

Industrial and Economic Development Patterns and Processes

AP Human Geography

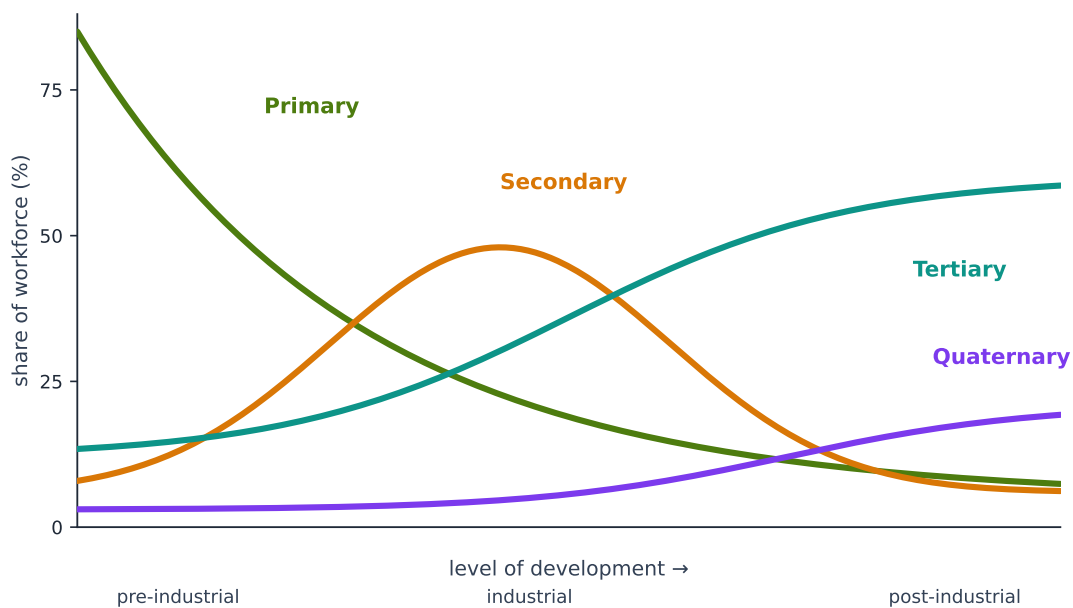
The Industrial Revolution

The **Industrial Revolution** 工业革命 (from the 1700s) shifted production from hand tools in homes to machines in factories, first in Britain and then worldwide. It transformed geography:

- Industry clustered where **resources** (coal, iron) and **transport** (rivers, ports, rail-ways) came together.
- It powered **urbanization** as workers moved to factory cities, and it began the huge, uneven spread of wealth between world regions.
- **Break-of-bulk points** 转运点 (ports, rail hubs where cargo changes transport) became key industrial locations.

Economic Sectors and Patterns

An economy's jobs fall into sectors, and the mix shifts as a country develops.



As development rises, workers move from primary (farming) to secondary (industry) to tertiary and quaternary (services)

- **Primary sector** 第一产业—extracting raw materials (farming, mining, fishing).
- **Secondary sector** 第二产业—manufacturing raw materials into goods.
- **Tertiary sector** 第三产业—services (retail, transport, healthcare).
- **Quaternary** 第四产业 and **quinary** sectors —information, research, and top decision-making.

Poorer economies lean on the primary sector; richer ones on the tertiary and quaternary. **Weber's least-cost theory** 韦伯最小成本理论 explains where factories locate, balancing the cost of transport, labour, and agglomeration.

Measures of Development

Development 发展 is the process of improving people's economic and social well-being. It is measured in several ways:

- **Gross Domestic Product (GDP) per capita** 人均国内生产总值—economic output per person; a common but incomplete measure.
- The **Human Development Index (HDI)** 人类发展指数 combines income, education (years of schooling), and health (life expectancy) into one score from 0 to 1—a fuller picture than money alone.
- The **Gender Inequality Index (GII)** 性别不平等指数 and the **Gini coefficient** 基尼系数 (income inequality) add social detail.

