

中國崛起對東亞雁行架構下台灣產業發展的影響 —以紡織業與資訊電子業為例

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東亞經濟在二次大戰之後，以出口導向的發展方式快速成長，學者常以「雁行模式」描繪東亞國家在產業的發展上所呈現之多層次的領導與跟進現象。探討東亞雁行產業發展的文獻多以日本為領頭雁，並以「日本→NIEs→ASEAN4→中國大陸」為東亞產業的繼承順序。但Kojima (2000)指出，各層雁群國家所繼承的產品種類會因各國稟賦條件而不同，繼承的順序也會因各國資本和知識累積速度不同而改變，亦即各國在雁行隊伍的位置並非固定。Brezis等 (1993)則以新技術的使用不必然與舊技術的經驗累積為前提，提出「蛙跳理論」(leapfrogging)指出當新的生產技術出現，領先國與跟隨國之間的地位有可能發生逆轉。兩者均指出，雁行發展下的各成員國在產業繼承順序上確有發生變化之可能。

陳宏易、黃登興 (2009)使用RCA指數長期變化趨勢，來判斷不同產業在東亞國家間的繼承順序，結果顯示美日和NIEs為東亞第一代和第二代的領頭雁是可以確信的，但中國大陸所繼承的產業，有不少新興產業是越過ASAEN4，直接從美日和NIEs承接。可見中國大陸有可能已脫離原有的雁行位置，出現超前ASEAN4的現象。中國的崛起不但帶動東亞既有經濟分工體系的變化，也因兩岸關係的密切，對台灣在東亞體系中的角色帶來衝擊。為瞭解此現象對台灣產業發展的意涵，本文修正陳宏易、黃登興 (2009)及過去學者採用的RCA指數分析法，選擇技術較為定型化的紡織業與技術革新較為活躍的資訊電子產業，將美國及東亞11國依據傳統雁行順序，按經濟發展先後分為美、日、四小龍、東協四國、中國和越南等六個群組，以迴歸分析導出各群組國家RCA指數的時間趨勢。首先檢驗兩個產業的上中下游在1995年至2009年期間的繼承序列是否有顯著的不同。再對兩岸的相對發展趨勢，以及台灣在四小龍中之相對表現加以研析。

關鍵詞：顯示性比較利益、雁行模式架構、跳躍模式、產業繼承
JEL 分類：O14、O53、F02、F21

The Impacts of the Rise of China on Taiwan's Industrial Development — The Cases of Textiles and Information Industries

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After WWII, the East Asian economies had grown rapidly following the model of outward-oriented development. Many literatures use the term of “flying geese” framework to describe the multi-layer sequential leading and following industrial development pattern within the region. Most of them point to Japan as the leading goose followed by the Asian NIEs (Hong Kong, South Korea, Singapore and Taiwan) as the first layer of following geese, the four ASEAN countries (Indonesia, Malaysia, Philippines and Thailand) the second layer and China the third, according to the sequence of industrial development. But the order of the layers, presenting the advancement in industrial technology and maturity in industrial development, may not always remain constant. Some economies may pass over others and excel to the front layer if their human and physical capital are accumulated in a faster pace, as pointed by Kojima (2000); or if there is a new technological innovation which does not base on the knowledge and experience of the former technology and results in strong advantages to a latecomer, causing the reversal of positions as leader and follower, named as “leapfrogging” by Brezis et al. (1993).

To test whether the order of industrial development sequence in the East Asian has deviated from the one stated above, Chen and Huang (2009) uses the time series of RCA (Revealed Comparative Advantages) index to identify the relative positions of the economies of the region. They added the US into the picture and found that, up to the early 21st century, Japan and the US remain as the leader geese, and the position of the Asian NIEs as the first layer of following geese has been robust. But China has outpaced the ASEANs and inherited some of industrial production directly from Japan/US and the Asian NIEs. It seems that the rise of China may have altered the structure of production division within the region.

With the thaw in cross-straits relations starting in early 1990s, Taiwan and China have established a close production network. The new development brought by the rise of China should have important impacts on the role of Taiwan in the regional development. This paper modifies the RCA method employed by Chen and Huang (2009) and former studies and focuses on the textiles industry (less-intensive technological innovation) and information industry (more intensive technological innovation) to investigate whether the inheritance order of the two industries has changed, and whether the changes in the two industries are significantly different. The performance of Taiwan among the four Asian NIEs and the relative development between China and Taiwan are also analyzed.

Keywords: RCA (revealed comparative advantages) index, flying geese pattern, leapfrogging, industrial inheritance

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