

ISSN 2615-3718 (Online)  
ISSN 2621-5675 (Print)

Asian Institute of Research  
**Journal of Social and Political  
Sciences**

Volume 1, No.3, 2018



ASIAN INSTITUTE OF RESEARCH  
Connecting Scholars Worldwide



Asian Institute of Research  
**Journal of Social and Political Sciences**  
Volume 1, Number 3 (October 2018)

<b>Table of Contents</b>	<b>i</b>
<b>Journal of Social and Political Sciences Editorial Board</b>	<b>ii</b>
<b>Maneuver of Digital Economy in Global Era: Indonesia’s Economic Synergy and Compensation Political Strategy Encounter Indian Digital Expansion</b> Mansur Juned, Syahrul Salam	<b>363</b>
<b>Myanmar on the One-Belt One-Road</b> Si Si Engyin	<b>370</b>
<b>Relationship Between Principals’ Autocratic Leadership Style and Motivation of Support Staff in Public Secondary Schools in Kenya</b> Nyaboga Evans Nyagaka	<b>377</b>
<b>Playing Cards of Myanmar with the Giants</b> Si Si Engyin	<b>386</b>
<b>Protection and Comparative Advantage of Milk Production through Rearing of Cross-Bred Dairy Cattle in Bangladesh: A Policy Analysis Matrix</b> S. Islam, M. Khatun, F. A. Huda	<b>393</b>
<b>An Analysis on Social Ecological Changes and Development Paths after Macao Sovereignty Returned to China</b> Li Meng, Yang Liao	<b>402</b>
<b>Traveling “Belt &amp; Road Initiative” Paths Toward Enlightened Superpower Intelligence Operations with Chinese Characteristics</b> James A. Schnell	<b>421</b>
<b>Balance of Power as Main Instrument of Equilibrium in Contemporary International Relations</b> Orazalina Korlan Burkitbayevna	<b>424</b>

## **Journal of Social and Political Sciences Editorial Board**

### **Editor-In-Chief**

Assoc. Prof. Nada Adeeb Omar Eltaiba (Qatar)

### **Editorial Board**

Assoc. Prof. Françoise Le Lièvre (France)  
Associate Prof. Shun-Yung Kevin Wang (United States)  
Dr. Niki Alsford (United Kingdom)  
Prof. Fabrizio Pezzani (Italy)  
Prof. Dr. Elena Andreevska (Macedonia)  
Associate Professor, Ph.D. Ana-Maria Bercu (Romania)  
Prof. Muhammed Haron (Botswana)  
Dr. Ezeibe Christian Chukwuebuka (Nigeria)  
Kittisak Jermittiparsert, Ph.D. (Thailand)  
Silvius Stanciu, Ph.D. (Romania)  
Prof. Mogopodi Lekorwe (Botswana)  
Assistant Prof. Dr. S. Arulchelvan (India)  
Assoc. Prof. Arshad Javed Rizvi (Pakistan)  
Prof. Martina Blaskova (Slovak Republic)  
Assoc. Prof. Pescaru Maria (Italy)  
Sakip Karahman, Ph.D. (Turkey)  
Assistant Prof. John Glynn (Thailand)  
Prof. Munyae M. Mulinge (Kenya)  
Manolis Adamkis, Ph.D. (Ireland)  
Ghazali Bello Abubakar, Ph.D. (Nigeria)  
Dr. Muhammad Uhaib As'ad (Indonesia)



# Maneuver of Digital Economy in Global Era: Indonesia's Economic Synergy and Compensation Political Strategy Encounter Indian Digital Expansion

Mansur Juned<sup>1</sup>, Syahrul Salam<sup>2</sup>

<sup>1</sup> Department of International Relations, Faculty of Social and Political Sciences, Universitas Pembangunan Nasional Veteran Jakarta, mansurjuned@upnvj.ac.id, mansurjuned@ymail.com

<sup>2</sup> Department of International Relations, Faculty of Social and Political Sciences, Universitas Pembangunan Nasional Veteran Jakarta.

## Abstract

India has claimed itself as a country being able to adapt fast against digital technological development and moreover, it is able to create or innovate in the development of digital industry in the world. Tight competition among big countries with tremendous capital urges India to do the maneuver of business cooperation in the more sophisticated and modern sector, but it makes many parties enjoyable. As the region with a big population, ASEAN becomes the target of India, particularly Indonesia with adequate capital and direction of the government's policy towards the development of digital technology makes India as the focus of establishing digital cooperation. However, for Indonesia itself, it is not able to balance the human resources capacity. Therefore, this research tries to explain Indonesia's maneuver in digital business in ASEAN and Indonesia's anticipative measures against the maneuver.

**Keywords:** India, Digital Business, ASEAN, Compensation, Indonesia

## 1. Introduction

### *1.1 Globalization and Compensation Politics*

Globalization is an effort to reach profit objectives from all sectors and it results from any cooperation and freedom of goods trade and service flows from all over the world without any state border lines. It is believed that it is able to bring welfare for all parties involved in the process. The belief is not without any basis because the globalization is considered to give opportunities for anyone to enjoy liberalization and capitalism. Day by day the globalization is able to facilitate inter-country and inter-region trade. However, trade liberalization causes income retribution and absolute loss for some societies. Therefore, a trade agreement can only increase the welfare of a nation if people who get advantages from the globalization can give compensation to those who are disadvantaged.

In Europe, the disadvantaged nations from the globalization are usually those that tremendously apply active social programs and intervention in manpower market. The United States is the biggest country involved in the

globalization. Despite supporting the free market, the social protection remains to prevail despite under the leadership of Democratic Party. Under the Republican Party, it tries to reduce the social protection in the United States. Trump government indirectly indicates that current globalization tends to support the groups who have skills and assets. Compensation politics is frequently used to justify the advantaged trade policy despite the promising compensation is frequently not implemented. The bad impact of the globalization results in some deteriorating for different parts of society, but with some compensation, they can be helped. Despite it can support them for a while; Dani Rodrik thinks that it will be useless if we do not think alternatives to change the existing globalization regulations (Rodrik 2017).

The condition finally pushes each country to be involved in the globalization. Of course, the countries consisting different entities are directly involved in the globalization itself, i.e., society. Appropriate to the initial objective, the globalization is to provide profit for society in any country. However, the current economic condition of developing countries until right now cannot be separated basically from the implication of conditionality's implementation on the basis of neoliberalism.

Dani Rodrik has stated about anticipative measures when he sees the facts that the developed countries have worries on the negative impact of the globalization. It should be paid more attention carefully. The relationship between free trade and public welfare does not go on automatically like the assumption of neoliberal thinkers. The implementation of free trade in the world trade condition is unequal. There remains manipulation and monopoly as well as unperfect competition plus no institution or policy so that the globalization cannot guarantee equal distribution. On the other hand, it will direct to the growth of poverty rate and economic difficulties for many parties.

Finally, it has been clearly seen that global economic management all this time is not built on the basis of a vision reflecting the joint interests of all states. It is based on the neoliberalism principles, the vision reflecting the interests of some developed countries. It is proved that the world economic development does not run equally. The biggest profit for the world economic activities remains under the domination of the developed countries. Meanwhile, liberalism-neoliberalism principles are successfully planted in the economic policies of many states throughout the world, these results in the shackle of possibility to reach the ideals of the world's poverty reduction that mostly occurs in the developing countries or some parts of society in the developed countries (Rodrik 2017).

In general, it can be concluded that the implementation of liberalism/neoliberalism in various schemes results in the vulnerability of state economic fundamentals against crisis and poverty particularly for groups of society who do not have any access and capacity to enter into the market. Moreover, the economic gap in various schemes undergoes the growth as the impact of liberalism/neoliberalism hegemony in the global economic management all this time (Chomsky 2011).

The United States' economic policy is truly the mix of protectionism, interventionism, free market, and liberalism. All policies are particularly directed to the demand of groups that implement the social policies; they are mostly rich people and those in power. For example, the United States always has active industrial policies like other industrial countries. It can be understood that private company system can only exist if there is any extensive intervention from the government. It is carried out to regulate the market and protect private capital.

The writer sees that there are two important consequences of the globalization. Firstly, the globalization expands the implementation of the third world's capital to industrial countries. In the Third World, there are two strata of society: a rich group of people who gets privileges and those who are in misery. Secondly, the structure of governance frequently relates to various business interests, and finally, it makes difficult to choose between giving priority to capture capital sources or people welfare. Therefore, political compensation is not the final solution to the existing problems for the globalization. It is only temporary medicine. When a society is not involved in the globalization, they will be hindered to capital sources for the regulations and laws give advantages for some parties (the rulers and capitalists).

## 2. Research Methods

The type of research used here is a qualitative research method. With the type of qualitative research method, the writer tries to explore and understand the attitude of India and Indonesia in relation to digital business and economic relationship (Creswell 2014, 4-5). The collecting data method that the writer had done is through the study of literature. With the study of literature, the writer collects data by reading literature, such as books,

magazines, journals, articles, official websites, newspapers, and reports. These should be relevant to support the study and complete the data in relation to the discussed topic.

### 3. Result and Discussion

#### 3.1 *Economic Globalization and India's Digital Expansion to ASEAN*

Economic globalization can be defined as a phenomenon that reduces the geographical gap in economic activities. It is divided into several points, i.e., the globalization in the sector of production, trade, finance and capital flows. There are three things that become factors of the economic globalization, i.e., firstly, innovation in the sector of information technology, communication, and transportation. The second factor relates to the building of international institutions that regulate and try to reduce excise tax blocks; and thirdly, it builds the similarity of values and perception on the globalization led by the leading countries in the world.

The globalization in the sector of production and trade has the following characteristics: it occurs fragmentation or specialization of the supply chain in some countries so that it increases inter-state production chain. Moreover, it occurs trade with comparative advantage principles to minimize opportunity costs. Finally, it builds a multilateral trade system. In finance and capital flows, the economic globalization makes people easier and more profitable in the transaction of currency, credit, and others. Many international financial services have reduced its transaction cost globally.

Despite in many things, it is profitable, in some cases in Asia the economic globalization results in significant vulnerability towards a potential crisis. Therefore, it requires effort, and it does not only relate to crisis management but also an effort to prevent the crisis. In Southeast Asia, it has been established ASEAN Surveillance Process (ASP) and Asian Monetary Fund (AMF) for wider coverage to maximize cooperation and prevent a potential systematic crisis (Rajan 2001).

In the sector of taxation, the economic globalization basically has speeded up the goods trade flows. In this matter, the state should get profit. It results in a state policy that reduces all kinds of progressive taxes. Despite it sometimes reduces state income, the policy finally makes businessmen and people in general in the country profitable. If the taxes are reduced, and these will influence and increase goods prices and trade flows. It is a condition when the private sector definitely supports the state economy. On the other hand, anti-globalization can prove that not all people can get profit from the economic globalization. For example, those who do not have access and capital are frequently people in "the loss position" and disadvantaged. Therefore, efforts give fair compensation to those who have been disadvantaged is a must so as to believe that the goodness of the globalization keeps staying. We believe that the synergy between the private sector and the government is a must in the national development.

For example, Vihaan Network Limited (VNL), the India-based telecommunication and equipment providers, will help the government in the broadband connectivity development program for 2,000 villages in 2018. Despite the cooperation is carried out with the Indonesian government through the Ministry of Communication and Information Technology (Kominfo), it is part of the Universal Service Obligation program (USO). In the program, VNL will provide BTS in the remote areas that are far from the connectivity coverage. VNL will not only build BTS but also it operates them. It means that digital development in Indonesia mostly only involves India because the company becomes the super-technology provider. The network to be constructed will depend on the government's request whether it is 4G or 3G. However, until 2018 VNL has a total target of 2,000 connectivities and it can be implemented in the East of Indonesia, such as Sulawesi, Kalimantan or Papua through the programs of Kominfo. VNL provides the base transceiver station (BTS) in the form of independent GSM network or GSM extension for the existing PBX network. The system will get support automatic solar panel, and the panel battery filler occurs daytime. It is appropriate for the remote or rural area in Indonesia for economic power. Moreover, it can be used via off grid or on the grid with PLN's electricity transmission channel. An operator company that has used VNL's services is PT XL Axiata Tbk. The company with the stock code of EXCL in Indonesia Stock Exchange has expanded its connectivity to the 33 remote villages through the BTS installation in Papua and West Sulawesi.

Moreover, for the first time, Indian-ASEAN Conference and Exhibition called ICT Expo 2017 is held in Jakarta. The objective is to strengthen the relationship and commitment between India and ASEAN countries. Acting as the event organizer dated December 6 and 7, 2017 at Hotel Shangri-La Jakarta is Telecom Equipment and Services Export Promotion Council (TEPCT), India's telecommunication export services and promotion board. India-ASEAN ICT Expo 2017 becomes the platform for the convergence of telecommunication and information technology and business exchange between two regions (Secretariat 2015).

Either ASEAN countries or India can share their experiences concerning how to embrace digital technology, digital competency, and digital literacy. It is intended to find the life and change in all aspects of human society in each country again. The conference discusses training, regulation in the sector of communication, information technology convergence and telecommunication, e-health, e-government, e-education, e-finance, infrastructure, new technology, standardization, the tender of spectrum and optimization, permit issues as well as services providers. India-ASEAN ICT Expo 2017 meets more than 100 companies from India and ASEAN countries, and it attracts more than 2,000 exhibition visitors. The event also presents stakeholders of information technology and Telecom from India to Network, Meet and Plan so as to meet the dream of the economic cooperation with the ICT ASEAN industries.

Capital Investment Coordinating Agency (BKPM) records that in the last four years the investment in the sector of e-commerce and digital business has reached US\$2-3 billion per year. However, in the past, the investment in the sector was almost nothing. For the phenomena, Head of Capital Investment Coordinating Agency (BKPM) Thomas TrikasihLembong states that digital business has become an investment helper since 2014. It is possible that it has reached 15-20% of total foreign direct investment (FDI) each year in the sector. To attract more digital investment, BKPM initiates the relaxing regulations and laws. Firstly, it urges the Regional Government of Greater Jakarta Province to relax the regulations and laws so that digital companies can register their co-working spaces address as their head offices. Moreover, co-working spaces become a trend (ASEAN n.d.).

Greater Jakarta Province receives 95% of total investment in the sector of digital business. In the period of 2010-2017, the realized foreign investment in Greater Jakarta Province reached US\$34 billion with a total number of 27,601 projects having been realized. Therefore, the capital province occupies the second row of the investment destination region with trade as an investment's favorite destination. The second support is the relaxation of foreign manpower inflow regulations and laws particularly in digital business because Indonesia is the lack of skilled and expert manpower in the sector. Moreover, after discussing with Indonesia's unicorn leaders, he gets input to bring mentors from India and Australi for the training of national manpower. Right now he claims that the attention of RI President JokoWidodo has changed from physical infrastructures such as roads, bridges, and others to vocation education or non-physical infrastructure. It has objectives that Indonesia does not have loss moment of fast digital business growth and its impact to the national economy.

Indonesian Chamber of Commerce and Industry (Kadin) sets up India Bilateral Committee in its new executive board of directors to stimulate the realized target of total trade and investment value of US\$50 billion in 2025. Chief of Indonesian Chamber of Commerce and Industry (Kadin) Rosan P Roeslani admits that right now there is much potential economic cooperation to be developed between the two countries. The establishment of India Bilateral Committee is considered to become an initial step to identify the potential. The committee is expected to identify potentials or obstacles because in the 2016 CEO Forum the two countries have agreed to reach the ambitious target of 50:50 with total trade and investment value of US\$50 billion in 2025 (Mudassir 2018).

Two official visits of RI President Jokowi Widodo to India are considered as the commitment of strengthening the bilateral economic relationship between the two countries. Indonesia and India are predicted to become the 6th and 3rd biggest economic power in 2030 consecutively. Therefore, the two countries have potentially great investment and trade cooperation. Vice Chief of Kadin for International Relationship Sector Shinta Widjaja Kamdani expects that the committee is able to become the catalyst to reach the trade and investment target for the two countries' businessmen particularly in the six sectors having been approved previously, i.e., mining, infrastructure, manufacturing, pharmacy, digital and service sectors. Indonesia itself is the biggest trade partners in ASAN. India is the biggest palm oil from Indonesia. The country is also one of main export destination for coal from Indonesia.

For investment, India recorded the significant growth rate in 2017. It is more than five times if compared to the growth rate in the previous year, i.e., from US\$55 million to US\$286.6 million. Therefore, it is an important to step for Indonesia's businessmen to increase better economic relationships with India's businessmen. Based on the data of Central Bureau of Statistics (BPS), the trade balance between Indonesia and India in 2016 amounted to US\$12.9 billion with total export of US\$10.2 billion and import of US\$2.1 billion. In 2017, Indonesia-India's trade balance year on year rose to 28.7% with a total export value of US\$14.08 billion and import value of US\$4.05 billion. However, the trade of the two countries in the period of January-March reduced 3.06% from US\$4.46 billion in 2017 to US\$4.33 billion in 2018.

### *3.2 Capacity of India's Digital Industry*

With the support of demography, reformation, and globalization, India has grown fast in the next decade. Right now the new report from Morgan Stanley Research, it is found that two main initiatives have digitalized the cash-based economy and reform the old tax system. It is the way of India's expansion, and it makes India one of the countries with the biggest economic growth in the world and the fast growth in the world in the next ten years. The country has been in the strong track, and the digitalization occupies the Nominal Gross Domestic Product Growth as the highest one.

Despite the country encounters short-term growth issues, investors can expect to see the shift, and it is seen in the economic growth since 2018. All states that India's economy is ready to leap from the recent seventh position to the third biggest economy in 2027 with total Gross Domestic Product of US\$6 trillion. Its equity market is recently in the tenth ranking in the world, and it can leap to the fifth position with the financial services and consumerism stocks that lead.

Moreover, companies in India are the most direct beneficial receivers of vast global implication. The e-commerce growth, consumption growth, financial product, and investment can make India as the significant market for companies all over the world. In its initial digital revolution, India launches the biometric identification programs in 2010 called Aadhaar. It gives each individual the 12-digit number, and it can be verified with fingerprint or sloce scan. The project is almost done with most of 1.3 billion citizens in Indonesia registered with the state digital database (PTI 2018).

Jan Dhan estimates that 35% of India's households do not have bank accounts. Morgan Stanley predicts that most of India's households have access to bank accounts while the leap of cellular telephone uses makes easier for Indians to manage their accounts and do the transaction without cash money by using their mobile phone. Recently India has 800 million mobile phone users, and 430 million people have Internet access - one-third of India's population. The Internet access will double in the next 10 years and our estimates that 915 million people of India will be on the Internet in 2026.

Head of India's Research Center, Ridham Desai states that the government has been pushing the country towards the non-cash payment by limiting cash transaction value and providing digital payment incentive; the target is to increase the six-time digital transaction in this year.

Migrating Indian people from the cash-based transaction to the digital one either through bank debit card, credit card or cellular wallet, is the main catalyst for economic growth. The cash transaction inhibits economic growth such as the ease of business to avoid taxes, the restriction of e-commerce and the possible inhibition of customers and small-scale business to build credit. Moreover, the migration to digital is the main catalyst for economic expansion, the direct benefit receivers to cover a new way of customer finance companies and services, such as UPI, Mobile Wallet and Rupay Cards - the gateway domestic card payment launched three years ago - quickly results in two third of digital payment market in 2027.

India also carries out serious steps to fight against low digital literacy rate. It established the National Literacy Mission (National Digital Literacy Center) in August 2014. India tries to make one person in each household who has met digital literacy in 2020. India also has the commitment to training 147 million people in rural areas with the skill required to take technological benefits. It is a positive measure in creating more digital literary by increasing consciousness on the importance of digital literacy for national development.

### *3.3 India's Digital Cooperation with Other Countries in ASEAN: Malaysia and Singapore*

India and Malaysia have agreed to increase cooperation in the digital and e-commerce initiatives. In the joint statement on the commemoration of the 60th diplomatic relationship, Malaysian Prime Minister Datuk Seri Najib Razak and his partner from India, Narendra Modi state that two countries admit the importance of the cooperation in the region. The digital and e-commerce initiatives conducted by the two countries are admitted to increasing cooperation in the sector, and in the context, it admits the contribution of India's IT Company particularly located in Cyberjaya. Malaysia will build the first Digital Trade Zone in the world. It will give potential profit for businessmen by offering a conducive environment for digital companies to carry out the exciting internet-based innovation. Therefore, it catalyzes Malaysia's economy. The initiative is part of the National E-Commerce Strategic Roadmap recently launched with the purpose of doubling the e-commerce growth in the country from 10.8% to 20.8% in 2020.

Moreover, India is Singapore's natural business partner. The country undergoes urbanization quickly, and it has stipulated to build 100 smart cities. Singapore, the urban city country, is ready to be India's partner in this

journey and it helps to develop the urban solution on the basis of their own experiences. New capital city of Amaravati in Andhra Pradesh and it is an example. As the chairman of ASEAN countries, Singapore has the commitment to increase the ASEAN-Indian relationship. If the two parties use the cultural and historical relationship, it will overcome the current obstacles, and it builds bridges for the future, new generation and our successor generation to get the best things. The financial industry in Singapore absolutely should be supported with good technology capacity. For this matter, cooperation between India and Singapore in the financial technology sector is a must (PTI 2018).

### *3.4 Adaptive Efforts and Indonesia's Anticipation*

Indonesia is the biggest archipelago country in the world with a great population. The condition looks like India. We make cooperation, and it starts with the initiative of digital connectivity in the region. We can fulfill telecommunication demand in ASEAN. Indonesia will become potential and strategic market for India. The demand for Indonesia's telecommunication project is very high for the development of internet basis, the aggressive e-government project, broadband, and others. Therefore, India's government seriously proves the ability of IT and telecommunication sector by creating innovation and research and development center for various global class apparatuses. The cooperation basis in the digital sector between India and ASEAN is extensive experience and power that we have with ASEAN countries. India's power in the sector of ICT, finance and the government's support in the infrastructure development in India is seen with the government's commitment to developing a fiber-optic broadband network with a total range of 250,000 kilometers connecting all villages in Indonesia has made it optimistic to do the digital business expansion to Indonesia.

As it was known in the 13th ASEAN-India Summit Meeting in November 2015, India's Prime Minister Narendra Modi has carried out the Line of Credit with a total value of US\$1 billion. It will promote the projects supporting physical and digital connectivity between India and ASEAN. India has proved its ability in the sector of Information and Communication Technology. The country is admitted as the chosen destination for telecommunication products and services with telecommunication product technology transfer designed through the research and development for the demands of developing countries.

Head of Capital Investment Coordinating Agency (BKPM) Thomas Lembong states that for Indonesia it is great big to making cooperation with India in this matter. Either India or Indonesia is under "boom" period of the digital economy. However, Indonesia's electronic traders mostly use programmers and coding services from India. Many e-commerce in Indonesia utilizes India's programmers and coding services. Indonesia is in the booming of the digital economy, but it is lack of programmers (bkpm 2018).

In fact, Indonesia should carry out substantive and real efforts so that they can increase capacity in the programmer sector. It is very important because information technology is a vulnerable and expensive business sector if it is not totally under the control of the state, it will be difficult for Indonesia to hunt the lag. The compensation politics is required in this matter. Indonesia's society will not only be advantaged with the business expansion, but it will be disadvantaged for the expansion that does not have a clear agreement in relation to technology transfer to Indonesia's human resources.

