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Meryem Gurel
University of San Francisco, mgurel@usfca.edu

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THE EVOLUTIONARY GLOBAL VISION OF CHINESE POLITICAL PHILOSOPHY

China’s Socio-Economic Transformation in the 21st Century

Meryem Gurel
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Abstract

Evolving relations of East Asia due to trade liberalization raised the search for financial stability for institutional development. It also increased the importance of China integrating the global economy into renewing its political philosophy in the new century. This capstone project aims to examine why China has transformed its socio-economic structure by generating outward investments and how it has affected international political relations in terms of the role of the economic institution Asian Infrastructure Investment Bank (AIIB). Quantitative methodology aims to examine the impact of China’s export trade on income distribution and economic growth through linear regression analysis for the period of 2000-2018. The remaining conflict is discussed through economic index, manufacturing rate and theoretical literature to explain Chinese national economic modernization. The findings demonstrate that China’s large export trade has a positive impact on income level but it fails toward income equality due to monopoly of trade. While China’s production requires the transfer of technology, moderate production facilities do not contribute to income distribution efficiently. China’s inefficient production and unimproved social rights -women rights, democracy, liberalism and transparency with institutionalism- remain the importance of political issues affecting globalization such as supply chain and competitiveness with “Made in China 2025” beyond the Chinese economy in the 21st century. China’s economic growth does not mean the end of liberalism and liberalization while Confucianism is effective within Chinese business culture. Debates about China’s globalization will continue as suggestion.

Keywords: China, regional economic integration, liberalization, institution, policy, philosophy
Introduction

The quest for financial stability in East Asia after the 1997 Asia economic crisis raised new formations among neighboring countries by the increasing initiative of China. These regional formations developed trade liberalization and financial liberalization for a solid financial institution. While China’s export based economy provided economic growth and income level, after 2008 global economic crisis China economy has slowed down. Chinese companies -the core of Chinese economy- pursued oversea investments to renew the companies and to develop international trade. In 2014, Chinese government announced the Belt and Road Initiative (BRI) through land and sea investments. This was another outward investments by readjusting inward investments for national economic modernization. In addition, China established the Asian Infrastructure Investment Bank (AIIB) to finance the investments.

Drawing upon the existing literature, those evolving relations in East Asia increased the importance of Chinese politics with party values and principles as well as historical philosophy with Marxist and Confucianism, because of trade and financial liberalization to establish an institution for investments of BRI and for Chinese international economics. The main purpose of the capstone project is to examine why China generates a socio-economic modernization and how Chinese political philosophy with modernization will affect international relations. Quantitative method analyses the impact of China’s export trade on income distribution and economic growth through linear regression analysis and further details with economics indexes for the period of 2000-2018. For the reason of developing data, knowledge, science and technology as well as culture and philosophy affecting political relations in the 21st century, this capstone project aims to fill the gap of Asia Pacific global studies by providing China’s
international political integration with economy and philosophy to globalization for academic interest.

The study structure follows; literature review of Chinese economy in the 21st century, BRI, AIIB and political philosophy as the second section, China with empirical literature and data application as the third section, findings and discussion as the fourth section, conclusion as the fifth section.

**Literature Review of China’s Economy in the 21st Century**

The quest for financial stability East Asia after the 1997 Asia economic crisis raised new formations among neighboring countries by the increasing initiative of China. A series of free trade agreements (FTA) developed the regional cooperation of China, Japan, South Korea and Association of Southeast Asian Nations (ASEAN). Developing cooperation for regional integration based on trade liberalization without tariff limitations such as ASEAN+1, ASEAN+3, Chiang Mai Initiative, ASEAN Way, Regional Comprehensive Economic Partnership (RCEP) required building an institution for progressive solutions in terms of economy, politics and security. China’s continuation with “go global” strategy followed the announcement of BRI which included 64 countries in Asia and Europe, and It has been a distinctive policy deepening China’s core and peripheral relations by constructing socio-economic foundations through infrastructure investments, trade without barriers, financial and political coordination and, people to people connections through culture and language (NDRC 2015, Capie 2012, Park 2006, Park 2001). To finance BRI investments especially agricultural and rural development among member countries AIIB was established as a multilateral development financial institution.
BRI achieved the ability to interconnect vision and action of Asian countries’ regarding the independence celebration of Asian countries’ 100th anniversary in the 21st century (Table 1 in Appendices p.26) (AIIB 2020, Economist 2016). AIIB has an importance as the financial funding institution for outward foreign direct investments (FDI) as China’s macroeconomic development. The institutional developments are becoming the materialized strategy of China’s global vision on the pursuit of political economy due to the fact that 75% of capital formation is expected to be generated by Asian economies. Sustainable Development Goals (SDGs) contributing to climate change, industry, innovation, and poverty has been gaining importance for international political economy and financial architecture (Griffith-Jones 2015), which affects China’s FDI policy and industrial selection.

