Small Economy but Big Lessons: What India and Hungary can Learn from Outward Looking Model of Singapore?

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Abstract: Economic growth is one of the most important jobs for any policy maker. This job becomes more challenging when an economy works in a more interconnected world. In such a globalized world, performances of many smaller economies are path breaking. So it is high time for many big economies of the world to revisit the growth model of smaller economies. Singapore’s outstanding industrial and trade policy have become a great example before the world. Every country’s growth pattern is unique in its own sense. This paper critically examines the three different countries viz. Singapore, India and Hungary’s trade and industrial policy. While observing several arguments that whether the successful result of similar development strategy for every country is possible or not, it is difficult to say that outward looking growth model of a small country like Singapore will certainly offer a big lesson for the smaller economy like Hungary and one of the world’s biggest economies India. It may be difficult to practice, but not impossible that following the growth path of Singapore, both the countries will be able to sustain tremendous growth and economic success. Singapore’s success story gives a valuable message that without government’s proactive role and other conducive factors, no country can progress.

Keywords: restricted industrialization, trade policy, industrialization process, country’s share of world exports
Introduction

Trade growth and industrialization progress both are the significant indicators of any country’s economic development. Since trade is considered as an engine of growth (Robertson, 1938) and industrialization is considered as a promoter of growth. Thus, it can be said that the success of an economy depends on both the effectiveness of trade policy, which regulates trade and industrialization process that promotes industrial development. Trade policy and industrialization process must be complementary to each other. Because, the prior objective of industrial policy is to promote trade, the primary objective of trade policy is to speed up the process of industrialization. The more trade policy and industrialization process of a country complements or supports each other, the more success in terms of growth, that country will experience. Tilman (2011) argued that one of the problems for developing and lower middle income countries is lack of coordination between their industrial policies and trade policies and others. At the present time, every economy’s goal is to have a long-run sustained growth. But, their way and strategies differ. As far as development strategy is concerned, there always remains big debate between the free traders, who advocate outward-looking export promotion strategies of industrialization, and the protectionists, who are proponents of inward-looking import substitution strategies (Michael and Stephen, 2003). Michael and Stephen (2003) called the promoters of inward looking strategies the trade pessimists and the proponents of export promotion policies the trade optimists.

Paul and Maurice (2009) defined import substitution industrialization process as the strategy of encouraging domestic industry by limiting imports of manufactured goods and protecting domestic manufacturers from international competition. Paul and Maurice (2009) also explained export promotion strategy as the strategy of encouraging more and more export of manufactured goods by adopting free trade policy rather than protectionist measures. Jagdish (1988) classified export-promoting trade strategy into two strategies: Export-promoting and ultra-export promoting trade strategy. Export- promoting trade strategy is defined as the situation, when the incentive to produce the exportable goods equals to produce the import-competing goods. When the incentive to produce exportable good exceeds that to produce the import-competing goods, this is the ultra-EP strategy. It is very clear that, today, Singapore is one of the highly advanced countries of the world. It emerged as newly industrialized economy at the forefront of developing countries. Hungary in recent years has shown tremendous progress in terms of trade and industrial development, but still it needs to develop more. India, which is considered as one of the fastest growing economies in the world, is still struggling to achieve higher productivity and efficiency led growth.

The paper focuses on studying strategies related to trade policy and industrialization process of the three different countries, India, Singapore (Asian countries one which is very big in terms of its size and another very small) and Hungary (a Central and
Eastern European Country). The paper also tries to answer the question, why Singapore is more advanced than India and Hungary at present. What kind of role, trade policy and industrialization process of these countries have played in their growth and development?