Compensation politics should be carried out because not all people have access to capital and capacity of competition with other countries. It is usually carried out for poor people because they undergo difficulty in encountering life in a country with the liberal system. It is an idea to give compensation to Indonesia's businessmen, who are a disadvantaged condition, then it is not outside product, but there is unbalance technology transfer. Indonesia's businessmen and human resources should get compensation because at least they are part of Indonesia and finally they will only serve for Indonesia in the future.

## **4. Conclusion**

Firstly, Indonesia should allocate greater fund for the collaboration with information technology businessmen and startup so that the country should at least have a legal and personal approach to Indonesia's IT business owners. If human resources from India develop IT business here, Indonesian society will only become viewers. In fact, high-technology business potentially can create significant dependency in the inter-country business and economic relationship.

Secondly, compensation politics is basically the state's effort to give the disadvantaged parties compensation from the existing system and economic-political structure. The compensation can be carried out in any kind that the society can accept. For the purpose, building the capacity in a kind of developing human resources, such as

the building of coworking house and the IT laboratory for anyone who wants to study it deeply is the government's efforts that have to be done. At least public feels they get facilities from the state for their interest development and in one time, it will be useful for the state.

Thirdly, regulations on workers' composition in each business agreement with other countries or companies of other countries are an effort that should be carried out. Indeed the government occasionally wants to execute the approved projects, but it is wise if the renegotiation will be carried out so that Indonesia's society will be trained and involved in various IT prospective businesses.

In fact, the efforts have been carried out to bridge Indonesia's unreadiness against definitely hard competition in the economic and business sector. Appropriate to the constitution, a state has to protect its citizens and the disqualified parties in a kind of cooperation policy with other countries. Don't make Indonesian people lost for the cooperation. In fact, the cooperation is intended to build the nation. Or if it makes lost, the government should carry out the qualified compensation politics. Therefore, the disadvantaged parties can receive it.

## REFERENCE

1. ASEAN. n.d. "ASEAN Trade Facilitation Framework." *asean.org*. Accessed July 20, 2018. <http://asean.org/storage/2016/08/ASEAN-Trade-Facilitation-Framework.pdf>.
2. bkpm. 2018. *Indonesia to become the ASEANS biggest digital economy country*. July 17. Accessed July 20, 2018. <http://www.bkpm.go.id/en/artikel-closed/readmore/indonesia-to-become-the-aseans-biggest-digital-economy-country>.
3. Chomsky, Noam. 2011. *How The World Works*. USA: Soft Skull Press.
4. Creswell, John W. 2014. *Research Design: Qualitative, Quantitative, and Mixed Methods Approaches* (4<sup>th</sup> Ed.). Thousand Oaks, CA: Sage Publications.
5. Mudassir, Rayful. 2018. *RI - India Target Total Dagang dan Investasi Capai US\$50 miliar*. May 18. Accessed July 20, 2018. <http://industri.bisnis.com/read/20180518/12/797051/ri-india-target-total-dagang-dan-investasi-capai-us50-miliar>.
6. PTI. 2018. *India, Singapore to explore new areas of cooperation during Modi visit*. April 6. Accessed July 20, 2018. <https://economictimes.indiatimes.com/news/politics-and-nation/india-singapore-to-explore-new-areas-of-cooperation-during-modi-visit/articleshow/63639333.cms>.
7. Rajan, Ramkishan S. 2001. "Economic Globalization and Asia: Trade, Finance, and Taxation." *ASEAN Economic Bulletin* (ISEAS - Yusof Ishak Institute) 18 (1): 1-11.
8. Rodrik, Dani. 2017. "Terlambat Memberikan Kompensasi." *Kompas*. April 28. Accessed July 20, 2018. <https://kompas.id/baca/utama/2017/04/28/terlambat-memberikan-kompensasi/>.
9. Secretariat, The ASEAN. 2015. *ASEAN Economic Community Blueprint 2025*. Jakarta: ASEAN Secretariat.



## Myanmar on the One-Belt One-Road

Si Si Engyin<sup>1</sup>

<sup>1</sup> School of Political Sciences and Public Administration, Shandong University, Jinan, China

### Abstract

“One-Belt One-Road” project is a global project which can maintain the existence of member countries, economic and social development and reduce the international security crisis under the condition of anarchy in the era of globalization. More accurately, it is China's global economic development strategy, and there will be more than 100 member states. Each member country has its own characteristics, and there are various important factors of OBOR. Among them, the national position is the most important one. Because of special geographical conditions, Myanmar has become one of the most important members of OBOR. China- Myanmar relations have been keeping close ties with each other “Pauk-Phaw” relations and have built a lot of cooperation projects. Nowadays, due to the One Belt One Road initiative, what kinds of benefits can get for Myanmar and alternatively what can get for the One Belt One Road are really intriguing questions.

**Keywords:** Globalization, Anarchy, One-Belt One-Road, Pauk-Phaw Relations

### *I. Overview of Sino-Burmese Relations*

Myanmar has experienced the protection of China in history, Myanmar has established diplomatic relations with China since 1950, but at that time, the Sino-Burmese relationship is general. Under the guidance of Deng Xiaoping's "Five Principles of Peaceful coexistence," in 1954, China and Burma established good-neighborly relations. After the settlement of the border problem in 1960, Sino- Burmese began to establish the cordial "Pauk-Phaw" relations (Burmese language "Pauk-Phaw" means the meaning of relatives or brothers, in history, the Burmese people called the Chinese "siblings" as "brothers"). In 1967, after the anti-China incident in Burma, it broke the "Pauk-Phaw" relationship, but it was not that long. At that time, Myanmar had to face big domestic political issues, economic problems, security crisis and so on. In 1971, the friendship between China and Myanmar was restored to the "Pauk- Phaw" relationship under the efforts of the leaders of the two countries. After the leadership of the military government in 1988, the general election was held in 1990, but the result of the election was not achieved. Democratic leader Daw Aung San Suu Kyi won an overwhelming victory, causing western countries to exert pressure on the country. When the junta was in power, that government faced with Western isolation and sanctions. On the other hand, Burma's foreign policy had to promote good relations with its neighbors. Myanmar sought to establish greater trade links with its neighbors, increase cross-border trade, purchase military equipment and try to stop re-signing agreements with ethnic rebel groups in its borders. After the Tiananmen massacre in 1990, most countries in the world avoided it, and the relationship with the United States deteriorated drastically. When China is recovering, it also establishes good-neighborly and friendly relations with its neighboring countries. Thus, in 1990, Sino- Burmese relations gradually became closer to the

"good neighbor" relationship. During the military government, Burma's political, economic and security dependence on China was very high. Weak countries have a high degree of dependence on a superpower. Meanwhile, the openness of small and weak countries is relatively high. During the 2010 political reform in Myanmar, Myanmar government established a normalization of relations with the West, and it helped democratization of Burma. In fact, Myanmar's Democratic line just opened the door, to go a long way to face a lot of tests, thus Myanmar needs the support of all countries. The normalization of the West has a great effect on the democratization and human rights of political reform in Myanmar, but Myanmar's new government also faces the issue of national reconciliation, economic strengthening, terrorist organizations and so on, these problems can not only rely on friends from afar, the need for immediate help, as the saying goes, "Far away relatives are not as close neighbors." Similarly, Myanmar can learn the good things of neighboring countries from afar. And in most of the problems, Myanmar needs to cooperate with neighboring countries. Since 2010, although Myanmar has gone through a democratic route and resumed normal relations with the West, it has not divided its relations with its neighboring states. In the case of any party in the two countries to take the stage and use any policy, China-Burma relations will continue to go on, and there is no reason to retreat.

## ***II. The Starting Point of One- belt One- road***

21<sup>st</sup> Century is the age of globalization, and the world is in anarchy. Kenneth Waltz emphasized that under the anarchic condition, the first consideration of a country is survival. He believes that in such a system, the purpose of the state is not to gain or maintain power but to ensure survival and that the balance of power was conducive to reducing the risk of war. For the sake of the existence of the country, Robert Gilpin believes that the international economic factors should be taken into account, especially in the era of globalization, the international economic factors are increasingly dominant. In the area of international security, he stressed that only the improvement of the overall strength, including the national economic strength, could be better secured. In the state of anarchy, the members of the international community have a high degree of distrust, and through the establishment of an international system and the establishment of an international organization, the understanding among members can be enhanced, and communication and cooperation among members can be promoted. The goal of more than 100 member countries is to create a favorable environment for the overall development of each country and to reduce the international economic crisis and the international security crisis.

Chinese President Xi Jinping has announced some initiatives to promote China's international presence and establish closer ties with more countries. "One Belt One Road" is the main initiative and will be one of the most extensive globalized programs. This represents not only the renewal, stronger and better coordination of China's overseas expansion, but also in terms of domestic investment activities, almost every province in China has its own shares. In September 7, 2013, President Xi Jinping made a speech at Nazarbayev University in Kazakhstan: "In order to make the economic ties of the Eurasian countries closer, mutual cooperation is , and the development of space is wider, we can build the "Silk Road Economic Belt" with an innovative cooperative model, the Silk Road Economic Belt, which is a great cause for the people of all countries along the route." (Xi Jinping: 2013) In his speech to the Indonesian parliament on 3<sup>rd</sup> October, 2013, President Xi Jinping said that: "The Southeast Asian region has been an important hub of the sea Silk Road since ancient times, and China is willing to strengthen maritime cooperation with ASEAN countries and use the China-ASEAN Maritime Cooperation Fund set up by the Chinese government to develop a good marine partnership, Jointly build the "21st Century Maritime Silk Road"." (Xi Jinping: 2013) Two years later, an important milestone has been achieved in the "One- belt One- road" program and various projects in different countries have been started. These include the acquisition of European ports, construction of new Eastern European Railways, construction of highways, natural gas pipelines and so on. The initiative of the "One- belt One- road" will have an impact on about more than 60 countries.

The Silk Road, which has more than 4000 years old, has restarted "One- belt One- road" strategy. The "One- belt One- road" strategy includes "Silk Road Economic Belt" and "Maritime Silk Road." The "Silk Road Economic Belt" has three routes: the first is the "Southwestern Silk Road", after leaving Yunnan Province, Southwest

China, through Myanmar, Bangladesh, India and other countries, and finally to the India Ocean; the second is the "Grassland Silk Road", from the northwest China Xinjiang Autonomous Region depart, through Kazakhstan, Russia, Belarus and other countries, finally to the Baltic Sea coast; the third is the "Central Asia Green State Silk Road", after leaving western China and North West Tibet and Xinjiang Province, through Tajikistan, Uzbekistan, Turkmenistan, Iran, Iraq, and finally reached the Persian Gulf Coast. The "maritime Silk Road" has two routes: the first is from China's coastal ports across the South China Sea to the India Ocean, and the second is from China's coastal ports across the South China Sea to the South Pacific Ocean. Among them, the main significance of the Southwest Silk Road is the connection between land and sea, with greater permeability. On the "Southwest Silk Road," the strategic location of land and sea links refers to Myanmar.

### ***III. The Importance of Myanmar's Status Under the OBOR Strategy***

Myanmar is one of the most important partners on the OBOR. The first reason is Myanmar's geographical location, and the second reason is Myanmar's energy resources. From the geographical location, Myanmar is located at the southern end of the Indochina peninsula. It has an important strategic position, flashing in the India Ocean and the Bay of Bengal. On the one hand, it is the doorway of China's westward policy, on the other hand, the door of the East entry policy of India. For China, Burma is the gateway to the Bay of Bengal and the India Ocean. The geographical location of Myanmar is very important for China's "one- belt one- road" project. It will connect to India from southwest Yunnan through Myanmar and will become the key part of the "Silk Road Economic Belt" on land. According to Myanmar's position, China also envisages a "maritime Silk Road," from Yunnan, the distance between Myanmar and the India Ocean is much shorter than that through the Malacca Strait. As a result, many projects related to the OBOR have been carried out in Myanmar, for example: building a deep-sea port in the Bay of Bengal, and construction of gas pipelines and oil pipelines from Kyaukpyu, Myanmar to Yunnan, China. In such a geographical environment, Myanmar wants to create and maintain a win-win situation for every partner. For Myanmar, hope to obtain economic benefits and investment from China's OBOR project to safeguard national interests.

### ***IV. The Dream of "OBOR" Initiative to Myanmar***

In 2017, Xi Jinping emphasized at the nineteen Congress: "the dream of Chinese people and people from all over the world is closely linked. Without a peaceful international environment and a stable international order, it is impossible to come true China's dream". He simply referred to the "new round" of "the Silk Road," that is, "One-belt One- road advocates creating an enabling environment for the country's development." The OBOR initiative aims to promote connectivity between Asia, Europe, Africa and its neighboring countries, to establish strengthen partnerships between countries along the OBOR, to establish all dimensions, multi-level and composite connectivity networks, and to achieve the independence, balance and continuous development of these countries.

OBOR is designed to create the world's largest economic cooperation corridor, has five main objectives: policy coordination, connectivity on facilities, liberalization and facilitation of trade and investment, financial integration and people-to-people bonds. The cooperation on the OBOR is more important than promoting the development of the six economic corridors: China- Mongolia- Russia, Central Asia- Western Asia, India- China, China- Pakistan, Bangladesh- China- India- Myanmar. These corridors will become a venue for energy and industrial clusters and will be built through railways, highways, waterways, aviation, pipelines and information superhighways. The basic goal of the "OBOR" is to build the global energy net. The energy sector and geopolitical importance play a vital role in Burma's economic development.

China and Myanmar governments have identified as the "Bangladesh, China, India and Burma economic corridor." China is facing increasing import dependence, and energy demand is expected to keep pace with economic growth. At present, China's oil imports are now being transported from the Middle East and Africa, relying on the Straits of Malacca. Natural gas and oil are the biggest components of Burma's exports. Therefore, under the "OBOR" project, the southwest regions: Yunnan province, Guangxi province can get Myanmar's oil

and gas with more efficient and reasonable price. In addition, there are other reasons for China's construction of Sino-Burmese oil pipeline: (1) this pipeline will allow China's crude oil imports to avoid the Malacca Straits; (2) the oil pipeline from Kyaukphyu to Kunming is 1200 kilometers, which is shorter than that of Malacca strait to Guangzhou; (3) the financial pipeline construction will limit the impact of other countries on Myanmar and Myanmar will become a strategic buffer zone for China; (4) the history, current situation and future prospects of the Sino-Burmese relations ensures the safety of the pipeline; and (5) the construction of the pipeline will be cheaper than other alternatives, because there is a 400 kilometer long railway operation and a railway is planned to be built to connect the remaining 500 km between Sittwe and Kunming. (Bo Kong: 2010) OBOR will be linked to land and sea in Burma. The road is to find the shortest route of export for the southern part of China. With this outlet, China can avoid some of the dangers of current energy and trade routes, and can also obtain new energy channels and trade channels, and also reduce the cost and time of transportation. For example, Southwest China's goods are transported from the Kunming-Kyaukpyu railway to the Kyaukpyu port, and then transported to the South Asia, Africa, and Europe markets. It can save 2 to 7 days, and the cost can be reduced. (Professor Li Chen Yang, 2016.) "OBOR" through Myanmar, the Chinese people want to be able to provide a reasonable price of goods, more efficient and lower costs than the current to export of Chinese products to the "OBOR" market and other related countries. Along the way, a large number of construction materials, capital equipment, skilled labor and technical expertise will be required and can be sold to countries and regions related to the area, and skilled labor and technical experts are trained for the residents of the region. In this way, OBOR can provide the benefits not only in political sectors but also in economical sections for China.

#### ***V. Myanmar's Dream to the "One-Belt One-Road" Initiative***

Myanmar has not officially started the "OBOR" initiative, but Myanmar national leaders have these ideas on OBOR initiative: on 17<sup>th</sup> of November, 2015, Daw Aung San Suu Kyi in an interview with reporters from the Xinhua news agency said that she appreciates China's "OBOR" initiative and hopes that the "OBOR" initiative can achieve results that are favorable to all. During Daw Aung San Suu Kyi's visit to China on August 20, 2016, Myanmar reiterated its position to welcome China's "OBOR" initiative. On September 12, 2016, vice president U Myint Swe in Kunming said that Myanmar was willing to support and actively participate in the construction of the "OBOR," to promote the construction of Bangladesh-China-India-Myanmar economic corridor. On April 7, 2017, U Htin Kyaw, the former President of Myanmar, in Shaanxi said that Myanmar hopes to strengthen economic and trade cooperation with Shaanxi, especially in the industrial, agricultural, tourism, trade and other fields of training cooperation to enhance the level of vocational education in Myanmar. At present, more and more countries are participating in the construction of "OBOR," and Myanmar is also studying how to join. On May 15, 2017, when the leaders' roundtable was held at the Beijing Conference Centre, Daw Aung San Suu Kyi said: "The projects under the Initiative would be most effective if they are designed to re-enforce or complement on-going and future projects of respective nations and regional organizations." To quote again, "She added that each partner country has its own characteristics and the best multi-national initiatives are those aligned well with national plans." Furthermore "She emphasized the need to ensure that business activities are carried out in a socially and environmentally responsible manner." She also mentioned that "The creation of employment opportunities for local peoples is also an important factor." (Kyaw Win, 2017) During her visit to China, Republic of the Union of Myanmar and People's Republic of China signed a memorandum of understanding on cooperation between the two governments on the Silk Road Economic Belt and the 21st Century Maritime Silk Road framework.

On the "OBOR" initiative, Burma's economists held a forum in August 2017 to "OBOR: positive or negative for Myanmar?" (Khine Kyaw: 2017) In this forum, U Aye Lwin, a member of the Myanmar Investment Commission and the ruling National League for Democracy party's Central Economic Committee, said: Myanmar needed to know its own strengths and weaknesses to ensure that it will benefit from China's new Silk Road strategy. He emphasized the importance of policy coordination. Dr. Khin Maung Nyo, founder and vice president of the Myanmar Economics Association, said that "China is the top investor in Myanmar, and we owe a lot to that country. We still have a large sum of foreign debt to settle, and approximately 44 per cent of that comes from China. We need to take that into serious consideration. In the past, we used to look cautiously at

China. But I have noticed that China has shown respect towards the sovereignty of other nations to a degree more than ever before.” “Myanmar could not avoid OBOR, as it played a vital role in China’s Silk Road and maritime trade expansion plans,” said U Zaw Phay Win, an economic adviser to the Union Parliament. “In every strategy, good and bad things can happen at the same time, but Myanmar must work to ensure that positive results are produced,” he said.

Myanmar's natural resource situation has created economic opportunities for Myanmar. In particular, energy enrichment is absolutely significant for Burma. Although Myanmar has such a good condition, economic and social development is still very backward. The reason for the economy's inability to recover is the backwardness of science and technology, the shortage of professionals, insecure land rights, fragile exchange rate regimes, the collapse of income and tax systems, fiscal deficits, and so on. So since the 2011 government Reform, Myanmar has been looking for the most suitable investor in the country, hoping to upgrade its infrastructure, develop weak industries and, of course, create plenty of jobs.

"OBOR" through Myanmar, Myanmar nationals hope to provide reasonably priced goods of good quality. At the same time, exports of domestic products, mainly Myanmar's voluntary export commodities, to China's markets and other relevant countries, are being exported at higher efficiency and lower costs than they are now. To upgrade Myanmar's economy, fewer employment opportunities are the main problems facing Myanmar government. In terms of job creation, most of the jobs are short-term occupations, for example: setting up roads, railways and establishing deep seaports. Thus, the Myanmar government needs to prepare long-term occupations for rural employment, for example new investments in the manufacturing sector, the promotion of trade, the flow of goods between participating countries and so on. In the manufacturing sector, Myanmar still lagged behind than other ASEAN countries, needs to cooperate with technical investors, mainly to produce exports dominated by Myanmar resources and contribute to member countries of OBOR. According to Myanmar’s geopolitical situation, Myanmar can supply land consignment, sea consignment, and air consignment, so, rural people can provide transportation and delivery services for OBOR passengers. In addition, based on Myanmar’s national geopolitical resources, can attract the tourists from neighboring countries and "OBOR" passengers. In the future, manufacturing export goods, strengthening trade and increasing tour services are reliable means of employment opportunities and also can create export earnings.

#### ***VI. Current Cooperation Between China and Myanmar on the One-Belt One-Road***

China and Burma have been closely related to each other and have established a partnership in history. Some of the cooperation during Burma's long military reign will also continue under the "OBOR" project, for example oil and gas pipeline cooperation and Myit Sone dam. In 2009, China National Petroleum Corporation (CNPC) and Myanmar Oil and Gas Corporation (MOGE) jointly implemented a long dual oil and gas pipeline agreement extending from the Bay of Bengal in Myanmar to Kunming in China. The pipeline is designed to transport 22 million tons of crude oil annually. The diameter of 813mm and the natural gas pipeline can replace 30.72 million tons of coal per year. Some of the cooperation projects were required under the "OBOR" project but were suspended after the democratization of Myanmar in 2011, for example, the Myit Sone hydropower station, which was officially started in December 2009. The installed capacity of the Myit Sone Hydropower station is 6 million Kilowatts, and the annual average power generation is about 30.8 billion Kilowatts. Firstly, some of the electricity will spend in Myanmar as needed and then others will send to the North and South Power Grid in China. Myanmar will gain 10% of the power, and the rest will be exported to China. The local community opposed the dam site because it locates from the main Sagaing fault line less than 100 kilometers. If the earthquake weakens the dam or causes the reservoir to a landslide, it poses a risk to the residents of the basin. If the Myit Sone dam breaks out during the earthquake, it will endanger the lives of thousands of people in Myitkyina, the largest city in Kachin State. (Rachel Harvey: 2011) Therefore, on September 30, 2011, the president of Myanmar, U Thein Sein, announced this in the Myanmar Parliament: "Because our government is elected by the people, is to respect the will of the people. We have a responsibility to deal seriously with issues of public concern. Therefore, during the time of our government, the construction of the dam will be suspended." OBOR also needs to build the railway, and the railway project is one of the cores of the "OBOR" strategy, needs

to use a lot of electricity. If the Myit Sone dam can be started, the railway project of "OBOR" can be successfully implemented in the Myanmar area. Also in 2009, Citic Group (CITIC) signed a separate memorandum with the Myanmar Ministry of National Planning and Economic Development to construct a deep-sea port and rail network in Rakhine State. The railroad will run parallel to the natural gas pipeline, 868 kilometers (539 miles) long. At that time, residents asked for transparency and accountability in every aspect of the special economic zone, so as to raise the living standard of the local residents. However, a civic organization in Kyaukpyu said that the project still lacks transparency. The Ministry of Railways of Myanmar was accused of the complaints from the civic organization, so Kyaukpyu-Kunming railway project was stopped in 2014, and there is no more progress. Today, however, the port transaction has gained new life and consortium led by CITIC Group. Since the elected government became powerful in 2011, the Myanmar government has formulated the special economic zone plan. Among them, the position of the Kyaukpyu special economic zone will be part of the "OBOR" project, and both Burma and China will show interest in the development of the project. Former President U Thein Sein and former union parliamentary speaker U Thura Shwe Mann announced that Kyaukpyu is one of the special economic zones. Legislators also agree that Kyaukpyu is a special economic zone, but requires transparency. On December 29, 2015, the former parliament approved that will operate the Kyaukpyu Special Economic Zone in the coming term of government. China's investment of about 10 billion dollars has been designated for a deep-sea port in Kyaukpyu, to create a trade real estate and a special economic zone. Special economic zones include deep-sea port terminals, and industrial clusters include steel, petrochemical plants, highways and other infrastructure to supplement industrial belts. The Asian Infrastructure Investment Bank, AIIB, will play a big role in Myanmar. When former president U Htin Kyaw visited China in April 2017, President Xi and President U Htin Kyaw agreed to launch a 770-kilometer oil pipeline from the western part of Burma to the Chinese border. The pipeline can deliver 22 million tons of oil a year, accounting for nearly 6% of China's total imports in 2016. The crude oil transported through this route will be mainly to Kunming and Chongqing, in western China. In return, Myanmar will receive 13.81 million of dollars for road usage fees, and the transit charge for each ton of crude oil imported through the pipeline in the next 30 years is the US \$1.

