Poverty, the state and development

Edexcel IAL Economics WEC14 sections 4.3.4-4.3.6 full package

Poverty, the state and development

- distinguish absolute from **relative poverty** and explain what changes them;
- measure inequality with a **Lorenz curve** and calculate a **Gini coefficient**;
- classify public spending and taxes, and use the Laffer curve;

Poverty, the state and development (2)

- distinguish a **fiscal deficit** from the **national debt**, and structural from cyclical deficits;
- evaluate macroeconomic policies and the problems policymakers face;
- measure development with the HDI, explain the constraints on growth and evaluate development strategies.

Poverty

- The **relative poverty** line at 60% of the **median** is $0.6 \times 30{,}000 = 18{,}000$.
- Ten years later the median has risen to 40,000. The relative line rises to $0.6 \times 40{,}000 = 24{,}000$.
- A household whose income rose from 17,000 to 22,000 has escaped **absolute poverty** if the absolute line is fixed below 17,000, but it is still in relative poverty: 22,000 is below 24,000.

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Poverty (2)

- **Economic growth** raises incomes and usually cuts **absolute poverty**, but **relative poverty** falls only if the poor share in the gains.
- **Education and training** raise the earnings of the poor.
- **Welfare benefits** 福利 and cash transfers: Brazil's Bolsa Família, begun in 2003, paid poor families a monthly sum if their children attended school and had vaccinations; by 2013 it reached about 14 million families.

Poverty (3)

- **Changes in the tax system**, for example a higher tax-free allowance.
- **Structural change** 结构性变化: when coal mines and steel works close, whole regions fall behind, as in northern England in the 1980s and north-east China in the 1990s.
- **Aid**, and **civil wars and conflict**, which destroy farms, schools and jobs: Syria and Yemen saw poverty rise sharply in the 2010s.

Inequality

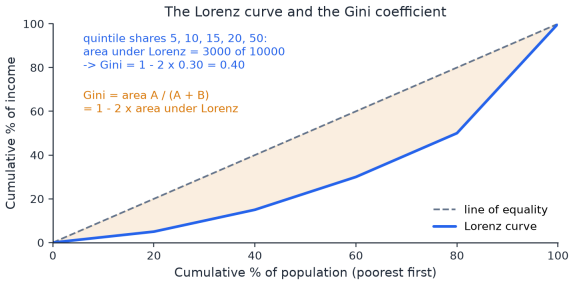
- some inequality gives incentives to work, train and start firms;
- very high inequality can waste talent, because poor children cannot afford good schooling;
- the rich save more of their income, so high inequality can hold back consumption;

$$\text{Gini} = \frac{\text{area between the line of equality and the Lorenz curve}}{\text{whole area below the line of equality}}$$

Inequality (2)

- it pushes people to migrate in search of better pay;
- it is linked with gaps in health and **life expectancy** 预期寿命, and with crime and lower trust.

Figure: Inequality



- Quintile shares of 5, 10, 15, 20 and 50 per cent give a **Lorenz curve** with a **Gini coefficient** of 0.40.
- Read the axes and units first.

Public expenditure, taxation and borrowing

- **capital expenditure** 资本支出: spending on assets that last, such as railways, hospitals and schools;
- **current expenditure** 经常性支出: day-to-day running costs, such as teachers' and nurses' pay and medicines;
- **transfer payments** 转移支付: pensions and benefits, which move income from taxpayers to others without buying any output.

Public expenditure, taxation and borrowing (2)

- **progressive 累进税**: the average tax rate rises as income rises. China's income tax rises in bands from 3% to 45%;
- **proportional 比例税**: everyone pays the same share of income;
- **regressive 累退税**: the average rate falls as income rises. Taxes on tobacco take a bigger share of a poor smoker's income than of a rich smoker's.

