International Product Life Cycle Theory

Lecture 6

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Evolution of Trade Theories

- Mercantilism
- Absolute Advantage
- Comparative Advantage
- Factor proportion Trade
- **International Product Cycle**
- New Trade Theory
- National Competitive Advantage

Lecture 6

- The **product life-cycle theory** is an economic theory that was developed by Raymond Vernon (1966) in response to the failure of the Heckscher-Ohlin model to explain the observed pattern of international trade.

International Product Life Cycle Theory

- A theory of the stages of production for a product with new “know-how”: it is first produced by the parent firm, then by its foreign subsidiaries and finally anywhere in the world where costs are the lowest; it helps to explain why a product that begins as a nation’s export often ends up as an import.

International Product Life Cycle Theory

- The theory suggests that early in a product's life-cycle all the parts and labor associated with that product come from the area in which it was invented.
- After the product becomes adopted and used in the world markets, production gradually moves away from the point of origin.
- In some situations, the product becomes an item that is imported by its original country of invention. A commonly used example of this is the invention, growth and production of the personal computer with respect to the United States.

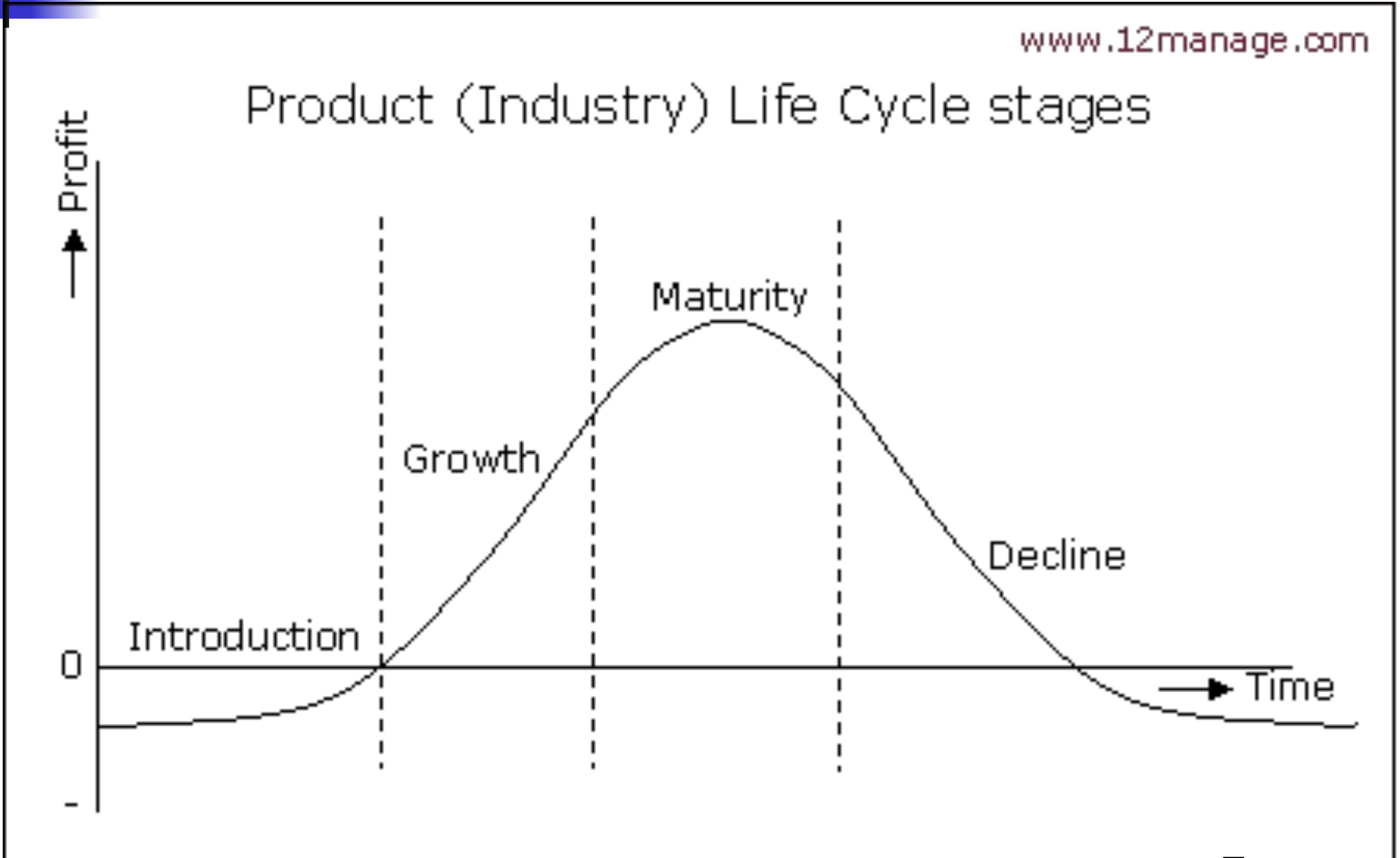
International Product Life Cycle Theory

There are five stages in a product's life cycle:

- Introduction
- Growths
- Maturity
- Saturation
- Decline

The location of production depends on the stage of the cycle.

International Product Life Cycle Theory



International Product Life Cycle Theory

Stage 1: Introduction