However, the implementation of these projects may be influenced by a number of factors. The first is the conflict between Myanmar military and northern Myanmar (near to China- Myanmar border) ethnic minorities. This conflict has a great threat to the citizens of the Sino- Burma border, and the border trade between the two countries is also damaged, so the region needs to be peaceful and stable. In addition, Myanmar's investment environment also has some defects, from weak infrastructure to the weak rule of law. The Myanmar government needs to protect investors from the legal side. The second effect is the concern of the people in the region. Under the leadership of the military government, Burma's trade in large-scale investment projects is considered unjustly and corruptly, thus it also has deepened citizens' dissatisfaction with the country. In this case, the new government led by Daw Aung San Suu Kyi became powerful in 2016, needs foreign investment to prove that it provides growth and dividends for the people. The third effect is environmental protection, "OBOR" is a long-term "Win-win" project that will have a significant impact on the lives of peoples and societies, not only the best interests of the participating countries, but also the social and environmental impacts, as the state counselor, Daw Aung San Suu Kyi, has pointed out. In terms of environmental protection, Myanmar can trust AIIB, and AIIB may have a place on ADB and the World Bank. The last effect is the danger of Rohingya's conflict (in Bengali Language Rohingya means that the people in the Rakhine State of Myanmar), indeed the conflict of terrorist organizations. In the conflict of August 2017, the Government of Myanmar officially announced that the attack had been prepared for a long period of systematic planning with the support and assistance of foreign aid terrorist organizations and terrorist supporters. This conflict has a great impact on the Kyaukpyu Special Economic Zone, and the other side faces the damage to the "Southwest Silk Road" on the sea and land connection and the economic corridor of BCIM. For the time being, the government of Bangladesh and Myanmar resolved this problem together. If the two governments could not solve the problem, China and India would be very likely to participate in solving the terrorist organization problem.

### VII. Conclusion

OBOR initiative is the invitation of China to all countries of the world to create a favorable environment for the overall development of each country. However, each country in the region has its own characteristics, and there are different views on how best to deal with this opportunity. For Myanmar, there are not only historical reasons, but also because of the reality of economic and trade ties, China is the most viable candidate. For China, there are not only natural resources, but also the same ethnic, cultural of the two nations and the strategic position of Burma, and Burma is an important neighbor partner. Myanmar hopes that the OBOR project will help the transformation of Myanmar's industrial priorities and economic reform. Although there is no clear answer at present, China and Myanmar's energy cooperation and the Kyaukpysu Special Economic Zone project will realize Sino- Myanmar common dream "OBOR." Thus, the two governments also should prepare for the challenges and difficulties that can face in the future.

### References

1. Bo Kong, 23.9.2010, The geopolitics of the Myanmar- China Oil and Gas Pipeline, The National Bureau of Asian Research, NBR Special Report.
2. Khine Kyaw, 8.9.2017, Time to prepare for OBOR: Forum, Online: <http://www.elevenmyanmar.com/business/10990>, Eleven Journal (Accessed Date: 3.5.2018).
3. Kyaw Win (Labour), 26.6.2017, Myanmar and the One- Belt One- Road Initiative, Global News Light Of Myanmar.
4. 李晨阳教授, 16.8.2016, 缅甸与中国的一带一路倡议, 网上: [http://www.globalview.cn/html/global/info\\_12792.html](http://www.globalview.cn/html/global/info_12792.html), 世界知识期刊, 存取日期: 2018.5.20。(Professor Li Chenyang, 16.8.2016, Myanmar and China are on the "One- Belt One- Road", Online : [http://www.globalview.cn/html/global/info\\_12792.html](http://www.globalview.cn/html/global/info_12792.html), World Knowledge Journal, Accessed Date: 20.5.2018)
5. Rachel Harvey, 31.8.2011, Burma dam: Why Myitsone plan is being halted, Online : <http://www.bbc.com/news/world-asia-pacific-15123833>, BBC, (Accessed Date: 22.5.2018).
6. 习近平, 8.9.2013, "弘扬人民友谊共创美好未来---在纳扎尔巴耶夫大学的演讲", 载"人民日报"第3版。(Xi Jinping, 8.9.2013, "Promoting People's Friendship and Creating a Better Future - A Speech at Nazarbayev University", People's Daily Newspaper, 3<sup>rd</sup> edition.)
7. 习近平, 4.10.2013, "携手建设中国 - 东盟命运共同体---在印度尼西亚国会的演讲", 载"人民日报"2013年10月4日第2版。(Xi Jinping, 4.10.2013, "Work together to build China-ASEAN fate Community---speech in the Indonesian parliament", "People's Daily" Newspaper, 2<sup>nd</sup> edition.)



# Relationship Between Principals' Autocratic Leadership Style and Motivation of Support Staff in Public Secondary Schools in Kenya

Nyaboga Evans Nyagaka<sup>1</sup>

<sup>1</sup> P.O Box 509-40500, Nyamira, Kenya, Phone Numbers: +254727284247 / +254728539313, Email: enyanya05@yahoo.com

## Abstract

Staff motivation is a significant factor in enhancing organizational commitment and productivity. In a school system, two types of staff perform their duties in a complementary manner, namely the teaching staff and the support staff. The school principal is expected to play an administrative role, which includes motivational. However, the principals' motivation to support staff has been an issue of concern in the management of schools in Kenya. The specific objective was to: find out the relationship between principals' autocratic leadership style and motivation of support staff. Descriptive correlation and exploratory designs were used. The study population consisted of 170 principals, 172 deputy principals and 170 BOM chairpersons with 1020 support staff, a total target population of 1532. Stratified, random and purposive sampling techniques were used to select 51 principals, 51 deputy principals, 51 BOM chairpersons and 306 support staff members, making a total sample of 459 respondents. The instruments for data collection were questionnaires, interview schedules, and document analysis. The study used descriptive and inferential statistics of chi-square, Pearson's Product Moment Correlation, and simple linear regression analysis. Qualitative data were analyzed by organizing the content into themes and sub-themes as they emerged, then tallied and reported as excerpts. Validity was determined through JOOUST experts. The study employed a Cronbach alpha coefficient analysis of which a minimum of 0.709 and 0.84 was obtained for each of the items whose reliability was tested. There was a statistically significant negative relationship between principals' autocratic ( $r = -.231, n=306, p < .05$ ) leadership style and support staff motivation and that principals' autocratic leadership orientation accounted for 5.3% of the variation in motivation among support staff. Ministry of Education should design regular in-service courses for support staff and principals to maximize motivation and principals to evaluate their leadership styles and the level of motivation of the support staff.

**Keywords:** Public Secondary School, Staff Motivation, Support Staff, Autocratic Leadership Style

## 1. Introduction

The autocratic (authoritative) style is characterized by implementing the will of a leader, without taking into the consideration the opinion of subordinates. Leaders decide alone, give orders to subordinates and expect them to carry them out, based on unilateral, top-down communication. In order to motivate, leaders use their position to decide on the appropriate remuneration. Undertook management style research of experiments, observing teachers instructing children, for how to make a paper mache (or pulp) mask, in a classroom (Lewin, 1939). Findings show that the productivity (output) of masks made by the children, for example, the quantity of work, was the highest under autocratic styles of leadership.

Further, the study revealed that the work from the children ceased altogether under the autocratic leadership style. The children expressed a strong hostility towards autocratic styles. The study also found that decision-making was less creative under authoritarian leadership. Lewin (1939) also found that it is more difficult to move from an authoritarian style to a democratic style than vice versa. Authoritarian leadership is best applied to situations where there is little time for group decision-making or where the leader is the most knowledgeable member of the group. However, Lewin's study, involved school children and teachers as respondents while the present study involved principals, deputy principals, BOM chairpersons and support staff members as respondents. The present study sought therefore to fill this gap in the literature.

A study in the USA by Warrick (2007), found out that an autocratic leader puts a high emphasis on performance and a low emphasis on people. Assumes that people are lazy, irresponsible and untrustworthy and that planning, organizing, controlling and decision making should be accomplished by the leader. Autocratic some but little consultation by a manager with subordinate for instance at least subordinate has explained to them the reasons for the manager's decision. Autocratic leadership styles which are a more bossy way of managing subordinates, based on centralised decision making by the manager, who is often impatient, aggressive and dominating. An autocratic manager would not encourage participation in decision making from their subordinates.

According to a qualitative study by Fulmer (2006) conducted in Tanzania. The study explored the role of instructional leadership and its impact on instructional behaviours of teachers, leading to improvement in student achievements. The study used descriptive research design. The data was collected from 25 pre-service principals on their reflections in becoming instructional leaders along with secondary data from progress and curriculum intervention reports. The findings indicated that the instructional leadership role was crucial for lasting and productive changes in schools and instructional interventions of principals did impact on the thinking and behaviours of teachers to improve student achievements. However, this study only focused on instructional leadership behaviour. The present study sought to look into autocratic leadership style and strike the relationship between leadership style and support staff motivation. Fulmer's study was purely qualitative research approach while the current adopted a descriptive survey research design of both qualitative and quantitative approaches.

In Kenya, a study by Karori (2013) focused on the effects of headteachers' leadership styles on students' performance in K.C.P.E in public primary schools in Kikuyu district. The study adopted the ex-post facto survey research design. All teachers and headteachers in all the public primary schools in Kikuyu district were targeted. Twenty-seven headteachers and 154 teachers were randomly sampled from 27 primary schools. Responses were obtained using questionnaires. Descriptive and inferential statistical techniques were utilized in data analysis. The current study adopted descriptive correlation and exploratory design. Findings revealed there was a significant relationship between head teachers' leadership styles and students' academic performance. According to the study findings, there was no relationship between headteachers' gender, age, teaching experience and marital status and their leadership styles. Teachers perceived their headteachers as autocratic. However, this study was majorly focusing on public primary schools and students' performance in KCPE but failed to provide any information on principals' leadership styles, and secondary schools support staff motivation. The present study sought to fill this gap and determine the relationship between principals' autocratic leadership style and motivation of support staff in public secondary schools in Nyamira County, Kenya.

## **2 Objective of the Study**

This study focused on achieving the following objective: To establish a relationship between of principals' autocratic leadership style and motivation of support staff in public secondary schools.

### **Research Hypothesis**

The research was guided by the following hypothesis:  $H_{01}$ -There is no statistically significant relationship between principals' autocratic leadership style and motivation of support staff in public secondary schools.  $H_{a1}$ -

There is a statistically significant relationship between principals' autocratic leadership style and motivation of support staff in public secondary schools.

### 3. Research Methodology

This study adopted a descriptive correlation survey and exploratory research designs to explore whether there was a correlation between the principals' leadership style and motivation of support staff in public secondary schools in Nyamira County. According to Mugenda and Mugenda (2005), a descriptive correlation survey research design determines and reports the way things are. Descriptive correlation survey design was employed because it guaranteed breadth of information and accurate descriptive analysis of characteristics of a sample, which was used to make inferences about population (Orodho, 2004). This design is useful when a researcher wants to collect data on phenomena that cannot be observed directly. Its advantage is that it allows collection of large amounts of data from a sizeable population in a highly effective, easily and in an economical way, often using questionnaires. Exploratory design helped in clarifying about this phenomenon on the relationship between principals' leadership styles and motivation of support staff that would not have been clearly studied in this specific context. Quantitative and qualitative approaches (mixed methods) guided data collection procedures for this study. Tools including questionnaires, interview guides, and document analysis were used to collect relevant data on the relationship between principals' leadership styles and motivation of support staff.

The study was carried out in Nyamira County. The Latitude and Longitude of Nyamira County are 0°56'S34°93'E respectively. Nyamira County is located in the former Nyanza Province, and borders the counties of Bomet to the East, Narok to the South, Kisii to the West, Homa Bay to the South West and Kericho to the North East. It covers an area of 899.3 km<sup>2</sup>. The population of Nyamira County is 598,252 people, with the male comprising 48%, and female 52%. The population density is 665 people per km<sup>2</sup> (County Government of Nyamira, 2015). The Government of Nyamira County has four constituencies, namely West Mugirango, North Mugirango, Borabu and Kitutu Masaba and five sub-counties, namely Nyamira South, Nyamira North, Borabu, Manga and Masaba North (County Government of Nyamira, 2012), prepared a map showing the location of Nyamira.

Nyamira County was chosen for the study because of the following main reasons, namely; the existence of many schools and a large number of staff employed in schools which made it possible to have respondents who could give the required information for the study. Similarly, the various economic activities in the area provide an alternative source of employment, hence a competitor and a fallback alternative to formal employment in the schools. This makes motivation an important variable in attracting staff to work in secondary schools.

There is also a widespread support staff turnover in secondary schools in Nyamira County despite the fact that county is fairly developed and productive area. Support staff's motivation has persistently been dismal. Hence the county was convenient for the study. The sub-counties in Nyamira County were easily accessible because of the good road network which cuts across the sub-counties and given that no similar study has been conducted in the county. No seminar or workshop ever held to address the support staff's motivation. The study location became more suitable.

This study had a target population of 1532 which comprised of 170 Principals, 172 Deputy Principals, 170 Boards of Management chairpersons and 1020 support staff members. Units of analysis were 170 public secondary schools Nyamira County, five sub-counties namely Nyamira North, Nyamira South, Masaba North, Manga, and Borabu. The target population is summarized as shown in Table 3.1

**Table 3. 1: Target Population**

<b>Sub-County</b>	<b>Number of schools</b>	<b>Principals</b>	<b>Deputy Principals</b>	<b>BOM Chair</b>	<b>Support Staff</b>	<b>Total</b>
Nyamira North	43	43	43	43	258	387
Nyamira South	44	44	45	44	264	397
Masaba North	32	32	32	32	192	288
Manga	28	28	29	28	168	253
Borabu	23	23	23	23	138	207
<b>Total</b>	<b>170</b>	<b>170</b>	<b>172</b>	<b>170</b>	<b>1020</b>	<b>N=1532</b>

Source: Nyamira County Education Office (2016)

Mugenda & Mugenda (2005) suggests that for correlational or experimental research, 30 cases per group or more are required; and for descriptive and survey research, ten percent of the accessible population. This study, therefore, employed a sampling fraction of 30% of the target population (Mugenda & Mugenda, 2005) the sample size is represented in Table 3.2

**Table 3. 2: Sampling Frame**

<b>Sub-county</b>	<b>Sample size Principals</b>	<b>Deputy principals</b>	<b>BOM Chairpersons</b>	<b>Support staff</b>	<b>Total</b>
Nyamira North	13	13	13	77	116
Nyamira South	13	13	13	79	118
Masaba North	10	10	10	58	88
Manga	8	8	8	50	74
Borabu	7	7	7	42	63
<b>Total</b>	<b>n=51</b>	<b>n=51</b>	<b>n=51</b>	<b>n=306</b>	<b>459</b>

From table 3.2, this study had a target population of 1532 which comprised of 170 Principals, 172 Deputy Principals, 170 Boards of Management chairpersons and a support staff of 1020. Using the sampling fraction of 30%, the sample size comprised of 51 Principals, 51 Deputy Principals, 51 BOM Chairpersons, and a support staff of 306, making a total sample size of 459. The sample elements were selected through stratified sampling, simple random sampling, and purposive sampling.

#### 4. Results and Discussion

This section presents the analysis of the test of the hypothesis. The study used one null hypothesis related to support staff level of motivation and principals' leadership styles. To do this, Chi-Square and a Pearson Product Moment Correlation Coefficient was computed to test each hypothesis, with scores on leadership style as the

independent variable and support staff level of motivation as the dependent variable. The scores of the variables were computed from the frequency of responses from the support staff questionnaire and converted into continuous scaled data by computing mean responses per respondents, where high scale ratings implied high perceived motivation and high usage of the leadership style and vice versa. The p-value was set at .05, the null hypothesis was rejected when the p-value was less than .05, but it was accepted when the p-value obtained was greater than .05.

**H<sub>01</sub>: There is no significant relationship between principals' autocratic leadership style and motivation of support staff in public secondary schools.**

The study was interested in establishing the principals' autocratic leadership style and motivation of support staff in public secondary schools. To achieve this, the principals were required to indicate the autocratic leadership style in a contingency table and analysed by chi-square test. Their responses are summarized in Tables 4.20 and 4.21

**Table 4.20: The relationship between principals' autocratic leadership styles and motivation of support staff (using data from principals)**

Count	VLM	LM	AM	HM	VHM	Total
Disagree	0	2	10	26	1	39
Neutral	0	0	2	7	0	9
Agree	0	0	2	1	0	3
<b>Total</b>	<b>0</b>	<b>2</b>	<b>14</b>	<b>34</b>	<b>1</b>	<b>51</b>

Source: Field Data

As the first step used in the study to arrive at chi-square test which was used to test the set hypothesis was Table 4.20 which was contingency table showing cross tabulation between principal's autocratic leadership style and motivation of support staff. The study found the majority (27) of the principals disagreed that the support staff was highly motivated, 10 disagreed that the staff was averagely motivated, 7 principals were neutral on the staff were highly motivated compared to 2 principals who were both neutral and also agreed that the staff was averagely motivated.

**Table 4.21: Chi-square test on the relationship between principals' autocratic leadership styles and motivation of support staff (using principals' data)**

	Value	Df	Asymp. Sig. (2-sided)
Pearson Chi-Square	145.99a	97.00	0.62
Likelihood Ratio	115.78	97.00	0.99
Linear-by-Linear Association	0.58	1.00	0.45
N of Valid Cases	51.00		

a 81 cells (100.0%) have expected count less than 5. The minimum expected count is .06.

Source: Field Data

The  $\chi^2$  results of 145.99, df 97,  $p < 0.05$  indicated that the null hypothesis was rejected and therefore implying the existence of a significant relationship between principals' autocratic leadership style and motivation of support staff in public secondary and the alternate hypothesis ( $H_{a1}$ ) was accepted. The study was also interested in establishing the relationship between principals' autocratic leadership style and motivation of support staff in public secondary schools. To achieve this, the support staff members were required to indicate the autocratic

leadership style in a contingency table and analysed by chi-square test. Their responses are summarized in Tables 4.22 and 4.23

**Table 4.22: The relationship between principals' autocratic leadership styles and motivation of support staff (using data from support staff)**

COUNT	VLM	LM	AM	HM	VHM	TOTAL
Disagree	0	12	60	156	6	234
Neutral	0	0	12	42	0	54
Agree	0	0	12	6	0	18
<b>Total</b>	<b>0</b>	<b>12</b>	<b>84</b>	<b>204</b>	<b>6</b>	<b>306</b>

Source: Field Data

As the first step used in the study to arrive at chi-square test which was used to test the set hypothesis was Table 4.22 which was contingency table showing cross tabulation between principal's autocratic leadership style and motivation of support staff using data from support staff. The study found that the majority (156) of the support staff disagreed that the support staff were highly motivated, 60 disagreed that the staff were averagely motivated, 42 support staff were neutral on the fact that the staff were highly motivated compared to 12 support staff who were both neutral and also agreed that the staff were averagely and highly motivated respectively.

**Table 4.23: Chi-square test on the relationship between principals' autocratic leadership styles and motivation of support staff (using support staff data)**

	Value	Df	Asymp. Sig. (2-sided)
Pearson Chi-Square	264.174a	165	0.73
Likelihood Ratio	215.79	165	0.99
Linear-by-Linear Association	0.64	1	0.49
N of Valid Cases	306		0.73

a 81 cells (100.0%) have expected count less than 5. The minimum expected count is .06.

Source: Field Data

The  $\chi^2$  results of 264.174a, df 165,  $p < 0.05$  indicate that the null hypothesis is rejected and therefore implying the presence of a significant relationship between principals' autocratic leadership style and motivation of support staff in public secondary and the alternate hypothesis ( $H_{a1}$ ) is accepted. Furthermore, to test the hypothesis, a Pearson Product Moment Correlation Coefficient analysis was done, with scores on principals' level of autocratic leadership style used as the independent variable and support staff level of motivation as the dependent variable. Table 4.24 shows the SPSS output on correlation analysis results on the relationship between principals' autocratic leadership style and motivation of support staff.

**Table 4.24: Relationship between Autocratic Leadership Style and Motivation of Support Staff**

		Autocratic Leadership	Support Staff Motivation
Autocratic Leadership	Pearson Correlation	1	-.231**
	Sig. (2-tailed)		.000
	N	306	306
Support Staff Motivation	Pearson Correlation	-.231**	1
	Sig. (2-tailed)	.000	
	N	306	306

\*\* . Correlation is significant at the 0.01 level (2-tailed).

The finding of the study shows that there was statistically significant, though weak, negative correlation ( $r = -.231$ ,  $n=306$ ,  $p<.05$ ) between principals' autocratic leadership style and motivation of support staff in public secondary schools, with high autocratic tendencies of the principals resulting in to low motivation level among the support staff members in secondary schools and vice-versa. Given that the relationship was statistically significant, the hypothesis that "there is no statistically significant relationship between the principals' autocratic leadership style and motivation of support staff in public secondary schools." was rejected. It was therefore concluded that high-level autocracy in leadership demotivates support staff members.

To estimate the level of relationship between principals' autocratic leadership style and support staff motivation, a coefficient of determination was computed. This was done using regression analysis, and the results were as shown in Table 4.25.

**Table 4.25: Model Summary on Regression Analysis of Influence Principals' Autocratic Leadership on Motivation**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.231 <sup>a</sup>	.053	.050	.42847	1.759

- a. Predictors: (Constant), Autocratic Leadership  
b. Dependent Variable: Support Staff Motivation

The model shows that principals' autocratic leadership orientation accounted for 5.3% (as signified by coefficient  $R^2 = .053$ ) of the variation in motivation among support staff workers in the secondary schools in Nyamira County. However, to determine whether principals' autocratic leadership orientation was a significant predictor of motivation among the support staff workers, Analysis of Variance (ANOVA) was computed as Table 4.26

**Table 4.26: ANOVA –Influence of Principals' Autocratic Leadership Orientation**

Model	Sum of Squares	Df	Mean Square	F	Sig.
Regression	3.138	1	3.138	17.095	.000 <sup>b</sup>
1 Residual	55.811	304	.184		
Total	58.949	305			

- a. Dependent Variable: Support Staff Motivation  
b. Predictors: (Constant), Autocratic Leadership

From Table 4.26, it is evident that principals' autocratic leadership orientation was a significant predictor of motivation among the support staff workers [ $F(1, 304) = 17.095$ ,  $p<.05$ ] in secondary schools. This further confirms that principals' autocratic leadership orientation significantly influences motivation among support staff.

However, linear regression was generated to find the actual relationship between principals' autocratic leadership orientation and motivation of support staff workers, as shown in Table 4.27.