China’s economy and the Chinese business system running by state-owned enterprises (SOEs) are interwoven with its historical governance and philosophy. The dynamic hierarchy governance makes the business environment complicated. It requires reforms and regulations of SOEs (Child 2003) which is an evolving process to restructure Chinese companies. In parallel, China’s inland regions referring to the rural areas have social structural challenges from transportations to institutions for competitiveness of Chinese companies. This also arises complexity within itself. Reaching over $1000 for middle income range to $9470 in terms of gross national income per capita (GNI per capita) (Figure 1 in Appendices p.27) in the new

\[1 \text{ Furthermore, other financial institutions also established such as Silk Road Fund, BRICS New Development Bank, ASEAN Infrastructure Connectivity Fund including China Development Bank (CDB) with a total value of $156.3 billion (Bulloch 2015, 27).}
\[2 \text{ GNI per capita between $1,026 and $3,995; upper middle-income economies are those between $3,996 and $12,375; high-income economies are those with a GNI per capita of $12,376 or more.}
century and becoming a member of the World Trade Organization (WTO) became a milestone for Chinese business environments and Chinese companies went out for overseas investments with a “go global” strategy. Also, Chinese companies went for public shares with overseas investments called Initial Public Offering (IPO)\(^4\) to restructure their companies. This strategy was a change in the direction of opening China’s economy. Despite the 2008 global economic crisis China provided economic growth for a while, whereas developed countries’ economic growth started to slow down. This contrast, in consideration of macroeconomic policy- began new discussions among developed economies and emerging market economies (EMEs) in terms of spillover economies which the reserve currency was imposing pressure on national currencies.

China’s aim for the continuation of international economy and finance to recover the international monetary policy with G-20 countries required a sustainable and balanced economic growth (Mohan and Kapur 2014). Following the economic discussions due to slowdown of global economy, China’s economic growth with huge reserve currency as a middle-income country with an expanding membership among international institutions and economic organizations\(^5\) set China’s existence on the global stage.

China’s economic growth has been slowed after 2011 by setting a target of 7% annual rate of gross domestic product (GDP). China shifted into transition from a market economy to a services trade economy with communism ideology while production facilities would come across a limitation (Krugman 1994). In addition to that, China’s increasing export-import trade also has been complicated due to diversified production. In 2017, China was the 33\(^{rd}\) most complex country exporting 540 comparative advantage products and the largest export country

\(^4\) Further explanations [www.investopedia.com](http://www.investopedia.com)

\(^5\) WTO, APEC, SCO, BRICS, G-20
with the value of $2.41 trillion with a positive trade surplus. Co-exported network of products is a predictive factor for the evolution of export structure for Chinese business system as well as to income inequality referring to the Gini Index\(^6\) (OEC 2017). This conflict comes from China’s structural limitation in terms of export products contributing to national income level explained in the empirical section.

However, China’s industrial export based economic model has been increasing the pressures such as competitiveness of firms, demand on energy and raw materials, and capital reserves limiting economic development. These limitations required readjusting a macroeconomic policy from trade to Chinese brands in other words a national economic modernization. Chinese policies pursued main strategies for national security through asymmetrical investments of natural resources, transfer of technology, global supply chain, transition to services trade economy requiring trust and reputation for Chinese brands and intellectual property rights (IPR) of technology and know-how. Chinese policies pursued FDI as macroeconomic factor to reduce the pressure of Yuan capital stocks for the benefit of political stability (Goldsmith and Wagner 2010) for the integration to international economy and finance.

Regarding these developments, at present China had to provide a balanced economic growth by readjusting its socio-economy to green economy\(^7\), and by readjusting socio-demography, environmental advancement and progressive social structure to build an ecological civilization, and investments for natural resources to be compatible with universal standards which has been in discussion since 2004 (Li and Lang 2010, 57, Xi 2017, 1-10). To achieve

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\(^6\) The measure of economic inequality of income distribution in a country. It represents the values between 0 perfect equality and 1 perfect inequality.

\(^7\) This term refers to the United Nations macroeconomic environmental initiative to reduce carbon pollution of fossil fuels with investments of green technology, and it is tasked for transition through Sustainable Development Goals.
these macroeconomic goals, China made a five-year plans (FYP) for a long term New China to celebrate its 100 anniversary in 2049-2050. China’s global strategy has continued with outward FDI along BRI member countries as it is explained in the following section.

