

Effects of a Hypothetical Iranian Accession to the World Trade Organization on Iran's Flower Industry

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Abstract

This is a hypothetical case study, based on survey responses, that outlines how an Iranian accession to the World Trade Organization (WTO) would affect Iran's flower industry. Four different groups are examined: flower producers, flower exporters, flower importers, and flower distributors. The results of the research indicate that Iran's accession to the WTO would increase the performance of several industry factors, including direct foreign investment, the competitive strength of flower exporters, related job opportunities, and the number of international flower distribution companies in Iran. Results also show that Iran's accession to the WTO would have no impact on Iran's annual flower imports, the cost of raw materials for flower production, and the size of Iran's domestic flower market.

Author's Note

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1. Introduction

The flower industry is a major presence in both developed and underdeveloped countries, with an annual global trade value of more than US\$100 billion. The Netherlands is the world's largest exporter with more than 50 percent of the world's flower export; other major flower exporters include Colombia, Ecuador, Kenya, Israel, Italy, and Spain (Institute of Business Research 1997). Cut flowers are one of the most globally produced commercial mass production items (Kendirli &

Cakmak 2007). Given that Iran has a comparative advantage in flower production in the Middle East, the flower industry is currently one of the country's fastest growing markets, with the potential to turn into one of the country's most prosperous non-petroleum exporters (Asgari & Rooshandel Arbatani 2001).

The World Trade Organization's founding in 1995 affected all international markets and industries around the world. In today's competitive global market, it can be hugely beneficial for countries to join the WTO and access a huge global market. Thus, we seek to evaluate the effects of a hypothetical Iranian accession to the WTO on Iran's flower industry. All the data used in this article are based on survey responses of senior managers of companies active in Iran's flower industry. For this reason, this article can be classified as a hypothetical case study.

2. The World Trade Organization

The World Trade Organization came into force on January 1, 1995, fully replacing the previous GATT Secretariat as the organization responsible for administering the international trade regime (International Institute for Sustainable Development 2000). The goal of the World Trade Organization is to facilitate and supervise international trade. As of today, the WTO has 157 members and 27 observer governments (World Trade Organization 2012). It forms part of a complex system of multilayered governance, both horizontally and vertically (Cottier 2007).¹

According to the CIA World Factbook (2012), Iran is the world's 24th largest economy by GDP, and currently the largest outside the WTO. Iran applied to join the WTO on July 19, 1996. A high-level governmental committee, chaired by the deputy foreign minister, was given the responsibility of drafting a final report on Iranian accession for the Council of Ministers. The committee's recommendation clearly supported Iran's application (Alavi 2010). The United States, however, vetoed Iran's application 22 times between 1996 and 2005, due to the political tensions between the two countries. But on May 26, 2005, WTO members unanimously approved Iran's application, and Iran became an observer member of the WTO. It is still several stages removed, however, from permanent membership, though it is probable that Iran will become a permanent member of the WTO in the near future. The country's recent economic reforms, including subsidy cuts, tax reforms, tariff reductions, and changes to its copyright laws, clearly indicate that the country is eager to become a permanent member. But, undoubtedly, Iran's accession to WTO

¹ The WTO, however, does have its critics. Khor (2000) believes that the WTO has not helped developing countries to overcome the challenges of exporting their products to world markets. Those who criticize the WTO also believe that wealthy countries use their negotiation power in the WTO to gain outside benefits for themselves. Many wealthy countries are able to maintain high import duties on certain products or even block their import, particularly in the agricultural sector. Another major criticism of the WTO is that it ignores the importance of environmental issues caused by large increases in international trade and the mass production and distribution of commercial goods.

