Instructions. The exam consists of 4 essay questions. They each have equal weight. Please choose 2 questions from section 1 and one each from sections 2 and 3. There is no single good answer for these questions, but most good answers will combine appropriate analytical frameworks with evidence. Please write legibly and label any diagrams clearly!!

Section 1: Choose two questions from this section
1. In an attempt to stimulate agricultural productivity and reduce poverty, the Government of Malawi recently implemented a fertilizer subsidy program in which low-income farmers were given the option of purchasing up to two 50kg bags of inorganic fertilizer at a discount of greater than 2/3. You have been asked to evaluate the program, which covers about half of the rural farming households in the country. You have access to survey data on a representative sample of rural farm households who were surveyed during the crop year 2004/05 (before the program) and again in 2008/09 (this is a panel dataset: the same households were surveyed both times). The survey measures beginning-of-year assets, farm size, household composition, agricultural output for the year, and consumption expenditures for the year, for each household in each of the two years. It also indicates whether the household purchased subsidized fertilizer for the 2008/09 season.

→ Explain how you would use these data to assess the impact of the subsidy program. What limitations arise from the fact that access to the program was not randomized? Would it be possible to correct for these limitations, if additional variables were available?

2. For about the past 5 years or so, the United States has been channeling a lot of its bilateral development assistance to low-income countries through the Millennium Challenge Corporation (MCC), rather than through USAID. MCC grants are large; they are for 3 to 5 years; and they involve no policy conditionality. They tend to support ambitious sector-wide strategies (e.g., health, private-sector development, governance, infrastructure) and leave most aspects of implementation to the recipient country; they do require that a serious impact evaluation be built in. Countries qualify to apply for these grants by scoring well within their reference group on a set of 16 indicators of governance (there are 2 reference groups, defined by development level). Unlike USAID, which is part of the State Department, the MCC is quasi-independent: the State and Treasury departments sit on the Board of the MCC but do not determine who qualifies for aid or who receives awards.

→ Most development economists in the 1960s would have found an arrangement like the MCC bizarre, relative to one in which the donor and recipient work together to identify projects the donor can help finance and deliver, generally by providing a combination of input financing and technical assistance, without policy conditionality. In your view, is the design of the MCC strongly grounded in what development economists have learned, since the 1960s, about long-run development and the effectiveness of foreign aid?

3. Formal credit and insurance markets are only just beginning to be available to low-income households in developing countries. Two important innovators are the Grameen Bank in Bangladesh, and (much less known) ICICI Lombard, which has developed a rainfall insurance product that has been offered to rural Indian households since 2003. The rainfall insurance product charges an up-front premium to farmers, and then provides a cash payout that is proportional to the...
shortfall of rainfall below a given upper threshold during the growing season (up to a maximum payout when rainfall is below a lower threshold). As you know, the Grameen Bank requires an ongoing public subsidy. The ICICI Lombard product is financially self-sustaining but far from actuarially fair (it costs farmers an average premium of 100 rupees, for an average payout of only 30 rupees).¹

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Why is bank credit so scarce in rural areas in low-income countries, and how do the design features of Grameen Bank lending address the market imperfections that discourage formal financial institutions? What is it about rainfall insurance, in particular, that makes it a promising insurance product in low-income areas? Finally: Should micro-finance providers be financially sustainable?

Section 2: Choose one question from this section.

4. This morning (December 15, 2010) Ghana pumped the first oil in its history. Oil revenues are expected to be about 5% of GDP for the next 20 years, and presumably that much or higher thereafter. Earlier this week the Parliament passed a bill that will hold 30 percent of oil export proceeds aside for the future, to be used to handle temporary shocks to oil revenues (the Stabilization Fund, taking 21% of proceeds) and to provide for the eventual exhaustion of reserves (the Heritage Fund, taking 9%). The remaining 70 percent can be used as regular revenue, to support government expenditures. The originally-proposed legislation ruled out the use of future oil revenues as collateral for external borrowing, but the Parliament struck down that provision before passing the bill.

Does this legislation look to you like a good framework for managing oil revenues? How would you advise the Government of Ghana in terms of how to allocate the budgetary component (what categories of spending, what mechanisms for evaluation, etc)? Would you encourage collateralized borrowing?

5. A number of economists have documented the emergence and persistence, over the post-WWII period, of ‘twin peaks’ in the cross-country distribution of real GDP per capita: that is, there increasingly appear to be two groups of countries globally, one tending to cluster around low incomes per capita and another tending to cluster around high incomes per capita.

Is neoclassical growth theory consistent this phenomenon? If so, via what mechanism(s)? If not, what mechanism(s) might explain the twin peaks phenomenon?

Section 3: Choose one question from this section.

6. Assess the following statement: “Macroeconomic policy is hugely undervalued in development analysis. Latin America would have grown as rapidly as the high-performing Asian economies between 1970 and the present if only inflation had been kept in check and countries had maintained competitive exchange rates.”

What were the main lessons from the emerging-market financial crises of the 1990s? Do these differ – if so, how; if not, why not – from the lessons learned from the debt crisis of the 1980s?