**Belt and Road Initiative**

BRI has been holding its importance for the benefit of China to restructure Asia from inland of China to Europe known as the Silk Road Economic Belt and from the South China Sea reaching to Venice, on Italy’s coast. The motivations of BRI as natural resources, strategic assets, market and efficiency seeking, and the determinants of BRI as cost advantage, institutions, cultural closeness, market size, labor, free trade, national agglomeration to climate change contributing carbon emissions are the drivers of BRI investments. China’s manufacturing-based economy increased the importance of supply side needs (Aybar and Gurel 2018) in the consideration of China’s macroeconomic modernization by readjusting inward and outward FDI.

China’s comprehensive and holistic approach to BRI member countries aims to build a mechanism operating China’s macroeconomic policy. Sea and road transportations, Information and Communication Technologies (ICT), constructions of logistics on the coastal sides, land-water channels, pipelines of petroleum and natural gas, air freight-transportation and civil aviation are some of planned infrastructures promoting cooperation with member countries. China builds industrial parks, trade and cooperation zones to expand trade relations for new generation technologies, biotechnology, new energy technologies and entrepreneurship (NDRC 2015). BRI’s materialization in Asia and Europe countries is set on a mutual win-win policy and will bring new standard rules for the behalf of Chinese policy.
Following these developments, China’s BRI will also be bringing new standard rules due to trade and investments. In additions, at 19th National Congress Premier Xi Jinping set a goal for New Era China by 2050 by establishing technological developments, a new vision for rule of origin (ROO)\(^8\) and formation of environmental civilization for the green economy. The CPC principles are also uplifted by technology and science developments (Xi 2017). As a result, China’s integration to the global economy is strongly related to its national economic modernization.

Furthermore, Asia is a vast geography where household consumption and energy demand gain importance due to increasing urbanization. Asian urbanization will affect 85% global income growth by middle-income households due to increasing megacities and population around 9 billion people by 2050 (Figure 2 in Appendices p.27) (UN 2019, Toward a more Urban World 2018). In parallel with increasing urbanization, energy consumption and demand will increase by 2040. Although China’s new economic transition has still uncertainties, it is affecting global energy markets (Figure 3 in Appendices p.28). China has the largest industries of energy intensive manufacturings (IEO 2018, WEO 2017). For the path of China’s internationalization, the Chinese currency *renminbi* (RMB) was accepted to the international reserve currency basket (IMF 2016) in 2016 to be usable in international markets and trade, and also to strengthen Chinese economy and global economy in the international monetary system.

While China generates global FDI trends, the new generation investments of developing countries for the formation of strategic economy affects governments’ policies requiring success, leadership, vision, education, knowledge and know-how so that mega projects are not found

\(^8\) “Made in China 2025”
realistic by practicing trial and error manners. Resource and infrastructure investments have been involving high risky budgets in the long-term period that governments are under severe challenges. Outward investment of productions -specified by expertise, zone and scale- require advanced economies’ companies in international operations. In the 21st century, leading strategic investments and trade are invalid by advocating traditional trade, but it should be governed with dynamics of trade.\(^9\) Production, labor, technology, licensing, contracting, creating demand and trade liberalization require new political perceptions (Moran 1999, 155-168). Modernization of policies for trade and investments required a solid financial institution to promote BRI investments and internationalize Chinese RMB and China established the AIIB.

**Asian Infrastructure Investment Bank as Multilateral Institution**

Following the Cold War, Asia Financial crisis awakened East Asian countries to advance relations among economics, politics and security such as a solid financial institutions, trade and investment liberalization, bilateral agreements, cooperative and broad initiatives, leadership, professional management and reforms. Ending with poor results due to weak and diverse ASEAN countries not only increased complex relations but also necessitated China’s emergence more important in the Northeast Asia (Capie 2012, 192-194, Moran 1999). The fundamental reason is the lack of understanding of institutional development as the key challenge for a sustainable cooperative mechanism. As a result of the Asia Financial Crisis the evolutionary regionalism and institutionalism, ASEAN has maintained its importance for regional multilateralism in the expansion of East Asia countries by being the center of regional

\(^9\) Effective trade depends on ideas, production, technology, goods and services rather than domestic resources as international markets are more integrated.
cooperations (Capie 2012, 178). For this reason, East Asia has been shaped by dynamism of weak and superior states’ economy, policy and security as well as institutions at present.

Post- Cold War discussions asserted not only the importance of material superiority but also the importance of special rights to minimize the costs. Based on two-decades developments since 1990s, institutionalism gained importance for the balance of powers under a stable sustained structure as a key form in international relations due to diverse nations and multilateralism (Capie 2012, 105-107). China penetrated broader geographies with BRI. AIIB was established as a multilateral development financial funding institution for the legitimization of BRI investments. AIIB has mainly asserted the dominance of China and India and Russia, then BRI member countries to deepen international cooperation. The founding member Mainland China holds 26% voting rights with 29,780.4 million USD (30%), India holds 7.63% voting rights with 8.367 million USD (8.65%), and Russia holds 6.01% voting rights with 6,536.2 million USD (6.75%) within regional members of AIIB. The institutional role of AIIB is to strengthen China’s international relations with stakeholders with a win-win policy of BRI.

