

Many thanks to Referee 1 for the report on

Chongqiang Ren, Guofang Zhai, Shutian Zhou, Shasha Li, and Wei Chen (2017). Adaptation assessment and analysis of economic growth since the market reform in China. Economics Discussion Papers, No 2017-24, Kiel Institute for the World Economy. <http://www.economics-ejournal.org/economics/discussionpapers/2017-24>

Our replies are as follows:

Firstly, we try to adopt a new assessment method in the field of Economics, which is also in line with the needs of our paper. As the extenics method not only qualitatively analyses the state of being of the economic subsystem (non-adaptation, basic adaptation, adaptation in advance) during the market-oriented process but also quantitatively analyses the adaptation capacity of the subsystem (economic subsystem, social subsystem and nature-resources-environment subsystem) and the changes that occur at different stages.

Secondly, we must clarify some key definitions. Economic system is a complex system, including economic, social and resource environment subsystem. Economic adaptation also includes these subsystems. In our paper, we understand the economic adaptation from the perspective of economic vulnerability. Economic adaptation is found to reduce economic vulnerability (Smit B & Wandel J, 2006). The economic adaptation is a systematic concept that considered as an adaptation capacity whilst continuously interacting with internal and external economic environments (Turner B L et al., 2003; Bertolini L, 2007; Blaikie P et al., 2014). In this paper, adaptation capacity of Economic Growth includes Economic capacity (EC), Social capacity (SC) and Nature-resources-environment capacity (NREC). We choose the economic efficiency, economic system and economic development as the index of EC, and choose social development and social insurance as the index of SC, and choose natural disaster relief, resource production and efficiency, environment investment and treatment as the index of NREC.

Thirdly, this paper applies the entropy method in Shannon C E and Weaver W (1947) to determine the class of economic adaptation indexes. The entropy method includes the following steps.

First step: Data normalization. All indexes chosen for this study are of positive attributes; thus, positive data processing method is used in this study.

$$Y_{ij} = \frac{X_{ij} - X_{\min(j)}}{X_{\max(j)} - X_{\min(j)}} \quad (1)$$

Where x_j is the statistics of index j of sample i , and $x_{\min(j)}$ and $x_{\max(j)}$ are the minimum and maximum values of index j , respectively. After data normalization, the value data is within the range of [0-1].

Second step: Calculate weight value of index according to the standardized data of data processing.

$$P_{ij} = \frac{Y_{ij}}{\sum_{i=1}^m Y_{ij}} \quad (2)$$

Where P_{ij} is the proportion of index j of sample i , and m is the sample number.

Third step: Calculate information entropy.

$$E_j = -k \sum_{i=1}^m P_{ij} \ln(P_{ij}) \quad (3)$$

$$k = 1 / \ln(m)$$

Where E_j is the information entropy of index j .

Fourth step: Calculate utility value.

$$U_j = 1 - E_j \quad (4)$$

Where U_j is the utility value of index j .

Fifth step: Calculate weight.

$$W_j = \frac{U_j}{\sum_{j=1}^n U_j} \quad (5)$$

Where W_j is the weight of index j . All the index weights of each system are added, and the sum is the weight of the system.

Fourthly, this study only signifies a first step towards assessing economic adaptation of Economic Growth. Future work could emphasize on diagnosing and assessing the vulnerability of economic growth, which are also combined with economic sensitivity during the market reform process. Subsequent studies will give an answer to the question of anonymous review (what shall be coordinated across which agents? the more specific policy will be recommended in the conclusion).