

Analysis for the Influence of the China Industrial Policies to the Digital Economy

by

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Abstract

The World recent economic debate focuses on how the industrial policies can be designed to reflect and pilot the digital economy subject to the ongoing rapidly technological advancement in the world. However the influence of the China industrial Policies has never been studied. The present paper is focusing on evaluating the influence of the China industrial policies to the digital economy during the period from 2010 to 2017 in China. With that regards the simple regression model was used to evaluate the influence of the China industrial policies to the digital economy. Time series data for the study were collected from the World Bank data indicator and the United Nations Report (Digital Economy Report, 2019) during the period from 2010 to 2019 for China. To analyze the influence of the China industrial policies the China industrial policies were represented by the economic openness and stands as the independent variable while the remaining macroeconomic variables (Information Technology GDP, Information technology employment, and Population using internet) regarded as dependent variables for the study. The findings of the study were in actual fact catching up the attention. The study findings revealed that the relationship between the economic openness and all macroeconomic variables (Information and Technology GDP, and Information and technology employment) is positive and meaningful, except to the population using internet where findings revealed that the economic openness and the population using internet relationship is negative and meaningless during the period from 2010 to 2017 in China.

Key Words: China, Industrial Policies, and the digital economy.

Introduction:

Industrial Policies are the government policies created to pilot and guide the industrial sector production in the process of industrialization for the quick economic development of the particular country. The meaning and definition of the word industrial policies have been elaborated as the policies particularly focusing on the industrial activities and the prosperity of the organizations. Foster and Azmeh (2019) define the industrial policies as “The terminology of industrial policy has been used to outline a broad set of industrial, trade, technology, and education policies,” while the Digital economy is the economy mainly contributed from the information and technology gross domestic product of the country. Literature suggested the proper meaning of the digital economy exploring that the digital economy basically is the underlying technology for the economic development of the country. Zhang and Chen (2019)

defined the digital economy as “The definition of the digital economy has evolved with the underlying technology.

With the recent world quickly technological advancement the china digital economy has become most significant and its contribution to the Gross domestic product of the china economy has been rising. The importance, role and the contribution of the digital sector to the China economy have been shown as the sector contributed 32.9% to the China economy during the year 2017. Miura (2018) wrote that, “According to a think-tank affiliated with China’s Ministry of Industry and Information Technology, the Chinese digital economy accounted for 32.9% of the country’s total GDP in 2017”.

Most interesting is the recent world economic debate which demands the industrial Policies to be designed to reflect and guide the digital economy for the quickly sustainable and significant economic development in the world. The debate for the industrial policies to be pilot of the digital economy as technological advancement rapidly happening now become inevitable for most of the countries in the world. For the decision makers, policies stakeholders including different governments’ policy makers it is advisable to review industrial policies to reflect the digital economy advancement and development. Foster and Azmeh (2019) argued that, “The digital economy and digitalisation are becoming an ever more important element of production including in developing and emerging countries”.

Towards accomplishing the industrialization process and journey to realize the targeted goals among the different countries literature insisted that the industrial policies objectives must be set against the digital economy strategies. In addition to that policy makers should consider creating the national digital policies and link them with the industrial policies for effective and efficiency in their implementation. Foster and Azmeh (2019) argued that “growth of national digital policies and highlight how industrial policy objectives are important drivers of digital strategies”.

Motivation and Objective of the Study:

The World recent economic debate focuses on how the industrial policies can be designed to reflect and pilot the digital economy subject to the ongoing rapidly technological advancement in the world. However the influence of the China industrial Policies has never been studied.

The debate for the industrial policies to be pilot of the digital economy as technological advancement rapidly happening now become inevitable for most of the countries in the world. For the decision makers, policies stakeholders including different governments’ policy makers it is advisable to review industrial policies to reflect the digital economy advancement and development. (Foster & Azmeh, 2019) argued that, “The digital economy and digitalisation are becoming an ever more important element of production including in developing and emerging countries”.

The present paper is focusing on evaluating the influence of the China industrial policies to the digital economy during the period from 2010 to 2017 in China.