2 Literature review

In the global scenario, 1950’s and 1960’s saw the high tide of import-substituting industrialization. Since late 1960’s, it has come under increasingly harsh criticism. By the late 1980’s, the critique of this policy has been widely accepted by economists. Meanwhile, developing countries had started liberalizing trade. Now the efforts have been shifted to promote more exports of manufacturing goods. Since late 1960’s, arguments regarding the export promotion, trade strategy had been started and is still continued. Meanwhile, a large number of empirical studies have been conducted focusing on the impact of export-promotion development strategy for economic growth. Econometric studies were conducted of the export-growth relationships. Study by Robert (1967) confirmed that there is highly significant relation between export growth and increase in per capita GNP. It was found that 1% increase in per capita GNP is associated with a 3% increase in exports. Another study by William (1981) included 55 middle income developing countries for the period 1960-1977, observed significant positive associations between growth and total exports. Bela (1985) found in a study of 43 developing countries during 1973-78 that export promotion policy has favorably affected growth performance. Jessie (1994) studied the significance of development level in determining export-growth relationships. The study suggested that export promotion strategy is not equally effective at all stages of the development cycle rather than at the intermediate development level.

Jagdish (1988) examined the old and new arguments that questioned the understanding of export-promotion strategy. While considering experiences from the studies on the advantages of the export promotion trade policy and examining several new sources of arguments concerning export promoting trade strategy, Jagdish (1988) concluded that an export promotion trade strategy remained the preferred option for every country and developing countries should adopt the policy in line with the industrialized countries. Tilman (2011) argued that the success of any industrial policy depends on how effectively it has been designed and implemented. The objectives and challenges for industrial policy in low and lower-middle income countries are quite different from those in higher income countries. The challenges for low income countries are to balance the patterns of development spatially, develop resource-efficient technologies, coordination failure, lack of monitoring, evaluations and other political checks and balances, fragmentation of the business community, lack of comparable strategic focus and political
determination. Low and lower-middle-income countries need to pursue proactive industrial policies to achieve success.

While studying the industrial and trade policy of the three economies (India, Singapore and Hungary), it has been observed that Singapore has adopted an export promotion model since 1967. As far as India and Hungary are concerned, there are many similarities between the two in terms of trade protection and industrialization as both had adopted restricted industrialization until 1990 (Takács and Nalin, 2016). The study has taken into consideration three strands of theoretical literature.

The first strand of literature observes the role of industrial and trade policy in Singapore’s economic transformation. Singapore’s growth process and its economic strategies have seen the most attention from the development planners all around the world. Jagdish (1988) gave credit of substantial improvements in the export performance of Singapore for their shift to an export promotion trade strategy. Singapore’s industrialization policies are characterized by an export-oriented manufacturing led by the multinational corporations (MNCs). There were several state agencies for industrial development (H.A. Yun, 1994). Gundy et al. (2004) divided Singapore’s economic strategies into three categories: government’s strategic role, mobilization of its human capital, continuous development of infrastructure. Since 1980’s, the government proceeded towards development of high value added and high technology industries. So, the composition of exports also changed from low-skilled industrial products to high-skilled manufacturing products. At present, Singapore’s industrialization policy is directed towards achieving high technology economy and expanding external ties with the world. All in all, Singapore’s success became possible because of a right combination of state led social and economic policies and right place and timing of reforms. While studying the role of industrial and trade policy in the success of the East Asian economies (Singapore is one), Paul and Maurice (2009) were of the view that it is unfair to say that industrial policy was a key driving force behind Asian success. Also, it can be said that trade policy of these economies has permitted growth, but wrong to say that it caused growth.

