EXAM SØK 3523 SPRING 2022
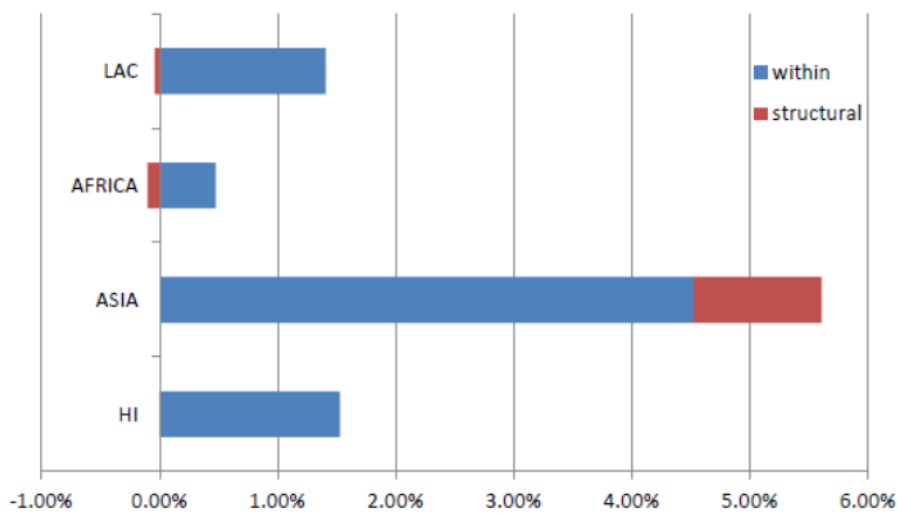
The exam consists of three questions, and all should be answered. Weights in the grading are given in parentheses.
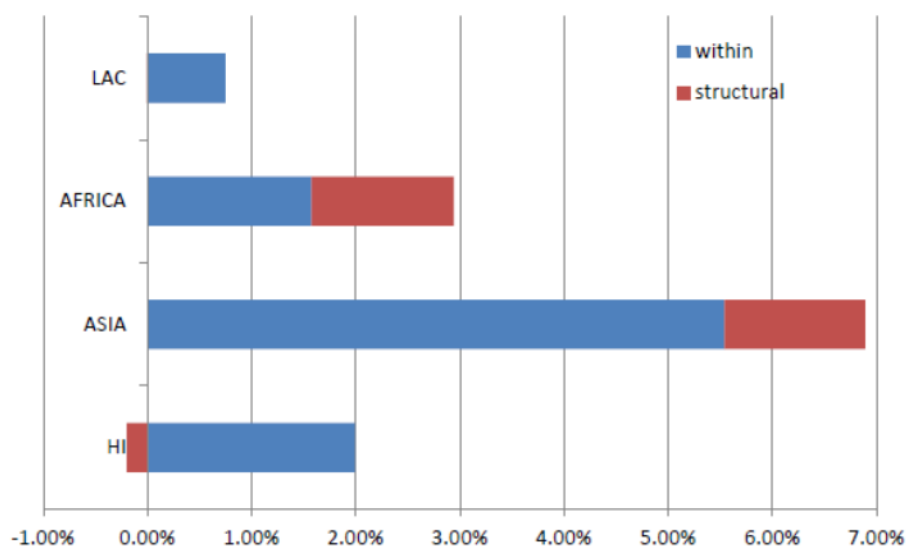
<u>Question 1 (30%)</u>

The figure below is taken from the article "What is driving the 'African growth miracle'?" by McMillan and Harttgen. Explain the figure and discuss the shift in African growth experience since 2000.

Figure 4.b. Decomposition of Productivity Growth by Country Group, 1990-1999 (weighted)

Figure 4.d. Decomposition of Productivity Growth by Country Group. Post 2000 (weighted)

Question 2 (30%)

Start from an economic model with two types of firms; a traditional firm with constant returns to scale and a modern firm with increasing returns to scale.

a) Explain how a demand externality can give rise to multiple equilibria and a potential poverty trap.
b) Discuss how the size of fixed costs in modern production affects the degree of industrialization/modernization.
c) Illustrate graphically how a reduction in the productivity gains from increasing returns to scale in modern production can take the economy from multiple equilibria to a single equilibrium with only traditional production (for a given level of fixed costs).

Question 3 (40%)

The rural-urban wage gap may reflect productivity differences or differences in the skill-composition of rural and urban workers. Productivity differences may relate to market distortions, while the skill argument is understood as worker sorting. Develop the sorting argument separating between skilled and unskilled workers and between rural and urban production with different skill intensities. Discuss how the importance of sorting can be tested empirically using relevant data.