Literature Review:

Literature suggests that to achieve the quick developments with the recent technological advancement the industrial policies since act as the core vehicle on the industrialization journey should be reviewed matched and made to reflect the technological change particularly the digital economy. The United Nations Conference Trade and development (2018) highlighted the matter

clearly and stated that, “A case for such a more ambitious shift towards mission-oriented industrial policies could be made with regard to new digital technologies”.

Recently digital economy is counted to be the major factor for recreating and innovating the production process, kind of the business to be done, ways to fasten the economic development and market strategies for the economy in performing the industrialization agenda. United Nations Conference on Trade and Development (2018) stated that; “The fast spread of digital technologies throughout the world is reshaping production processes and business models, with important implications for the economic diversification and structural transformation of countries”.

Recent world evidence manifests that digital transformation is mostly started to be adopted by many countries in the world particularly the global north of the world. Many countries around the world recently made the digital economy the priority to fasten their developments particularly the industrialization process. Foster and Azmeh (2019) clarified that “The impacts of the digital transformation have been increasingly felt over the previous two decades, particularly in the global North”.

The debate for the industrial policies to be pilot of the digital economy as technological advancement rapidly happening now become inevitable for most of the countries in the world. For the decision makers, policies stakeholders including different governments’ policy makers it is advisable to review industrial policies to reflect the digital economy advancement and development. Foster and Azmeh (2019) argued that, “The digital economy and digitalisation are becoming an ever more important element of production including in developing and emerging countries”.

Towards accomplishing the industrialization process and journey to realize the targeted goals among the different countries literatures insisted that the industrial policies objectives must be set against the digital economy strategies. In addition to that policy makers should consider creating the national digital policies and link them with the industrial policies for effective and efficiency in their implementation. Foster and Azmeh (2019) argued that “growth of national digital policies and highlight how industrial policy objectives are important drivers of digital strategies”.

The rapid growth of science and technology to the world all the economic sectors become dependent on the digital sector, digital economy and digital resources. The meaning is that the digital economy has become the priority sector and mostly pilots other sectors of the economy. Azmeh, Foster, and Echavarri (2019) suggested that “With the expansion of the internet and its importance in all sectors of the economy, digital resources are becoming central to economies”.

The recent literature evidence shows that the world internet technology advancement have not well reflect the available geographical areas services providers, institutions and other related platforms (Evans & Gawer, 2016) argued that, ‘This global spread of the internet, nonetheless, has not been mirrored by a similar expansion in the geography of digital service providers, firms and platforms, which still predominantly originate from a handful of advanced economies”.

It is evident that with the well structured institution having the best marketing strategies and managing to outreach the outsiders markets, is because of the role played by the digital economy which it has to be enhanced for sustainable growth of the respective institutions Foster and Azmeh (2019) highlighted well the matter insisting that, “With unique organisational structures in terms of market strategy, platform business models, financial objectives, and

demands of capital providers, such digital firms are able to maintain a global reach but with relatively ‘asset light’ investments outside their home countries”.

The meaning and definition of the word industrial policies have been elaborated as the policies particularly focusing on the industrial activities and the prosperity of the organizations. Foster and Azmeh (2019) define the industrial policies as “The terminology of industrial policy has been used to outline a broad set of industrial, trade, technology, and education policies”.

Literature suggested the proper meaning of the digital economy exploring that the digital economy basically is the underlying technology for the economic development of the country. Zhang and Chen (2019) defined the digital economy as “The definition of the digital economy has evolved with the underlying technology.

The literature evidence manifests that recently China has achieved the fastest economic development in the world however the China digital economy remains behind other development sectors within china. Zhang and Chen (2019) insisted that “China’s digital economy has expanded rapidly in recent years. While average digitalization of the economy remains lower than in advanced economies.