**Table 4.27: Coefficients of Linear Regression: Principals' Autocratic Leadership Orientation**

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	3.637	.218		16.692	.000
	Autocratic Leadership	-.254	.061	-.231	-4.135	.000

- a. Dependent Variable: Support Staff Motivation

$$Y = B_0 + B_1X + \epsilon$$

$$Y = 3.637 - 0.254X_1 + \epsilon$$

Where Y = Adjustment

$$B_0 + B_1 = \text{Constant}$$

X = Level of Autocratic Leadership Style

It is evident from Table 4.27 that if the level of autocratic leadership style was increased by one standard deviation, then perceived scores in the level of motivation of support staff workers would drop by .231 standard deviation units. This is a substantial effect from one independent variable.

The deputy principals maintained during interviews that support staff members with more work experience were not allowing the use of an autocratic leadership style which was preferred by principals as such they were clashing with the principals. The deputy principals added that most principals preferred to work with less experienced support staff members who could easily be intimidated so that they don't speak their minds. One Deputy Principal explained that:

*Principals do initiate sacking of support staff member who had long-term work experience because such support staff members do not support their leadership styles (D/P 15)*

Most BOM chairpersons on their part maintained that most support staff members in the school setups were hired by Board of Management and were aware of the rights to demand good leadership styles. One BOM Chairperson noted that:

*Some principals are using authoritarian leadership style on support staff members, and in such instances, the board normally come to the rescue of the support staff and recommend the transfer of the principals (BOMC 13)*

The finding is supported by Warrick (2007) who found out that an autocratic leader puts a high emphasis on performance and a low emphasis on people. This coincides with the finding related to principals autocratic practices including; forcing deadlines and productivity on support staff without minding a personal relationship with them.

## 5. Summary, Conclusion, and Recommendations

The finding of the study established that there is a statistically significant negative relationship ( $r = -.231$ ,  $n=306$ ,  $p < .05$ ) between principals' autocratic leadership style and motivation of support staff. The principals' autocratic leadership orientation accounted for 5.3% (as signified by coefficient  $R^2 = .053$ ) of the variation in motivation among support staff workers and principals' autocratic leadership orientation was a significant predictor of motivation among the support staff workers [ $F(1, 304) = 17.095$ ,  $p < .05$ ] in secondary schools. If the level of autocratic leadership style was increased by one standard deviation, then perceived scores in the level of motivation of support staff workers would drop by .231 standard deviation units.

### 5.1 Conclusion

Based on the findings of the relationship between principals' autocratic leadership style and support staff motivation, the study came up with the following conclusion; principal setting deadlines to be met by support staff as an element of autocratic leadership style by the principals contributed as a much more towards support staff motivation in public secondary schools in Nyamira County.

### 5.2 Recommendations

Based on the findings and the conclusions of the study, the following recommendations are made with the view of improving the relationship between principals' autocratic leadership style and motivation of support staff in public secondary schools:

- 1) In-service courses and other appraisal courses to enhance quality leadership should be provided.
- 2) This study recommends that the principals see the value of mixed leadership styles applied to manage staff in schools.

- 3) Support staff members should be allowed to evaluate and recommend the leadership styles of the principals.
- 4) Ministry of Education should design relevant and regular in-service courses and other appraisal courses for support staff members and principals to minimize the challenges faced. Such training should emphasize human resource management and interpersonal relations at the workplace. The training should also emphasize the accountability of the workers on their responsibilities.

### 5.3 Suggestions for Further Research

The study did not exhaust all issues pertaining to the relationship between principals' autocratic leadership style and motivation of support staff in public secondary schools in Nyamira County, Kenya. Other issues emanated from the study that require further investigation are as follows:

- The relationship between principals' autocratic leadership style and discipline of students.
- The relationship between principals' autocratic leadership style and motivation of teachers.

### REFERENCES

1. Cherry, K. (2013). Leadership theories - 8 Major Leadership Theories [Retrieved 2 January] Available at: <http://psychology.about.com/od/leadership/p/leadtheories.htm>
2. County Government of Nyamira (2012). The location of Nyamira <http://www.nyamira.go.ke/>
3. County Government of Nyamira (2015). The location of Nyamira <http://www.nyamira.go.ke/>
4. Fulmer, C.(2006). Becoming instructional leaders: *Lessons Learned from Instructional Leadership Work Samples. Educational Leadership and Administration*, 18 (1), 109-172.
5. Karori C., Mulewa A., Ombuki C.and Migosi J. (2013). Effects of head teachers' leadership styles on the performance of examinations in public primary schools in Kikuyu District, Kenya. *International Journal of Educational Research and Reviews* Vol. 1 (4), pp. 053-065
6. Lewin, K., Lippit, R. and White, R.K. (1939). Patterns of aggressive behavior in experimentally created social climates. *Journal of Social Psychology*, 10, 271-301
7. Mugenda, O. & Mugenda, A. (2005). *Research methods: Quantitative and qualitative approaches*. Nairobi: Acts Press.
8. Nyamira County Director of Education Office (2016).A discussion on deployment of teachers to headship position, 22nd July, 2015, Nyamira.
9. Orodho, J. A. (2004). *Techniques of writing research proposals & reports in education and social science research methods*. Nairobi: Bureau of Educational Research.
10. Warrick, D.D. (2007). *Leadership Styles and Their Consequences*. University of Colorado



## Playing Cards of Myanmar with the Giants

Si Si Engyin<sup>1</sup>

<sup>1</sup> School of Political Sciences and Public Administrations, Shandong University, Jinan, China

### Abstract

Myanmar's strategic location and abundant natural resources always make Myanmar as the core interests of some powerful countries. Since independence, because of historical experiences and national location, Myanmar has always used the neutral and non-aligned foreign policy and followed the five principles of peaceful coexistence. After the world economic crisis in 2008, the importance of Myanmar's strategic position is more obvious. At that time, because of China's influence, Myanmar tried to carry out the political transformation. During this transition period, Myanmar needs support and encouragement from far and near friends. From 2011, western countries and Japan began to contact with Myanmar and helped the democratic transition. Although there is no country challenges Myanmar's sovereignty, the giants have great effects on Myanmar domestic issues, e.g., national reconciliation and terrorist conflicts. So, Myanmar needs to balance national interests and giant powers. Although small countries constitute as a majority of the world, the foreign policy of small states has never been a concern of mainstream of international relations theory. Therefore, this article will describe along with the shift of the world power center, the relationship between Myanmar and China, India, Japan, the United States and the European Union, and then pointing out which policy can find Myanmar's own balance among the giants?

**Keywords:** Non-aligned foreign policy, National interests, Giant powers, Balance

### *1. Introduction of Myanmar*

Myanmar founded in 849 AD (known as Burma before), has a long history, splendid culture, a good geographical position and abundant natural resources. According to the 2017 census, the national population is more than 50 million. There are seven provinces, seven states and five autonomous regions and a total of 135 ethnic groups in Myanmar. Myanmar is mainly Buddhist country, the majority of the population about 87% is Buddhism, 6% Christian, 4% Islam, 0.5% Hinduism and other religions. Geographically, Myanmar covers an area of 261,228 square miles (677,000 square kilometers), east-west longs 582 miles (936 kilometers) and south-north 1275 miles (2051 kilometers). Myanmar's east, the northeast and the southeast are bordered by China, Laos, Thailand, the west and southwest by Bangladesh, India, Bay of Bengal and the Andaman Sea. Myanmar is situated between two powerful countries China and India, on the one hand, Myanmar is the doorway to China's westward policy, and the other is the entrance of India's eastward policy. Myanmar has not only important strategic positions, but also rich natural resources, such as oil, gas, forests, water resources, jade, ruby, gold, and so on. Sometimes its own advantages not only create benefits but also create hurt itself. For example: in 1885, Burma was colonized by Britain because before of Myanmar's abundant natural resources and during World War II in 1942, Burma was the fascism of Japan because of Myanmar's strategic geographical conditions. During the world war, Burma allied with Japan to defeat Britain and allied with Britain to defeat Japan. Then Burma came to realize that the war had divided the world into two parts and that it would not be good for Myanmar to join any part. Therefore, since independence, Myanmar has always attached importance to the strategic location of the country, never allowing any foreign troops to be deployed within its borders, never waging aggression or

interfering in the internal affairs of any other state, and used non-aligned or neutral, independent and active foreign policies to deal with its relations with other countries in its foreign policy.

## ***2. Analysis of Myanmar's diplomatic strategy***

Although Myanmar has a large population and an enormous area, it has few decades of economic backwardness and no strong influence in international affairs. Therefore, Myanmar is regarded as a "weak country." Of course, Myanmar's foreign policy is also a "weak state diplomacy." For historical reasons, Myanmar, as a small country invaded by colonialism, has always been particularly sensitive to the issue of sovereignty and independence of the foreign powers. U Nu (1948-1962) government's diplomatic objective is to avoid conflicts between major powers and to avoid interference by a major state in Burma. During the reign of U Nu, Burma fully participated in international affairs and pursued an active neutrality foreign policy. U Nu defined Myanmar's neutralism as five basic principles: do not ally with any great power, to maintain friendly relations with all countries without enemies, do not accept conditional assistance, according to the merits of the matter itself, we will examine each foreign policy issue without hesitation, willing to contribute to world peace and help any country that may need help (Chi- Shad Liang. 1990).

U Nay Win (1962-1988) government's diplomatic goal is to avoid foreign interference in the civil war, to avoid being forced to choose a great power in the cold war and to avoid being involved in the post-colonial war in Southeast Asia. 1974 Constitution stipulated that: "Myanmar has always pursued an independent foreign policy, with the goal of world peace and friendly coexistence among nations and the principle of peaceful coexistence among nations." (贺圣达.1993) The government embodied "neutrality" as six aspects: neutralism and non-alignment, friendship and cooperation, maintaining peace and disarmament, supporting national liberation and opposing colonialism, supporting the principle of national self-determination; and supporting the United Nations.

In the age of globalization, no country can live close to the door, and any country must participate in the life of the international community. The military junta (1988-2010) is aware of this, so the military junta has decided to open the door, its diplomatic goal is to strengthen security, enhance national economic development and prosperity, promote as a peaceful nation and justice world order. But the military government could not get the normal relations with Western because it was a human right issue and a democratization issue, so Burma was sanctioned by the West. In the period of 1988 to 2009, Myanmar's national leadership accepted the view that "national power is much more important than human rights." Since then, Myanmar's foreign policy has promoted economic cooperation with its neighbors. Under these circumstances, China and India began to support Burma. Between 1988 and 2010, China and India became Burma's largest investors and the most important "partner" powers. Myanmar's neutrality foreign policy is to ensure its maximum independence, autonomy, and flexibility, instead of limiting its activity space. (金日.2003) After Western sanctions, although Myanmar has been using the foreign policy of "neutrality, non-alignment" policy, Myanmar's economy and security rely on China. As Myanmar's foreign trade is highly dependent on its neighbors (China and India), more and more have doubt about super powers.

Hence, the junta government proposed "a road map for Democracy," which includes such elements as the convening of the National Convention, the enactment of a new constitution, the National people's general election, etc. Since then, the junta began to enact a new constitution, in early May 2008, the military government enacted a new constitution and then announced that in 2010 will hold a national election. Myanmar began reform of domestic politics and opening-up in 2011. Despite Myanmar has transformed politics, Myanmar's foreign policy has not changed, and its objectives have remained unchanged. As stated in the 2008 Constitution: "The union has an independent, active and non-aligned foreign policy in order to achieve world peace and friendly relations between nations and uphold the principle of peaceful coexistence among nations." In addition, "The union shall not invade any State" and "do not allow the deployment of foreign forces in the territory." The "neutral or non-aligned" foreign policy of the 2008 constitution meant to balance the Sino-Burmese relationship and to reduce the sanctions and political pressure by the west, hoping to develop cooperation with many countries for more assistance.

Since 2011, Myanmar has been normalized in the west and has been closely related to democratic states. Conservative experts have long predicted that 2015 years later Daw Aung San Suu Kyi will maintain good

relations with the West, which for decades has supported her struggle for democracy and human rights in Burma. However, Myanmar's foreign minister Daw Aung San Suu Kyi officially announced that the new government's goal is to foster "better relations not only with neighboring countries and between ourselves, but also with the rest of the world and our country." Myanmar's new government wants the good relations not only with the West but also with its neighbors. Myanmar, with its democratic transition, has many needs. It must engage with many countries. It must not be offended or fall with any super power. With the shift of world power center, there are more and more ways for big countries to pursue interests. Myanmar has become the connection between China's "maritime Silk Road" and "Silk Road Economic Belt", the important position of the US's "return to the Asia Pacific" strategy, the door of India's policy toward the East, and the test point of Japan to China, so these big powers re-emphasize the strategic position of Myanmar. The new government's foreign policy is to seek foreign aid strategy, as well as to improve domestic conditions and political stability.

### ***3. Relationship between with the Giants***

As Myanmar regains its place on the world stage, its role in global economic and political affairs has become significantly increased. The changing geopolitical policy of the great Powers in the 21st century has made Myanmar's geographical position increasingly important. At the beginning of China's "one- belt and one- road" project, China needs Myanmar's important position more than ever. Because "one- belt and one- road" not only can get energy resources in Myanmar area, but also can connect the "Silk Road Economic Belt" and "maritime Silk Road." As China's image in the Myanmar region continues to rise, India continues to promote cooperation with Myanmar and to change the Indian government's approach to northeastern India. In order to implement the strategy of "returning to the Asia-Pacific" and "two oceans," the United States also needs a good relationship in an important geopolitical region in Asia. Japan can't get Myanmar's natural resources but wants to control China's energy trends, so Japan needs a place to watch China's new energy road. European countries want communications with each Asian country in the second largest economy area of the world, especially with democratic countries, and then want to create parliamentary relations. Therefore, China, India, the United States, Japan and European and American countries also follow their own values and want to have friendly relations with Myanmar. Therefore, since the political transformation, Myanmar has gradually become the core interests of great powers. Since then, China, India, the United States, the European Union and Japan have begun to provide more assistance and support to Myanmar.

#### ***3.1. Myanmar and China***

China is an important neighbor to the north, northeast, and east of Burma, and the Sino-Burmese relationship is more than 60 years "Pauk- Phaw relations." China is the exporter of Myanmar's natural resources and the biggest investor in Myanmar. Myanmar is the energy generation site of China (southwestern) and one of the most important seaports. After the political transformation of Myanmar in 2001, some scholars believe that China-Myanmar relations will gradually calm down. After the 2015 election, the idea of academics was even more powerful because of Daw Aung San Suu Kyi's personal reasons. Therefore, the new Government attaches great importance to the balance of power diplomacy. Her first visit to the destination was a small ASEAN country "Laos." In August 2016, she visited China, the former president U Htin Kyaw visited India in the same month, and then Daw Aung San Suu Kyi visited the United States in September. This sequence indicates that Myanmar understands that "far away relatives are not as close neighbors," hinting that Burma's foreign strategy priorities Beijing in front of Washington. This has made China feel at ease. The new government hopes to rebuild the damaged bilateral cooperation and continue to strengthen the Pauk- Phaw relationship.

The foreign policy of China and Myanmar is the best explained by the geopolitical angle. Because of the unchanged historical and geographical reasons and the common ethnic relations between the two countries, China and Myanmar continue to observe the five principles of peaceful coexistence and establish good-neighborly relations. The most important reason is the reason for Myanmar's national reconciliation. Myanmar's national reconciliation is vital not only to Myanmar but also to maintaining the stability of the China-Myanmar border and the friendly cooperation between China and Myanmar. (中国驻缅甸大使,2017) China needs Myanmar's strategic position because it will be the deep sea-port for China's southwestern province, and then

China can avoid some of the dangers of energy and trade routes. When China officially started the "One- Belt One- Road" project in 2015, China wanted Myanmar's domestic peace because it was going to achieve a safe and stable "Silk Road Economic Belt." China has not interfered in the domestic affairs of other countries, but these years China has had to push the ethnic armed groups in northern Myanmar to actively participate in the peace process and help the Government to achieve the peace process. At the Second and the third Pinlong Peace Conference (May 2017 and July 2018), we can see the impact of China in Myanmar national peace process. As requested by Myanmar government, China has publicly supported the country's participation in peace after the national armed group. China is also concerned about the Rohingya terrorist organization in order to build "the Maritime Silk Road" and the "Bangladesh- China-India-Myanmar economic corridor." On the Rohingya issue, China is prepared to mediate between Myanmar and Bangladesh. Myanmar and Bangladesh are conducting bilateral discussions to solve this problem. China, like the international community, can provide productive assistance. Under the project of "one- belt and one- road," China envisages an economic corridor, extending from Yunnan, China, to Mandalay in the central part of Burma, then to the east to Yangon, and to the Kyaukpyu Special Economic Zone in the West. This economic corridor will link Myanmar's Central economic zone and the less developed parts of the west can balance the country's development. Therefore, China and Myanmar are carrying out good-neighborly and friendly relations with their respective values to achieve common interests.

Myanmar got along well with the world's largest population, the second largest economy of the neighboring country, China and then bilateral cooperation has gradually built up all over the country. At the same time, China has an impact on all aspects of Myanmar, especially on the domestic peace issue in Myanmar and its dependence on China for its economic, trade and investment. So, during the military government, Burma leaders began to worry about Burma becoming a small country dominated by China. So Myanmar has long been looking for a partner to balance its relationship with China, and of course, it is looking for neighboring countries, for example India.

### *3.2. Myanmar and India*

India has often been worried about China's influence on Myanmar, also hoped to get the natural resources and strategic position of Myanmar, so India began a new Indo-Burma relationship in 1990. India's proposals for cooperation with Myanmar are based on China's commitment to Myanmar.

From the geopolitical point of view, the importance of India to Myanmar is similar to that of China. India is an important neighbor to the west of Myanmar. India's goal is not only to establish good relations with Myanmar but also to change the Indian government's approach to northeastern India. India also is the exporter of Myanmar's natural resources and the second- biggest investor in Myanmar and then Myanmar is one of India strategic neighbors and the only door for India's East policy. According to the statistics of the Ministry of Commerce of Myanmar, China-Myanmar trade is 10 times larger than that of India-Myanmar trade. But Myanmar has not ignored India-Myanmar relations. Myanmar State Counsellor chose Beijing as her visit abroad ahead of New Delhi, but the president chose the first trip to New Delhi at the same month. It indicates that Myanmar understands that "it cannot choose its destined neighbors," expresses that Myanmar's foreign strategy priorities on China and India are the same. Since 2011, India, like the Western countries, supported Myanmar's democratic transition and economic and social development. Myanmar will not leave India on the issue of democratization and the Rohingya issue in Rakhine, and the opportunities for contacts with India have become increasingly great. On the Rohingya issue, India, like China, prepares to mediate between Myanmar and Bangladesh. India intends to strengthen security and counter-terrorism, trade and investment, infrastructure and energy cooperation and cultural cooperation in these regions.

Since 1948, Sino-Indian influence in the Myanmar region has always existed, but it does not harm the other side, because China, Myanmar, and India have adhered to the "Five Principles of Peaceful Coexistence." When China and India are competing in the Myanmar region because of geographical factors, Japan, another powerful Asian country, is also participating in the competition.

### *3.3. Myanmar and Japan*

Since 2011, the relationship between Japan and Myanmar has increased markedly. Although Japan is not a big neighbor of Myanmar, Japan's trade with Myanmar has greatly increased than India-Myanmar trade. Japan thinks that China imports oil through Myanmar while avoiding the Malacca Strait and the South China Sea, which is not conducive to Japan. So Japan wants to control China's energy trends. In 2011, U Thein Sein government formulated the five special economic zones for economic development. The core of the economic cooperation between Japan and Myanmar is the Special economic zone of the seaport, such as Thilawa port in the economic capital Yangon and the Dawei port near the Thai-Myanmar border. The Dawei port is located in the Bay of Bengal and 150 miles away from Bangkok. Japan imagines that Dawei port through the Bay of Bengal leads directly to the Indian port, other Southeast Asian countries also imagine that their exports send to Dawei port and then through the Bay of Bengal to the Indian port, rather than through the Strait of Malacca. Otherwise, Dawei port can help Japan to invest in other Southeast Asian countries. Thus, Myanmar can create greater regional connectivity for itself and another mainland Southeast Asian countries. When Myanmar started democratization, Japan strongly supported five projects in Myanmar: national reconciliation, economic cooperation, the promotion of private sector investment, personnel exchange and human resource development.

Although the relations between India-Myanmar and Japan-Myanmar are growing, China is still Myanmar's biggest reliant. Besides, China's economic rises, the Myanmar government realizes that it is not enough to cooperate with India and Japan in order to balance Sino-Myanmar relations. So the junta wants normal relations with the West.

### *3.4. Myanmar and the West*

In 2008, the world had an economic crisis, so America's diplomacy shifted to Southeast Asia. After the 2008 financial crisis, Clinton expressed: Southeast Asia is also inclusive of the world's most dynamic trade and energy routes, from the Indian Ocean through the Straits of Malacca to the Pacific Ocean. So the United States wants to establish a good relationship with Southeast Asia. Both China and the United States are trying to make economic progress through development assistance and major projects. These efforts to consolidate the heritage in their respective activities in the Southeast Asian region are very evident in Myanmar.

Clinton's visit in 2011 and the visit of President Obama in 2012 and 2014, were marked by America's encouragement of democratic transformation to Myanmar. Myanmar, which has not yet been democratized, also needs the support and guidance of the major advocates of human rights and democratic countries of the world. With the guidance and assistance of the United States, Myanmar can smoothly implement the second general election in 2015. The democratization and human rights under the guidance of the United States have reversed the adverse effects on Sino-Myanmar economic cooperation, such as the Myitstone dam problem, Letpadaung copper and gold mines, and oil and gas pipes from Myanmar's Rakhine state to China's Yunnan province. For Myanmar, in the case of big countries squeezing each other, small country seizes the chance and pursues national interests or realizes the way to survive to maximize benefits. (方天建, 何跃. 2013) Although the United States has little influence on Myanmar's economy, it can play an important role on the multilateral development banks, from 1988-2012 because of the United States' economic sanctions, Myanmar did not get international loan assistance for a long time. In 2013, United States re-engaged with the international banks for Myanmar, so, from this time Myanmar got international loan assistance.

When the Trump administration came to power in 2016, they didn't announce any foreign policy toward Myanmar. However, in November 2017, a visit to Myanmar by Rex Tillerson, the US Foreign Minister, showed Trump's renewed interest in Myanmar or Southeast Asia. In fact, Trump's Southeast Asia policy began five months after President Trump took office, for example, in May 2017, the US Secretary hosted the US-ASEAN special session, in November 2017, President Trump attended the ASEAN Summit in the Philippines and the APEC Summit in Vietnam. According to President Trump's personal business identity, the priority of American diplomacy is "economic power." When Sino-US economic war broke out in early 2018, both countries refused to export and import each other. Therefore, in order to defeat China, the United States must reconcile with other Asian countries. Similarly, to defeat the US, China must also look for other partner countries all over the world. Therefore, the small and medium-sized countries should prepare early how to face this economic war and how to take their own national interests from this situation. At these days, some of the small countries worry about their

economies will not be able to continue their relations with the United States. At this point, Myanmar doesn't need to worry about that. Although Myanmar's economy is small, Myanmar's strategic geographic position can bring a lot of economic and security benefits to major powers. Therefore, there has been no change in the relationship between the US and Myanmar. The United States continues to provide assistance in the following categories: national reconciliation, support for democratic institutions, expansion of economic reform, building resilient and productive communities, and funding for humanitarian assistance.

