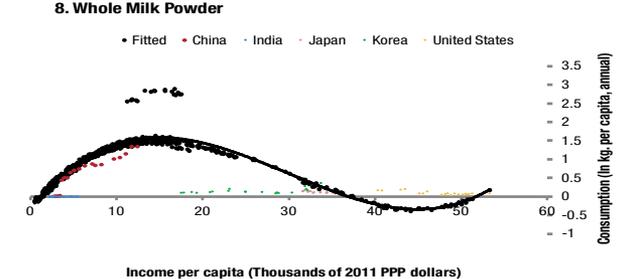
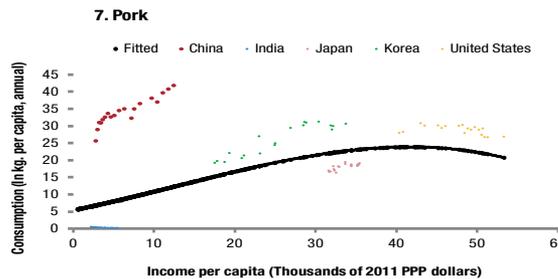
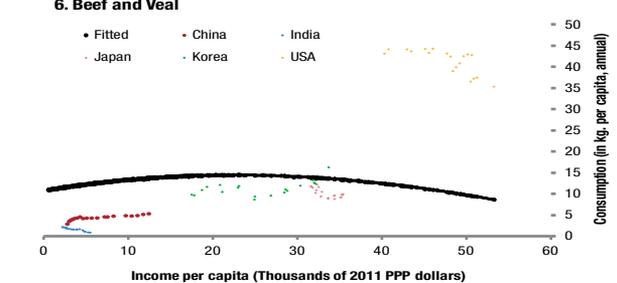
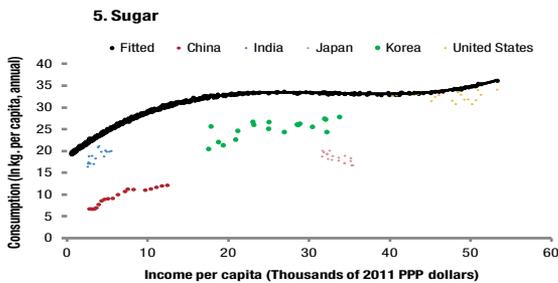
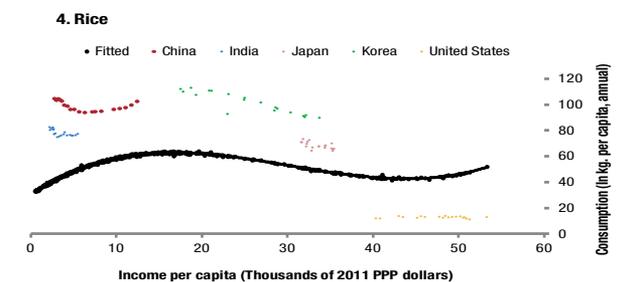
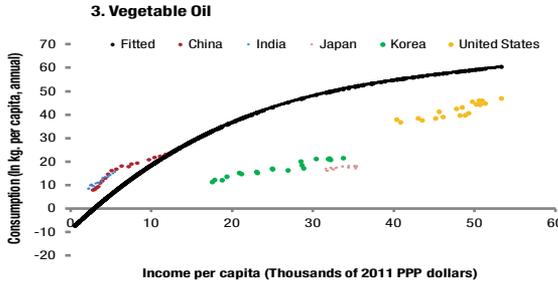
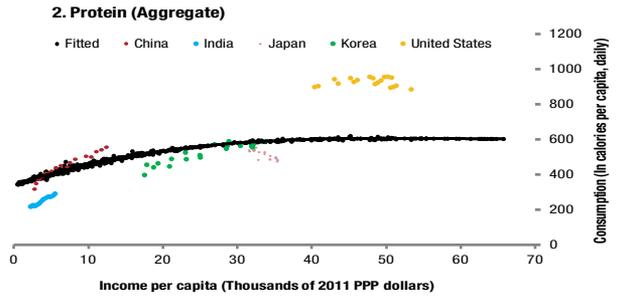
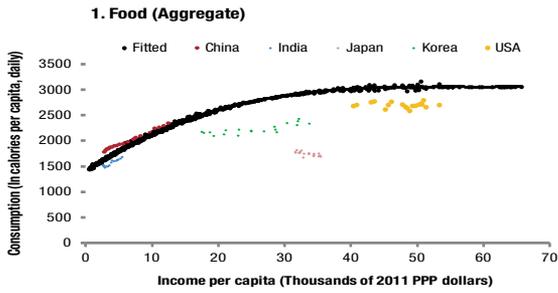


Figure 3.2.1. Engel Curve Estimates and Consumption Per Capita of Selected Food Items
 (Kilograms/capita; income in 2011 constant purchasing power parity dollars per capita)



Source: IMF staff estimates.

Notes: (1) The estimated equations build on the methodology in Box 1.2 in the IMF's *World Economic Outlook* of April 2014. Engel curves for each commodity/aggregate are derived from a regression of per capita consumption (in annual calories per capita for aggregate food and aggregate protein, and in annual kilograms per capita for selected items) on a third-order polynomial, relative local food price inflation of the relevant commodity or aggregate, and country fixed effects. (2) The dataset used for this analysis consists of the UN Food and Agriculture Organization's food consumption and local producer prices of 20 agricultural commodities, World Bank purchasing power parity (PPP) GDP in 2011 constant dollars, and local Consumer Price Index inflation and population data from the IMF's World Economic Outlook database. The panel covers 1996–2014 and includes 42 countries: Bangladesh, Ethiopia, Haiti, Ghana, Mozambique, Tanzania, Vietnam, and Zambia (low-income); Argentina, Brazil, China, Colombia, Chile, Egypt, India, Indonesia, Malaysia, Mexico, Nigeria, Pakistan, Peru, the Philippines, Russia, South Africa, Thailand, Turkey, and Ukraine (emerging); Australia, Canada, Israel, Japan, Korea, New Zealand, Norway, Saudi Arabia, Switzerland, and the United States (high income); and others including Algeria, Iran, Kazakhstan, Paraguay, and Uruguay.