In development perspective, the digital economy has both parties’ means benefits and disadvantages. Among the serious disadvantages of the digital economy is that it creates less to the society because most of the works which performed by the human being could be replaced by the machines during the production process. Zhang and Chen (2019) argued that, “Digitalization brings significant benefits to the economy, but also risks. Digitalization can boost productivity, promote rebalancing, and create jobs in new sectors. On the other hand, digitalization could disrupt traditional sectors; lead to job losses, especially mid-skill workers in the manufacturing sector”.

The importance, role and the contribution of the digital sector to the China economy have been shown as the sector contributed 32.9% to the China economy during the year 2017. Miura (2018) wrote that, “According to a think-tank affiliated with China’s Ministry of Industry and Information Technology, the Chinese digital economy accounted for 32.9% of the country’s total GDP in 2017”.

Recent records show that the China digital economy sector is the third sector on the contribution to the economic growth of the China economy. Miura (2018) argued that “Digital Economy Contributing a Third of GDP at a time when a downward trend in China’s potential growth rate appears to be inevitable, there is hope that the digital economy will emerge as a new driving force for the economy.

Industrial policies defined as the policies of the country created for the purpose to guide and pilot the industrial sector of the country through all its production activities. Barwick, Kalouptsidi, Bin Zahur (2019) explained the meaning of Industrial Policies, stated that; “Industrial policies, broadly defined as a policy agenda that shapes a country’s or region’s industrial structure by either promoting or restricting specific sectors, have been widely used in developed and developing countries.

It has argued that the digital process and industrialization undertaking might be comparable and similarly to the ending goals that are their effects to the economic development and society organizations (Landscape Parminder Jeet Singh,¹ IT for Change, 2019). Digitalisation can be compared to industrialisation in what would be its eventual impact on economic and social institutions.

China industrial policies and the India policies are compatible in the aspect of inclusive growth since both created the path to inclusive growth. Kaur et al (2013) argued that, “These two

major country cases form the basis for a consolidation of recent conceptual ideas, where effective and successful industrial policy is viewed as part of a social contract, creating a pathway to inclusive growth”.

Literature evidence highlights that the recent China industrial policies are implemented with the reflection of very long term goals to be accomplished. To catch the goals of the current China industrial policies it is necessary to consider many years back for tracing since the year of 1970 (Defraigne, 2014). China's current industrial policy has been pursuing long term objectives and can be traced back to the late 1970s.

The meaning and definition of the digital economy has not been given the fixed and permanent meaning however literatures believe that the digital economy is the economy contributed mainly by the information and technology sector to the Gross Domestic Product of any country. Lovelock (2018) defines digital economy as “the share of GDP accounted for by the ICT sector”.

Among the significant roles of the China industrial policies is mainly to guide the entire china economy as the state driven industrial policies. Kenderdine (2017) insisted that “China's transition economy experiment continues to rely heavily on state-driven industrial policy to structure the economy”.

Industrial policies, broadly defined as policies that shape a country’s or region’s industry structure by either promoting or limiting certain industries or sectors, have been widely used in developed and developing countries (Barwick, Kalouptsidi, and Zahur, 2017).

With the emergence of digital technology, the digital economy will have far-reaching impact on Chinese economy, which will not only promote the faster growth of gross domestic product (GDP), but also increase productivity, transform consumption composition, optimize investment structure, enhance the scale of enterprise export, improve the quality of human capital, and lead the development of intelligent cities (Yan, Huijuan, Feng, and Jianfeng, 2019).

As the world's first active digital economy and second largest economy, China's policy determination to promote the deepening of the digital industry and contribute to the horizontal expansion of the digital economy is reflected in the deployment from “Internet Plus” to Digital China (Yangyan 2019).

Empirical evidence shows that population size is positively correlated with economic growth in terms of income per capita, suggesting the existence of large country effect (Xun and Tanying, 2019).

It has explored that the conflict between the anti - monopoly and digital platform oligarch has been persisting recently. Hong-ru (2019) stated that “The dispute of anti-monopoly against the digital platform oligarch has been constantly in recent years.

Digital economy refers to the economic model that takes digital technology as the core to drive the whole economic activity process and create benefits (Feng, Wang, and Wei, 2019).