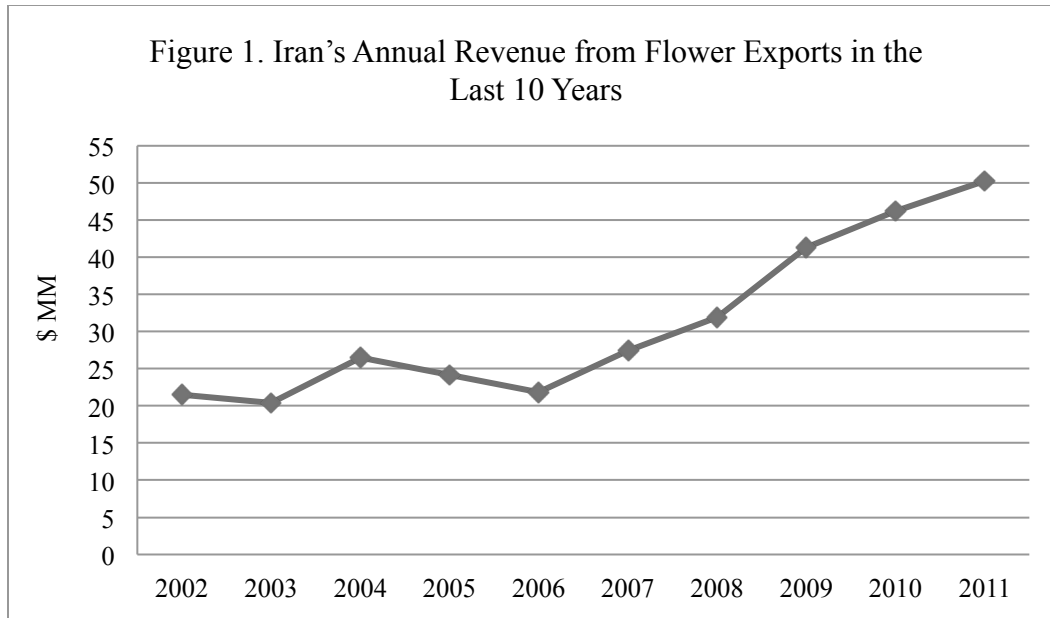
is largely reliant on the country's political relations with major western powers, particularly the United States (Mahdavi 2012).

3. Iran's Flower Industry Development

Iran's agricultural export from 2001 to 2011 made up roughly 40% of its non-oil exports. One of the most profitable industries within this sector is the flower industry. Iran exports more than 87,000 metric tons of fresh flowers and 200 million cut flowers each year (Khojaste Nejad 2011). Altogether, the country's flower industry employs an estimated 50,000 people. The total area under flower cultivation in Iran is 3,119 hectares—82 hectares of glass greenhouses, 1112 hectares of wooden and plastic greenhouses, and 1925 hectares of flower fields. Major cut flowers include chrysanthemums, rose, gladiolus, carnation, gerbera, anthurium, narcissus, tuberose, China aster, and liliun (Khojaste Nejad 2011). During winter months, Iran's flower export is at its highest level (Khojaste Nejad 2011).

The biggest foreign customers of Iranian flowers are the United Arab Emirates, the Netherlands, Iraq, Azerbaijan, Saudi Arabia, Kuwait, Turkmenistan, China, Japan, and Vietnam.

Figure 1 shows Iran's yearly revenue from flower exports in the last 10 years. It can be seen that Iran's revenue from flower exports has increased greatly in recent years, suggesting that the flower industry could potentially play a major role in the future of Iran's sustainable development (Razaieii 2012).



4. Methodology

4.1 Sampling and Data Collection

Our research was conducted in October 2012. Questionnaires were given to managers of various greenhouses and flower companies located in Isfahan, Tehran, Nowshahr, Chalus, Varamin, and Ramsar. The questionnaire contained 30 questions on a wide range of topics relating to Iran's flower industry, each to be scored on a 5-point Likert scale ranging from 1 to 5. We were looking for data on ten specific topics, with three questions devoted to each.