**Chinese Political Philosophy**

The evolving Chinese international relations in East Asia, Chinese policy became prominent in the world, and it gained importance with its history and philosophy. China’s economy originated with Chinese business system and its governance, and it is the origin of SOEs based on the transition from agriculture to manufacturing with government control. It is related to China’s history, philosophy and culture. In the new century the Chinese National Congress vowed to Chinese people for the advancement of production and the advancement of culture as well as for the establishment of ecological civilization by 2035 as a transition to the green
economy known as circular economy.\textsuperscript{10} Chinese policies and governance ensued from its historical social cases and philosophies such as Confucianism, Taoism, Marxism, Maoism for political rulers, and these are all related with imperial periods and establishment of 20\textsuperscript{th} century Republican China as an authoritative power for the distribution of the wealth and property, and for peace and prosperity. This historical period requires a brief explanation to understand Chinese political philosophy.

From the 20\textsuperscript{th} century till the 21\textsuperscript{st} century there was an important period for the proliferation of Marxism and Chinese social organization. The social cases such as 1916 New Cultural movement, 1919 May Fourth Movement and 1924 Labor Movement enlarged Marxist thoughts and Marxism. Although every social movement originated from a different reason, the main historical reason was the dominance of imperialism and Confucianism leaving the country behind within a paradoxical trap. Deng Xiaoping’s Open Door Policy provided achievement with economic liberalization and bilateral agreements. Also the corruption and destructive power were involved in socio-economic organization with materialism to govern society and industries under political control and pressures, and this finally burst out the Chinese society with the case of Tian’anmen Square in 1989 as well as The Great Proletarian Cultural Revolution 1966-76 with the dominant leadership under Mao Zedong exhausted the Chinese society. The imperial history was the main reason for extensive views of Marxism with a materialist concept as China’s desire to be away from the dominance of Confucianism and feudalism driving a poor shape in political and economic terms. Because the imperial period was caught in a “paradox of equilibrium

\textsuperscript{10} Green economy
a shortage of resources was not able to provide supply for huge production and to cover increasing Chinese population. China was a country with its agricultural economy and with its clan system based on feudalism (Richey and Hammond 2015, 3-6, Xiao and Li 2012, 568-570, Ping 2002, 48-49).

Chinese traditionalism drove Chinese society into a paradoxical trap to adopt Marxism. One of the important Marxist scholars was Li Dazhao (1889-1927) who contributed to the establishment of Republican China, and he defended the view that Marxism, political, legal, philosophical and spiritual structures have been changing all the time in the society, thus shaping the structure of its economy. Spiritual structures are dependent on the fundamental causes for the evolution of productivity. Human kind drives productivity as the cement of social organization, and the social organization promotes the growth of productivity and the growth of economy. Whenever the production exceeds the aim of social organization, organization is unavoidable to be collapsed generating a social revolution to replace a new social organization. For this reason, Li Dazhao strongly confirmed that productivity is fundamentally related to social development and social revolution by identifying the basic ideas of the materialist concept of history in China. While the science of history derives from natural sciences, the huge significance of the materialist concept of history is the subject for people searching for the laws of society and economic relations. The materialist concept does not come from a ruler or a wise man or God, but from the human power (Xiao and Li 2012, 571).

These reasons developed the power of understanding in Chinese family and laws. Socialist and Marxist China’s policies formed the capitalist family, and in family laws the value

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11 A country’s condition where supply and demand, is unbalanced. China’s supply shortage was not sufficient covering country’s demand and also dominance of agriculture was not able to achieve the demand in the country. Technological breakthrough was unavoidable.
of freedom is measured with property. Regarding the political control and Confucian traditions as Chinese political culture did not drive a path of liberalism in the society. However the planned and market economy during Deng Xiaoping period did not create disputes for socialism with Chinese characteristics (Xiaodong and Zhong 2014, 440-442). The main philosophy of Confucianism with virtue politics and other school of thoughts such as Mozi’s Mohism with utilitarian politics, Han Fei’s Legalism with totalitarian politics, Laozi’s Taoism since pre-Qin dynasty prescribed competitiveness of economics and political perspectives as the rule of the games. Confucius worried about inequality rather than less wealth, and the loss of harmony rather than becoming poorer, and this explained the ruler’s striking imbalance between gain and people’s loss of interest as well as between humane and tyrannical governance (Dunhua 2007, 161-163).