The fundamental role of the digital economy to economy is the central and core for innovation and to transform the economic growth kind and pattern of the specific country. Heng & Yong (2019) argued that, “The digital economy is the core element of innovation and change of economic growth mode”.

In order to dominate the world business the literature suggested that China should consider perfecting digital facilities Weiwei (2019) insisted that, “In order to improve competitiveness, dominance, penetration and originality of digital economy and realize the high-quality development of digital economy, China should take perfecting digital facilities, increasing efficiency in digital industry, expanding digital production, strengthening digital

application and promoting digital innovation as its development goals, and take "three industries linkage" "gradients-elapsing advancement" "Stock transformation" "optimizing layout" as development strategies".

The role and the importance of the digital economy also found on supporting the society development and education perspective for every nation. Yanling et al, (2019) argued that, "Digital economy promotes the development of social economy and education".

Research Methodology:

The present paper is focusing on evaluating the influence of the China industrial policies to the digital economy during the period from 2010 to 2017 in China. With that regards the simple regression model was used to evaluate the influence of the China industrial policies to the digital economy. Time series data for the study were collected from the World Bank data indicator and the United Nations Report (Digital Economy Report, 2019) during the period from 2010 to 2019 for China. To analyze the influence of the China industrial policies the China industrial policies were represented by the economic openness and stands as the independent variable while the remaining macroeconomic variables (Information Technology GDP, Information technology employment, and Population using internet) regarded as dependent variables for the study.

The analysis for the Influence of the China Industrial Policies to Digital Economy applied the Simple Regression analysis in double log and semi log linear models. The Digital Macro Economic Variables used in this study are regressed on Economic Openness Index (EOI) and dummy Variables as Independent Variables to represent Industrial Policies.

To assess the Influence of China's Industrial Policies to Digital Economy specifically to China's Information and Technology Contribution to GDP, China's Information and Technology Employment, and China's Population using Internet for the duration from 2010 to 2017 in China the study applied the following equations:

$\ln Y_t = \alpha_0 + \beta_1 \text{EOI}_t + \epsilon_{1t}$ (1) Where, $\ln Y$ is the natural log of Dependent Variable, EOI (economic openness index) is economic openness index. The α_0 is constant, and β_1 , is the coefficient parameter.

The Influence Of China's Industrial Policies to China's Information and Technology Contribution to GDP is evaluated by: $\text{ICTChinaGDP}_t = \alpha_0 + \beta_1 \text{EOI}_t + \epsilon_{2t}$ (2) Where, ICTChina is the natural log of China ICT GDP.

The Influence Of China's Industrial Policies to China's Information and Technology Employment is evaluated by: $\text{ICTChinaEMPL}_t = \alpha_0 + \beta_1 \text{EOI}_t + \epsilon_{3t}$ (2) Where, ICTChinaEML is the natural log of China ICT Employment.

The Influence Of China's Industrial Policies to China's Population Using Internet evaluated by: $\text{ICTChinaIN/POPL}_t = \alpha_0 + \beta_1 \text{EOI}_t + \epsilon_{4t}$ (2) Where, ICTChinaIN/POPL is the natural log of China Population Using the Internet.

Empirical Results and Discussion:

The contemporary study employed the descriptive and analytical quantitative techniques to evaluate the influence of the China industrial policies to the digital economy during the period from 2010 to 2017 in China.

Relationship between China Industrial Policies and Digital Macro-Economic Variables:

The study investigated the Influence for the China’s Industrial Policies to the Digital Economy through analysing the relation between different China’s Digital Macro Economic Variables such as China’s Information and Technology Contribution to GDP, China’s Information and Technology Employment and China’s Population using Internet as Dependent Variables, and Economic Openness Index has been proxied by Economic Openness Index (EOI) as Independent Variable.

Influence of China Industrial Policies to the Information and Technology GDP in China:

The findings of the study revealed that the relationship between the economic openness and the information and technology GDP is positive and meaningful during the period from 2010 to 2017 in China. The results manifested that R-Squared 0.51 having significant at the 1 percent critical value. The coefficient for economic openness Index is 3.77 (t=0.20, p<.001). The meaning is for each additional increase for the Economic openness (EOI) the Information Technology GDP increases by 3.77 points as well (Table 1).

