8.2 Poverty, public finance and development

Name: _____ Class: _____ Date: _____ **Total: 36 marks**

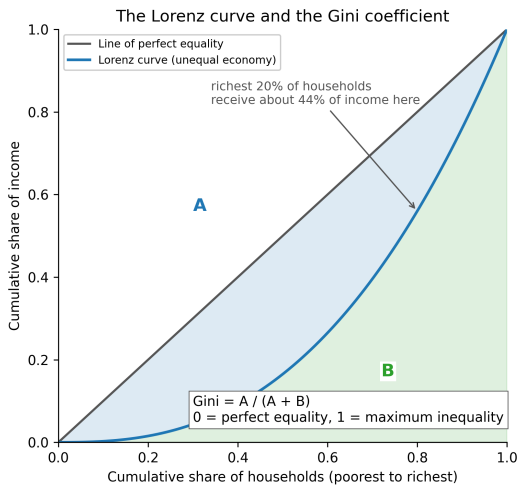
KEY WORDS absolute poverty • relative poverty • Lorenz curve • Gini coefficient • fiscal deficit • national debt

Objective

Measure inequality with Lorenz curves and Gini coefficients, analyse fiscal choices, and evaluate development constraints and strategies at full IA2 essay standard.

1 Key knowledge and worked examples

Absolute poverty is life below a fixed minimum standard; **relative poverty** is life far below the society's median income. The **Lorenz curve** plots cumulative income share against cumulative household share; the **Gini coefficient** is A/(A+B): 0 means perfect equality, 1 maximum inequality.



Worked example. A five-person economy has incomes 10, 20, 30, 60, 80 (total 200). Cumulative income shares, poorest first: 5%, 15%, 30%, 60%, 100%. Plot those points against 20%, 40%, 60%, 80%, 100% of people and join them: the curve bows below the 45° line. If a transfer raises the second income to 30, the second cumulative point becomes 20% of people, 20% of income – the curve moves toward equality and the Gini falls.

A **fiscal deficit** is a year's shortfall of revenue against spending; the **national debt** is the accumulated stock. A **progressive tax** takes a rising share of higher incomes; a **regressive tax** takes a falling share. Development constraints include primary-product dependency (Prebisch-Singer: primary exporters' terms of trade worsen over time), the savings gap (Harrod-Domar), the foreign-currency gap and **capital flight**.

2 Practice

2.1 Distinguish between absolute and relative poverty, and explain why a country can reduce one while the other rises. [4]

2.2 A four-person economy has incomes 5, 15, 30, 50 (total 100). Compute the cumulative income shares, sketch the Lorenz points, and state the income share of the richest 25% and the poorest 50%. [6]

2.3 Explain the difference between a cyclical and a structural fiscal deficit, and why the difference matters for policy. [6]

3 Exam-style questions

3.1 The fictional country of Soravia exports 85% of its foreign earnings as unprocessed cocoa. Cocoa prices fell 40% in two years; government revenue collapsed and skilled nurses emigrated. Evaluate the economic factors that constrain Soravia's growth and development. Refer to Soravia in your answer. [20]

Solutions

2.1 Absolute poverty: below a fixed minimum standard such as the international extreme-poverty line; relative poverty: below a set share (often 60%) of the median income of the society. Growth can lift the poorest above the fixed line while the median rises faster, so relative poverty rises even as absolute poverty falls. Authored marking guidance (original, not an official scheme): B1 per distinction, B1 + B1 for the explained scenario.

2.2 Cumulative income shares, poorest first: 5%, 20%, 50%, 100%. Points at (25%, 5%), (50%, 20%), (75%, 50%), (100%, 100%). Richest 25% receive 50% of income; the poorest 50% receive 20%. Authored marking guidance (original): M1 method, A1 values, B1 points, A1 readings.

2.3 A cyclical deficit appears because of the downturn itself: tax revenue falls and benefit spending rises through the automatic stabilisers. A structural deficit persists even at full employment, because spending commitments exceed normal revenue. It matters because a cyclical deficit self-corrects with recovery, while a structural one needs lasting tax or spending changes; treating a structural gap as cyclical delays the repair. Authored marking guidance (original): identification plus development for each, plus policy significance.

3.1 Model response (original; official WEC14 essays are marked 12 for knowledge, application and analysis plus 8 for evaluation; "refer to a country" is required).

Growth means rising real output; development means broader improvement in living standards. Soravia's first constraint is primary-product dependency: 85% of foreign earnings come from one unprocessed crop. The Prebisch-Singer hypothesis holds that primary exporters' terms of trade worsen over time, because demand for raw materials grows slowly with world income; Soravia's 40% price fall shows the volatility directly – export earnings, the tax base and the government's budget all collapsed together.

Second, the savings gap of the Harrod-Domar model: with incomes hit, domestic saving is too low to fund investment, so capital accumulation and growth stall. Third, a foreign-currency gap: export earnings no longer cover the capital imports that diversification needs. Fourth, the emigration of nurses – a human-capital drain – weakens health services and future productivity; remittances only partly offset the loss. Weak state capacity after the revenue collapse adds a governance constraint.

Evaluation: cocoa dependence could be reduced by processing cocoa domestically or developing tourism, but both need capital Soravia lacks – which argues for debt relief or aid with conditions. Microfinance could widen credit access. Yet if governance is weak, aid may be diverted; and commodity buffer stocks have historically been hard to sustain. The binding constraint looks like the foreign-currency gap, since even good projects cannot be imported without earnings.

Judgement: Soravia's priority is export diversification supported by debt relief, because no domestic strategy escapes the savings and currency gaps quickly enough on its own. (≈330 words; allow supported alternative judgements with conditions.)