Confucianism in the 21st century became popular not only as the origin of nationalism and economic growth but also as a search for faith and new ideas within a basis of traditional culture and moral values to understand the world. Confucianism promoted a national unity for social change that the Chinese millennial youth generation as a post-Mao generation would like to construct (Richey and Hammond 2015, 3-6, Xiao and Li 2012, 568-570). Because of destructive movements and traditionalism, the role of women in the society, and the ideals of science, liberalism, democracy and individual freedom are unimproved under the systematical control and hierarchy in China. The lack of freedom in the Chinese society came out with materialism, individualistic ethos, jargoning, romantic and sexual themes. China’s increasing international influence has been forming with Chinese millennial youth influenced by Confucian values and the Han dynasty due to the identity of Chineseness (Richey and Hammond 2015). Controversies of social structure and productivity postponed liberal policies and democracy.
Currently democracy matters with trade and financial liberalization and outward investments as well as culture and people to people connectivity. For this reason, local governments in Chinese hierarchy gained importance for liberalism and trade liberalization.

Chinese local governments played an important role by building relations with ASEAN to overcome the structural limitations for expansion of international trade relations. China developed its international political relations with social, economic and cultural perspectives, and it is conceptualized as local liberalism by the examination of Yunnan and Guangxi by Mingjiang Li (2014). Local liberalism has been playing an important role for Chinese international relations for the reason that local governments are strategically aligned to the central government. In addition, China’s border provinces remained poor economically so that local activism played an important role for Chinese government to open up the borders for economic relations. This has been a forward step to activate the western development plan in China. The study indicated that local governance is related to strengthening economic linkages with less central control dependent on local liberalism (M. Li 2014) among Chinese states.

Another study about liberalism in the contemporary period is associated positively with income inequality but not with economic growth although the collectivist culture formed China’s industrialization and materialism as the formation of wealth for social change (Zhang, Brym and Andersen 2017). Taoism as well as Confucian philosophy also found effective with firm management and product development. Confucian values promoting benevolence, righteousness, propriety, wisdom, honesty and trustworthiness affect Chinese behaviors and hierarchy for the good of the group as collectivist culture. Each individual has symbiotic relation in the society so that there is always mutual benefit or interest -so called “Guanxi”- which was found effective in supply chain and operational management. Leadership and hierarchy among Chinese employees
are driven with Confucian values. Taoism promoting individual freedom is found effective for creativity of employees. Confucian and Taoism are effective drivers for Chinese business environment and product development providing economic benefits (Subramanian, et al. 2018). *Guanxi* with traditional philosophies also affects Chinese business relations and political relations with BRI embedded as win-win philosophy and people to people connectivity. Although Confucianism is influential in Chinese society relations, in international relations and laws, liberalism is influential regarding institutionalism requiring transparency and accountability. Chinese local institutions are under the impact of Confucian thoughts practicing state hierarchy and collectivism as a fact of production and social organization. According to Boerwinkel, democracy and liberalism are important in international relations to contribute theories whereas Chinese philosophy is not effective in international relations and does not contribute theories (Boerwinkel 2015). Democracy and liberalism also contribute to institutional development. This is also necessary to apply international legal services while China makes a transition into trade in services economy signed with the World Trade Organization (WTO).

Liyue (2012) defended that Cultural Revolution (1966-1976) left Chinese society lawless and traditional, trying to modernize Chinese society with socialist capitalism without democracy. Although China has achievements with reforms, reforms made in specific sectors and limited. China’s modes of supply\(^\text{12}\) penetrating in international markets operates inefficient lacking with the pressures of global competition and laws of WTO. Inefficient penetration into international markets requires further national legal reforms and liberalization as the extension of government policy.

\(^{12}\) UNSTATS, modes of supply in one of the WTO member country under GATS; cross-border, consumption, commerce and third-party service
Different advantages of complex philosophies demonstrate that traditional philosophy and liberalism form a contradiction between Chinese productivity and society for China's globalization. Depending on explanations at above sections demonstrating the importance of evolving relations in East Asia related to China’s global vision formed the research question for this capstone project; How will China’s socio-economic transformation affect the international political relations? To narrow the questions with further detail, we will examine empirical literature to process quantitative analysis.

**Chinese Economy with Empirical Studies**

Based on the theoretical and empirical literature, as a macroeconomic indicator export-import trade has an impact on a country’s income level affecting consumptions, and economic growth. China’s international trade has been affecting economic growth through the improvement of manufacturing. Manufacturing, trade liberalization, the market openness, investments, and government policies are important for economic growth influencing policy makers’ decisions as key factors for globalization. To explain further details, the findings among export trade, economic growth, and income distribution -resulting the structural limitation of rural and urban areas- will be merged with economic complexity index (ECI)\(^{13}\) among product range and Gini index. For this reason, China’s export trade data is pulled off (Schmitt, Imhof and Nechmand 2019, OEC 2017, MITmedia n.d., Su and Heshmati 2010). To implement this analysis, empirical literature was examined and explained as the following.