Table 1 Regression between Economic Openness and Information and Technology GDP during the period from 2010 to 2017 in China¹

Dependent Variable: - Information and Technology GDP

VARIABLES	COEFFICIENT	STD DEVIATION	T-STATISTIC	PROBABILITY
EOI	3.77	18.67	0.2	0
C	-13.12			0
R-SQUARED	0.51			
ADJUSTED R-SQUARE	-0.4701			
S.E.OF REGRESSION	6.73			
NUMBER OF OBSERVATION =8				

Appendix 3

Regression Computation to assess the Influence of China’s Industrial Policies to China’s Information Technology Contribution to GDP (From natural logarithms - Appendix 2)

YEAR	EOI-X	ICT-GDP	X ²	Y ²	XY
2010	3.926	1.548	15.413476	2.396304	6.077448
2011	3.927	1.526	15.421329	2.328676	5.992602
2012	3.877	1.548	15.031129	2.396304	6.001596
2013	3.845	1.548	14.784025	2.396304	5.95206
2014	3.808	1.589	14.500864	2.524921	6.050912
2015	3.68	1.569	13.5424	2.461761	5.77392
2016	3.617	0	13.082689	0	0
2017	3.642	0	13.264164	0	0
TOTAL	30.322	9.328	115.040076	14.50427	35.848538

¹ Source: Appendix 3

Influence of Industrial Policies to Information and Technology Employment in China:

The result of regression analysis revealed that there is a significant positive relationship between Economic Openness and Information and Technology Employment during the period from 2010 to 2017 in China. The Results are statistically significant with R-Squared 0.4707 having significant at the 1 percent critical value. The coefficient for economic openness Index is 1.46 ($t=0.0179$, $p<.001$). This Implies that for each additional increase in Economic openness the Information Technology Employment increases by 1.46 points. The results Indicates that Economic Openness Index Influences the overall performance of Information Technology Employment (Table 2).

Table 2 Regression between Economic Openness and Information and Technology Employment during the period from 2010 to 2017²

Dependent Variable: Information and Technology employment

VARIABLES	COEFFICIENT	STD DEVIATION	T-STATISTIC	PROBABILITY
EOI	1.46	81.65	0.0179	0
C	-5.07			0
R-SQUARED	0.4707			
ADJUSTED R-SQUARE	-0.4244			
S.E.OF REGRESSION	29.44			
INCLUDED OBSERVATION 8				

Appendix 4

Regression Computation to assess the Influence of China’s Industrial Policies to China’s Information Technology Employment (From Natural Logarithms data - Appendix 2)

YEAR	EOI-X	ICT-EMPL(Y)	X ²	Y ²	XY
2010	3.926	0.531	15.413476	0.281961	2.084706
2011	3.927	0.588	15.421329	0.345744	2.309076
2012	3.877	0.588	15.031129	0.345744	2.279676
2013	3.845	0.642	14.784025	0.412164	2.46849
2014	3.808	0.642	14.500864	0.412164	2.444736
2015	3.68	0.693	13.5424	0.480249	2.55024
2016	3.617	0	13.082689	0	0
2017	3.642	0	13.264164	0	0
TOTAL	30.322	3.684	115.040076	2.278026	14.136924

Influence of the Industrial Policies to the China Population Using Internet:

The findings of the study revealed that the relationship between economic openness and the China population using the internet is negative and meaningless (Table 3).

