Singapore: 1960s

- Small nation
- Low industrial base
- High unemployment
- Social unrest
- Hostile environment
- Overdependence on entrepot trade
- No natural resources
- Withdrawal of British base
Singapore: 1960s

Small Nation
- High Unemployment
- Low Industrial Base
- Hostile Environment

Social Unrest
- Withdrawal of British Base
- Overdependence on Entrepot Trade
- No Natural Resources

3-pronged strategy adopted

Enhance existing advantage
- Entrepot trade
- Marine sector
- Oil refinery
- Reduce trade tariff
- Tourism

Strategy

Build new capability
- Market, capital and technology transfers via foreign investment
- Expand market beyond the region
- Nationalise areas where private sector has no expertise
- Tax incentives

Complementary policies
- Legislation-institutional framework on labour matters
  - Pro-enterprise bureaucracy
  - Housing/Healthcare policy
- Education policy focusing on technology
  - Population policy

Source: Literature search
Infrastructure is an integral part of the strategy

**Industrial Park**
- Development of Jurong Industrial Estate commenced in 1961

**Port**
- Development of Keppel Harbour
- First container berth opened in 1972

**Airport**
- Decision made in 1975 to build Changi Airport

Contributes to success of export-oriented policy via foreign investment

Source: Literature search

---

Singapore’s industrialisation story

**THEN**
- Small domestic market (less than 2 million people, low per capita income) and loss of a common market, i.e. Malaysia
- No natural resource endowment
- Over-dependent on entrepot trade and servicing British navy base
- Minimal industrial base (mainly in non-durable consumer goods)
- Withdrawal of British military base
- Low education base (~60% literacy rate)
- High unemployment (~9%)

**NOW**
- Per capita income of US$38,000
- Key industries: Electronics, Oil, Pharmaceutical
- Leader in foreign trade and investment (AT Kearney)
- World’s easiest place to do business (World Bank)
- No 2 city in the world with the best investment potential (BERI)
- Best skilled labour in Asia-Pacific (IMD)

Source: Literature search
Singapore is a key trader, investment recipient, and owner in the world

- 14th largest merchandise exporter (share = 2.1%) and 15th largest merchandise importer (share = 1.9%) in 2008
- 17th largest commercial service exporter (share = 1.9%) and 15th largest commercial service importer (share = 2.2%) in 2008
- 17th largest recipient of foreign direct investment stock (share = 1.6%) and 18th largest owner of foreign direct investment stock (share = 1.0%)

Source: WTO, UNCTAD

Areas with high density, proximity and better linkage to regional and global markets will tend to do better economically

- **Density**: A certain level of economic concentration is required
- **Distance**: Economic distance (cost and time taken for moving goods/services) from major markets
- **Division**: Integration with the region and global market

Infrastructure is a key policy option for countries far from world market

Table 9.1: An instrument per dimension—a simple framework for regional integration

<table>
<thead>
<tr>
<th>Region or Neighborhood</th>
<th>Close to world markets</th>
<th>With big countries far from world markets</th>
<th>Small countries far from world markets</th>
</tr>
</thead>
<tbody>
<tr>
<td>World neighborhoods</td>
<td>Central America and Caribbean, North Africa, Middle East</td>
<td>South America, Southern Africa, East Asia, South Asia</td>
<td>Central Africa, East Africa, West Africa, Central Asia and Caucasus, small Pacific Islands</td>
</tr>
<tr>
<td>Dimensions of the regional integration challenge</td>
<td>International division (0-1)</td>
<td>Regional division, economic distance (0-1)</td>
<td>International division, economic distance, tax ideas (0-3)</td>
</tr>
<tr>
<td>What policy instruments should facilitate</td>
<td>Integration with large nearby markets</td>
<td>Regional integration</td>
<td>Regional and global connectivity</td>
</tr>
<tr>
<td>Priority Instruments</td>
<td>Institutions: Agreements on trade and factor mobility within region and with large markets nearby.</td>
<td>Regional integration</td>
<td>Regional and global connectivity, Regional compensation mechanisms</td>
</tr>
<tr>
<td></td>
<td>Infrastructure: Transport corridors connecting to large regional economies. Regional power grids, telecommunications, water management.</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Incentives: Subsidized human development investments in targeting countries and areas. Productive investments in funding countries and areas. Preferential market access.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>


Concentration of export-oriented activities in areas with global connectivity

Map 9.1: Exporting in industries concentrated in coastal areas to minimize distance to the global market

Transport costs matter for export-oriented activities; infrastructure is a key factor in play

For the last two decades, the trade policy agenda of Latin America has been dominated by traditional market access and policy barriers issues. It has paid off. Tariffs have come down a lot. Most tariff reduction efforts saw tariffs fall from more than 40 percent in the mid-1960s to close to 10 percent by 2005. NAFTA trade agreements continue to dominate policy discussions in the region. But transport costs are now more important than tariffs. Simple averages of export and import freight rates from 6.3 percent in Argentina to 12 percent in Colombia for intra-regional freight, and 3.5 percent in Uruguay to 25 percent in landlocked Paraguay. Freight costs in Latin America and the Caribbean for exports to the United States—where most foreign trade systems are focused—have been three to five times higher than intra-regional freight. Lower efficiency and weak competition in the maritime transport sector seems to be the culprit (see figure to the right). On average, transport costs in Latin America would decline by 20 percent if countries in the region had U.S. levels of port efficiency.