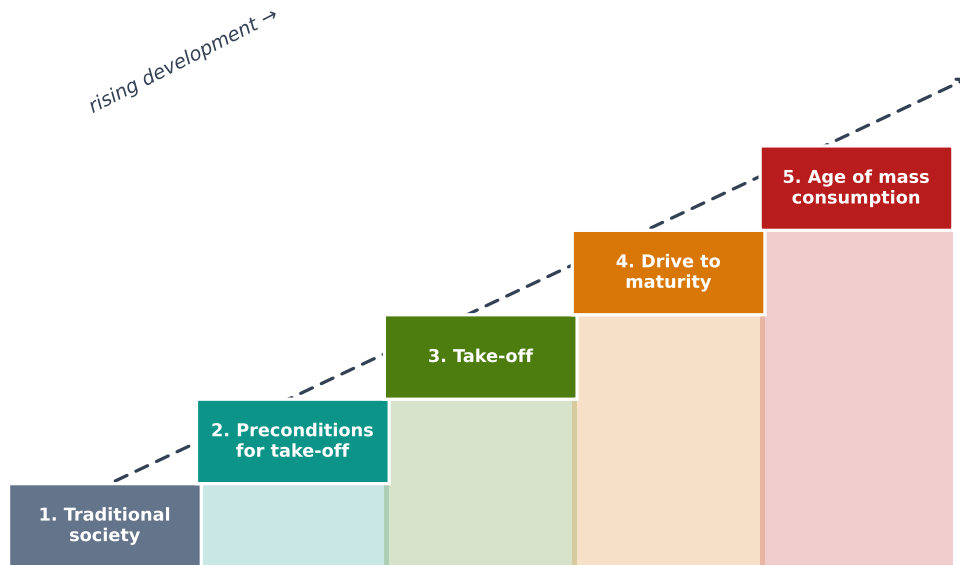
Women and Economic Development

The role of **women** is both a cause and a measure of development.

- As economies develop, more women enter paid work and education, which raises household income and lowers fertility (linking back to the demographic transition).
- **Microfinance** 小额信贷—small loans, often to women—helps start businesses in poorer regions.
- Gender gaps in pay, land ownership, and schooling hold development back; closing them is one of the UN's key goals.

Theories of Development

Two famous theories explain **why** some regions are rich and others poor.



Rostow sees development as a climb through five stages; critics say it ignores global inequalities

- **Rostow's stages of growth** 罗斯托发展阶段—every country climbs through **five stages**: traditional society, preconditions for take-off, take-off, drive to maturity, and age of mass consumption. It is optimistic but assumes all countries can follow the same path.
- **Wallerstein's world-systems theory** 沃勒斯坦世界体系理论 divides the world into a wealthy **core** 核心, a poorer **periphery** 边缘, and a middle **semi-periphery** 半边缘. The core stays rich partly by using the periphery's cheap labour and resources—a **dependency** 依附 view that challenges Rostow.

Trade and the World Economy

Countries are linked by trade, which reshapes development.

- **Comparative advantage** 比较优势 means each country gains by specialising in what it makes most efficiently and trading for the rest.
- **Complementarity** and **neoliberal** free-trade policies, plus organisations like the WTO and trade blocs (EU, USMCA), have deepened **globalization**.
- **Outsourcing** 外包 and global supply chains move manufacturing to lower-cost countries, changing where—and by whom—the world's goods are made. **Special economic zones** 经济特区 attract this investment with tax breaks.

Sustainable Development

Sustainable development 可持续发展 meets present needs without harming the ability of future generations to meet theirs.

- It tries to balance **economic growth**, **social fairness**, and **environmental pro-**

tection —the "three pillars".

- **Ecotourism** 生态旅游 and small-scale, renewable projects can develop an economy while protecting the environment.
- The UN's **Sustainable Development Goals (SDGs)** 可持续发展目标 set shared targets for poverty, health, education, and climate —a common way to measure progress today.

Exam tips

- Classify jobs by **sector** (primary through quinary) and tie the mix to the development level.
- Prefer the **HDI** over GDP per capita —it adds education and life expectancy.
- Contrast **Rostow's stages** with **world-systems** (core and periphery) and **dependency** theory.
- Use **comparative advantage** and the effect of **tariffs** in any trade answer.
- Bring in **sustainable development** and the **ecological footprint** for evaluation marks.