The United States and western countries generally believe that democracy promotes economic development. If democratization leads the rule of law to be held in the country, other countries will not hesitate to do business in this country. It is said that democratic countries have a freer economic policy and open trade than non-democracy countries. This mechanism could lead to a democratic country becoming part of global trade. For these reasons, the United States and European Union countries adhere to democracy in their foreign policy.

Since the democratic transition started in Myanmar, the European Union has stopped sanctions and strengthened investment in Myanmar. According to the official statistics of Myanmar in 2016, the EU is the fourth largest foreign investor after China, Singapore, and Hong Kong, accounting for about 10% of the total investment. The European Union also provides to help Myanmar's democratization. As the invitation of the Union Election Commission of Myanmar, the EU, together with some 100 observers, deployed the largest international electoral observer Mission in the 2015 general election, confirming the EU's emphasis on electoral reform in the country. When the NLD government came to power in 2016, the European Union provided 3 million euros in aid of the Rohingya conflict and national reconciliation. Since 2011, the EU is firmly committed to supporting democracy, the rule of law and good governance, the peace process, human rights, poverty reduction and sustainable development, economic warfare in the country, and their hope is to help the democratic transition in Myanmar, and to achieve more democracies in the South-East Asian region after the successful democratic transition.

The United States and European Union countries are increasingly willing to reduce economic sanctions and increase investment in Myanmar and Myanmar is happy to do so. In Myanmar's democratization and human rights routes, the West and Japan offered their own help, and the country was greatly encouraged. China and India have been encouraging Myanmar's economic and social development for a long time. With Myanmar's growing contacts with giant countries, Myanmar pays special attention to its neutral foreign policy and is confident that it will strengthen its independence and non-alignment policy without falling to one side. Myanmar more actively encourages greater cooperation with big powers, rather than competing with each other. In fact, Myanmar is only trying to use its strategic values to develop its country. In the absence of any provocation, Myanmar will continue to be friendly with China, while making strategic partnerships with India, the United States, the European Union, and Japan.

#### **4. Conclusion**

Myanmar has been used non-aligned foreign policy since independence and got the national objectives and benefits. At present, the new government has a historic opportunity to shape Myanmar's political and economic trajectory, aroused the attention of the big powers. Although no country challenges Myanmar's sovereignty and interests, its political, economic and security issues are affected by the great powers. There is no other country's influence on Myanmar's domestic reconciliation except China. In fact, China cannot achieve Myanmar's national reconciliation, but China can offer a lot of assistance, Myanmar also needs China's assistance. As the Myanmar government turns to the Democratic line, the Rohingya case is becoming more and more serious. The United States and Western countries are beginning to put pressure on Rohingya problems, and they also want to step in to solve this problem. So, the domestic reconciliation and Rohingya issues have great influence and great assistance by China and the Western countries. In the case of anarchy, Myanmar, at the crossroads of great interests, faces many opportunities and challenges. When socioeconomically backward Myanmar seeks powerful partners, Myanmar wants to build a good relationship with any super power. Although Myanmar foreign policy opens based on these national needs, Myanmar, one of the leaders of non-aligned movement countries, will not do alliance with other countries. But, may be, Myanmar will implement a "quasi-alliance" foreign policy with some big countries in accordance with the needs of the national interests, and to adhere to the independent, neutral and free policy of non-alignment. In order to balance power, balance interests, and balance threats,

Myanmar actively participates in the giant partnership and establishes friendly relations with many countries, and Myanmar will continue to implement the "non-alignment policy."

### References

1. Chi - shad Liang, 1990, Burma's Foreign Relations: Neutralism in Theory and Practice, New York: Praeger.
2. 方天建, 何跃, 2013( 3), 冷战后东南亚地缘政治变化中的大国战略调整述评, 世界地理研究。
3. (Fang Tianjian, He Yue, 2013 (3), A Review of the Strategic Adjustment of the Great Powers in the Geopolitical Change of Southeast Asia after the Cold War, Study of World Geography.)
4. 贺圣达, 1993, 当代缅甸, 成都: 四川人民出版社。
5. (He Shengda, 1993, contemporary Burma, Chengdu: Sichuan people's publishing company.)
6. 金日, 2003(1), 从中立主义到后中立主义: 瑞典外交政策之嬗变, 国别与地区, 欧洲研究。
7. (Jin Ri, 2003 (1), From Neutralism to Post-neutralism: The Evolution of Swedish Foreign Policy, Country and Region, European Studies.)
8. 中国驻缅甸大使, 8.2.2017, 当前中缅关系发展势头良好, 国际在线 (北京), 网上 : <http://news.163.com/17/0208/09/CCO97TBK00018AOQ.html> (存取日期 : 2017.12.25)。
9. (China's ambassador to Burma, 8.2.2017, The current Sin0- Myanmar relations are developing well, Online: <http://news.163.com/17/0208/09/CCO97TBK00018AOQ.html> (Accessed date: 2017.12.25 ).)



# Protection and Comparative Advantage of Milk Production through Rearing of Cross-Bred Dairy Cattle in Bangladesh: A Policy Analysis Matrix

S. Islam<sup>1</sup>, M. Khatun<sup>2</sup>, F. A. Huda<sup>3</sup>

<sup>1</sup> Socioeconomic Research Division, BLRI, Savar, Dhaka, e-mail: s.islam@blri.gov.bd

<sup>2</sup> Socioeconomic Research Division, BLRI, Savar, Dhaka

<sup>3</sup> Professor, Department of Agricultural Economics, BAU, Mymensingh

## Abstract

The study aims to determine the policy incentive in terms of protection and efficiency of production through a comparative advantage in the milk sector by using policy analysis matrix (PAM) on the basis of field level primary data from different agro-ecological zones of the country. From policy analysis matrix in-line with private/financial profit, social/economic profit and policy divergences/transfers, various protection coefficients such as NPCO, NPCI, EPC and PC and competitiveness coefficients such as DRC, SCB were derived to measure the level of protection and comparative advantage in the milk sector of Bangladesh. The results of the policy transfer and protection coefficients ( NPCO, NPCI, EPC and PCO criteria) shows that milk production in Bangladesh is subsidized for inputs (NPCI<1) and taxed for the product/output (NPCO>1).The net effect of output taxation and input subsidy resulted in net taxation on value added (EPC>1) for policy goal of self-sufficiency. From the efficiency perspective, the estimated economic profitability criteria and competitiveness indicators (DRC, SCB) exhibit that Bangladesh has a comparative advantage in milk production domestically for import substitution.

**Keywords:** Milk, Policy Analysis Matrix, Protection and Comparative Advantage

## 1. Introduction

Livestock is one of the most important sub-sectors of agriculture sector that plays a significant role in the economy of Bangladesh. It is vital in terms of employment generation, animal protein sources, cash income, manure and driving source of agricultural production. Nowadays, the livestock population in Bangladesh is 539.72 lakh where cattle are 236.36 lakh, and buffaloes are 14.64 lakh (DLS, 2015). In the fiscal year 2014-15, total milk production was 69.70 lakh metric tons whereas demand for milk 144.81 lakh metric ton. Per capita, milk availability was 122 ml/day, and the deficiency was 75.11 lakh metric ton (DLS, 2015). The demand for milk is aggravating day after day. Uddin *et al.* (2011) in a study focused on dairy cattle population per farm and found that the number of dairy cattle per family decreased over time. Irrespective of regions, per household, average milk production varied from 311 to 762 liters. In the same study, he stated that drinking of milk did not show any consistent trend over time and the amount of intake was much higher than the national average (Uddin

*et al.*, 2011). Rabbani *et al.* (2004) conducted a socioeconomic study on the participation of rural people in dairy production, and he showed that large farmers raised the cross-bred dairy cattle and small farmers raised the local breed. Besides, the empirical experiment has shown that rapid improvement of the local cattle by cross-breeding produced satisfactory milk production and surviving well under the traditional conditions. Kuddus (2006) in a study found that net return of rearing dairy cattle in the commercial region was significantly higher than that of other regions due to the rearing of cross-bred cows and feeding them high-quality feed. The demand for milk and milk products are increasing due to rapid population growth, and educated people are much conscious about nutrition. In fact, in most of the cities and towns, milk supply is scanty instead of its high demand.

Every year Bangladesh imports a huge amount of powder milk from abroad. The neighboring country India, hold the top position in the list of exporting of milk to Bangladesh. For this, the country has to pay millions of dollars for trading milk. In terms of milk production, India holds the second position just behind the USA. United States of America, India, China, Brazil and New Zealand produced 91.30, 60.60, 35.70, and 18.90 billion kilograms, respectively every year. On the other hand, New Zealand secured the apex position in the hierarchy of global milk exporting countries. New Zealand exported milk in terms of monetary value US\$ 5.6 billion which was 20.4% of the total milk export. Alam *et al.*, (2007) conducted a study and found that the comparative advantage of milk production in Bangladesh was 1.11 indicating that milk production was not profitable and importation of fresh milk or powder milk was better than the production of milk domestically. But that study was performed more than one decade ago. For producing a more update and authentic information, research work was needed. The study was able to find out the comparative advantage of milk production in Bangladesh and suggests some policy guidelines which might assist the researchers, academicians, planners and the farmers.

#### **Objectives of the Study: the study has the following specific objectives**

- i. To measure the comparative advantage of milk production in Bangladesh;
- ii. To examine the policy implications arising from the findings.

#### **2. Methodology for Policy Analysis Matrix (PAM)**

In welfare economics, there are two types of theoretically right and simply understandable measures that are used for measuring policy impact. First, the analysis focuses on the private and social cost of public sector investment. Popular measure in this area is the benefit-cost analysis which includes further three measures, which are internal rate of return (IRR), net present value (NPV) and the benefit-cost ratio (BCR) (Gittinger, 1982, Kanapiran and Fleming, 1999). Secondly, analysis concentrated on the static effects of price-distorting policies. In the analysis of trade, price policy incentives, and comparative advantage, it has become customary to estimate the nominal protection coefficients (NPC), effective protection coefficients (EPC), domestic resource cost (DRC) although there have some limitations for estimation (detail see Corden, 1979; Balassa and Schydrowsky, 1972; Bruno 1967, 1972 ; Byerlee and Morris, 1993). A new summary measure, the policy analysis matrix (PAM) that prevents the limitations of previous measures and includes all these ratios is used as an analytical technique for this study to measure the comparative advantage and policy distortions in the milk sector of Bangladesh (Monke and Pearson, 1989). In the near past lot of studies used PAM for measuring comparative advantage and policy distortions in different countries including Bangladesh.

The policy analysis matrix is a system of double-entry bookkeeping analytical framework developed by Monke and Pearson (1989) and improved by Masters and Winter-Nelson (1995) for measuring the impact of policy on competitiveness and farm-level profits, the influence of investment policy on economic efficiency and comparative advantage, and the effects of agricultural research policy on changing technologies. PAM provides complete and consistent coverage to all policy influences on costs and returns of agricultural production. The primary strength of the PAM is that it allows varying levels of disaggregation and it makes the analysis of policy-induced transfers straightforward. The PAM also makes it possible to identify the net effect of a set of complex and contradictory policies and to sort out the individual effects of those policies. Along with strength, PAM also suffers some sorts of weaknesses, one of which is the assumption of fixed input-output coefficients. (Nelson and Panggabean, 1991).

The PAM contains two accounting identities (Table 1), one as the difference between revenues and costs which define the profitability and the other measuring the effects of divergences (distorting policies and market failures) as the difference between observed parameters and parameters that would exist if the divergences were removed. The PAM is based on the estimation of budgets by using market prices and social prices (Monke and Pearson, 1989). The data in the first row of table provide a measure of private profitability (D), which assesses the values of outputs and inputs using private prices, which are equal to the actual or expected financial (market) prices for goods and services that are bought or sold by farmers, merchants, or processors in the agricultural system. The private or actual market prices thus include the underlying economic costs and valuations plus the effects of all policies and market failures.

The private profitability illustrates the competitiveness of the agricultural system, given current technologies, output and input prices and policy transfers (Monke and Pearson, 1989; Masters and Winter-Nelson 1995; Nelson and Panggabean, 1991). The second row of the matrix in the table measures the social profits (H) that reflects social opportunity costs. Social profits measure efficiency or inefficiency of resources use and provide a measure of comparative advantage. To determine the second row of the matrix, social prices (which reflect the underlying scarcity and thus the optimal allocation of resources) are used for valuation of inputs and outputs. Social value/price demonstrates a benchmark policy environment for comparison as these are considered those that would hypothetically occur in a free market without policy interventions (Monke and Pearson, /1989; Masters and Winter-Nelson, 1995). The second accounting identity, in the third row of the table, measures the divergences, which is defined as the difference between the first and second rows. The difference between private (actual market) and social (efficiency) values of revenues, costs, and profits can be explained by the policy interventions or existence of market failure. If market failure correction policies by the government do not exist (or are negligible) than any differences between the first row and the second row must be caused by distorting policies. But if the efficient policies by the government for correcting the effect of market failure create greater income and thus correct divergences by reducing the difference between private and social valuations. The third row also reflects transfers between producers on one side and government treasury and consumers on the other side (Monke and Pearson, 1989; Masters and Winter-Nelson, 1995).

An important indicator for calculating the protection rate by a different ratios such as NPC (NPCO and NPCI) and EPC, and also DRC, SCB ratio for measuring comparative advantage used in this study. These are defined as;

**Nominal protection coefficient (NPC):** One of the most widely used simplest and easiest measure of price distortions is the nominal protection coefficient (NPC) (Corden, 1971; Balassa and Schydlosky, 1972; Gulati et al., 1990; Taylor and Phillips, 1991; Sadoulet and de Janvry, 1995; Fang and Beghin, 2000), defined as

$$NPC_i = P_d^i / P_r^i * ER$$

From the PAM table, NPC is the ratio of private price with a comparable social price of the commodity. This ratio indicates the impact of policy on the divergence between the two prices for output (NPCO) and tradable inputs (NPCI). Subsidies to output are indicated by NPCO (which is A/E) if its value larger than one, and inputs subsidies lead to NPCI (which is B/F) if its value smaller than one (Fang and Beghin, 2000).

If  $NPC > 1$ , producer are protected, and consumers taxed, from a strictly trade theoretic point of view, suggest inefficiency in producing and the price is heavily affected by government policies or other factors of that commodity. Thus the welfare (and efficiency) of the economy can be improved by letting domestic price secure around the appropriately adjusted world price or by eliminating discriminatory policy interventions. (Corden, 1979; Timmer, 1989; Anwar, 2004; Shilpi, 1996).

If  $NPC < 1$ , producer are taxed and consumers subsidized may be due to market failure or government intervention, and

If  $NPC = 1$ , the structure of protection is neutral.

### Effective protection coefficient (EPC)

EPC is such type of measure defined as the ratio of distorted tradable value added at market price to its undistorted value at border prices. EPC captured the effect of government policies (tax and subsidy) on input as well as output market (Bureau and Kalaitzandonakes, 1995; Sadoulet and de Janvry, 1995; Anwar, 2004).

The formula for EPC is;

$$EPC = Va_i^d / Va_i^b = P_i^d - \sum_j a_{ij} p_j^d / P_i^b - \sum_j a_{ij} p_j^b$$

From the PAM table, EPC is a ratio of value added in private prices (A-B) to value added in social prices (E-F). This coefficient indicates the degree of policy transfer from the output and tradable input distortions. A value greater (or less) than one indicates a net subsidy (or net tax) to value added (Beghin and Fang, 2002; Monke and Pearson, 1989).

### Domestic resource cost (DRC)

The domestic resources cost (DRC) is widely used in developing countries for measuring comparative advantage, efficiency and guiding for policy reforms. The DRC was developed simultaneously in the 1960s by Bruno (1965) in Israel and by Krueger (1966) in the United States. The DRC, defined as the shadow value of non-tradable inputs used in an activity per unit of tradable value added. In another way, it's the ratio of the shadow value of domestic resources and non-traded inputs to the net foreign exchange earned or saved by producing the good domestically (Morris, 1989; Masters and Winter-Nelson, 1995; Sadoulet and de Janvry, 1995; Anwar, 2004).

The formula is;

$$DRC = \sum_{j=k+1}^N a_{ij} p_j^{dni} / P_i^b - \sum_{j=1}^K a_{ij} p_j^b$$

DRC has been rigorously used for measuring comparative advantage and guiding for policy reform in developing countries (World Bank, 1991; Appleyard 1987; Morris 1990; Gonzales et.al., 1993; Alpine and Pickett, 1993) as well as in academic research (Nelson and Panggabean, 1991; Nishimizu and Page, 1986; Weiss, 1991). However, Master and Winter-Nelson showed that the DRC might be biased against activities that rely heavily on domestic non-traded factors, (e.g. land and labour). The proposed social cost-benefit (SCB) is a good alternative for the DRC, which accounts for all cost and avoids classification errors in the calculation of DRC (Masters and Winter-Nelson 1995; Fang and Beghin, 2000). From PAM framework SCB is defined as (F+G)/E. The interpretation of SCB is same as like DRC. In the following table, policy analysis matrix (PAM) is shown:

Table: Policy analysis matrix (PAM)

Items	Revenue	Costs		Profit
		Tradable inputs	Domestic factors	
Private prices	A	B	C	D
Social prices	E	F	G	H
Divergences	I	J	K	L

Source: Monk and Pearson, 1989.

Private profits (D) = A-(B+C), Social profits (H) = E – (F+G), Output transfers (I) = A – E, Input transfers (J) = B – F, Factor transfers (K) = C – G, Net transfers (L) = D – H or I – J – K

NPCO=A/E and NPCI=B/F, EPC= (A-B)/ (E-F), DRC=G/ (E-F) and SCB= (F+G)/E, Profitability coefficient (PC) = (A-B-C)/ (E-F-G) or D/H

### **Necessary data for different parameters of PAM**

PAM calculation required a comprehensive data set. For PAM construction, primary information are yields, inputs, market and social prices of inputs and outputs. For the study, data were collected from various national and international published and unpublished sources. Primary data on cost and return of milk production were collected from different agro-ecological zones of the country. Output and input coefficients are physical quantities of output and input. These output and input coefficients assume constant over the year under the study period. Here we compiled all the output and input coefficients are on per lactation period. We use the farm gate price as a financial or private price, which is paid by the farmers for purchasing their necessary inputs and price taken from the selling of their output. The input such as human labour, feed (dry roughages, green fodder, concentrate), medicine, vitamin, and vaccine, farm gate prices was collected from field level primary data. Farmers use both cash-purchased and family-owned inputs, and all are valued at market prices. In particular, for valuing both families and hired labour the similar wage rates have been used in this study. Inputs are divided into two categories; a) Tradable inputs: medicine, vitamin, vaccine, semen considered as 100% tradable inputs. b) Non-tradable inputs: The domestic resources include labour, land, feed treated as non-tradable inputs. Social prices are calculated on the basis of import parity prices considering commodity tradability status. However, we use the import parity price for output to know the comparative advantage under the import situation. For tradable input the semen, medicine, we use import parity price as they are imported. For estimating the parity price of this tradable output and input, we use CIF or FOB price as a world market or border price. We collect the CIF price of powder milk (port Izmir, Turkey) and the official exchange rate from World Bank. For social valuation of output under the importable hypothesis, we use import parity price. So, the social value of output is quantity multiplied by the import parity price of milk. In case of tradable input, we use import parity price for social valuation. Likewise, the social value of the tradable input is imported parity price multiplied by quantity. There has mismanagement in the exchange rate in Bangladesh. So it is necessary to estimate the shadow exchange rate to know the distortions caused by exchange rate (Shahabuddin *et al.*, 2002; Shilpi, 1998). In our case shadow exchange rate (SER) calculated from the official exchange rate (OER) by using a social conversion factor (SCF). In our study we assume milk; the output is importable as well as exportable and the inputs mainly the semen and medicine are under importable hypothesis.

So, cost, insurance and freight (CIF) and fee on board (FOB) prices are the import and export parity prices at the border respectively. These prices are used as reference prices. By using shadow exchange rate, these border or reference price converted to domestic currency than it called social border price. These entire parity prices measured at the farm gate level. The import and export parity price at farm gate level computed from the border parity price by adjusting the social cost associated with moving the imported commodity from border to the farm-gate or moving the export commodity from the farm gate to the border. For determining the parity price at the farm gate level, the border price adjusted with the marketing, transportation and processing cost. This adjustment depends on the assumption of producing areas of the output and marketing level (please sees Timmer, Falcon, and Pearson, 1983). In our study, Dhaka is taken as a wholesale market because most of the milk marketing, import and export routed and centered through Dhaka. We assume these cost the same as private and social as these are competitive price and cost. In case of powder, milk to convert FOB price to CIF price at Chittagong port done by adding the freight cost to the FOB price of powder milk.

### **3. Result of policy analysis matrix**

The results of the policy analysis matrix as well as the coefficients derived from the policy analysis matrix under import parity condition discussed with utmost emphasis.

#### **Policy analysis matrix under the import parity price of milk**

To find out the government policy incentives situation and to evaluate these policies, the policy analysis matrix is very much helpful. In Table 1, we see the tradable and non-tradable input costs at the private price are BDT 23594 and BDT 36949 per lactation, respectively. On the other hand, at a social price, the subsequent costs are BDT 24232 and BDT 40004, respectively. The private profit per lactation period of fresh milk (raw milk) production is BDT 43094 which is greater than zero (0) which indicate the supernormal returns and possible to expand milk production in future unless the per lactation milk production cannot be increased or substitutions

are more profitable at a private price. This also indicates that existing input and output prices, technologies, and government policies lead to the profitable milk production in Bangladesh. On the other hand, social profit of milk production is BDT 7108 per lactation which is also greater than zero. This value points out that milk production under free trade will be in favour of producers compare to existing situations. Thus, Bangladesh has a static comparative advantage of domestic milk production for import substitution, and it uses scarce resources efficiently.

The table also shows different policy transfer or divergences such as output, input, factor and net policy transfers. It is evident that output transfer (the difference between private revenue and social revenue) is 32292. The value is positive which indicates that government protective policies affect positively to the producer incentives. The input transfer (the difference between the private and social price of tradable inputs) is -638 which is also negative. The negative value illustrates that the domestic producer buys the imported inputs less than the world price for milk production. Thus the government has implemented input subsidy policy to the livestock sector to decrease the cost of production. Therefore the producer receives input subsidies for milk production in Bangladesh. The factor transfer (the difference between the private and social price of non-tradable inputs) is -3055 which is negative. The negative value shows the opportunity costs of non-tradable inputs are higher than their market prices. On the other hand, the net policy transfers (the difference between private and social profit or social revenue minus the social cost of tradable and not tradable inputs) is 35986 which is positive. This positive value means that milk producer could earn less profit (or high loss) without government intervention. That means under free trade producer will make less profit contrast to the existing policy situation. It can be concluded that milk producers earn a high profit under current government policy orientation.

**Table 1: Policy analysis matrix for fresh milk (cross-bred) per lactation period**

Items	Revenue	Costs		Profit
		Tradable inputs	Domestic factors	
Private prices	103638	23594	36949	43094
Social prices	71345	24232	40004	7108
Divergences	32293	-638	-3055	35986

Source: Own estimation

In the study NPCO value under import, parity was found to be greater than one ( $>1$ ) for fresh milk (cross-bred). This indicates that policies of fresh milk provide nominal protection for the producers. NPCI's values were found to be less than 1 ( $<1$ ) for fresh milk of import parity price suggesting that the government policy are marginally reducing import cost and average market price of input just keeping the world price. NPCI values of less than 1 ( $<1$ ) clearly indicate that government has been providing marginal support to the milk sector.