The second strand of literature deals with the Hungarian trade policy and industrialization process. J. Drecin (1975) talked about the internal social and economic contradictions that restricted the country from achieving higher level of industrialization. They are: lack of qualified labor, its small internal market, social tensions among the masses because of low living standards. Industrial development in Hungary needs greater specialization and modernization of products, technological development and better international relations. Josef (1984) analyzed industrial policy of Hungary on the basis of four criteria: selecting industries for promotion, selecting markets for sale, allocating resources towards target sectors and achieving production and exports. It was concluded that Hungarian planners were not fully succeeded in all these criteria. Like Singapore, Hungary’s economic growth was also driven by expansion of exports and investments. Francoise (1996) examined the trade policy reforms of Central & Eastern European Countries
(CEECs) including Hungary in details and made a comparison with China. Limited foreign trade reforms had been implemented in the 1970s and 1980s in the CEECs. Since 1989, complete trade reforms were adopted. Between 1989 and 1991, the trade monopoly was abolished, quantitative restrictions on imports sharply reduced or eliminated for most industrial products, tariff barriers were set at a low, or moderate level, currency convertibility was in progress, measures to attract foreign direct investments was adopted. CEECs’s approach towards trade reforms was trade liberalization and namely import liberalization aimed at integrating the European Union. Andrea et al. (2000) evaluated new trade policy orientation adopted by Hungary during 1990s and found it successful. It was argued that there were two basic objectives of the new policy: to be integrated with the world economy and, to establish trade relation with the European Union. In the 50’s and 60’s, forced industrialization development policy was adopted by Hungary. It wanted to achieve the condition of self-sufficiency and economic independence and to survive without any external assistance (Tabor, 2004 and J. Fazekas, 2008). Priyanka et al. (2013) discussed about the trade policy of Hungary and said that from 1950’s - 60’s till 90’s, restrictive economic policy remained continue.

The third strand of literature focuses on trade policy and industrial reforms of India. Thirukodikaval (1991) expressed the view that India’s trade and industrial policy have failed. The entire system of discretionary and quantitative restrictions on any economic activity must be abandoned once and for all. But, still in present scenario, India has not abandoned the restrictions completely. The question also arises that how India’s export promotion strategy should be for sustaining long term growth. G. M. Naidu et al. (1997) proposed an export promotion framework for India, while concerning the experiences of other countries that have adopted similar strategies. The study mentioned some problems in India’s export promotion strategy like, high level of government intervention, lack of coordination, clear objectives and vision, extensive duplication of efforts. Some more initiatives were suggested that must be taken for export promotion. Such initiatives are to increase country’s competitiveness through infrastructure development and maintenance, adopt a systematic approach to export development, minimize bureaucracy and promote entrepreneurship, develop partnerships between public and private organizations, promote effectiveness of programs, competing in R & D and quality, accountability of public and private organizations, etc. Arvind (2008) gave credit of Korea’s outstanding performance during the 1960s-70s to its outward oriented policy on the other hand provide a credit of India’s poor performance in its inward looking policy. Petia and Amit (2011) studied the impact of India’s trade reforms on firm productivity and found it positive. It was found that there were complementarities between trade liberalization and additional industrial policy reforms. Jagdish and Arvind (2013) pointed out the weaknesses of India’s industrial sector like, poor performance of labor intensive firms, small size of Indian firms, less of large and medium sized firms comprising industry and dominance of small sized firms. While discussing the history of India’s trade policy, Priyanka et al. (2013) notified that from 1947 till 1990, firstly the purpose of trade policy has been to restrict imports
and boost exports, and in later years, to stimulate economic growth and export promotion via import liberalization. Since 1991, external trade liberalization has taken place, which resulted in a major shift in the growth of India’s trade.

In a nutshell, the above literature shows that there are empirical evidences of positive relations between export growth and growth in income or GNP. While focusing on theoretical as well as applied studies on trade and industrial policy of the three economies, it has been found that Singapore’s development strategy is much more synchronized and well structured than Hungary and India.

3 Materials and Methods

An analytical approach has been adopted to critically evaluate the trade policy and industrialization pattern of the three countries. To clearly depict the trade performance of all the three countries, their export shares in world exports have been calculated. It is the percentage of a country’s total exports in the world's total exports. This ratio is being used to evaluate the changes of a country’s share in world markets over time.

