A HI-TECH FOUNDATION OF TAIWANESE ECONOMY

Alexander Mechitov, University of Montevallo, Montevallo, Alabama, U.S.A.
Michael J. Grainger, University of Montevallo, Montevallo, Alabama, U.S.A.
Helen Moshkovich, University of Montevallo, Montevallo, Alabama, U.S.A.

dx.doi.org/10.18374/JIFE-23-4.1

ABSTRACT

Modern Taiwan represents a lot of interest for comparative economic studies as an example of a successful, dynamic, and highly innovative economy. The foundation of this success is a combination of hard-working Chinese culture, a free-market and export-oriented economy, and a consistent state policy aimed at supporting local R&D and manufacturing in hi-tech industries. The paper pays special attention to achievements in the production of computer hardware, to extraordinary advancements of the local semiconductor industry, and to the history and business model of TSMC company which has become a global leader in the production of the most cutting-edge microchips. Analyzing the main economic problems, the authors conclude that the only way to continue the current economic model and to keep the Taiwanese economy globally competitive is to keep a high level of innovation and manufacturing excellence.

Keywords: *Taiwan, Taiwanese economy, Taiwanese culture, semiconductor industry, microchips, TSMC*

1. INTRODUCTION

Taiwan is an island about 300 km long located less than 150 km from mainland China, close to Japan and South Korea in the center of East Asia. The island, also historically famous as Formosa, has an area of 36,000 square km (close to the size of Belgium or Maryland) and a population of 23 million people (about one-third of France or the UK). Thanks to its exceptional economic growth in the second part of the 20th century, Taiwan along with South Korea, Hong Kong, and Singapore was called an Asian Tiger. In this group of the most vibrant new Asian economies, Taiwan was receiving less attention in academic publications than three other “tigers”. South Korea represented more interest for studies being the largest economy among them, Singapore’s development was the most unusual and spectacular, and Hong Kong was primarily one of the largest financial centers in the world. The second reason for getting less attention was the uncertainty around the political status of Taiwan. During the Cold War, countries of the communist block didn’t recognize Taiwan and minimized its economic relationship with the island. In 1971, United Nations recognized the mainland People’s Republic of China as the only China representative, and as a result today only a few small countries have diplomatic relationships with Taiwan. The U.S., while following the one-China policy, keeps active economic and military relationships with Taiwan and de facto supports its current independent status.

Taiwan’s successful development represents a lot of interest from all emerging economies. Like South Korea and Singapore, in a short period of time, Taiwan managed to become one of the most global economic players with large merchandise export famous for the high quality of its products. With complex international relationships and being surrounded by much bigger and powerful economies of Japan, South Korea, and PRC, Taiwan made emphasis on producing the most advanced and sophisticated equipment especially in IT area. Since the end of 1980s, Taiwan has been producing a big share of all basic computer equipment, successfully updating its technology and keeping with fast progress in the digital hardware. In the 21st century, Taiwan has gradually become the main producer of microchips and later the leading supplier of the most advanced and sophisticated chips in the world. Taking into account its comparatively small size, all these achievements represent a lot of academic and practical interest.