Young (2000) criticized that China’s productivity in non-agricultural sectors was not sufficient, and Krugman (1994) also criticized that sooner or later China’s productivity regarding

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\(^{13}\) Economic Complexity Index (ECI) is defined as a country’s complexity of export product with linear equation.
its huge input and poor output would restrict its economy (Wang and Yao 2003, 33). In addition to that, structural limitations between rural and urban provinces increased the inequality in China such as connectivity of geography through transportation, insufficient technology, reforms of government institutions and readjustment of domestic investments that are some of the findings of empirical analysis of China’s outward foreign direct investments. Increasing pressures caused Chinese policies to renew its economic structure through reforms (Y. Wang 2015, Wang and Wan 2015, You 2015, Buckley, Clegg, et al. 2007, Buckley 2004).

Chinese government pursued political reforms with five year plans (FYPs). These reform policies have been applied to advance productivity through technology and science to establish the fundamental developments of ecological civilization of Chinese society. New formations as the existing instruments of economics come with advanced technologies, data-revolution, information and science as adaptive complex systems and natural science. Research in the future arising from socio-economic requirements is found in evolutionary political economy. In addition to that, institutional development, structural productivity, diversity of products to export also gained importance to achieve economic complexity shedding light on economic growth and income inequality in a country (Hanappi and Scholz-Wackerle 2017, Hartmann, et al. 2017).

Another empirical analysis with economic complexity regarding income inequality, and economic fitness\textsuperscript{14} regarding industrial production, through 71 industries in 31 cities as the scope of China’s regional economic development indicated that the coastal cities have higher economic complexity is positively correlated with economic development. But it is negatively correlated

\textsuperscript{14} Economic fitness is defined as a self-consistent metrics for product’s complexity as province’s fitness with non-linear equations assessing the comparative advantage of a product diversity, in terms of production of complex goods.
with income inequality. Coastal cities having economic diversity and relative income\textsuperscript{15} have less income inequality. Population, urbanization, education, innovation and trade are some other factors influencing economic development in China. Limitation among economic development and complexity has remained an open question for theoretical and econometric studies (Gao and Zhou 2018). Empirical studies demonstrated that China’s export-led economy came across with unbalanced structure and unsustainable economic growth.

In the next section China’s export trade on income distribution and economic growth will be examined through bivariate linear regression analysis (Schmitt, Imhof and Nechmand 2019, Isagiller 2007, Frankel and Romer 1999). The findings will be explained in detail through the Gini index, ECI, and PMI rate.

**Data Application and Discussions**

Linear regression method (LRM) is a statistical methodology and is defined as the relationship between a dependent variable and an independent variable or more independent variables through the linear equation \( Y = \beta_0 + \beta_1 X \). The dependent variable \( Y \) is estimated by every value of independent variable \( X \), so \( Y \) will appear on the best-fitting line or regression line. According to summary of data output, we can provide further testing after explanation of significance \( F \). If it is smaller than 5\%, the method is significant. The provided data from the World Bank database between 2000-2018 will be performed through LRM. Independent variable is export trade as thousand USD on X axis (horizontal), dependent variable on Y axis (vertical) is

\textsuperscript{15} Relative income depends on the satisfaction of individual's consumption as a member of the society. Consumption is an increasing concept related with income according to life standards in the society rather than absolute income.
GDP per capita current USD, GDP PPP\textsuperscript{16} international current USD ($) and economic growth as GDP (constant 2010) USD refined from inflation, LRM explains how export trade is associated with income level in terms of GDP per capita current USD ($) and GDP PPP international USD ($), and how export trade is associated with economic growth in terms of GDP constant USD (Schmitt, Imhof and Nechmand 2019, Darity 2008). See the Appendices pp 29-32 for figures and the detail data summary.

The data summary output of Figure 4 demonstrates that export trade is positively associated with income level GDP Per Capita $ with the indicators as $R^2$ 0.93, and significance F 1.0 smaller than 5% and $p$-value 0.092 closer to zero explain the significance of the model. Figure 5 demonstrates that export trade is positively associated with income level GDP PPP $ with the indicators as $R^2$ 0.91, and significance F 1.2 smaller than 5% and $p$-value 0.22 closer to zero explain the significance of the model. Figure 6 demonstrates that export trade is positively associated with income level GDP constant 2010 $ inflation corrected with the indicators as $R^2$ 0.92, and significance F 3.51 smaller than 5% and $p$-value 0.005 closer to zero explain the significance of the model.