India’s share of world export is calculated as:

\[ E_i = \left( \frac{I_x}{W_x} \right) \times 100 \]

Where, \( I_x \) = India’s goods export in the world
\( W_x \) = Total goods export in world

Singapore’s share of world export is calculated as:

\[ E_s = \left( \frac{S_x}{W_x} \right) \times 100 \]

Where, \( S_x \) = Singapore’s goods export in the world
\( W_x \) = Total goods export in world
Hungary’s share of world export is calculated as:

\[ E_h = \left( \frac{H_x}{W_x} \right) \times 100 \]

Where, \( H_x \) = Hungary’s goods export in the world
\( W_x \) = Total goods export in the world

The data for comparing economic performance of the three countries have been taken mostly from World Bank, World Economic Forum and IMD World Competitiveness center. For a comparative study of the trade policy and the industrialization process of the three countries, three main sources are- Ministry of trade and Industry of Singapore, the Hungarian Chamber of Commerce and Industry in Hungary, and Ministry of Commerce and Industry of India.

**Singapore’s Trade Policy and Industrialization Process**

Before the 1960s, Singapore was a dependent nation. There was a lack of natural resources, hinterland and industry. The country was fully dependent on entrepot trade of the East India Company. There was no specific industrial strategy. In the first half of the 1960s, Singapore approach towards trade was somehow restrictive. In the latter half of the 1960s, Singapore adopted export promotion and outward oriented trade policy. The labor intensive industrialization process had been adopted and the focus was on building labor intensive industries. In 1970’s, the trade policy was directed towards increasing export potential. Export-oriented industrialization process has been adopted to attract FDI into the country to increase productive capacity. During 1980’s, industrialization process was aimed to enhance overall competitiveness of the economy compared to other regional economies. Since 1990s, the strategy has been to make Singapore’s firms more entrepreneurial and Singapore’s workforce more experts and to be competitive with international standards. After 2000s, innovation driven industrialization process has been adopted.

**Hungary’ Trade Policy and Industrialization Process**

From 1945-1967, being a member of the Council for Mutual Economic Assistance (CMEA), restrictive trade practices have been adopted. Industrial policy has been forced from the center, that means planned and executed from the top down. No incentives were there to develop and produce competitive products by industrial units. In 1968, market-oriented reforms had been introduced by the New Economic Mechanism. Under this, state control was reduced. The focus was being given on developing priority sectors. Seeing the poor performance of production, attention was paid towards specialization, higher standard for products and management,
domestic and foreign demand, availability of infrastructure and manpower. After the termination of CMEA in 1991, strategy of trade policy changed. Trade relation was established with foreign countries. Imports were liberalized and foreign investments have been encouraged.

India’s Trade Policy and Industrialization Process

India’s trade policy was relatively freer during British rule. Like other developing countries, India followed non-industrial model. During the period 1948-1980, India’s regulatory policy regime became more restrictive. Liberalization of foreign trade was adopted during 1952-57. After that, restricted import policy was adopted till 1966. Again, export promotion and import restriction strategy have been adopted till 1975. In the late 1970s, the import liberalization policy had been adopted. All in all, inward looking industrial policy had been adopted. There was extensive intervention of the Indian state in industrial development. Various acts and regulations related to industrial policy, development and licensing, like Industrial Development & Regulation Act, 1951, The Industrial Policy Statement, 1973 were enacted during the period. In early 1980s, a trend towards deregulation started. The period saw starting of liberalizing trade, industrial and financial policies. Subsidies, tax concessions were given for encouraging exports. The industrial policy statement of 1980 placed emphasis on the promotion of competition in the domestic market, technological up-gradation and modernization of industries. Since 1991, trade policy was directed towards lessening of administrative controls and barriers to the free flow of goods and services. There were removal of quantitative restrictions on goods, elimination of a system of licensing and reduction in tariff rate. Industrial Policy of 1991 includes provisions like, Liberalization of Industrial Licensing Policy, Introduction of Industrial Entrepreneurs’ Memorandum, reforms of the state-owned undertakings, liberalization of location policy, Electronic Hardware Technology Park (EHTP)/Software Technology Park (STP) scheme, liberal foreign investment policy.