In addition, the study also estimated EPC (Effective protection coefficient) which is a better indicator of an effective incentive than the then NPC, as it finds the impact of production on inputs and outputs, and depicts the degree of protection according to the value addition process in the production activity. The values of EPC were found to be greater than 1 ( $EPC > 1$ ) for fresh milk (cross-bred), implying that government policies provide positive incentives to the produces.

The result of DRC calculation has been done on import parity prices. These depend actually on the tradability status on the commodity. The value of the DRC estimation revealed that Bangladesh had a comparative advantage for import substitution of fresh milk as on DRC values were less than 1 ( $<1$ ). In other words, government policy could save foreign exchange by producing fresh milk domestically and efficiently, and it causes import subsidies. This is because the opportunity cost of domestic resources and non- traded inputs used in producing milk is less than ( $<$ ) foreign exchange saved. The SCB (social cost-benefit) in less than one, it indicates that the benefit of the government policy of protection is the higher than the cost of protection. Estimated profitability is greater than 1 ( $>1$ ) indicates that the private profit is higher than the social profit. The policy benefits are in favour of producers (Table 2).

**Table 2: Different indicators of protection and comparative advantage**

Items	Unit	Value
NPCO = Nominal Protection co-efficient (subsidies to output)	Ratio	1.45
NPCI = Nominal Protection co-efficient (subsidies to inputs level)	Ratio	0.97
EPC = Effective protection co-efficient	Ratio	1.70
DRC = Domestic Resource Cost	Ratio	0.84
SCB = Social Cost Benefit	Ratio	0.90
PC = Profitability co-efficient	Ratio	6.06

Source: Own estimation

#### 4. Conclusions

The private profit per lactation period of fresh milk production was calculated BDT 43094 which is greater than zero (0) indicates the supernormal returns and possible expansion of milk production in future unless the per lactation milk production cannot be increased or substitutions are more profitable at a private price. This also indicates that existing input and output prices, technologies, and government policies lead to the profitable milk production in Bangladesh. Rearing dairy cattle, no doubt is a profitable enterprise, and the country has a comparative advantage over milk importation. From the light of research findings the following policy recommendations were made:

- The government should increase subsidy on tradeable and non-tradeable inputs to encourage milk production domestically. Inputs that are associated with dairy cattle rearing and livestock development should be kept at subsidised price so that farmers can able to purchase the required inputs easily and will make their enterprise profitable and sustainable. For dairy cattle development government import high yielding or milk producing cattle semen such as Holstein Friesian, Norwegian Red Cattle, and Guernsey, etc. from abroad. This semen is highly expensive, and the government will make it possible to purchase by farmers at a low price.
- GOs-NGOs along with other organizations should come forward to invest more in R&D and to boost up livestock sector in developing high yielding milk breeds. Research is a pre-condition for developing a new breed for better production performance. Only research can do sustainable development and production. For this, a huge amount of investment is needed, government and other national and international organizations can play a pivotal role in budget accumulation and investment.
- Pay attention to milk market stabilization through establishing mini milk processing plant throughout the country which would be a sustainable development approach in the milk sector. Through this research, we noticed that lack of preservation and marketing, farmers were demonstrating by pouring milk in a high way. Because they didn't get their remunerative price of milk. They have no facility for storing the milk. As we know that milk is a highly perishable commodity. In this regard, pasteurization and other forms of value addition can make it feasible for the proper price.

#### References

1. Alam, J., Akteruzzaman, M., Aatur Rahman, S. M., and Huda, F.A. (2007). Profitability and comparative advantage of producing livestock and poultry products in Bangladesh and their international competitiveness. Annual Research Review Workshop 2011, BLRI, Savar, Dhaka.
2. Alpine, R.W.L.; Pickett. J. (1993): Agriculture, Liberalization and Economic Growth in Ghana and Cote d'Ivoire, 1960-1990. OECD Development Center, Paris: OECD Publications (cited in Fang and Beghin, 2000, also in Masters and Winter-Nelson, 1995).
3. Anwar, S. (2004): Comparative advantage and competitiveness of major agricultural crops in Indus BASIN: Price risk analysis. A PhD thesis submitted to the faculty of agricultural economics and rural sociology, University of Agriculture. Faisalabad, Pakistan.
4. Appleyard, D. (1987): Comparative Advantage of Agricultural Production Systems and its Policy Implications in Pakistan. Development Paper No. 68. The Food and Agriculture Organization of the United Nations, Rome, Italy (cited in Fang and Beghin, 2000, also cited in Anwar, 2004).

5. Balassa, B.; Schydlosky, D.M. (1972): Domestic Resource Costs and Effective Protection Once Again. *Journal of Political Economy*. VO. 80: PP.63-69 (cited in Nelson and Panggabean, 1991).
6. Beghin, J.; Fang, C. (2002): Protection and Trade Liberalization Under Incomplete Market Integration. *American Journal of Agricultural Economics*. 84(3): PP.768–773. American Agricultural Economics Association.
7. Bruno, M. (1967): The Optimal Selection of Export-Promoting and Import-Substituting Projects. *Planning the External Sector: Techniques, Problems and Policies*, Report on the First Interregional Seminar on Development Planning. New York: United Nations, (cited in Nelson and Panggabean, 1991, also in Shahabuddin, et.al, 2002).
8. Bruno, M. (1972): Domestic Resource Costs and Effective Protection: Clarification and Synthesis. *Journal of Political Economy*. Vol. 80: PP.16-33 (cited in Nelson and Panggabean, 1991).
9. Bruno, M. (1965): The optimal selection of export-promoting and import substituting projects. In *planning the external sector: Techniques, problems and policies*. New York: United Nations (cited in Balaassa and Schydlosky, 1972).
10. Bureau, J.C.: Kalaitzandonakes, N. (1995): Measuring effective protection as a superlative index number. *American Journal of Agricultural Economics* 77: PP. 279–290.
11. Byerlee, D.; Morris, M. L. (1993): Calculating levels of protection: Is it always appropriate to use world reference prices based on current trading status? *World Development*, Vol. 21, No. 5. PP. 805-815 (cited in Shilpi, 1996).
12. Corden, W. M. (1971): *The Theory of Protection*. London: Oxford University Press.
13. Corden, W. M. (1979): *The Theory of Protection* (London: Oxford University Press) (cited in Shilpi, 1996).
14. Fang, C.; Beghin, J.C. (2000): Food Self-Sufficiency, Comparative Advantage, and Agricultural Trade: A Policy Analysis Matrix for Chinese Agriculture. Working Paper 99-WP 223. Center for Agricultural and Rural Development and Department of Economics, Iowa State University, Ames, Iowa. USA.
15. Gittinger, J.P. (1982): *Economic Analysis of Agricultural Projects*, 2nd ed. Baltimore MD: The Johns Hopkins University Press, London (cited in Nelson and Panggabean, 1991 also in Anwar, 2004).
16. Gonzales, L. A.; Kasryno, F.; Perez, N. D.; Rosegrant. M. W. (1993): Economic Incentives and Comparative Advantage in Indonesian Food Crop Production. Research Report No. 93. International Food Policy Research Institute, Washington, D.C (cited in Fang and Beghin, 2000 and in Masters and Winter-Nelson, 1995).
17. Gulati, A.; Hansen, J.; Pursell, G. (1990): Effective incentives and India's agriculture: cotton, groundnuts, wheat and rice. Policy, Planning and Research Working Paper No. 332, The World Bank Washington, DC (cited in Rakotoarisoa and Gulati, 2006).
18. Kannapiran, C.A.; Flemming, E.M. (1999): Competitiveness and comparative advantage of tree crop smallholdings in Papua New Guinea. Working paper series in agricultural and research economics (cited in Anwar, 2004).
19. Krueger, A.O. (1966): Some economic costs of exchange control: the Turkish case. *Journal of Political Economy*. 74: PP. 466-480.
20. Kuddus, M.A. (2006). Production and consumption aspects of milk in some selected areas of Mymensingh. *Bangladesh Journal of Agricultural Economics*, 29: PP. 39-52.
21. Masters, W. A.; Winter-Nelson, A. (1995): Measuring the Comparative Advantage of Agricultural Activities: Domestic Resource Costs and Social Cost-Benefit Ratio. *American journal of agricultural economics* 77: PP. 243-250.
22. Monke, E.A.; Pearson, S.R. (1989): *The Policy Analysis Matrix for Agricultural Development*. Ithaca and London: Cornell University Press.
23. Morris, M. L. (1990): Determining Comparative Advantage through DRC Analysis: Guidelines Emerging from CIMMYT's Experience. CIMMYT Economics Paper No. 1. Mexico City, Mexico (cited in Fang and Beghin, 2000).
24. Morris, M.L. (1989): Wheat policy options in sub-Saharan Africa: The case of Zimbabwe. *Agricultural Economics*, Volume 3, Issue 2, PP. 115-129.

25. Nelson, G.C.; Panggabean, M. (1991): The Cost of Indonesian Sugar Policy: A Policy Analysis Matrix Approach. *American Journal of Agricultural Economics*. Vol. 73 No. 3: PP. 704-12. Published by: Blackwell Publishing on behalf of the Agricultural & Applied Economics Association.
26. Nishimizu, M.; Page, J. (1986): Productivity change and dynamic comparative advantage. *Review of economics and statistics*, 68: PP. 241-247 (cited in Masters and Winter-Nelson, 1995).
27. Rabbani, M.S., Alam, M. M., Ali, M. Y., Rahman, S. M. R. and Saha, B.K. (2004). Participation of rural people in dairy enterprise in a selected areas of Bangladesh. *Pakistan Journal of Nutrition*, 3 (1): PP. 29-34.
28. Sadoulet, E.; de Janvry, A. (1995): *Quantitative Development Policy Analysis*, Baltimore, MD.: The Johns Hopkins University Press.
29. Sadoulet, E.; de Janvry, A. (1992): Agricultural trade liberalization and low income countries: A general equilibrium-multimarket approach. *American Journal of Agricultural economics*, Vol. 74, No. 2. PP. 268-280. American agricultural economics association.
30. Shahabuddin, Q.; Hossain, M. Mustafi, B.A.A.; Narciso, J. (2002): Assessment of comparative advantage in rice cultivation in Bangladesh. In: Sombilla M, Hossain M, Hardy B, editors. *Developments in the Asian Rice Economy. Proceedings of the International Workshop on Medium-and Long-term Prospects of Rice Supply and Demand in the 21st Century*, 3-5 December 2001, Los Baños, Philippines: International Rice Research Institute. PP. 369-384.
31. Taylor, D.S.; Phillips, P.T. (1991): Food-pricing policy in developing countries: further evidence on cereal producer prices. *American Journal of Agricultural Economics* 73, PP. 1036–1043 (cited in Rakotoarisoa and Gulati, 2006).
32. Timmer, C. P. (1989): *Agricultural prices and stabilization policy*. Development Discussion Paper No. 290 (Cambridge, MA: Harvard Institute for International Development) (cited in Shilpi, 1996).
33. Uddin, M. T. and Islam, M. M. (2011). Impact of recent changes in livestock production pattern on farm families' livelihood and health in selected areas of Bangladesh. *Annual Research Review Workshop 2011*, BLRI, Savar, Dhaka.
34. Weiss, J. (1991): An application of the domestic resource cost indicator to Mexican Manufacturing. *Industry and Development*, 29: PP. 63-78 (cited in Masters and Winter-Nelson, 1995).
35. World Bank. (1991): *Zimbabwe Agricultural Sector Memorandum*. Report No. 9429-ZIM. Washington, D.C (cited in Fang and Beghin, 2000).
36. <https://www.worldatlas.com/articles/top-cows-milk-producing-countries-in-the-world.html>
37. <https://www.worldstopexports.com/top-milk-exporting-countries/>



# An Analysis on Social Ecological Changes and Development Paths after Macao Sovereignty Returned to China

Li Meng<sup>1</sup>, Yang Liao<sup>2</sup>

<sup>1</sup> News Center of South China Agricultural University

<sup>2</sup> College of Public Management, South China Agricultural University, Guangzhou, 510642, China

## Abstract

This paper analyzes the social and ecological changes of Macao's sovereignty before and after China's return from the aspects of population and land, economic structure and social structure. The authors believe that the tension between population and land is a fundamental issue in Macao's social ecology. After the return of Macao sovereignty to China, Macao residents increased rapidly, and land use growth was slow. The economic structure of Macao is relatively simple. Although Macao is trying to explore industrial diversification, the economic structure of its gaming industry is hard to change. After the return of sovereignty, the changes in the educational structure and employment structure of Macao reflect the social stratification and niche of different families and groups in Macao. In the past about 20 years since the return of Macao sovereignty to China, there have been some changes in human-land relations and urban space, industrial adjustment and economic structure, cultural education, and labor employment. These changes have had a profound impact on the future social development of Macao. Due to the scarcity of land resources and the urgent need for low-rent housing, the issue of rational development and utilization of Macao's land has become the focus of the Macao people. Before the moderate diversification of the economy and the diversification of local employment, Macao's long-term stability and prosperity have developed a long way. The natural ecology of human-land relations, the economic ecology of gambling and related services, and the multi-ecological interweaving of the social and cultural ecology of education and employment bias have added new features to Macao's public administration and social governance. In the future development of Macao, it is necessary to take effective measures in the areas of politics, economy, population, and education on the basis of changes in the international and domestic environment to promote social stability and prosperity in Macao.

**Keywords:** Macao Sovereignty Return to China, Social Ecology, Social Change, Public Management, Social Governance

## 1. Main literature review

There are many changes in politics, economy, society, and culture, and many related research results have been made in the past about 20 years since the return of Macao sovereignty to China. Felix Neto (2001) reported that Chinese students are engaged in 87 dangerous activities in Macao, the average risk level judgment of materials

*The second article of a series of papers on social ecology and social change after Macao's sovereignty return to China.*

and technology, and compared with the survey results of African, American and European samples, that these results can pass the particularly high crime rate in Macao and local The rude display of the media to explain.

Coc Meng Chiang(2005) reviewed how the Macao government helped the real estate market solve the problem of oversupply of real estate in the early 1990s, and considered the housing sector to be one of the most important local public revenue sources in Macao. From the perspective of network scale, Kwok Kit(2011) examined the factors affecting the quality of social networks and believed that the level of social participation, trust, and social identity was positively correlated with the quality of social networks. From the perspective of political economy, Dicky Wai Leung Lai (2010) explored the development of social security in Macao from 1998 to 2008, provided empirical support for the political-economic interpretation of East Asian social policy, and enhanced the understanding of the nature of social policy in the region.He(2014) also compared the impact of Macao's social policy on its capitalist social structure with six welfare effects.

Yim King Penny Wan(2012) described the global casino and casino travel boom and investigated the social, economic and environmental consequences of casino gaming in Macao since the liberalization of casino licenses in 2002. He(2013) assessed the sustainability of Macao's tourism industry by assessing the economic, sociocultural and environmental impacts of tourism in 2002-2009, visitor satisfaction and the level of community involvement in local tourism planning, and considered Macao to urgently need integration of all major Overall plan for tourism development for stakeholder interests.

Bill K.P. Chou(2012) holds that the background to the establishment of a legality legitimacy crisis since the transfer of the Macao government's autonomy, which should be traced back to the administrative problems of the colonial era. He (2015) also believes that Macao's major social organizations perform political and social functions of political mobilization and participation, provide social services on behalf of the government, and act as agents of the Chinese government to implement the united front, strengthen the coordination policy of social forces and the tools of the Macao government to win supporters.

Anise M. S. Wu(2013) believes that the favorable attitude towards superstition and technology, the poor control of the perceived behavior of gambling rejection, and the high gambling intention increase the vulnerability to excessive gambling participation. Carlos, Siu Lam(2015) researches the nature of informal learning in Macao and inquires as to how front-line employees develop, experience, and share the knowledge gained through this process. Glenn McCartney(2015) examined the corporate mission statements of Macao's casino concessionaires with regards to social message content as well as social outcomes to date within Macao's various tourism stakeholders, puts forward that it is further amplified by Macao's small landmass, limited workforce pool, increasing tourism arrivals and a vast dependency on imports, creating a constant battle for resources and added pressure on its community and natural environment. Xi Yan (2016) reveals the sociolinguistics imagination of the homogeneous language community in Macao, and illustrates how the Macao people negotiate and construct discourse in the tension between "one country" and "two systems", and believe that Macao can explain local and national How tensions work in the language and produce a broader resonance outside the location of the survey.

Li Sheng(2017a) illustrates and analyzes the dynamic relationship between economic regulation and urban politics on a rapidly growing urban island facing various governance challenges,he holds that the root causes of the Macao Special Administrative Region (SAR) government's inability to regulate the city's major economic issues should be partly attributed to the city's 500 years of Portuguese colonial rule. He (2017b) also discusses on the urban governance and political culture of Macao, and believe the sustainable development of the former Portuguese colonies was largely hampered by residents' political communication, opaque urban governance, lack of middle class and negative attitudes supporting the establishment of social groups.

Ying-ho Kwong(2017) learned about contemporary politics in Macao by providing a casino-sponsored community association perspective and provided an interesting case study on the democratization of local government, arguing that the existence of a ruling coalition reorganization is essential for the post-colonial Macao government to maintain its regime's continued existence. Tycoons use community associations to build

cooperative networks, defend government policies, achieve political mobilization, and more importantly, protect existing hybrid systems. In addition, KampengLei(2018) and Liao Yang(2018) also discussed related issues.

However, from the perspective of social ecology, it is rare to analyze the results of social changes since the return of Macao sovereignty to China (Hsin-Huang Michael Hsiao,2014) Using statistical data from various sources and historical history in sociology - a comparative analysis of the Dharma, Hao Zhidong (2015) examined the changes in national and class politics before and after the return of Macao in 1999. Using data from 2003 and 2007, Davis K.C. Fong (2011) analyzed the social cost of Macao gambling before and after the liberalization of the gaming industry from the perspective of the welfare economy. He believed that the sharp increase in social costs in Macao is the history of the increase in gambling supply and the previously underdeveloped monopoly system caused by the impact.

In summary, the existing literature on Macao society focuses on social costs and social security, social policy and social security, social interaction and social trust, public administration and social organization, social culture and social language, urban governance and In areas such as political ecology, less focus is on the issue of social and ecological changes caused by tensions between Macao's population and land. Therefore, this paper starts with the problem of the tight relationship between population and land in Macao and analyzes the social changes caused by Macao's "land" conditions and the "land" problem. So that we can better observe and analyze Macao society.

## **2. Macao's population and land changes with the return of sovereignty to China**

The Population issues and the land issues are important areas of socio-ecological research. The relationship between the population and land of Macao is, in fact, a key issue that cannot be avoided in the sustainable development of Macao society.

### **(1) Population and land before the return of Macao sovereignty to China**

According to related research, the population of Macao since 1561 has changed differently in different historical periods. From five or six hundred people in 1561 to 10,000 in 1578, it was stable at 20,000 in 1580-1621 and increased to 40,000 in 1640. It was reduced to 5,500 in 1743, but it began again in 1750. It rose from 20,000 to 37,000 in 1835, to 13,000 in 1839, to more than 80,000 in 1860, to 59,959 in 1878, and to 74,866 in 1910. (Zheng Tianxiang,1994)

According to the 13<sup>th</sup> census of Macao, on August 30, 1991, the resident population of Macao was 355,693, and there were 47,000 inhabitants, totaling 400,000. In terms of nationality, 68.2% of the population of Macao is Chinese, Portuguese is 27.9%, and British is 1.8%. However, since many Chinese at the time held Portuguese or British passports, the proportion of local Chinese should be more than 68.2%. From the perspective of language use, the daily language of 3 years old and above is 86.3% for Guangzhou dialect, 1.1% for Mandarin, and 9.2% for other Chinese dialects, accounting for 96.6%.In addition, about 11,000 of the Portuguese are native Portuguese. In terms of population distribution and population density, 96.3% of Macao's population is distributed in the Macao peninsula, with populations of 2.0% and 0.9% in Taipa and Coloane, respectively, and 0.8% of floating residents. In the Macao peninsula, Huadi Matang District has the largest population, accounting for 35.5%; followed by St. Anthony's Church District, accounting for 30.5%; while the remaining Wangdetang District, Fengshuntang District, and Lobby Area together account for 30.3 %.It is worth noting that the population density of Macao is 19,761 people per square kilometer, 51,127 people in the Macao peninsula, and the population density of St. Anthony is the largest, reaching 98,776; the population density of Taipa and Coloane is 1,748 and 437 respectively(Huang Hanqiang and Wu Zhiliang,1994).

Macao is the site of the Pearl River Estuary, and its land area has been increased through continuous land reclamation. From 1866 to 1991, the Macao Peninsula experienced about four large-scale reclamation activities, namely the North Bay and Shallow Bay reclamation from 1866 to 1910, and the inner harbor reclamation from 1919 to 1924, new port and South Bay reclamation from 1923 to 1938, the new port since the 1980s and the black sand ring reclamation. The area of Macao expanded from 10.94 square kilometers in 1910 to 180,000

square kilometers in 1991, of which the Macao Peninsula increased from 3.35 square kilometers to 6.7 square kilometers, and Taipa Island and Coloane also ranged from 1.98 square kilometers to 5.6 square kilometers. Increased to 4.1 square kilometers and 7.2 square kilometers(Huang Hanqiang and Wu Zhiliang,1994).

## (2) Population and land change after the return of Macao sovereignty to China

Macao sovereignty officially returned to China on December 20, 1999. In the past 20 years, there have been many changes in the population and land of the Macao Special Administrative Region. Due to the small number of Macao people and limited development space, reclamation and expansion of geospatial space is also the only way to resolve the narrow land after Macao's sovereignty returns to China. It can be said that the continuous expansion of the land area in Macao in recent years is actually the result of land reclamation in the Cotai area. During the 25 years from 1991 to 2015, the total area of Macao increased by 12.4 square kilometers, of which the area of the reclamation area increased by 4.3 square kilometers.

**Table 1. Changes of land area in Macao from 1991 to 2017** (unit: : km<sup>2</sup>)

year	Total area	Macao Peninsula						Ilhas Islands			Cotai reclamation zone
		subtotal	St <sup>o</sup> . António	S. Lázaro	S. Lourenço	Sé	N. Sr <sup>a</sup> . Fátima	subtotal	Taip a	Coloane	
1991	18.0	6.7	1.1	0.6	0.9	1.4	2.7	11.3	4.1	7.2	1.6
2001	25.8	8.5	1.1	0.6	0.9	2.9	3.0	13.8	6.2	7.6	3.5
2006	28.6	9.3	1.1	0.6	1.0	3.4	3.2	14.1	6.5	7.6	5.2
2011	29.9	9.3	1.1	0.6	1.0	3.4	3.2	15.0	7.4	7.6	5.6
2015	30.4	9.3	1.1	0.6	1.0	3.4	3.2	15.2	7.6	7.6	5.9
2017	30.8	9.3	1.1	0.6	1.0	3.4	3.2	15.5	7.9	7.6	6.0

**Source:** data compiled from the statistical yearbook of Macao in the past year, but excluding the new campus of the University of Macau.

The data in Table 1 shows that the land area in Macao has increased by 1.71 times since the return of the year (ending 2017), compared with 1991 before the reunification, mainly due to the increase in the area of the lobby area, Taipa and Huadi Matang district. At the same time, the area of the Cotai reclamation area has also increased by 3.75 times.

