

CHAPTER 6

Food Supplies and Food Security

There has been debate over whether food supplies can expand sufficiently to meet the demands of an ever-increasing population since at least 1798, when the English political economist Thomas Robert Malthus published his *Essay on the Principle of Population*. According to Malthusian theory, populations grow exponentially but food supplies grow only arithmetically; at some point, therefore, the human population should outgrow its ability to feed itself. Since Malthus, a large body of literature has explored the interplay between technology, population, agriculture, economic growth, and income.¹ For most of human history—and certainly in Malthus’s time—income per capita was basically stagnant. This is no longer true. The modern era is instead characterized by rapid economic growth and diverging growth and income trajectories across countries.

Nowadays the issue of food security no longer centers around food supplies—that is, the ability of humankind to produce enough food—but rather on people’s access to adequate calories and nutrition.² As such, food security is mainly perceived as an issue facing poor countries, but the issue is broader: developments in food markets are far-reaching and indicative of structural developments at the global level.³ Rapid growth in emerging markets, the evolving size and demographic structure of the populations of countries at every level of economic development, and technological innovation have and will continue to shape global food markets, including the structure of agriculture and the demand for food products. Furthermore, food markets are segmented and subject to multifaceted distortions created by investment and trade. This chapter takes an in-depth look at recent developments in and the likely future evolution of global food markets and discusses the implications for food security. The chapter addresses the following questions:

- What is special about food markets?

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¹See among others Galor and Weil (2000); Galor (2005 and 2011); and Gollinand, Parente, and Rogerson (2002).

²According to the World Food Summit (1996) declaration: “Food security exists when all people, at all times, have physical and economic access to sufficient, safe and nutritious food that meets their dietary needs and food preferences for an active and healthy life.”

³See Arezki and others (2016) and references therein for a discussion on food price fluctuations and their consequences.