4 Results and discussions

The result of the paper can be discussed at the two levels: Policy level and empirical level. At the policy level, a clear cut comparison in strategies related to trade policy and industrialization process among the three countries has been presented through the table 1.
Trade policy

<table>
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<tr>
<th>Singapore</th>
<th>Hungary</th>
<th>India</th>
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<tr>
<td>• In the latter half of the 1960s, outward oriented trade policy has been adopted.</td>
<td>• Restrictive trade policy has been adopted till 1990.</td>
<td>• Restrictive trade policy till 1980</td>
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<tr>
<td>• With the objective to promote free, fair, stable, strong, liberal and rule based trading system.</td>
<td>• After 1990s, import and wage rate were liberalized.</td>
<td>• Trade liberalization, liberalization of industrial sectors stared from 1980s</td>
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<tr>
<td></td>
<td>• Focused on expansion of exports and attracting foreign investments.</td>
<td>• After the LPG policy in 1991, the fully export oriented policy adopted. The economy became open to trade and investment.</td>
</tr>
</tbody>
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**Industrialization process**

- Focus on making domestic firms more competitive through promoting innovation
- Adopted pro-business, pro-foreign investment economic policy framework.
- Transformed from low skilled and technology based industry to high skilled technology based industry.

- Centrally controlled industrialization process till 1967.
- After 1968, state control was liberalized.
- Since 1991, the unrestricted industrialization policy was adopted.

- Inward looking industrial policy has been adopted till 1980.
- Huge govt. intervention on industrial matters.
- 1980s, the focus was on making industries competitive, technologically friendly and modernized.
- 1990s, industries became open for private sector activities and investments.

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<td><strong>Industrialization process</strong></td>
<td><strong>Centrally controlled industrialization process till 1967.</strong> After 1968, state control was liberalized. Since 1991, the unrestricted industrialization policy was adopted. <strong>Inward looking industrial policy has been adopted till 1980.</strong> Huge govt. intervention on industrial matters. 1980s, the focus was on making industries competitive, technologically friendly and modernized. 1990s, industries became open for private sector activities and investments. <strong>Table1.</strong> Comparison of Trade Policy and Industrialization Process of Singapore, Hungary and India Source: Author’s compilation based on several literatures available At the empirical level, all the three countries’ industrial development and trade performance have been taken into consideration. Table 2 clearly depicts the far**</td>
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greater economic performance of Singapore, while India and Hungary lagged behind it. Among the three, India’s performance is at the least. The World Bank classification of the countries also substantiates this fact.