While there is a positive correlation between export trade and GDP in terms of economic growth in Figure 6, China’s GDP annual % in Figure 7 demonstrates a declining line from 13% in 2007 to 6% in 2018. Economic growth in terms of GDP annual % is not stabilized. The Chinese government announced to aim its economy to slow down for 7% in 2011 regarding 12\textsuperscript{th} FYP\textsuperscript{17} to increase investments and consumption and to reduce income inequality. In addition to that, although trade is a powerful determinant among geographies, it may not be a significant

\textsuperscript{16} Purchasing power parity; an international comparison currency -for economic productivity and standard of living- based on United States Dollar ($)

\textsuperscript{17} China’s 12\textsuperscript{th} Five Year Plan, NDRC, APCO worldwide
variable due to government policies\textsuperscript{18} toward creating demand and endogenous money\textsuperscript{19} in domestic markets. Because the amount of trade is not determined exogenously, as a result, this means the country requires inward investments such as technology, innovation, know-how, efficiency, and incentives (Frankel and Romer 1999).

In addition to that, according to Immiserizing Growth theory\textsuperscript{20} of Jagdish Bhagwati (1958), if a country’s economic growth is based on export trade, it can exceed the gains from economic growth in the long-run term. This means the country’s large export can make a decline and distortion due to adverse shift so that it can affect country’s income inequality causing poverty (Pryor 2007). Poorer country can become much poorer due to monopoly of trade as failure of imperfect market. At this point, China’s economic growth with huge capital accumulation does not contribute to the country’s income inequality, but it may increase the poverty due to export based production in China. According to the World Bank estimation, China’s poverty in a decade decreased from 80\% to 23.8\% under the international upper middle-income class poverty line (World Bank, 2020, China Poverty and Equity Brief).

Further explanations can be made through economic indices. The Gini index data represents income inequality of a country. It is explained between 0 meaning perfectly equality and 1 meaning perfectly inequality (World Bank). China’s highest index was 049.1 in 2008 and it is 3 points declined to 046.7 in 2018 (Figure 8 in Appendices p.33) (CEIC/NBS). In other

\textsuperscript{18} Free market policy, fiscal policy, monetary policy, investment policy, trade policy
\textsuperscript{19} Endogeneity of money supply is related to a country’s monetary system. The origin of money from commodity money to fiat money can be created spontaneously or evolutionary regarding different school of thoughts of the monetary theory.
\textsuperscript{20} If a country is highly demanded on export trade, an increase of a factor of production can cause the decrease of real output of an economy due to foreign inelastic demand, oftenly resulted with structural limitations in the country. This may be a cause of tariffs, prices or technology. This situation leads the country to poverty growth but not welfare.
economic databases China’s Gini index also reported 0.43 in 2008 and 0.38.5 in 2016 indicating a 5 point decline (FRED database). The Gini index shows that there is not much improvement about income inequality in China. Other empirical studies also indicated that China’s income inequality increased and decreased between 1978 and 2010. The increasing urbanization is positively correlated with China’s rural and urban income inequality due to reform and open-door policies. So, urban and rural developments have been the key trend affecting the Gini coefficient changes (Chen, Pu and Hou 2019).

As further explanation, income inequality is related to product diversity. Product diversity can be defined as industrial product space (Figure 9 in Appendices p.33). China ranked 19th according to ECI 2017 —the product range of HS4\textsuperscript{21} digits— of 133 countries with dominance of export composition of chemicals, electronics, machineries, vehicles exporting to the countries of Asia (44%), United States (25%) and The European Union (22%). A country’s industrial production composes the country’s ability to produce and provide income distribution. Composition of export products of a country is predictive for future pattern and economic growth. Empirical studies also explained the relation between production and income distribution by complex products or product diversity, this means if a country’s export has more complex products co-exporting other products, then the country has less income inequality. A high complexity of products is defined as sophisticated products requiring knowledge, know-how, innovation and technology. For this reason, economic complexity is found as a significant predictor of income inequality as well as institutions, export, and human capital.

\textsuperscript{21} UNSTATS; Harmonized system 4 digits; code of classified product range as trade tariffs in international custom
Also, China’s regional economy analysis demonstrated that Chinese provinces are still unbalanced. Although a higher economic complexity is positively correlated with China’s economic development, it is negatively correlated with income inequality. Coastal cities having higher economic diversity following relative income level have less income inequality (MITmedia n.d., Atlas of Economic Complexity 2020, Gao and Zhou 2018). China’s product space (Figure 9) demonstrates the cluster of products supported by other products as connected network products based on innovation and know-how. The nodes show export capabilities of connected products.

