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Prioritizing markets for Slovenia's export of pharmaceuticals

A comparative study of China and Japan

Topic and Research Question

The pharmaceutical industry is growing not only globally, but also in Slovenia. However, due to Slovenia's size, the market for pharmaceutical products is limited, leading Slovenian pharmaceutical companies to focus on exports (Vrtačnik, 2020). Exports are particularly important for large pharmaceutical manufacturers in Slovenia; for Lek and Krka, two of the largest Slovenian pharmaceutical producers, exports represent as much as 95 percent of income (Sloexport, 2023a, 2023b). Furthermore, the pharmaceutical sector has been identified as a priority sector for export in Slovenia's national strategy to promote internationalization, along with Japan and China, which were identified as a market of opportunity and a priority market, respectively (Government of the republic of Slovenia, 2021). Choosing the right market to export is a challenge not only for governments and national export agencies, which are faced with limited resources, but also companies, as wrong decisions can lead to wasted financial and human investment from both the state and the firm.

To determine which of the markets is more attractive for Slovenian exports of pharmaceuticals, the research question that this thesis aims to answer is:

What are the opportunities and challenges for Slovenia in exporting pharmaceuticals to China and Japan?

State of the Art

International Market Selection (IMSel) is defined as "the process of establishing criteria for selecting (country) markets, investigating market potentials, classifying them according to the agreed criteria and selecting which markets should be addressed first and those suitable for later development" (Andersen and Strandkov, 1998, p. 67). IMSel aims to reduce subjectivity and allows for screening of many potential markets based on provided data.

Within in IMSel, grouping models classify countries across dimensions based on their similarities using a wide variety of social, economic and political indicators in order to determine which markets are most similar to markets where exporting to has already been successful (Papadopoulos and Denis, 1989, pp. 39, 40; Steenkamp et al., 2012, p. 29). On the other hand, market estimation approaches, rank countries by order of preference based on market potential and market development. This thesis utilized a market estimation approach, with the aim of

distinguishing the two markets based on their attractiveness.

As the subject of this analysis is the pharmaceutical market in China and Japan, some additional characteristics of the market must be considered. To begin with, demand in the pharmaceutical market is not determined by consumers, their habits, or tastes, but rather by socio-demographic changes, levels of income and the structure of the health system, more specifically, prevalence of out-of-pocket spending. Moreover, besides tariff barriers, other trade barriers such as non-tariff trade barriers and IPR protection are of crucial importance in the pharmaceutical sector where government regulation plays a key role in regulating supply, and where R&D is the main component in developing new, competitive products (Lipsey and Weiss, 1976; Michels and Jonnard, 1999; Smith, 2002; Hamilton et al., 2005; Olcay and Laing, 2005; Adolfsson, 2007; Chadha, 2009; Cockburn, 2009; Boring, 2010; Olmeda and Sosa-Varela 2012; Chen, 2017 Blanc, 2015; Taylor-Strauss and Chen, 2019).

Methodology and Approach

This thesis utilizes the Trade-off model developed by Papadopoulos et al. (2002), with some adjustments since only one market is considered. This means that pharmaceutical market specifics which have been discussed in the State of the Art section, can be directly included in the variables which the model examines.

DEMAND POTENTIAL	
VARIABLE	MEASURE
Apparent consumption	Domestic production + imports – exports
Demand conditions specific to the pharmaceutical market	<ul style="list-style-type: none"> Out-of-pocket expenditure vs. government expenditure as % of total health expenditure, out-of-pocket expenditure per capita connected to GNI per capita; % of population aged 65 or above
Import penetration	Imports as % of apparent consumption
Origin advantage	Exporting Country's share in target's total imports of pharmaceuticals
Market similarity	Overall score of the following indicators according to Sethi (1971): life expectancy, GNI per capita, electricity production, import-to-GDP ratio
TRADE BARRIERS	
VARIABLE	MEASURE
Tariff barriers	Simple average tariff rate
Nontariff barriers	<ul style="list-style-type: none"> Incidence of nontariff barriers as per the UNCTAD TRAINS database that are still in effect IPR concerns reported to the European Commission which are still in effect
Geographic distance	Mileage distance between major ports of export-target countries
Exchange rate	<ul style="list-style-type: none"> Percent change in official exchange rate vs. previous years Exchange rate fluctuation over the study period

Analytical framework. Source: own depiction.

Main Facts

Demand potential: apparent consumption in China is much higher in Japan, making it a larger market. However, import penetration in Japan is over six times higher, making imports more important in the consumption of pharmaceuticals, which means that 1) the market is more accessible and 2) most competition stems from foreign rather than domestic enterprises. Regarding demand conditions specific to the pharmaceutical market, Japan performs better in terms of government as well as out-of-pocket health expenditure than China while also having an older population. Market similarity of Slovenia with China and Japan is not very high. Slovenia is closer of Japan in GNI per capita (marginal difference) and electricity production (much lower than both that of Japan and China). Lastly, Slovenia's presence in either of the markets is very low and neither of the markets presents more of an opportunity.

Trade barriers: no tariffs are applied for exports to Japan due to the EU-Japan Trade Agreement. China applies some, but low, tariffs. On the other hand, China applies more and more diverse non-trade barriers. What is more, a specific trade concern has been reported to the WTO and an IPR protection concern has been reported to DG Trade regarding exporting pharmaceuticals to China. Geographically, China is somewhat closer than Japan. Lastly, the exchange rate of the euro to the Chinese yuan is more stable than that of the Japanese yen, as well as more conducive to exports, since the euro has depreciated against the yuan in the past decade.

Results

From the analysis, it is evident that China's pharmaceutical market is much more domestic-oriented and protective of domestic industry. Since China's own production of pharmaceuticals is rather large, as is its domestic market, it makes exporting to China harder. On the other hand, the Japanese market is much more open and reliant on imports, making it easier to enter. This might lead to 1) more companies deciding to export to Japan, and 2) more success with those companies who export to Japan. However, that does not mean Slovenian export promotion agencies or companies should abandon all efforts to promote exporting to China. Those companies which have resources available to enter riskier and more difficult markets, should definitely do so, but should also be made aware of the challenges and

approach the Chinese market with caution. This is also reflected in the fact that Slovenia already exports more pharmaceuticals to Japan than it does to China, but exports to China are more diverse.

Although Slovenia's exports of pharmaceuticals are high, exports to China and Japan are relatively small compared to the overall exports. There is opportunity here – to perhaps increase the diversity of products exported to Japan, and to increase the exports of pharmaceuticals to China overall.

Lastly, some notes on the Trade-off model were also put forward. Although origin advantage was classified as opportunity by Papadopoulos et al. (2002, p. 171), in Slovenia's case, this is not necessarily so. That might be because the analysis was done on a small economy as opposed to large economies that Papadopoulos et al. (2002) analysed, but the 'origin advantage' of Slovenia is so small that it might actually represent more of a challenge than an opportunity, since it has to compete with other countries that have a much better origin advantage.

References

All references can be found in the full version of the MA thesis available at <https://theses.univie.ac.at/detail/67108/>

About the Author

Tinkara Godec holds a bachelor's degree in international relations from the University in Ljubljana. She is currently Deputy Editor in Chief at European Guanxi and an author at China Observers in Central and Eastern Europe as well as Research Fellow at CEIAS. She has previously interned at Slovenia's Ministry of Foreign Affairs and worked as with Student Think Tank for Europe-Asia Relations (STEAR) and is currently working at the Chamber of Commerce and Industry of Slovenia.

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