<table>
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<th>Indicators</th>
<th>Singapore</th>
<th>Hungary</th>
<th>India</th>
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<tr>
<td>GDP (in US billion $)</td>
<td>292.73</td>
<td>120.69</td>
<td>2114.85</td>
</tr>
<tr>
<td>GDP per capita, PPP (US $)</td>
<td>85,253</td>
<td>26,224</td>
<td>6,167</td>
</tr>
<tr>
<td>Total expenditure on R &amp; D (%)</td>
<td>2.20</td>
<td>1.37</td>
<td>0.89</td>
</tr>
<tr>
<td>Ease of Doing business index</td>
<td>2nd</td>
<td>41th</td>
<td>130th</td>
</tr>
<tr>
<td>Global competitiveness index *</td>
<td>2</td>
<td>69</td>
<td>39</td>
</tr>
<tr>
<td>Logistic performance index-</td>
<td>4.2</td>
<td>3.48</td>
<td>3.35</td>
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<tr>
<td>Quality of trade and transport related</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>infrastructure (1=low to 5=high)</td>
<td></td>
<td></td>
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<tr>
<td>Global enabling trade index **</td>
<td>1st</td>
<td>38th</td>
<td>102nd</td>
</tr>
<tr>
<td>High technology exports (current US $)</td>
<td>130.99 billion</td>
<td>11.76 billion</td>
<td>13.75 billion</td>
</tr>
<tr>
<td>Competitive Industrial Performance (CIP) Ranking ***</td>
<td>7</td>
<td>27</td>
<td>43</td>
</tr>
<tr>
<td>a. MVA (Manufacturing value added per capita (2005 $)</td>
<td>9,700</td>
<td>2,365.70</td>
<td>161.7</td>
</tr>
<tr>
<td>b. Manufactured exports per capita (current $)</td>
<td>32,285.9</td>
<td>9,634.30</td>
<td>223.3</td>
</tr>
<tr>
<td>World Bank classification by income</td>
<td>High income</td>
<td>Upper middle income</td>
<td>Lower middle income</td>
</tr>
<tr>
<td>World Bank classification by industrialization level</td>
<td>Industrialized</td>
<td>Industrializing</td>
<td>Industrializing</td>
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Table 2.
Macroeconomic Indicators of Singapore, Hungary and India (2015)
* 2016-17, ** 2016, *** 2013.
The composition of agriculture, industry and services in the GDP of Singapore, Hungary and India in value added terms has been shown in fig. 1, 2 and 3. From fig. 1, 2 and 3, it is clear that Singapore is in a more advanced state than India and Hungary. In Hungary, industry accounted for the highest share of its GDP in value added terms than the others two. This shows that Hungary’s industrialization process is in progress. In case of India, both industry and services sector accounted for a higher share of its GDP in value added terms. In Singapore, services accounted for the highest share of its GDP in value added terms than the others two. This shows that Singapore economy has moved to the later phase of development than India and Hungary.

Figure 1.
Percentage Contribution of sectors in Singapore’s GDP (2015)

Figure 2.
Percentage Contribution of sectors in Hungary’s GDP (2015)
It seems necessary to look at the trade related performance of Singapore, Hungary and India. A comparison can be clearly depicted in the figure 4. It is very clear from the figure that like overall macroeconomic performance, Singapore comes first, Hungary comes second and India comes last in trade performance also.

The three countries’ share of the world export during 2004-14 has been calculated. The result can be shown through figure 5. Singapore’s export share in the world export is the highest among the three countries during 2004 to 2014.
Likewise, trade related performance; industrial performance of the three economies in year 2013 can also be explained through figure 6. In the figure, it is clear that Singapore holds the highest position in terms of all the three parameters. Hungary has performed better than India.

Thus, both Hungary’s and India’s trade policy and industrialization process was not as conducive, effective and efficient as Singapore. One of the reasons for moderate performance of Hungary and India and in opposite spectacular performance of Singapore at international front may be their trade and industrial policy. Both countries’ trade and industrial policy suffer from several limitations, like less strategic attitude towards developing modern technology intensive industries, and less focus on developing the skills of their workforce.
Conclusion

After comparing the trade and industrial policy reforms of the three countries, Singapore, Hungary and India, it has been found that in spite of adopting similar export promotion development strategy by all the three, Singapore became more advanced and globally recognized than Hungary and India. The success of Singapore is clearer to the world today due to government’s proactive steps in nurturing the entrepreneurs, formulating a clear cut policy and supporting with a world class social and physical infrastructure. Advancement of Singapore over Hungary and India is well reflected in the table 1, showing development indicators of all the three countries. Moreover, Singapore’s trade, exports as well as imports as a percentage of GDP is also higher than Hungary and India (figure 4). It is still a debatable matter among development economists that development strategy of any economy will be as effective as for others also. Observing the affirmative relation between a country’s economic performance and trade and industrial policy reforms, it can be said that Singapore presents a strong case for implementing such steps in Hungary as well as in India.

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