**Table 2. Changes in Macao's environment from 2005 to 2017**

Subject/year	2005	2010	2013	2014	2015	2017
Total land area (km <sup>2</sup> )	28.2	29.7	30.3	30.3	30.4	30.8
Lane length of public roads (km)	368.2	413.4	421.3	424.1	427.0	427.5
Population density ('000/km <sup>2</sup> )	16.8	18.1	19.5	20.5	21.1	21.1
Motor vehicle density (No./km)	414	476	541	566	584	565
Total volume of drinking water treated ('000 m <sup>3</sup> )	59620	76755	87124	93321	94808	97232
Water consumption per day ('000 m <sup>3</sup> )	153	184	215	229	233	242
Waste water treated per day ('000 m <sup>3</sup> )	153	188	215	217	193	211
Domestic waste (t) <sup>a</sup>	162131	164780	207811	218987	229004	255653

**Source:** Macao Statistical Yearbook (2017), Macao Bureau of Statistics and Census, August 2018, PP. 29-30.

From the data in Table 2, it can be found that during the 13 years from 2005 to 2017, the total land area of Macao increased by 2.6 square kilometers, but the population density and car density increased by 4.3 persons and 151 cars per square kilometer respectively; By 1.63 times, the average daily water consumption and sewage treatment volume increased by 1.58 times and 1.38 times, respectively, and household waste also increased by 1.58 times. This shows that since the return of Macao sovereignty to China for about 20 years, with the increase of the population density of Macao, the relationship between Macao's population and the natural environment

has become tense. Not only the contradiction between population and land is prominent, but also the environmental carrying pressure is increasing. The area tends to decrease, and the number of households in various types of houses increases. See Table 3 for details.

**Table 3. Population density, living area and household changes in Macao from 2006 to 2017**

Subject year	Total area (’000 / km <sup>2</sup> )	Macao Peninsula (’000 / km <sup>2</sup> )	Taipa (’000 / km <sup>2</sup> )	Coloane (’000 / km <sup>2</sup> )	Per capita living space (square feet)	Total number of households (thousand households)						Average number of members
							1 Person	2 Person	3 Person	4 Person	5 or more than 5 Person	
2006	17.4	—	—	—	—	161.9	—	—	—	—	—	—
2007	18.0	48.6	10.2	0.5	217	171.1	25.1	36.8	39.6	44.4	25.2	2.93
2008	18.9	50.1	10.8	0.5	221	177.3	25.4	38.8	42.4	45.0	25.7	2.88
2009	18.4	50.2	10.8	0.5	225	177.9	25.1	39.8	42.8	45.7	24.6	2.86
2010	18.1	49.1	11.1	0.5	216	169.7	26.5	38.0	40.6	41.4	23.2	3.04
2011	18.4	50.1	10.6	0.6	217	172.6	24.8	42.5	40.2	41.5	23.6	3.05
2012	19.0	50.9	11.1	0.6	218	178.6	26.3	42.7	44.5	41.1	24.0	3.03
2013	19.5	53.4	11.6	0.9	218	185.2	25.0	44.9	45.9	42.6	26.8	3.07
2014	20.5	54.9	12.7	1.8	218	189.6	27.2	44.9	47.8	41.9	27.9	3.07
2015	21.1	55.9	13.4	2.6	216	192.7	27.3	45.1	48.3	44.1	28.0	3.09
2016	21.4	56.1	13.6	3.5	218	189.2	27.5	45.2	47.1	41.6	27.7	3.06
2017	21.1	55.7	13.0	3.5	220	191.5	27.7	47.2	48.1	41.6	26.8	3.03

**Source:** According to the data of Macao Data 2007-2018, Macao Bureau of Statistics and Census, PP. 5-6.

Under this circumstance, the Central Government announced the "Macao Special Administrative Region Map of the People's Republic of China" on the 15th anniversary of the return of Macao's sovereignty to China, clarifying the customary waters and new land boundaries of Macao, in order to alleviate tension relation between the population and the land in Macao, and promoting the transformation and development of Macao's economy and society and provided a good ecological environment.

### 3. Economic and social changes after the return of Macao sovereignty to China

Economic and social changes caused by changes in human-land relations are another important area of social-ecological research. In the past 20 years since the return of Macao sovereignty to China, many important changes have taken place in its economy and society.

#### (1) The economic structure and its changes after the return of Macao sovereignty to China

For a long time, Macao's economic structure is relatively simple, and the economic structure of the gaming industry is difficult to change.

**Table 4. The development of the gambling industry in Macao from 2004 to 2015 (Unit: million Macao pataca)**

year	number of gambling enterprises (room)	Profit				expenditure					total value added	Total capital available for fixed capital
		total	Gambling service	interest income	other revenue	total	employee expenditure	operating expenses	Shopping ar commissio expenses	Non- operating expenditure *		
2004	8	4406.6463	4363.3412	2.3021	41.0030	2284.8031	191.4014	432.8142	1623.8539	36.7337	2351.0970	310.6888
2005	8	4973.3460	4738.9679	13.6412	220.7369	2388.5528	310.3231	435.0532	1573.5900	69.5865	2951.0811	254.0592
2006	10	5836.8773	5803.7192	33.1581	—	3059.1503	498.1534	725.5074	1715.2509	120.2386	3365.1756	358.6429
2007	10	8521.1411	8497.6062	23.5349	—	4465.8588	871.9995	976.6871	2393.6893	223.4829	5126.3863	790.1350
2008	10	11117.4152	11110.12477	16.1675	—	5798.1566	1074.2144	1033.7751	3348.1713	341.9958	6719.2570	92.2329
2009	10	12157.9486	12140.3031	17.6455	—	6332.0548	1022.0575	1034.6012	3932.7338	342.6623	7175.0463	294.7728
2010	10	190672	190621	51	—	91272	10706	11886	65436	3244	113336	1099
2011	10	270252	270113	139	—	124377	12268	14203	94757	3149	161128	2241
2012	10	306822	306487	335	440	137511	14325	17561	102516	6218	186432	3188
2013	10	363071	362750	321	564	156653	16177	21173	115737	7132	225868	4346
2014	10	354049	353637	412	—	150894	18970	24551	103836	3536	225247	2645

2015 10 233229 232951 278 — 101866 19933 21244 56991 3697 154736 2751

**Source:** According to the Macau Gambling Survey 2004-2015, non-operating expenditure includes interest, depreciation, fines and so on.

According to the data in Table 4, the number of gaming companies in Macau has stabilized at ten since 2006, and the revenue from gaming services has continued to decline since 2014, but its revenue is still nearly 40 times that of 10 years ago (2006), and it is 2004. It is 53 times, and its expenditure is 33 times and 44 times respectively. This situation indicates that the gaming industry still has a very strong position in its economic and social development after the return of Macao's sovereignty to China, and the profitability of the Macao gaming industry has also been rising in recent years. See Table 5 for details.

**Table 5. Development of gambling enterprises in Macao from 2010 to 2014** (Unit: million Macao pataca)

Subject	year	2010	2011	2012	2013	2014
	enterprise(room)		10	10	10	10
Gaming and related services revenue		190621	270113	306487	362745	353637
purchase, commission and customer rebate		65436	94757	102516	115737	103836
operating costs		11886	14203	17561	21167	24551
employee expenditure		10706	12403	14325	16178	18970
total value added		113336	161128	186432	225870	225247
cross fixed capital formation		1099	2241	3188	2153	2645
profit		102630	148726	172108	209692	206277
profit ratio (%)		53.8	55.1	56.2	57.8	58.3

**Source:** Macao gambling industry survey (2105), Macao Statistics and Census Bureau, p.4.

In 2014, the total revenue of the gaming industry in Macao was 354.06 billion patacas, a decrease of 2.5% year-on-year. This is the first time that the Macao gaming industry has recorded a decline since the survey was launched in 2004; The total added value of Macao's economic contribution was 225.25 billion patacas, a slight decrease of 0.3% year-on-year. (Macao Statistics and Census Bureau,2015)In addition, according to statistics from the Macao Gaming Inspection and Coordination Bureau, there were 33 lucky gaming casinos operating in Macao at the end of 2015, maintaining the 2014 level; the number of table games at the end of 2015 was 5,957, up 4.3% year-on-year; the number of slot machines increased 12.0%, a total of 14478 units(Macao Statistics and Census Bureau,2016).

It is worth noting that during the decade from 2005 to 2014, the Macao secondary industry decreased by 9.6 percentage points, while the tertiary industry increased by 15.8 percentage points during the same period. See Table 6 for details.

**Table 6. Macao's local industrial structure from 2005 to 2015 (unit : %)**

Subject year	The secondary industry				The service sector				
	total	manufacturing industry	Distribution of electricity, gas, and water	Construction business	total	Wholesale, retail, maintenance, hotel and catering industries	Transportation, warehousing & communications	Finance, insurance, real estate, leasing and business services	Public administration, social services, and personal services (including the gambling industry)
2005	14.8	4.3	1.8	8.7	88.7	11.9	4.7	22.2	49.9
2006	18.7	3.9	1.6	13.2	85.1	11.3	4.2	23.1	46.5
2007	17.7	2.8	1.1	13.8	86.0	11.7	3.7	22.8	47.9
2008	17.3 <sup>r</sup>	2.1 <sup>r</sup>	1.2 <sup>r</sup>	14.0 <sup>r</sup>	82.7 <sup>r</sup>	11.9 <sup>r</sup>	3.4 <sup>r</sup>	23.0	44.4 <sup>r</sup>
2009	11.0	1.5	1.3	8.3	89.0	13.9	3.7	23.2	48.2
2010	7.4	0.9	1.1	5.5	92.6	15.0	3.7	19.4	54.5
2011	6.4	0.6	0.8	4.9	93.6	15.6	3.3	17.8	56.9
2012	4.1	0.5	0.5	3.1	95.9	10.1	1.9	13.4	70.5
2013	3.7	0.4	0.5	2.8	96.3	10.0	1.8	14.4	70.1
2014	5.2	0.4	0.5	4.3	94.8	10.3	2.0	16.7	65.7

**Source:** According to the “Macao Information” in 2009, 2011, 2013 and 2016. *r* indicates its official revision number.

According to the data in Table 6, from 2005 to 2014, the manufacturing industry in Macao's industrial structure has decreased by nearly ten times, the construction industry has decreased by half, and the production and distribution of water, electricity, and gas have also decreased by 3.6 times. Public administration, social services, and personal services, including the gaming industry, accounted for more than half of the entire tertiary industry in the three industries. From 2009 to 2014, Macao's gaming and gaming intermediary industry accounted for 32.1%, 41.1%, 44.7%, 62.9%, 63.1% and 58.3% of the industrial structure in Macao, reaching its all-time high in 2013. After 2014, the gross profit of gaming companies showed an inflection point, falling for 26 months. It was only until August 2016 that it fell to a limit (gross income of 18.83 billion patacas), an increase of 1.1% over the same period of the previous year. (Macao Statistics and Census Bureau,2014,2017; Kuan Wangan,2016.)

Since the opening of the Macao gambling rights in February 2002, the gaming industry has outperformed Macao's economic development. From the 19.54 billion patacas in 2001 before the opening of the gambling rights, it climbed all the way to 305.235 billion patacas in 2012, breaking through 3000 for the first time. In the year 2013, it reached the highest level in history (361.86 billion patacas). At the same time, the development of other Macao business enterprises has been relatively slow. Although Macao's foreign trade increased in 2001-2015, the volume of import and export increased by 0.58 times and 4.42 times respectively in the past 15 years, but the trade deficit increased by 106.13 times. In addition, the gross weight of sea, land and air transport in Macao has dropped from 473,900 tons in 2001 to 249,900 tons in 2013. Although it rebounded in 2015, it has only reached half of the highest level in 2004 (632,500 tons). It is about 308,300 tons, and it has dropped 0.65 times in 15 years. In terms of construction and real estate, the expenditure on public works in Macao in 2015 was 7.904 billion patacas, an increase of 14.8 times compared with the expenditure of 533.8 million patacas in 2001. In 2015, the number of private projects and the sales of building units increased by 2.53 times compared with 3.17 times in 2004.<sup>②</sup>

Observed from the changes in the number of companies in Macao, the number of newly established companies and dissolution companies in 2001 was 883 and 90 respectively and has increased year by year. By the end of 2015, the number of newly established companies and dissolution companies in Macao reached 5,023 and 595 respectively. During the year, it increased by 5.69 times and 6.61 times respectively, while its power consumption was only 3.13 times, reflecting the small proportion of industrial processing enterprises in the economic structure of Macao. Since the 1980s, the Macao economy has formed four pillar industries of gambling, construction real estate, financial insurance and processing, and manufacturing (accounting for 5% of local GDP).

Since the return of Macao's sovereignty to China, the processing industry has shrunk significantly. The wholesale and retail, hotel, catering and other business services industries have developed rapidly, replacing the processing industry and becoming a new pillar industry. Gaming, construction real estate, and financial insurance continue to maintain the pillar industries status. The data shows that the value-added of the gaming industry in Macao from 1999 to 2012 increased by 20.4% annually, higher than the GDP growth rate of 6.5%, the GDP ratio increased from 22.3% to 45.9%; the value-added of the business services industry increased by 19% annually. Higher than GDP growth rate of 5.1%, GDP ratio increased from 8.8% to 15.6%; construction industry added value increased by 11.2% annually, financial and insurance industry added value increased by 9.2% annually, and the value added in 2012 accounted for GDP They were 11.9% and 5.7% respectively. (People Network,2014.)

It is worth noting that the unemployment rate in Macao was the highest in 2001 before the opening of the gambling rights, reaching 6.4%. After the opening of the gambling rights in 2002, the unemployment rate in Macao was lower year by year, and remained basically at 1.8% after 2013 (1.7% in 2014), while the number of foreign employees increased in the same period. In 2001, there were 25,925 external employees in Macao and exceeded 110,000 in 2012. It reached 181,600 in 2015. In the past 15 years, the number of employees in Macao has increased seven-fold. (People Network,2014.)

As early as 2001, the Macao SAR Government put forward the keynote of "taking the tourism betting industry as the leader and the service industry as the main body to promote the coordinated development of other industries." The national "Eleventh Five-Year Plan" and "Twelfth Five-Year Plan" clearly proposed to promote Macao. Moderate and diversified economic development." The national "Twelfth Five-Year Plan" clearly stated that it supports Macao to accelerate the development of leisure tourism, exhibition business, Chinese medicine, education services, cultural and creative industries. Macao's convention and exhibition industry have gradually developed since 2013. In 2015, it reached 1,263, and the number of visitors increased from 2.0336 million in 2013 to 2,156,100 in 2015. In the three years, it increased by 122,500, with an average annual increase of 40.8 thousand people.

In addition, in recent years, the SAR Government has continuously increased its support, formulated and promulgated the "Macao Cultural Industry Development Policy Framework", clarified the development path, specific development strategies and implementation measures of the Macao cultural and creative industries; continued financial support, since 2010, through various special funded support programs, more than 2,000 non-profit-making organizations and private cultural activities were funded, with a funding of nearly 100 million MOP, strengthening the protection and inheritance of Macao's cultural heritage, strengthening local cultural characteristics and promoting local cultural creation. (People Network,2014)

In general, the economic structure of Macao after the reunification has undergone new changes. After the opening of the gambling rights, the gaming industry is dominated by the gaming industry, and the processing industry is shrinking. Wholesale, retail, hotels, restaurants and other business services and leisure tourism and exhibition business The rapid development of new formats, such as cultural creativity, will help increase employment opportunities and jobs, and maintain the unemployment rate of 1.7% to 1.8% when the number of external employees increases year by year.

## (2) Macao's social structure and its changes after the return of sovereignty to China

Firstly, there have been some new changes in the population of Macao after the reunification. Although the labor force of 15-64 years old is basically stable at around 80%, in the decade of 2006-2015, the growth rate of young people under 15 years old has decreased. 2.8 percentage points, the elderly over 64 years old increased by two percentage points, and the aging index increased by 27.8%.

The population structure usually includes the natural structure, social structure and geographical structure of the population. The natural structure of the population is usually reflected in the age, sex, birth rate, mortality, natural growth rate, marriage rate, and aging index of the population. And the ratio of dependency; the social structure of the population usually include the hierarchical structure of the population, the ethnic structure, the language structure, the occupational structure, the cultural and educational structure, etc. It is the reflection of the current socio-economic development level of a country or region on the demographic structure; The geographical structure of the population reflects the spatial distribution of the population of a country or region.

In the decade from 2006 to 2015, Macao's natural population growth rate increased by 2.9 points, the birth rate increased by nearly three thousand points, and the mortality rate was basically flat at 3.1 thousand points. The sex ratio of newborn babies increased 0.6%; the number of marriages and divorces per 1,000 people increased by 1.6 and 0.6 respectively in ten years; from the geographical structure, the population density of Macao increased by 4,100 people per square kilometer from 2007 to 2015; However, the population density of the Macao Peninsula has grown the fastest, with an increase of 7,300 people per square kilometer in nine years; an increase of 3,200 people per square kilometer in Taipa; and an increase of 2,100 people per square kilometer in the outlying islands. See Table 7 for details.

**Table 7. Natural structure and regional structure of Macao population from 2007 to 2017**

subject		year										
		2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
End-year population('000)	total	538.1	549.2	542.2	540.6	557.4	582	607.5	636.2	646.8	644.9	653.1
	male	265.7	269.5	261.2	258.5	268	280.3	295.2	314	317	305.5	307.0
	female	272.4	279.7	281.0	282.1	289.3	301.7	312.3	322.2	329.8	339.4	346.1
Age structure (%)	0-14	13.5	12.8	12.7	12.4	11.8	11.6	11.3	11.4	11.9	12.5	12.7
	15-64	79.5	80.0	79.5	80.2	80.8	80.8	80.7	80.2	79.1	77.7	76.7
	65 and over	7.1	7.2	7.7	7.4	7.3	7.7	8.0	8.4	9.0	9.8	10.5
Population growth rate (%)		4.7	2.0	-1.3	1.4	3.1	4.3	4.3	4.6	1.6	-0.3	1.3
Aging ratio (%)		52.4	56.2	60.3	59.6	62	66.2	70.8	73.8	75.6	78.9	83
Dependency ratio (%)		25.9	25.1	25.7	24.6	23.7	23.8	24	24.7	26.4	28.7	30.3
Vital statistics	Crude birth rate(‰)	8.6	8.5	8.8	9.5	10.6	12.9	11.1	11.8	11.0	11.0	10.1
	Crude mortality rate(‰)	2.9	3.2	3.1	3.3	3.4	3.2	3.2	3.1	3.1	3.4	3.3
	Rate of natural increase(‰)	5.7	5.4	5.7	6.2	7.3	9.6	7.9	8.7	7.9	7.5	6.8
	Infant mortality rate(‰)	2.4	3.2	2.1	2.9	2.9	2.5	2.0	2.0	1.6	1.7	2.3
	Sex rate at birth(Males per 100)	106.7	110.4	108.9	108.1	109.7	113.8	114.5	109.7	109.2	109.4	107.5

	females)											
	Marriages per 1000 population (case)	3.9	5.0	5.6	5.8	6.5	6.7	7.0	6.6	5.8	6.0	6.0
	Divorces per 1000 population (case)	1.3	1.2	1.4	1.7	1.8	2.2	2.0	2.1	1.8	1.9	2.3
Population density('000/Km <sup>2</sup> )	total	18.0	18.9	18.4	18.1	18.4	19	19.5	20.5	21.5	21.4	21.1
	Macao Peninsula	48.6	50.1	50.2	49.1	50.1	51.9	53.4	54.9	55.9	56.1	55.7
	Taipa	10.2	10.8	10.8	11.1	10.6	11.1	11.6	12.7	13.4	13.6	13.0
	Coloane	0.5	0.5	0.5	0.5	0.6	0.5	0.9	1.8	2.6	3.5	3.5

**Source:** according to the relevant data of the 2008-2018 annual Macao data.

From 1999 to 2016, live pigs, deaths, marriages, foreign workers, and legal immigrants from mainland China during the 17 years in Macao showed a significant increase, while the number of illegal immigrants repatriated decreased by nearly half. See Table 8 for details.

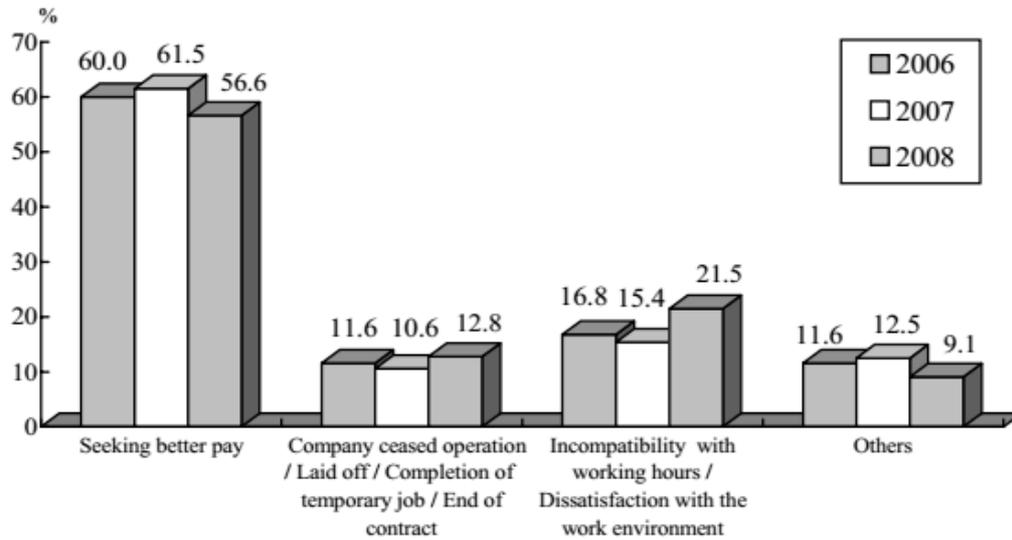
**Table 8. Macao population increase, labor force, and immigration status in 1999- 2017** (unit: person)

year	Live birth	mortality	Fetus mortality	marriage	Individuals granted right of abode	Non-resident Workers (end-period)	Chinese immigrants	illegal immigrants-repatriated
1999	4148	1374	15	1367	973	9988	4984	3434
2004	3308	1533	10	1737	7279	15553	6885	403
2009	4764	1664	13	3035	9489	74905	3121	1524
2014	7360	1939	20	4085	2278	170346	5889	1409
2015	7055	2002	9	3719	1784	181646	8468	1778
2016	7146	2248	18	3891	1447	177638	6327	1290
2017	6529	2120	20	3883	1527	179456	4206	913

**Source:** Macao population statistics(all relevant years). Among them, the number of marriages is the case.

The data in Tables 7 and 9 show that the natural structure and geographical structure of the Macao population after the return have undergone significant changes, and this change has been inflicted around 2005-2006. This should be related to the adjustment of the public policy of the Macao SAR government after the reunification.

Secondly, the post-return Macao education structure and the changes in its employment structure reflect the social stratification and niche of different families and groups in Macao. Generally speaking, in a society with a higher degree of openness, people's initial employment and transfer employment are basically related to their ability level (mainly reflected by the educational situation), and vice versa.



Source: *SURVERY ON JOB CHANGING OF THE EMPLOYED (2008)*, Government of Macao Special Administrative Region Statistics and Census Service, April 2009, page 2.

**Graph 1. Main reasons for changing jobs (2006-2008)**

The data in Figure 1 shows that the main reason for the labor exchange in Macao in 2006-2008 was to find better job benefits. Among the reasons for the transfer of Macao from 2006 to 2008, the top priority was the issue of work, which was more pronounced in 2007 (61.5%), while the factors of treatment in 2008 were reduced, while working hours and work The environment increased by 6.1% over the same period of the previous year.

