An Outlook of World Food Price in 2020 – Determinants, Trend and Alternatives

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Abstract

World food price has always been the central issue affecting food security and poverty alleviation in a global level. The sky-rocketing price of major agricultural commodities in the year 2007 and 2008 heated up this topic unprecedentedly. Effort has been made through a substantial amount of academic researches to explain the underlying determinants of the price fluctuation, as well as to explore the future trend. This paper will tempt to contribute to those analyses.

The main perspective of this paper is to summarise the underlying factors that influence the world food price and to construct a baseline scenario of the world price of several major agricultural commodities in the year 2020, based on the development of decisive macro indicators in the future years. To forecast the future, the past has to be introduced. Therefore, the paper will start with describing the significance of world food price issue, trying to list the major factors that may exert an effect to the volatility of price. Then in the second part, based on the statistics during the past years, those factors will be divided into two groups: the macro indicators such as the state of agricultural production, growth of population, increasing of GDP, international trade development etc.; other factors that recently appeared that are considered to play an increasing role in affecting world food price such as US dollar and oil price, production of biofuel and speculations in commodity markets. To put those factors together, in the third part, an overview of different models applied in previous study to explore the determinants of price fluctuation will be provided, following with comparisons of the pros and cons. After the overview, a sophisticated CGE model- GTAP will be selected to construct the baseline scenario in year 2020 integrating the macro indicators proclaimed in part 2. Accordingly, sensitivity analysis will offer an explicit explanation of impact of other indicators. Finally, present of the results and possibilities of incorporating other factors into the scenario will be discussed and conclusion will be drawn.

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