

## IS A DIGITAL GREAT WALL BEING BUILT BETWEEN THE U.S. AND CHINA?

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### ABSTRACT

*This study briefly reviews the causes of the U.S.-China conflicts, the U.S. actions and China's responses. It continues to point out that China is not going to remove subsidies to SOEs, and 5G is critical in the development of cutting-edge technologies. As a result, the U.S.-China relations have entered into a new phase, a phase of prolonged fierce technological competition centered on 5G because dominance in the field of advanced technology will lead to dominance of the world. This paper discusses the U.S. campaign to constrain Huawei and lists possible causes for not being successful. This paper also reviews China's strong capabilities in high technology. The U.S. pressure on China, especially Executive Order 13873 and the Entity List, has forced China to start its nationwide campaign to be technologically independent. We posit that Beijing's directive, internally referred to as the "3-5-2" policy, issued in early 2019, and its intent to export its censored internet services may mark the starting point of the "Digital Great Wall".*

**Keywords:** Belt and Road Initiative; Chinese Dream; Entity List; Huawei; Long March; State-Owned Enterprise; 5G

### 1. INTRODUCTION

The U.S.-China trade war has been continuing for more than two years since the U.S. started it on July 6, 2018 by officially levying 25 percent duties on \$34 billion worth of Chinese imports. The ongoing trade war had been marked by a series of retaliation-in-kind tariffs until January 15, 2020 when the U.S. and China signed the Phase One Economic and Trade Agreement to de-escalate the trade war. The U.S. agreed to halve a 15 percent tariff on \$120 billion worth of Chinese goods, however, a 25 percent tariff on \$250 billion worth of Chinese goods remain in place. China agreed to purchase an additional \$200 billion worth of U.S. goods over the next two years on top of the 2017 imports from the U.S., enhance U.S. firms' access to Chinese financial-service markets, enforce intellectual property protection and stop forced technology transfer (USTR, 2020). The subsidies to Chinese state-owned enterprises (SOE) are completely left out of the agreement. It is obvious that the agreement is only a truce.

China's average annual GDP growth rate had been an impressive 9.9 percent from December 1978, when Deng Xiaoping launched his "Reform and Opening-up" policy, through 2010 (Chen et al., 2019). However, it has slowed from 10.64 percent in 2010 to 6.11 percent in 2019 (see Figure 1). To avoid the middle-income trap, China has invested heavily in science, technology, engineering and mathematics (STEM) education, and research and development (R&D) in order to advance China into the rank of high-end manufacturing power. The National Science Board (NSB) reported on January 15, 2018 that the number of bachelor degrees in science and engineering awarded in China went up 360 percent in fourteen years from 2000 to 2014. Of the 7.5 million bachelor degrees in science and engineering conferred in 2014 globally, 1.7 million (twenty two percent) were awarded in China, whereas only ten percent were awarded in the U.S. (NSB, 2018). In regards to R&D expenditures, the U.S. spent more (\$497 billion) in 2015 than China (\$409 billion). However, China's annual growth rate was 18 percent between 2000 and 2015 which is significantly higher than the 3 percent rate in the U.S. "If current trends continue, the National Science Board expects China to pass the U.S. in R&D expenditures by the end of