- New products are introduced to meet local (i.e., national) needs, and new products are first exported to similar countries, countries with similar needs, preferences, and incomes. If we also presume similar evolutionary patterns for all countries, then products are introduced in the most advanced nations. (E.g., the IBM PCs were produced in the US and spread quickly throughout the industrialized countries.)

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Stage 2: Growth

- A copy product is produced elsewhere and introduced in the home country (and elsewhere) to capture growth in the home market. This moves production to other countries, usually on the basis of cost of production. (E.g., the clones of the early IBM PCs were not produced in the US.)
- The Period till the Maturity Stage is known as the Saturation Period.

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Stage 3: Maturity

- The industry contracts and concentrates—the lowest cost producer wins here. (E.g., the many clones of the PC are made almost entirely in lowest cost locations.)

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Stage 4: Saturation

- This is a period of stability. The sales of the product reach the peak and there is no further possibility to increase it. this stage is characterised by:
  - Saturation of sales (at the early part of this stage sales remain stable then it starts falling).
  - It continues till substitutes enter into the market.
  - Marketer must try to develop new and alternative uses of product.

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Stage 5: Decline

- Poor countries constitute the only markets for the product. Therefore almost all declining products are produced in developing countries. (E.g., PCs are a very poor example here, mainly because there is weak demand for computers in developing countries. A better example is textiles.)

- Note that a particular firm or industry (in a country) stays in a market by adapting what they make and sell, i.e., by riding the waves. For example, approximately 80% of the revenues of H-P are from products they did not sell five years ago. the profits go back to the host old country.