² Source : Appendix 4

Table 3 Regression between Economic Openness and Population Using Internet during from 2010 to 2017 in China³

Dependent Variable: Population using internet in China

VARIABLES	COEFFICIENT	STD DEVIATION	T-STATISTIC	PROBABILITY
EOI	-1.1	0.2973	-3.7	0
C	7.98			0
R-SQUARED	1.1220			
ADJUSTED R-SQUARE	-1.5783			
S.E.OF REGRESSION	0.1072			
INCLUDED OBSERVATION				

Appendix 5

Regression Computation to assess the Influence of China’s Industrial Policies to China’s Population Using Internet (From natural logarithms data - Appendix 2)

YEAR	EOI-X	POP-INT(Y)	X ²	Y ²	XY
2010	3.926	3.535	15.413476	12.496225	13.87841
2011	3.927	3.645	15.421329	13.286025	14.313915
2012	3.877	3.745	15.031129	14.025025	14.519365
2013	3.845	3.824	14.784025	14.622976	14.70328
2014	3.808	3.869	14.500864	14.969161	14.733152
2015	3.68	3.918	13.5424	15.350724	14.41824
2016	3.617	3.974	13.082689	15.792676	14.373958
2017	3.642	3.995	13.264164	15.960025	14.54979
TOTAL	30.322	30.505	115.040076	116.502837	115.49011

Summary of the Findings:

The study findings revealed that the relationship between the economic openness and all macroeconomic variables (Information and Technology GDP, and Information and technology employment) is positive and meaningful, except to the population using internet where findings revealed that the economic openness and the population using internet relationship is negative and meaningless during the period from 2010 to 2017 in China.

Conclusions:

The present paper is focusing on evaluating the influence of the China industrial policies to the digital economy during the period from 2010 to 2017 in China.

The study findings revealed that the relationship between the economic openness and all macroeconomic variables (Information and Technology GDP, and Information and technology

³ Source : Appendix 5

employment) is positive and meaningful, except to the population using internet where findings revealed that the economic openness and the population using internet relationship is negative and meaningless during the period from 2010 to 2017 in China.

Attachments:

Appendix 1

Data Figure For China’ Economic Openness Index, China’s Information Technology Contribution to GDP, China’s Information and Technology Employment, and China’s Population Using the Internet in the period of 2010 to 2017:⁴

YEAR	EOI	POP-INT	ICT-GDP	ICT-EMPL
2010	50.717	34.3	4.7	1.7
2011	50.741	38.3	4.6	1.8
2012	48.268	42.3	4.7	1.8
2013	46.744	45.8	4.7	1.9
2014	45.065	47.9	4.9	1.9
2015	39.629	50.3	4.8	2
2016	37.21	53.2	0	0
2017	38.15	54.3	0	0
	356.524	366.4	28.4	11.1

Appendix 2

Natural Logarithms Data Figure For China’ Economic Openness Index, China’s Information Technology Contribution to GDP, China’s Information and Technology Employment, and China’s Population Using the Internet in the period of 2010 to 2017:⁵

YEAR	EOI	POPUL-INT	ICT-GDP	ICT-EMPL
2010	3.926	3.535	1.548	0.531
2011	3.927	3.645	1.526	0.588
2012	3.877	3.745	1.548	0.588
2013	3.845	3.824	1.548	0.642
2014	3.808	3.869	1.589	0.642
2015	3.68	3.918	1.569	0.693
2016	3.617	3.974	0	0
2017	3.642	3.995	0	0
	30.322	30.505	9.328	3.684

⁴ Source: World Bank Data & United Nations Digital Economy Report 2019 (United Nations Conference On Trade and Development- UNCTAD)

⁵ Source: Calculated by the Author based on Appendix Number One.

Appendix 3

From Natural Logarithms Data (Appendix 2), Regression Computation to assess the Influence of China’s Industrial Policies to China’s Information Technology Contribution to GDP

YEAR	EOI-X	ICT-GDP	X ²	Y ²	XY
2010	3.926	1.548	15.413476	2.396304	6.077448
2011	3.927	1.526	15.421329	2.328676	5.992602
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Appendix 4

From Natural Logarithms Data (Appendix 2), Regression Computation to assess the Influence of China’s Industrial Policies to China’s Information Technology Employment.