A reduction in transport costs would bring about substantial benefits. A 10 percent decrease in trade costs would increase the region’s exports by 3 percent and intra-regional exports by more than 50 percent. The benefits of better transport policies seem to be much larger than lower tariffs. Compared with a similar reduction in tariffs, the benefits of a fall in transport costs for intra-regional exports are almost seven times larger and lead to an increase in the number of products exported to the region, which is nine times bigger than a similar reduction in tariffs. Source: Inter-American Development Bank, Indebtorizing.


Agglomeration has resulted in economic concentration in countries

Economic concentration is a global phenomenon

Note: Each data point represents an agglomeration area of population size of 750,000 or more.

Infrastructure is also key for income distribution to lagging areas

Table 3 - "Anita G. H. A role of the production of the policy vs. space"

<table>
<thead>
<tr>
<th>Complexity of challenge</th>
<th>Policy type — local (L), national (N), and international (I)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Policy priorities for economic integration</td>
</tr>
<tr>
<td></td>
<td>Institutions</td>
</tr>
<tr>
<td>One-dimensional problem</td>
<td>LN</td>
</tr>
<tr>
<td></td>
<td>N</td>
</tr>
<tr>
<td>Two-dimensional problem</td>
<td>L</td>
</tr>
<tr>
<td></td>
<td>N</td>
</tr>
<tr>
<td>Three-dimensional problem</td>
<td>L</td>
</tr>
<tr>
<td></td>
<td>N</td>
</tr>
<tr>
<td></td>
<td>N</td>
</tr>
<tr>
<td></td>
<td>N</td>
</tr>
</tbody>
</table>

Note: The production of the policy vs. space areas within country economic neighborhoods or administrative units such as cities, provinces, and regions and of spaces based on geographic proximity.
Infrastructure is only part of the policy formula

**Limitation**
- Small country
- No natural resource endowment

**Endowment**
- Strategic geographical location
- People

**Philosophy**
- Free market system
- Outward orientation

**Government role**
- Provide legislative framework
- Provide stable environment for business
- Facilitating business
- Investing in infrastructure and manpower

_Source: Literature search_

Singapore has to constantly adjust its policies although it has a world-class infrastructure

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Challenges</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tight labour market with upward pressure on wages</td>
<td>More mature economy with slower growth</td>
<td>Hit by the Asian financial crisis in 1997 through linkages with the regional economies</td>
</tr>
<tr>
<td>Emergence of lower-cost developing countries, which become strong contenders for foreign investment</td>
<td>Rising cost with resource constraints</td>
<td>Affected by synchronised downturns in major developed countries and global electronics industry in 2001, and terrorist attack in US</td>
</tr>
<tr>
<td>Wage policy to encourage efficient use of labour</td>
<td>More intense competition</td>
<td>Rise of large new players like China and India</td>
</tr>
<tr>
<td>Manpower development via training</td>
<td>Low technology base on global basis</td>
<td>Expand external ties through multilateral trading framework and bilateral negotiation</td>
</tr>
<tr>
<td>Encouraged automation, mechanism and computerisation</td>
<td></td>
<td>Maintain competitiveness and flexibility to remain price competitive</td>
</tr>
<tr>
<td>Shifted towards higher value-added investment promotion</td>
<td>Regionalisation</td>
<td>Promote entrepreneurship and domestic companies</td>
</tr>
</tbody>
</table>

**Strategy**
- Deepen technology base
- Cluster development
- Promote manufacturing and services as twin pillars of economy
- Regionalisation

_Source: Ministry of Trade and Industry_
In fact, infrastructure is a factor under “basic requirements” for measuring competitiveness.

**Basic requirements**
- Institutions
- Infrastructure
- Macroeconomic stability
- Health and primary education

**Efficiency enhancers**
- Higher education and training
- Goods market efficiency
- Labor market efficiency
- Financial market sophistication
- Technological readiness
- Market size

**Innovation and sophistication factors**
- Business sophistication
- Innovation

**Key for factor-driven economies**

**Key for efficiency-driven economies**

**Key for innovation-driven economies**


---

**Conclusion**

- Infrastructure is important for economic development, especially in a globalised environment
- Infrastructure development is necessary for more equitable income distribution to lagging areas
- Infrastructure development is not a cure-all solution but a part of the economic policy formula
THANK YOU