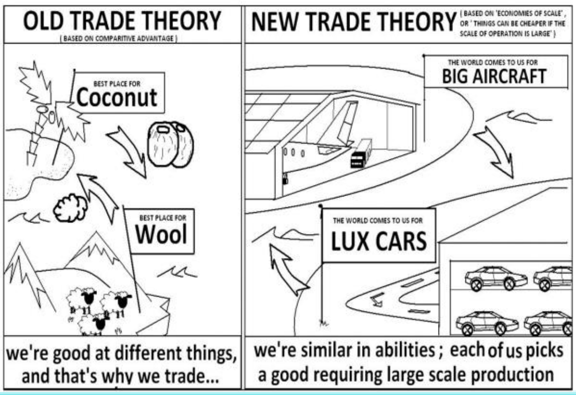
Beyond Comparative Advantage



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Introduction: More Reasons to Trade

Trade models built exclusively on the idea of comparative advantage have a mixed record when it comes to predicting a country's trade patterns.

- It is exceedingly difficult to precisely measure a country's comparative advantage
- A large share of international trade is not based on comparative advantage.

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Intra-industry and Inter-industry Trade

- Intra-industry trade: International trade of products made within the same industry (steel-for-steel, bread-for-bread)
- Intra-industry trade is growing increasingly important in international trade especially between industrial countries
- Inter-industry trade: International trade of products between two different industries (steel-for-bread)

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Intra-industry and Inter-industry Trade

Type of Trade	Phrase	Meaning	Source
Inter-industry	Either/or	Either imports or exports in a given sector of the economy	Comparative advantage
Intra-industry	Both/and	Both imports and exports in a given sector of the economy	Product differentiation

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Characteristics of Intra-industry Trade Once Again

- Intra-industry trade between industrial countries is common
- Fundamental problem is defining an industry.
- For example, if computers are defined as office machinery, then computers and pencil sharpeners are in the same industry,
- More broadly an industry is defined, the more trade appears to be intra-industry

Evidence suggests that intra-industry trade is greater
  - in high technology industries
  - where there is more scope for product differentiation
  - in countries more open to trade
  - in nations that have received larger amounts of foreign direct investment

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The Gains from Intra - industry Trade

- Lower prices: An increase in the size of the market allows for scale economies, which lowers production costs and eventually prices to consumers
- Increase in the number of firms: There is a high likelihood that intra industry trade expands the number of domestic firms and the quantity of domestic output
- Increase in consumer choices: Intra-industry trade tends to give access to a much greater variety of goods than produced domestically

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Trade and Geography

- Two fundamental links exist between trade and geography:
  - A place may pull in economic activity because it is close to a market (cities are low cost for expansion)
  - A place may offer firms the opportunity to find critical inputs (skilled labor)

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Geography, Transportation Costs, and Internal Economies of Scale

- For most manufactured goods, it is not practical to produce next to each market due to economies of scale (producing cars next to dealerships)
- Not all types of manufacturing have same level of transportation costs (presence of scale economies makes near market production impractical)
- Most foreign investment today is directed towards high income countries (to access larger markets), not developing countries
- All else equal, lower transportation costs often outweigh other costs that might be higher (southward shift of U.S. car manufacturing to be closer to final assemblers)

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External Economies of Scale

- External economies of scale occur when firms become more productive as the number of firms in an industry increases
  - If a firm in a region produce similar products, they will benefit from knowledge spillovers
  - When the presence of a large number of producers in one area creates a deep labor market for specialized skills
  - If an area holds a dense network of input suppliers, manufacturers locate near the suppliers

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Trade and External Economies

- Geographical concentration may be self-reinforcing:
- For example, as firms attract skilled workers or specialized input suppliers, the increased availability of high-quality inputs creates feedback leading to more firms in the same industry locating in the area.

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Industrial Policy

- Industrial policy: A government's policy designed to create new industries or support existing industries
  - industrial policies are controversial
  - in some cases they clearly are politically motivated and end up wasting huge amounts of money.

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Industrial Policy Tools

Common practices used by governments in some newly industrializing countries:

1. sell foreign exchange to targeted firms at below-market prices
2. provide government loans to private firms at below-market interest rates
3. provide government guarantees on loans obtained from the private sector
4. governments provide special tax treatment to targeted industries

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Industrial Policy Tools

5. Governments use their own purchases as a way to develop an industry.
6. firms are guaranteed a profit on the development of new products
7. Governments often support industries by encouraging firms to work together, either
   - through the direct funding of the research done by consortia and/or
   - through the relaxation of antitrust laws.