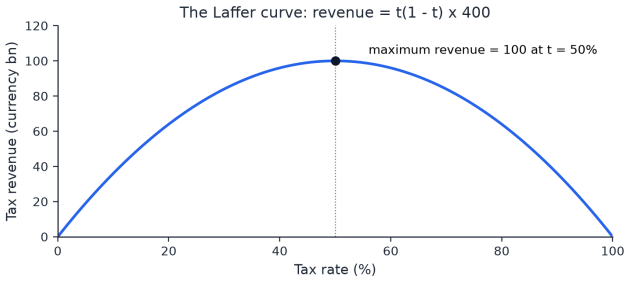
Public expenditure, taxation and borrowing (3)

- At $t = 0.3$: revenue $= 0.3 \times 0.7 \times 400 = 84$.
- At $t = 0.5$: revenue $= 0.5 \times 0.5 \times 400 = 100$, the maximum.
- At $t = 0.7$: revenue $= 0.7 \times 0.3 \times 400 = 84$.

Public expenditure, taxation and borrowing (4)

- **Automatic stabilisers 自动稳定器** change the budget without any decision: in a recession tax revenue falls and benefit spending rises, which supports demand.
- **Discretionary fiscal policy 相机抉择的财政政策** is a deliberate change in tax rates or spending.
- A **cyclical deficit 周期性赤字** exists only because the economy is in a downturn and disappears in recovery. A **structural deficit 结构性赤字** remains even at full employment. If the actual deficit is 5% of GDP and 2 percentage points of it are cyclical, the **structural deficit** is 3% of GDP.

Figure: Public expenditure, taxation and borrowing



- In the model, revenue $t(1-t) \times 400$ peaks at 100 when the rate is 50%; 30% and 70% raise the same 84.
- Read the axes and units first.

Macroeconomic policies and the state

- Governments use **fiscal policy**, **monetary policy**, **exchange-rate policy**, **supply-side policies** and **direct controls** 直接管制 (price or wage controls, limits on bank lending) to reduce deficits and debt, control inflation, respond to external shocks and cut poverty and inequality.
- **The 2008 global financial crisis.** Banks failed, credit froze and world output fell in 2009.
- Governments responded with demand-side policies: the US, UK and others rescued banks; central banks cut interest rates close to zero and began **quantitative easing** 量化宽松; China launched its ¥4 trillion stimulus.
- During the COVID-19 lockdowns of 2020 the UK went further: its furlough scheme paid 80% of the wages of workers who could not work, up to £2,500 a month.

Growth and development

- **health**: **life expectancy** at birth;
- **education**: mean years of schooling of adults and expected years of schooling of children;
- **income**: **GNI per head 人均国民总收入** at PPP, on a log scale, so each extra dollar counts for less in a rich country.

Growth and development (2)

- HDI $= \sqrt[3]{0.90 \times 0.70 \times 0.80} = \sqrt[3]{0.504} \approx 0.796$.
- The ordinary average would be $\frac{0.90+0.70+0.80}{3} = 0.80$.
- The **geometric mean** is lower because one weak dimension pulls it down: a country cannot make up for poor schooling with high income.

Growth and development (3)

- **primary product dependency 初级产品依赖**: copper earns about 70% of Zambia's export revenue, so a price fall cuts its income. By the **Prebisch–Singer hypothesis 普雷维什-辛格假说**, prices of primary products tend to fall over time compared with prices of manufactures, so the terms of trade of commodity exporters worsen;
- **volatile commodity prices**, which make incomes and tax revenue unpredictable;
- the **savings gap 储蓄缺口**: by the **Harrod–Domar model 哈罗德-多马模型**, growth = savings ratio ÷ capital–output ratio, and poor households save little;

Growth and development (4)

- the **foreign currency gap 外汇缺口**: too few exports to pay for imported machines and fuel;
- **capital flight 资本外逃**: the rich move their savings abroad;
- fast population growth, high debt, little access to credit, poor infrastructure, and low levels of education and skills.

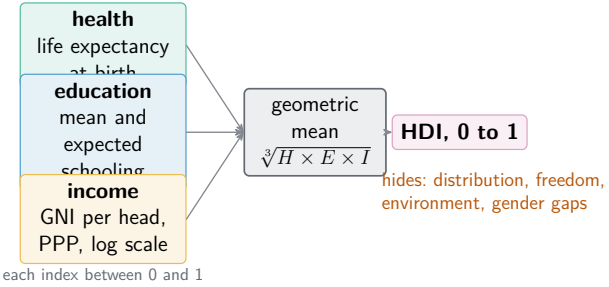
Growth and development (5)

- Growth $= \frac{12\%}{4} = 3\%$ a year.
- If the population also grows by 3% a year, GDP per head does not grow at all.
- To grow GDP per head by 2%, GDP must grow by 5%, which needs savings of $5\% \times 4 = 20\%$ of GDP. The gap of 8 percentage points must come from abroad (FDI, aid or loans) or from more saving at home.