The ten specific questions our questionnaire was designed to examine included:

- 1) Impact on direct foreign investment
- 2) Impact on competitive strength
- 3) Impact on the number of international flower distribution companies in Iran
- 4) Impact on job opportunities in Iran's flower industry
- 5) Impact on the size of Iranian domestic flower market
- 6) Impact on the number of modern greenhouses in Iran
- 7) Impact on the total area under flower cultivation in Iran
- 8) Impact on the amount of flowers imported to Iran
- 9) Impact on the cost of raw materials (95% confidence level).
- 10) Impact on Iran's foreign exchange earnings

The total sample size of our research was 206. This includes 99 green house managers, 53 managers of flower export companies, 37 managers of flower import companies, and 17 managers of domestic flower distributor companies. All were senior managers. The questionnaires were given to the managers in person and answers were collected by email. Three respondents refused to answer.

In order to choose a sample of 50 managers, we used stratified random sampling. The reason that we used stratified sampling was that subpopulations within the overall population varied. The sample includes 24 green house managers, 13 managers of flower export companies, 9 managers of flower import companies, and 4 managers of domestic flower distributor companies. We, therefore, replaced them with other managers from the statistical society.

4.2 Validity and Reliability of the Research Questionnaire

In order to confirm the validity of our research questionnaire, we examined its content validity. Content validity is a non-statistical type of validity that involves "the systematic examination of the test content to determine whether it covers a representative sample of the behavior domain to be measured" (Anastasi & Urbina 1997). The content validity of our questionnaire was evaluated by a group of five experts, including three international marketing managers and two flower export specialists. It was accepted unanimously.

To check the reliability of the research questionnaire, we used two separate methods: the internal consistency method and the split-half method. Using SPSS software, we calculated that the questionnaire's Cronbach's alpha was 0.82, indicating suitable reliability. In our split-half analysis, results showed that Cornbach's alpha was 0.79 for the first 15 questions of the questionnaire, and 0.83 for the remaining 15. Because the difference between the two is not significant, we can accept the reliability of the questionnaire.

5. Results

Questionnaire results:

- 1) Respondents believed that Iran's accession to the WTO would **increase** direct foreign investment
- 2) Respondents believed that Iran's accession to the WTO would **increase** competitive strength (95% confidence level).
- 3) Respondents believed that Iran's accession to the WTO would **increase** the number of international flower distribution companies in Iran (95% confidence level).
- 4) Respondents believed that Iran's accession to the WTO would **increase** job opportunities in Iran's flower industry (95% confidence level).
- 5) Respondents believed that Iran's accession to the WTO would **have no effect** on the size of Iranian domestic flower market (95% confidence level).
- 6) Respondents believed that Iran's accession to the WTO would **increase** the number of modern greenhouses in Iran (95% confidence level).
- 7) Respondents believed that Iran's accession to the WTO would **increase** the total area under flower cultivation in Iran (95% confidence level).
- 8) Respondents believed that Iran's accession to the WTO would **have no effect** on the amount of flowers imported to Iran (95% confidence level).
- 9) Respondents believed that Iran's accession to the WTO would **have no effect** on the cost of raw materials (95% confidence level).

- 10) Respondents believed that Iran's accession to the WTO would **increase** Iran's foreign exchange earnings (95% confidence level).

6. Discussion

Our results indicate that those employed in the flower industry believe that Iran's accession to the WTO would help Iran's flower production become more globalized and have positive long term benefits on Iran's flower export.

The responses indicate a belief that Iran's accession to the WTO would increase direct foreign investment and increase job opportunities in Iran's flower industry. From this, we can extrapolate that respondents believe low-priced labor in Iran will encourage international investment. This would only happen if Iran becomes a member of the WTO, as right now high tariffs and customs rules are not conducive to foreign investment.

The responses also indicate a belief that Iran's accession to the WTO would have no effect on the amount of flowers imported to Iran and the size of the Iranian domestic flower market. This suggests that though entering the WTO would enable other countries to export their flowers to Iran, Iranian consumers would still largely choose Iranian flowers over imported ones.

Right now, the most pressing problems in the Iranian flower industry are the high price of raw materials and the weak flower distribution system. The results of this research suggest that Iran's accession to the WTO might help alleviate such problems. Respondents believed that the country's accession to the WTO would increase the number of international flower distributor companies in Iran, which would ostensibly enable flower producers to export their products faster and with higher quality.

