p. 109994, 2020, doi: 10.1016/j.jenvman.2019.109994.
- [8] R. Muhammad, S. Jafar, A. Rabnawaz, S. Hussain, W. Ahmed, and P. Zhuang, "Aptitudes of Pakistani Rice Industry with Respect to Global Trade," *J. Econ. Sustain. Dev.* www.iiste.org ISSN, vol. 6, no. 22, 2015, [Online]. Available: www.iiste.org
- [9] I. Javed, A. Ghafoor, A. Ali, M. Ali Imran, and M. Ashfaq, "Margins and determinants of rice export from Pakistan to uae market," *Pakistan J. Agric. Sci.*, vol. 52, no. 2, pp. 569–575, 2015.
- [10] I. Javed and A. Ghafoor, "Determinants of rice export from Pakistan," *Lect. Notes Electr. Eng.*, vol. 185 LNEE, pp. 793–801, 2013, doi: 10.1007/978-1-4471-4600-1_68/COVER.
- [11] M. H. Saleem, S. Fahad, S. U. Khan, M. Din, A. Ullah, and A. E. L. Sabagh, "Copper-induced oxidative stress, initiation of antioxidants and phytoremediation potential of flax (*Linum usitatissimum* L.) seedlings grown under the mixing of two different soils of China," 2019.
- [12] I. Javed, M. Shfaq, and N. Anwar, "Exports of Major Agricultural Products from Pakistan to United Arab Emirates: Performance and Comparative Advantage," *Sci. Technol. Dev.*, vol. 36(1), no. November, pp. 53–60, 2017, doi: 10.3923/std.2017.53.60.
- [13] A. Adhikari, M. K. Sekhon, and M. Kaur, "Export of Rice from India: Performance and Determinants §," *Agric. Econ. Res. Rev.*, vol. 29, no. 1, p. 135, 2016, doi: 10.5958/0974-0279.2016.00026.4.
- [14] I. E. Zaheer et al., "Role of iron-lysine on morpho-physiological traits and combating chromium toxicity in rapeseed (*Brassica napus* L.) plants irrigated with different levels of tannery wastewater," *Plant Physiol. Biochem.*, 2020, doi: 10.1016/j.plaphy.2020.07.034.

- [15] K. Fatima, U. Nisar, and H. Yasmin, "Factors Affecting the Bilateral Trade of Pakistan With Major Trading Partners," *J. Econ. Impact*, vol. 1, no. 1, pp. 19–28, 2019, [Online]. Available: <http://www.scienceimpactpub.com/jei>
- [16] N. Iqbal, R. Begum, S. Ali, and A. A. Alsahli, "Journal Pre-proof," *Plant Physiol. Biochem.*, 2020, doi: 10.1016/j.plaphy.2020.10.010.
- [17] I. Javed et al., "Competitiveness in agricultural trade of Pakistan with united arab emirates," *Pakistan J. Agric. Sci.*, vol. 55, no. 3, pp. 703–709, 2018, doi: 10.21162/PAKJAS/18.3498.
- [18] J. Afzal et al., "Role of Ferrous Sulfate (FeSO₄) in Resistance to Cadmium Stress in Two Rice (*Oryza sativa* L.) Genotypes," 2020.
- [19] L. Latruffe, "Competitiveness, Productivity and Efficiency in the Agricultural and Agri-Food Sectors," *OECD Food, Agric. Fish. Pap.*, vol. 30, no. 30, pp. 1–63, 2010, doi: 10.1787/5km91nkdt6d6-en.
- [20] B. Balassa and D. M. Schydrowsky, "Domestic Resource Costs and Effective Protection Once Again," <https://doi.org/10.1086/259861>, vol. 80, no. 1, pp. 63–69, Oct. 2015, doi: 10.1086/259861.
- [21] J. H. and G. P. Gulati, A., "Effective incentives in India's agriculture cotton groundnuts, wheat and rice.," 1990.
- [22] D. S. Taylor and T. P. Phillips, "Food-Pricing Policy in Developing Countries: Further Evidence on Cereal Producer Prices," *Am. J. Agric. Econ.*, vol. 73, no. 4, pp. 1036–1043, Nov. 1991, doi: 10.2307/1242431.
- [23] A. Kumar, "Exports of Livestock Products from India : Performance," *Agric. Econ. Res.*, vol. 23, no. June, pp. 57–67, 2010.
- [24] M. Rakotoarisoa and A. Gulati, "Competitiveness and trade potential of India's dairy industry," *Food Policy*, vol. 31, no. 3, pp. 216–227, Jun. 2006, doi: 10.1016/J.FOODPOL.2006.03.003.
- [25] A. Sardar et al., "Potential markets for beef: An evidence from pakistani beef industry," *Sarhad J. Agric.*, vol. 35, no. 3, pp. 686–695, 2019, doi: 10.17582/JOURNAL.SJA/2019/35.3.686.695.
- [26] A. Economics and D. Library, "Agricultural Growth and Regional Disparity in India : A Convergence Analysis".
- [27] W. R. Reed and H. Ye, "Which panel data estimator should I use?," <https://doi.org/10.1080/00036840802600087>, vol. 43, no. 8, pp. 985–1000, Mar. 2009, doi: 10.1080/00036840802600087.
- [28] R. W. Parks, "Efficient Estimation of a System of Regression Equations when Disturbances are Both Serially and Contemporaneously Correlated," *J. Am. Stat. Assoc.*, vol. 62, no. 318, pp. 500–509, 1967, doi: 10.1080/01621459.1967.10482923.



Copyright © by authors and 50Sea. This work is licensed under Creative Commons Attribution 4.0 International License.