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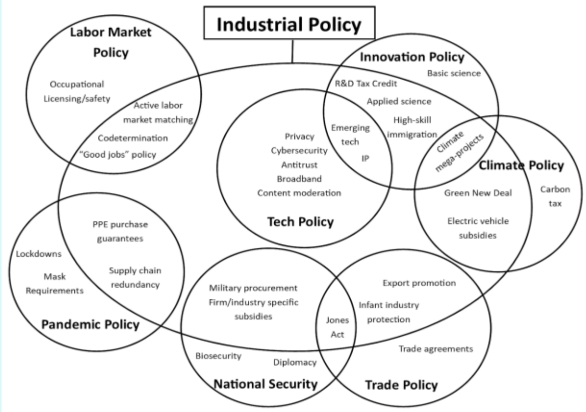

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Industrial Policies Example from USA

- Export-Import Bank (Eximbank)
  - Independent agency of the U.S. government
  - Guarantees of working capital loans for U.S. exporters to cover pre-export costs
  - Export credit insurance that protects U.S. exporters or their lenders against commercial or political risks of nonpayment by foreign buyers
  - Guarantees of commercial loans to creditworthy foreign buyers of U.S. goods and services
  - Direct loans to these foreign buyers when private financing is unavailable
  - Special programs to promote U.S. exports of environmentally beneficial goods and services
  - Asset-based financing for large commercial aircraft and other appropriate exports
  - Project financing to support U.S. exports to international infrastructure projects

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Problems with Industrial Policies

- A basic problem is that it is difficult to obtain the information necessary to measure the extent of market failure.
- Second problem is determining which industry to target.
- Industrial policies encourage rent seeking.
- Rent seeking: An activity, such as lobbying, by individuals, firms, or special interests to alter the distribution of income in their favor

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Problems with Industrial Policies

Opponents **of industrial policies:**

- Sound macroeconomic policies,
- High rates of saving and investment, and
- High levels of schooling were the keys to success, not industrial policies

Proponents:

- Opponents reasoning is ideological

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New Trade Theory

- **New trade theory** suggests that the ability of firms to gain **economies of scale** (unit cost reductions associated with a large scale of output) can have important implications for international trade
- Countries may specialize in the production and export of particular products because in certain industries, the world market can only support a limited number of firms
  - new trade theory emerged in the 1980s
  - Paul Krugman won the Nobel prize for his work in 2008

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What Are The Implications Of New Trade Theory For Nations?

- Nations may benefit from trade even when they do not differ in resource endowments or technology
  - a country may dominate in the export of a good simply because it was lucky enough to have one or more firms among the first to produce that good
- Governments should consider strategic trade policies that nurture and protect firms and industries where first mover advantages and economies of scale are important

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What Is Porter's Diamond Of Competitive Advantage?

- Michael Porter (1990) tried to explain why a nation achieves international success in a particular industry
- Porter identified four attributes that promote or impede the creation of competitive advantage

1. Factor endowments
2. Demand conditions
3. Relating and supporting industries
4. Firm strategy, structure, and rivalry

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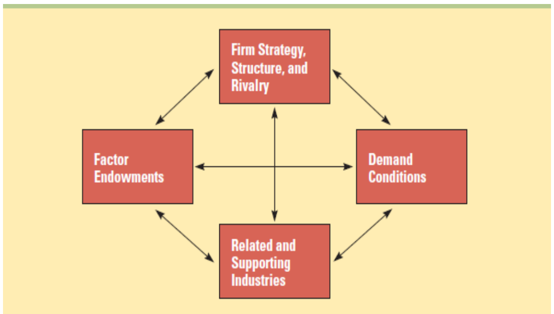
What Is Porter's Diamond Of Competitive Advantage?

Determinants of National Competitive Advantage: Porter's Diamond



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Does Porter's Theory Hold?

- Government policy can
  - affect demand through product standards
  - influence rivalry through regulation and antitrust laws
  - impact the availability of highly educated workers and advanced transportation infrastructure.
- The four attributes, government policy, and chance work as a reinforcing system, complementing each other and in combination creating the conditions appropriate for competitive advantage
  - So far, Porter's theory has not been sufficiently tested to know how well it holds up

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Thoughts?

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