Growth and development (6)

- the **World Bank 世界银行** lends for long-term projects such as roads, power and schools, often at low interest rates;
- the **International Monetary Fund 国际货币基金组织** (IMF) lends to countries in a balance-of-payments crisis, with **conditionality 附加条件**: the loans come with required policies, such as cutting deficits or floating the currency, as in Egypt's 2024 programme;
- **non-governmental organisations 非政府组织** (NGOs), such as BRAC in Bangladesh, run local schools, health clinics and small-loan schemes.

Figure: Growth and development



- Health, education and income indices, each between 0 and 1, combine by a **geometric mean** into the HDI.
- Match each part of the diagram to the text.

Data-response practice (Section B style)

- (a) Bangladesh's GDP is about US\$450 billion and its population about 173 million. Calculate GDP per head. [2]
- (b) Explain **two** limitations of GDP per head as a measure of development, using the extract. [4]
- (c) Explain, with reference to the **Lewis dual-sector model**, how the growth of the garment industry has helped to reduce poverty. [6]

Data-response practice (Section B style) (2)

- (d) Examine **two** risks of Bangladesh's dependence on garment exports. [8]
- (e) Evaluate the policies Bangladesh could use to keep developing after it loses its Least Developed Country status. [12]

Sources for this lesson

- **World Bank**, *June 2025 Update to the Poverty and Inequality Platform* (the 3.00-dollar line at 2021 PPP), and Poverty and Inequality Platform data.
- State Council Information Office, *Poverty Alleviation: China's Experience and Contribution* (April 2021); National Bureau of Statistics of China, Gini coefficients and migrant-worker monitoring report.
- UNDP, *Human Development Report 2023/2024*.

Sources for this lesson (2)

- S. Kuznets, "Economic Growth and **Income Inequality**", *American Economic Review* 45 (1955); W. A. Lewis, "**Economic Development** with Unlimited Supplies of Labour" (1954).
- OECD, statement on the two-pillar solution to the tax challenges of the digitalisation of the economy (October 2021).
- IMF, World Economic Outlook and Fiscal Monitor databases (government spending and debt).
- Pearson Edexcel International A Level Economics specification (WEC14), Issue 2, sections 4.3.4–4.3.6.

Common errors

- Saying poverty has fallen when only **absolute poverty** has. **Relative poverty** can rise while everyone gets richer.
- Mixing up wealth (a stock of assets) and income (a flow).
- Reading a higher Gini as more equal. A higher Gini means more inequality.

Common errors (2)

- Calling a tax **progressive** because the rich pay more money. Look at the average rate, not the amount.
- Confusing the deficit (one year's gap) with the debt (the total owed).
- Treating the HDI as a full measure of development. It leaves out distribution, freedom and the environment.
- Describing the Lewis model without its assumptions: surplus farm labour and profits reinvested at home.

Key terms

- **Absolute / relative poverty**: unable to meet basic needs / poor compared with the society's **median**.
- **Lorenz curve**: cumulative share of income against cumulative share of households.
- **Gini coefficient**: area between the **line of equality** and the **Lorenz curve** ÷ area below the line of equality.

Key terms (2)

- **Progressive / proportional / regressive tax**: average rate rises / stays the same / falls as income rises.
- **Laffer curve**: tax revenue first rises and then falls as the tax rate rises.
- **Fiscal deficit / national debt**: one year's excess of spending over revenue / total government debt.

Key terms (3)

- **Structural / cyclical deficit**: a deficit that remains at full employment / one caused by a downturn.
- **HDI**: **geometric mean** of health, education and income indices.
- **Primary product dependency**: relying on a few raw materials for export earnings.
- **Conditionality**: policies a country must adopt to receive an IMF or **World Bank** loan.

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Check yourself

- 1.
- **Median** income rises from 25,000 to 35,000.
- By how much does a **relative poverty** line at 60% of the median rise? 2.
- The poorest 50% of households receive 20% of income and the richest 50% receive 80%.