International Product Life Cycle Theory

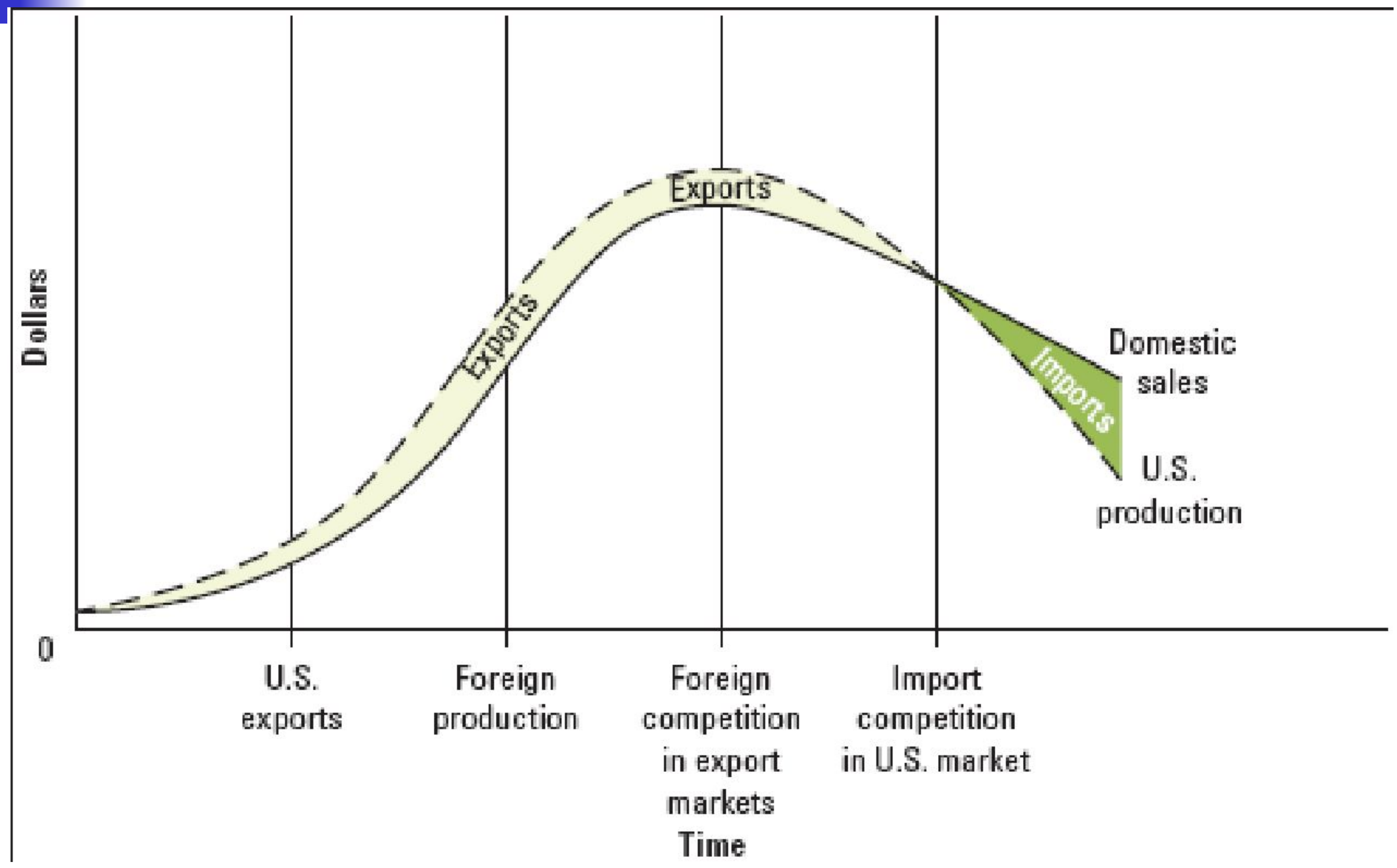
- The international product life cycle theory stresses that a company will begin to export its product and later take on foreign direct investment as the product moves through its life cycle.

- Eventually a country's export becomes its import. Although the model is developed around the U.S, it can be generalised and applied to any of the developed and innovative markets of the world.

International Product Life Cycle Theory

- In the new product stage, the product is produced and consumed in the US; no export trade occurs.
- In the maturing product stage, mass-production techniques are developed and foreign demand (in developed countries) expands; the US now exports the product to other developed countries.
- In the standardized product stage, production moves to developing countries, which then export the product to developed countries.

International Product Life Cycle Theory



The Theory in Today's World

The product life cycle theory was developed during the 1960s and focused on the U.S since most innovations came from that market. This was an applicable theory at that time since the U.S dominated the world trade.

- **Today,** the U.S is no longer the only innovator of products in the world.
- **Today** companies design new products and modify them much quicker than before. Companies are forced to introduce the products in many different markets at the same time to gain cost benefits before its sales declines. **The theory does not explain trade patterns of today.**