According to the manufacturing purchasing manager’s index (PMI) data provided from IHS Markit, in March 2020 China’s PMI (Figure 10 in Appendices p.34) rate is 52 which means industries need to improve and expand facilities positively. The National Bureau of Statistics of China provides PMI reports for two years, so a new data survey indicates the performance of manufacturing through output, orders, export, inventories of inputs and final goods by comparing the prior month. For two years China’s PMI has been pursuing a moderate condition above or below 50 rate (Figure 10). This means industries have remained unchanged requiring technology and innovation to increase PMI rate positively toward 100 which is an overall effective outlook of a country’s economy, as productivity contributes to a country’s income increasing standard of living.

Conclusion

Despite the economic crisis China’s economic development led to a new socio-economic transformation where Chinese manufacturing and governance system formed controversies with deepening integrations in East Asia. Since the imperial periods, the continuation of China’s paradox of supply-demand has been important for China’s 20th century with social cases driven
into complexity. Preserving social memory of philosophy, culture and history with close neighbor countries China has been improving its international relations with regional economic integrations, free trade agreements, outward investments and financial liberalization after the Asia financial crisis. At present, society, economy and policy became much more interrelated as a fact of globalization. For this reason, China’s socio-economic transformation is expected to affect deeply and unavoidably the Chinese international political relations today.

The quantitative study of the capstone project demonstrated that China’s income distribution and economic growth are related with its production. Although China has a scale of productivity affecting countries income level positively, Chinese productivity with PMI rate is not efficient and ECI demonstrates the inefficiency on income distribution. This controversy of Chinese domestic economy signifies that the production is not enough to overcome income inequality. This controversy depends on both product diversity and structural development between urban and rural regions. For this reason, China needs to modernize the country’s welfare and global competition with urbanization, infrastructure, professional management, knowledge, innovation, and technology as well as institutions. This requires education and human capital as well. But China’s productivity is dominated by the Chinese government and business carrying the importance of political philosophy.

As it is indicated through Gini index there are no efficient changes for China’s income inequality. China made a national economic shift into Trade in Services economy, by increasing wages and consumption and inward investment. Government political reforms pursuing science and technology developments, and providing data have been an overcoming phase for the conflicts of economic growth and income inequality. Besides these, China’s BRI and restructuring the connectivity from inland to cross-country borders became meaningful for
Chinese economic modernization and financial coordination. The increasing importance of international political relations under AIIB and its member countries are dominated by the shareholders China, India, and Russia. This also created flexibility for Chinese political relations, combining institutional development and local liberalism. This means the Chinese government’s hierarchy and regional policies are getting an adaptive path to globalization. In international trade and finance, liberalism is important for international legal implementations while traditional philosophies are still effective for business environment in China. Renewing ROO with Made in China 2025, democracy and liberalism will gain importance for international markets and global competitiveness of China.

This capstone project offers significant insights that China’s socio-economic transformation related with its international political relations includes a complex philosophy of Confucianism, Marxism and Liberalism affecting Chinese society, business system and institutional development. Correspondingly, China’s dominance in the AIIB demonstrates that there will be a maintenance of liberalism versus Confucianism in politics for Chinese national benefit. China’s economic modernization will be creating fragility in global economic relations and global supply chain due to inefficient productivity and related policies. Debates about China’s globalization will continue. China’s international political relations within complexity will raise the challenges for other countries as a suggestion.
## Appendices

### Table 1 AIIB Regional Member Countries

<table>
<thead>
<tr>
<th>Country</th>
<th>Independence</th>
<th>Centenary</th>
<th>Country</th>
<th>Independence</th>
<th>Centenary</th>
</tr>
</thead>
<tbody>
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<td>Mongolia</td>
<td>1921-1945</td>
<td>2045</td>
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<td>2029</td>
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<td>2070</td>
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Source: AIIB, January 2017
Figure 1 China Gross National Income


Figure 2 Urbanization and Population

**Figure 3** Energy Transition in China

![Energy Transition in China](https://www.iea.org/weo/china/)

*Source: IEA, [https://www.iea.org/weo/china/](https://www.iea.org/weo/china/)*
Figure 4  Summary Output

Dependent Variable GDP Per Capita Current $  Linear Regression Method

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<td>Adjusted R Square</td>
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<tr>
<td>Standard Error</td>
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<tr>
<td>Observations</td>
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<th>Upper 95%</th>
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**Figure 5** Summary Output

Dependent Variable GDP PPP International $   Linear Regression Method

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<td>Regression</td>
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**Figure 6** Summary Output

Dependent Variable GDP Constant 2010 USD  Linear Regression Method

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Figure 8

Source: CEIC database reported by NBS China

Figure 9

Product Space of China

Source: MIT Media Lab 2017
Figure 10

Source: Statista reported by NBS China 2020
References


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