Overall, our findings also show that those in the flower industry believe that Iranian accession to the WTO would help globalize the industry and facilitate higher competitiveness. Higher demand for flower exports would encourage companies to replace traditional methods of flower cultivation with more modern, efficient, and sustainable methods. Our results can be compared with previous research of Valibeigi (2003), which suggested that Iran's accession to the WTO would increase the competitive strength of many of the country's industries.

6.1. Sustainable Development and the Iranian Flower Industry

Sustainable development can be divided into three main parts including economic sustainability, environmental sustainability, and sociopolitical sustainability. The development of the Iranian flower industry has both sustainable and unsustainable aspects in each of these three sections.

There are many avenues for sustainable development in regards to Iran's flower industry. Much of these are economic. Currently, many areas in western and southern Iran have suitable climate conditions for producing cut flowers, but local citizens lack the resources to produce cut flowers in large quantities. Iranian accession to the WTO would make it easier for foreign investors to finance flower production projects in these areas and speed up economic growth. This could help

the country overcome its current unemployment crisis and improve the living standards of its citizens. Cut flowers exports also have the potential to turn into one of the country's main sources of foreign exchange earnings.

Benefits extend, however, to environmental sustainability. By reducing Iran's dependence on petroleum exports as a source of foreign exchange earnings, a larger flower export business would help the economy shift from an industry that produces toxic pollutants to one that is much more environmentally friendly. Increased demand for exports would also help producers use modern flower cultivation techniques, such as hydroponics, at much lower costs. This would decrease the amount of water consumption and energy usage in greenhouses. Finally, the increase in cultivation of indigenous flower species would help the country overcome deforestation problems in its central region.

Not all effects of the flower industry, however, are positive. The chief unsustainable aspect of this industry involves the large quantity of pesticides and other toxic chemicals that can be used in flower production. Also, an area that might be better served for food production could be used for more profitable flower production, leading to a possible food shortage. Finally, globalization brought on by increased demand would harm producers who currently used traditional methods of flower production. These producers are mainly in rural areas, and would suffer severe economic and cultural difficulties as a result of large-scale development in the flower industry.

6.2. Managerial Implications

The findings of this study have important practical implications for managerial practice. First, Iranian flower exporters should pay more attention to international marketing of their products in order to increase their competitive strength and to access global markets. A powerful marketing function can make a significant contribution to business performance (Auh & Merlo 2012). It is important to advertise Iranian flowers to other countries in order to introduce high quality Iranian flowers to the world.

Second, foreign investment rules must be made easier. Foreign investors are always ready to enter countries with low cost labor (Mohamadi 2001). The benefits of investing in Iran's flower industry must be adequately conveyed to foreign investors.

Third, Iranian flower distribution companies should expand their services and improve the speed of distribution. As the results show, after an Iranian accession to the WTO, many believe that the number of international flower distributors will likely increase; therefore, it is important for domestic distributors to expand their business so as to not lose their current market.

Fourth, flower producers should find new sources of raw materials. As the results show, Iran's accession to WTO may not decrease the price of raw materials. This can become a big problem for flower producers facing an increased demand for their product.

6.3 Research Limitations and Future Research

This study has two main limitations. First, the small sample size of our study (206) has limited statistical power (Auh & Merlo 2012). Second, because we collected our data through a questionnaire, our results are predictions based on the current industry conditions rather than hard observational data.

For future research we have three suggestions. First, it would be better to have a sample of managers from both domestic and foreign companies. This will help to have a more complete picture of the effects of this issue. Second, we suggest conducting similar studies in other industries. Having more information about the effects an Iranian accession to the WTO would have on different industries would allow for more fruitful comparative analysis. Third, we suggest studying other countries that are permanent WTO members in order to examine the impact of their membership on domestic flower production.

7. Conclusion

Our findings suggest that industry leaders believe that an Iranian accession to the WTO would help further develop Iran's flower industry, giving the country the potential to eventually become one of the world's largest flower exporters. The results also indicated that respondents believe membership in the WTO would improve the presence of the country's flower industry in international markets. Flowers might one day turn into one of Iran's major non-petroleum exports.

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