YEAR	EOI-X	ICT-EMPL(Y)	X ²	Y ²	XY
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2016	3.617	0	13.082689	0	0
2017	3.642	0	13.264164	0	0
TOTAL	30.322	3.684	115.040076	2.278026	14.136924

Appendix 5

From Natural Logarithms Data (Appendix 2), Regression Computation to assess the Influence of China's Industrial Policies to China's Population Using Internet

YEAR	EOI-X	POP-INT(Y)	X ²	Y ²	XY
2010	3.926	3.535	15.413476	12.496225	13.87841
2011	3.927	3.645	15.421329	13.286025	14.313915
2012	3.877	3.745	15.031129	14.025025	14.519365
2013	3.845	3.824	14.784025	14.622976	14.70328
2014	3.808	3.869	14.500864	14.969161	14.733152
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References

- Aiginger. K, (2014). Industrial policy for a sustainable growth path. Policy Paper No. 13 www for Europe -WIFO.
- Barwick. J. P., Kalouptsidi. M, & Zahur. N. B., (2019). Industrial policy: Lessons from China.
- Barwick. P. J., Kalouptsidi. M., & Zahu. N., (2017). China's Industrial Policy: an Empirical Evaluation .
- Defraigne. J.C, (2014). Short Term Policy Brief 81 China's Industrial Policy. 2010/256-524.
- Feng. Z, Wang. H, & Wei. L., (2019). Research and Prospect of Digital Economy Development in Shandong.
- Foster. C., & Azmeh. S., (2019). Latecomer Economies and National Digital Policy: An Industrial Policy Perspective.
- Heng. C. & Yong, (2019). Research on the New Manufacturing Model to Promote High – Quality Development of China's Industry under the Background of Digital Economy. (a Institute of Economics; b. egiional Economic and Financial Institute , Sichuan Agricultural University Chengdu 611130, China).
- Hong-ru. X., (2019). Platform Monopoly in the Development of Digital Economy in China.
- Jian. Z., & Yang. D.H, (2019). On Speeding up Innovation and Development of Economy in China. (Institute of Industrial Economics, China Academy of Social Sciences, Beijing 100836, China).

- Kaur. I. N. & Nirvikar. S., (2013) : China, India and industrial policy for inclusive growth, Working Paper, No. 710, University of California, Economics Department, Santa Cruz, CA.
- Kenderdine. T., (2017). China's Industrial Policies, Strategic Emerging Industries and Space Law.
- Lovelock. P., (2018). Framing Policies for the digital Economy towards Policy frameworks in the Asia-Pacific.
- Miura. Y. (2018). China's Digital Economy—Assessing Its Scale, Development Stage, Competitiveness, and Risk Factors. Advanced Senior Economist Economics Department Japan Research Institute.
- Parminder. L & Singh. J, (2019). IT for Change - 2019. Digital Industrialisation in Developing Countries — A Review of the Business and Policy.
- United Nations Conference on Trade and Development (2018). Adapting industrial policies to a digital world for economic diversification and structural transformation Note by the UNCTAD secretariat . United Nations.
- Weiwei. F. (2019). Strategic Analysis on Promoting High quality Development of Digital Economy (Jiangsu Academy of Social Sciences, Institute of Finance and Trade, Nanjing, Jiangsu 210004).
- Yan. X. , Huijuan. W, Feng.Z, & Jianfeng .G., (2019) ,: Impact of Digital Economy on China's Economic and Non-agricultural 。 Institutes of Science and Development, Chinese Academy of Sciences, Beijing 100190, China.
- Yangyan. (2019). Exploration on Development Strategy of China's Digital Economy from Perspective of International Comparison. School of Philosophy, Wuhan University, Wuhan 430072, China.
- Yanling. H, Yucong. M, & Shengfeng. L (2019) . Course under the Background of Digital Economy. Taking Smart Tourism Management Specialty as an Example. Guilin University of Technology, Guilin, Guangxi 541004, China).
- Zhang. L. & Chen. S., (2019) . China's Digital Economy: Opportunities and Risks. IMF Working Paper WP/19/16.
- Zhang Xun & Tanying (2019). Mechanism of Economic Growth in Large Countries in the Context of Digital Economy.