From the age point of view, young people aged 14-24 are the most heavily transferred, indicating that they are not satisfied with their first-time occupations and employment, so the frequency of transfer is large, and it is on the rise. See Table 9 for details.

**Table 9. The proportion of employment population conversion work in all age groups in Macao (2006-2008) (%)**

Age structure \ Year	2006	2007	2008
14—24	14.4	17.7	28.3
25—34	11.6	11.3	10.7
35—44	9.9	8.7	9.0
45—54	7.3	8.8	9.5
≥55	2.7	4.2	9.2

Source: *SURVERY ON JOB CHANGING OF THE EMPLOYED (2008)*, Government of Macao Special Administrative Region Statistics and Census Service, April 2009, page 2.

In addition, the status of work in the same industry and in different industries can also reflect the degree of social openness of a country or region to a certain extent.

**Table 10. Turnover of employees in related industries in Macao in 2008**

Employee mobility	Recreational, Cultural, Gaming & Other Service		Hotels, Restaurants & Similar Activities		Wholesale & Retail Trade	
	No.	% of Inflow	No.	% of Inflow	No.	% of Inflow
No. Of Employed	78900	...	41300	...	39600	...
Inflow	16200	100.0	8000	100.0	4300	100.0
Cross-industry	8200	50.6	3600	45.0	2400	55.8
Intra-industry	8000	49.4	4400	55.0	1900	44.2
outflow	2400	...	4100	...	4800	...

...Not applicable

**Source:** *SURVERY ON JOB CHANGING OF THE EMPLOYED (2008)*, Government of Macao Special Administrative Region Statistics and Census Service, April 2009, page4.

The data in Table 10 shows that the turnover rate of the entertainment and gaming, shopping and catering, wholesale and retail trades in Macao in 2008 was about 50%, but the cross-industry of entertainment, gaming and other services and wholesale and retail trades. The transfer is not only higher than that of the same industry but also higher than the cross-industry transfer of the hotel and catering industry. It shows that the hotel and catering industry prefers management, management, and professional technology. The wholesale and retail industry may be allowed to enter. The lower thresholds make it easier to attract cross-industry inflows, while the peers and inter-bank transfer of cultural gaming and other service industries are basically flat.

According to the human resources needs and salary surveys of different industries in Macao, the average pay gap between local employees and foreign employees in Macao is more obvious. The average salary of local employees is generally higher than that of foreign employees. For example, in June 2017, the average salary of local employees in the wholesale and retail business in Macao was 14,340 patacas, and the average salary of foreign employees was 10,640 patacas; the average salary of local employees in the transportation, communications and warehousing industry was 22,870 patacas, and the average salary of foreign employees was 18,870 patacas, the average salary of local employees in the public sewage treatment industry is 18,870 patacas, the average salary of foreign employees is 16,570 patacas, the average salary of local employees in the security services industry is 15,130 patacas, and the average salary of foreign employees is 11,550 patacas. (Macao Special Administrative Region Statistics and Census Bureau,2017)

In March 2018, the average salary of local employees in Macao's banking industry (excluding bonuses and bonuses) was 26,530 patacas, and the average salary of foreign employees was 27,440 patacas(Macao Special Administrative Region Statistics and Census Bureau,2018a) ; the average salary of local employees in the hotel industry was 210,000 patacas, the average salary of foreign employees was 14710 patacas; the average salary of local employees in the catering industry was 10,640 patacas, the average salary of foreign employees was 8,320 patacas; the average salary of local employees in manufacturing was 12,720 patacas, the average salary of foreign employees is 9,930 patacas; the average salary of local employees in the water and electricity supply industry is 33,540 patacas, the average salary of foreign employees is 20,290 patacas; the average salary of local employees in child care services is 15,410 patacas, the average salary of foreign employees The average salary of local employees in the elderly service industry is 19,830 patacas, the average salary of foreign employees is 11,440 patacas, the average salary of local employees in the insurance industry is 27,010 patacas, and the average salary of foreign employees is 31,750 patacas. The average salary of local employees is 17130 patacas, and the average salary of foreign employees is 10770 patacas. (Macao Special Administrative Region Statistics and Census Bureau,2018b)

The average salary of local employees in the gaming industry in June 2018 was 23,890 patacas, and the average salary of foreign employees was 19,120 patacas. (Macao Special Administrative Region Statistics and Census Bureau,2018c) With the exception of the banking and insurance industries, local employees in the rest of the industry are paid more than foreign employees. To a certain extent, this reflects the social niche and social

stratification of labor and employment structure, education and initial employment, and wage income since the return of Macao.

Thirdly, the changes in Macao's human development index after the reunification reflect some extent the changes in Macao's social structure.

The Human Development Index is a comprehensive measure of the development of a human being in a country or region. It is expressed by the weighted average of the life expectancy index, the education index, and the income index (per capita GDP calculated by the purchasing power evaluation method) of the country or region. The closer the composite index is to 1, the greater the humanistic development index of this country or region, and the higher its economic and social development. In general, the Macao human development index has been higher since the reunification, especially the life index and income index have reached the level of developed countries or regions in the world. See Table 11 for details.

**Table 11. Macao humanities development index(2004-2016)**

Year Subj	2004	2005	2006	2007	2008 <sup>r</sup>	2009 <sup>r</sup>	2010	2011	2012	2013	2014	2015	2016
LEI	0.937	0.935	0.942	0.950	0.983	0.987	0.989	0.983	0.963	0.963	0.968	0.972	0.974
EI	0.886 <sup>r</sup>	0.880 <sup>r</sup>	0.879	0.882	0.653	0.653	0.681	0.712	0.737	0.737	0.770 <sup>r</sup>	0.770 <sup>r</sup>	0.771
II	0.899	0.988 <sup>r</sup>	1.009	1.000	0.857	0.867	0.902	0.934	1.000	1.000	1.000	1.000	1.000
HDI	0.907 <sup>r</sup>	0.934 <sup>r</sup>	0.943	0.944	0.819	0.824	0.847	0.868	0.892	0.892	0.907 <sup>r</sup>	0.908 <sup>r</sup>	0.909

**Instructions:** LEI is "life expectancy index", EI is "education index", II is income index", HDI is "human development index".

**Source:** according to the data of "*Macao in Figures*" 2005-2018, <sup>r</sup> is the official revision number.

According to the data in Table 11, the humanity development index of Macao has maintained a fairly high level of life index and income index in the past 12 years, except for the relatively low education index. Among them, the 2014 Macao Human Development Index is the same as the 18th ranked Israel in the world. In 2013, it ranks with the 14th in the world. In 2012, it ranks 21st in the world rankings in Finland and Slovenia. Human development index.

### (3) The impact of Macao's economic and social changes after the return of sovereignty to China

In the past about 20 years since the return of Macao sovereignty to China, social changes have taken place in terms of human-land relations and urban space, industrial adjustment and economic structure, cultural education, and labor employment. This change has a far-reaching impact on Macao's future social development.

First of all, the population of Macao has increased year by year, but the land area of the road reclamation area has been limited. The tension between man and land is still an important issue for the stable and harmonious development of Macao society. Due to the scarcity of land resources and the just-needed demand for cheap housing, the issue of the rational development and utilization of Macao's land has become the focus of attention of the Macao people. Around the Macao government's withdrawal of the idle land that has expired but has not yet been exploited, the *Macao Daily News* and other major newspapers in Macao often heard that Macao citizens and associations expressed their views and their different demands through parliament or "delivery" and members' questions and deliberations.

The concern of Macao people, associations and parliamentarians about Macao's "idle land issue" is, in fact, a realistic reflection of the tense relationship between population and land in Macao. In the case that the polarization between the rich and the poor in Macao is becoming more apparent and the price of luxury houses in Macao is high, the general public has mostly focused on the issue of social housing construction. The problems of land development, utilization and social housing construction in Macao due to the tight relationship between population and land will be one of the central issues of concern to Macao people, associations and parliamentarians in the current and future period.

Secondly, the opening of the gambling rights in 2002 was indispensable to the economic development of Macao in the early days of the revitalization. However, in the past ten years, the gaming industry and its related service industries have become the only ones in Macao, making it difficult for other industries to develop really. The Macao economy is moderately diversified, and There is obviously a long way to go before the diversity of local employment.

The Macao gaming industry and its related service industries have occupied the absolute central position of Macao's local GDP and taxation for more than ten years. It not only affects the diversified development of Macao's industries but also has a negative impact on Macao's social culture. "Although the number of inbound tourists from Macao in 2005 increased from less than 9 million before the return to 18 million, the average per capita consumption of tourists was only 1,633 patacas, while in Hong Kong, which is a tourist destination city, the number of tourists was 21.8 million, but per capita consumption has reached HK\$4211, which is 2.5 times that of Macao. There is not much place to buy things in Macao. This is a big problem." (Zhao Lingmin, 2006.)

For quite a long time, the legend of "Macao people don't gamble" has been circulating in the Macao, but this situation is changing quietly. Some people think that "the situation of Macao residents going to casino gambling is actually more common." (Anonymous, 2016) In other words, there are actually dealers, elders, blue-collars and social gambling in Macao. "A survey conducted by the University of Macao in 2003 showed that 20.2% of the 320,000 Macao residents aged 15 to 64 were gambling in the casino in the past year. The average monthly gambling amount was \$87, of which sick gamblers. The proportion is about 1.78%. According to this proportion, there are about 5,700 pathological gamblers in Macao every year." (Anonymous, 2016) Some people even think that it is too harsh for Macao to prohibit gambling practitioners from entering the casino outside of work. What are the reasons? It seems to be self-evident.

Under the temptation of decent work and high income, the employment mentality of local residents in Macao also yearns for the gaming industry and its related service industries. "Opening the recent Macao newspaper, you will often see the full-page advertisement of 'Recruiting the dealer, monthly salary of 18,000 patacas'. The advertisement will be published the next day, and there will be a long-term applicant in the casino. There are junior high school students and university graduates. The other corner of the newspaper is the recruitment of police and teachers, with a monthly salary of 8,000 patacas." (Zhao Lingmin, 2006.) The huge taxation and employment bias brought about by the strong development of the gaming industry and its related service industries after the return of Macao actually curbed the diversified development of Macao's industry to a certain extent, and it is difficult to achieve effective diversification of its economy. Moreover, in the annual "send money" (government finance formed by gambling taxation), the dependence of Macao residents on "waiting, relying on, and wanting" is cultivated. The role of the "double-edged sword" in Macao's gaming and related services industry cannot be ignored.

Thirdly, the natural ecology of Macao's human-land relationship, the unique economic ecology of gambling and related service industries, and the multi-ecological interweaving of education and employment-biased social and cultural ecology have increased the public administration and social governance of the Macao SAR government. A new difficulty. In addition to building a "sunshine government" and scientific governance, effectively improving administrative efficiency, and promoting the transformation of "government governance" to service-oriented government management, we must also truly implement people-oriented, people-oriented, and truly achieve "government governance" to the government "good governance" and the "good governance" jump.

In the past about 20 years since the return of Macao sovereignty to China, Macao people have expressed their interests in peaceful and rational processions or "delivery." The activities of the "May 1st" or "October 1st" parade and "delivery letter" expressions are basically regularized every year.

**Table 12. People's parade and appeals expression in Macao during May 1 (2006-2016)**

year	Number of procession groups	Participation in the procession(unit: person)	Appeal content
2006	8	Over 3000	Expelling black workers and reducing foreign labor.
2007	5	No specific number	Livelihood, employment, and other issues
2008	No specific number	About 800	Livelihood, employment, and other issues
2009	No specific number	No specific number	unclear
2010	Multiple (unspecified)	No specific number	Livelihood, employment, and other issues
2011	8	About 2300	Livelihood, employment, and other issues
2012	No specific number	No specific number	unclear
2013	7	About1900	Livelihood, employment, and other issues
2014	18	1000	Livelihood, employment, and other issues
2015	13	About18000	Livelihood, employment, and other issues
2016	11	About 600, 141 cars and two motorcycles are involved.	Fighting corruption, protecting local workers' employment, demanding a salary increase, raising family members and ending real estate hegemony.

**Source:** Macao Yearbook web chronology. <http://yearbook.gcs.gov.mo/zh-hant/>; In 2016, refer to the Macao police net.

The statistics in Table 12 show that in addition to the incomplete information in 2008, 2009, 2010 and 2012, there are more groups and numbers of people in Macao during the May 1st period, and their appeals are mainly concentrated on people's livelihood and employment. People's livelihood involves social housing, pension, security, medical and health care, and employment is mainly focused on reducing foreign employees and increasing local employees. However, people's livelihood is a systematic project that requires overall planning and coordination. The employment problem essentially reflects social stratification and social mobility. It involves education guidance, social advocacy, policy guidance, and the willingness of both parties to work. It is far from simple addition and subtraction. The numbers of internal and external employees are so simple. All of these have put forward more and higher requirements for the "good governance" and "good governance" of the Macao SAR government.

#### **4. The stable development path of Macao society in the social, ecological change**

In the past about 20 years since the return of Macao sovereignty to China, the population, land, economy, and society have undergone varying degrees of change, that is, the social ecology since the return of Macao has changed. If Macao's prosperity, stability, and long-term stability are to be achieved in a situation where population, land, economy, and society have changed, it may be necessary to focus on the following three areas:

**(1) Resolutely implement the "one country, two systems" policy and the central government's institutional arrangements and policies for the Macao Special Administrative Region, promote regional integration and innovation and development in Macao and Guangdong and Hong Kong, and use the country's "One Belt, One Road" strategy to play China and The advantages of the Portuguese-speaking countries' economic and cultural exchange platform, jumping out of Macao to see Macao, jumping out of the gambling to see Macao, jumping out of China to see Macao, placing Macao in the macroscopic scene of economic globalization to rethink its positioning.**

At present, China's central government gives high expectations to Macao and regards Macao as a successful example of implementing "one country, two systems."The text of the first five-year development plan of Macao has been promulgated and implemented. The central government has given Macao the customary management of waters and the jurisdiction of the new land. On the morning of October 11, 2016, Premier Li Keqiang attended the "China-Portuguese-speaking countries economy and trade." At the opening ceremony of the 5th Ministerial Conference of the Cooperation Forum, China stated that it would adopt 18 new measures in five areas, including capacity, development, humanities, ocean and Macao platforms, to further strengthen Macao's cooperation with Chinese-speaking countries in China. status. This is a rare opportunity for Macao, and it is also

a golden opportunity for Macao to re-position itself and achieve innovation and development. The Macao SAR government should be more active and proactive in integrating the construction of the Guangdong-Hong Kong-Macao-Aowan area proposed by the central government and the “Belt and Road” economic belt advocated by China.

**(2) Moderately control the size of Macao's population, prevent Macao's population from growing too fast in a short period of time, and guide Macao residents from a dense population by building social housing and supporting public service facilities in areas with relatively low population density such as Coloane and Taipa.** The Macao Peninsula area has moved to an island area with a relatively small population density to ease the pressure on Macao's environment and promote the rational spatial layout of the Macao population. It also helps the relative differentiation between the residential area and the tourist area of the old city of Macao, avoiding the arrival of tourists to Macao. Local residents bring too much interference and inconvenience.

At present, Macao itself is positioned as a world tourism and leisure city. However, the scenic spots in Macao are mainly concentrated in the Macao Peninsula. The population density of the Macao Peninsula is large. The residents live in or near the scenic spots. The arrival of a large number of tourists has intensified the crowding of road traffic and shopping consumption and reduced the local residents, and The comfort and leisure of foreign tourists increase the time cost, transportation cost and even economic cost, which makes the marginal benefit brought by tourism greatly reduced or even zero. This is not only inconsistent with Macao's development orientation, but it may also damage Macao's tourism image and reputation. Therefore, the construction of social housing and its supporting public service facilities to evacuate the population density of the Macao Peninsula and realize the relative and moderate separation of the Macao tourist area and the Macao residential area is the only way to build a tourism and leisure city in Macao. The virtuous cycle of Macao's social ecology and natural ecology restores the basic path of the environmental carrying capacity of the Macao Peninsula.

**(3) Accelerate the moderate diversification of Macao's economy and change the situation of Macao's economy over-reliance on gambling and related service industries.** On the one hand, it is necessary to increase the stay time of foreign tourists in Macao and increase their consumption level during their stay in Australia. Macao can provide enough consumer market to foreign tourists, completely change the foreign tourists to Macao after entering the casino, less or not into the mall, only buy handwritten letters, no he can buy the dilemma.

Specifically, there are two main ways to extend the time for visitors to stay in Australia and to expand their consumption levels. First, the visa time for the modification of the Hong Kong and Macao Pass will be changed from one sign to one line, two lines, three lines or four lines, that is, increasing the number of mainland residents. The number of visits to Australia can be piloted in Guangdong and Fujian provinces adjacent to the provinces of Guangdong; the second is to extend the time for foreign tourists to visit Macao, and to make a one-day tour of Macao for two-day and three-day tours. It is necessary to expand the tourist and shopping areas of Macao and try to extend the relevant industrial chain of tourism to the outlying islands of Macao. To broaden the tourism and shopping market in Macao, it is proposed to open up the tax-free shops in Portuguese-speaking countries in the outlying islands of Macao, enrich the types of tourism and shopping in Macao, and completely change the phenomenon of single-traffic shopping in Macao with only hand-lettering, so as to enhance the tourism consumption of Macao's foreign tourists. Level.

**(4) Further increase investment in Macao education, especially higher education and vocational education.** If necessary, leverage the universities outside Macao to train professionals needed for Macao's economic and social development, and promote the benign operation of education, employment, and social stratification and mobility.

In recent years, Macao people have expressed their concerns about the employment situation in Macao by investing in education (such as the Macao Foundation donating 100 million patacas to help Jinan University,

etc.) and the employment and foreign employees to express their appeals or "delivery." In essence, it reflects the dissatisfaction of some Macao people in education and employment.

To solve these problems, on the one hand, it is necessary to fully open up the Macao job market, so that local residents and foreign employees can openly and fairly compete in the Macao job market, and open up the vertical flow channels of Macao society as much as possible, so that Macao society will be more open, inclusive and energetic. On the other hand, it is necessary to improve the enrollment rate of higher education or vocational education in Macao and to leverage domestic universities to train Macao talents when necessary.

## 5. Conclusion

Through the above analysis, this paper should draw the following conclusions:

First, the issue of the relationship between population and land in Macao is a key issue that cannot be avoided in the sustainable development of Macao society. The problems of land development and utilization and social housing construction in Macao due to the tension between people and land will be one of the central issues of concern to Macao people, associations, and parliamentarians in the current and future period.

Second, the huge taxation and employment bias brought about by the strong development of the gaming industry and its related service industry after the return of Macao actually curbed the diversified development of Macao's industry to a certain extent.

Third, in recent years, Macao residents have increased their demands for people's livelihood, including social housing, pension, security, healthcare, etc. In employment, they mainly focus on reducing foreign employees and increasing local employees. This puts more and higher demands on the "good governance" and "good governance" of the Macao SAR government.

Fourth, the stable development path of Macao society in the social-ecological change needs to promote regional integration and innovation and development of Macao and Guangdong and Hong Kong, and actively integrate into the national "Belt and Road" strategy, and control the population size to promote economic diversification and talents. Comprehensive development in education and other aspects.

### Note:

① Social ecology studies a state in which human society interacts with the natural environment. It generally has three different research perspectives: one is the sociological study of social ecology, focusing on the changes in land use and its patterns and the spatial combination of human society. In terms of the relationship between social culture and the natural environment; the second is the biological study of social ecology, analyzing human social behavior; the third is the ecological study of social ecology, from the perspective of human and nature, analyzing the interaction between human society and the natural environment. Process, results and their impact. Nowadays, people are increasingly inclined to conduct comprehensive interdisciplinary research on social ecology.

② Comprehensive reference to *the statistics of the Macao Economic Quarterly* for the first and second quarters from 2001 to 2016.

### References:

1. Anise M. S. Wu, Mark H. C. Lai; Kowk Kit Tong; Vivienne Y. K. Tao, 2013. Chinese Attitudes, Norms, Behavioral Control and Gambling Involvement in Macao. *Journal of Gambling Studies*, 29(4):749-763.
2. Anonymous, 2006. "Zeng Zhonglu talks about the impact of casinos on Macao people", *Southwind Window*, No. 23 (first half of December), p. 35.
3. Bill K.P. Chou, 2012. Legitimacy-Building and Public Sector Reform in Macao: Administrative Measures to Address Political Problems. *China: An International Journal*, 10(3):133-148.

4. Bill K.P. Chou,2015.Politics and Social Organisations in Macao: A Historical Institutional Analysis.*China: An International Journal*,13(1):22-42.
5. Carlos ,Siu Lam, 2015.*On the frontline in Macao: casino employees, informal learning, & customer service*.Las Vegas,NV, UNLV, Gaming Press.
6. Coc Meng Chiang,2005.Policy Review: Government Intervention in Housing: The Case of Macao.*Housing Studies*,20(1):149-155.
7. Davis K.C. Fong,Hoc Nang Fong;Shao Zhi Li. 2011.The social cost of gambling in Macao: before and after the liberalisation of the gaming industry. *International Gambling Studies*,11(1):43-56.
8. Dicky Lai,2010.The political economy of social security development in Macao. *China Journal of Social Work*,3(1):65-81.
9. Dicky Wai Leung Lai,2014.Macao's welfare model: An extreme world of welfare capitalism? *International Social Work*,57(6):676-687.
10. Felix Neto,Etienne Mullet.2001.Societal risks as seen by Chinese students living in Macao. *Journal of Risk Research*,4(1):63-73.
11. Glenn McCartney,2015. To be or not to be? Addressing the ethical void in Macao's tourism and casino development. *The Tourist Review*, 70(2): 150-162.
12. Hao Zhidong,2015.Social Stratification and Ethnic and Class Politics in Macao before and after the Handover in 1999.*China: An International Journal*,13(1):66-92.
13. Hsin-HuangMichael Hsiao(ed.).2014.*Chinese Middle Classes: Taiwan, Hong Kong, Macao, and China*. Abingdon: Routledge.
14. Huang Hanqiang and Wu Zhiliang,(ed.)1994. *Overview of Macau*, Beijing: China Friendship Publishing Company,pp.1-8.
15. KampengLei,Lu Liu,& Inchio,Lou. 2018.An evaluation of the urban metabolism of Macao from 2003 to 2013. *Resources, Conservation and Recycling*,Vol. 128, 2018, Pp. 479-488.
16. Kuan Wangan,2016. "Macao's gross profit growth in August ended with a continuous decline in gaming revenues," *China News Network*, September 1, 2016.
17. Kwok Kit,Eva P. W. ,Sze Man,2011.The Quality of Social Networks: Its Determinants and Impacts on Helping and Volunteering in Macao. *Social Indicators Research*, 102(2):351-361.
18. Li Sheng,2017a.Explaining urban economic governance: The City of Macao. *Cities*, 61:96-108.
19. Li Sheng,Penny Yim King Wan. 2017b. Explaining urban governance in the midst of political transformation: The city of Macao. *Asia Pacific Viewpoint*, 58(30): 289-300.
20. Liao, Yang(2018).An Analysis of the Social Stability and Resolution of the Conflict Since Macao Sovereignty Returns to China.*Journal of Social and Political Science*, 1(2):121-146.
21. Macao Statistics and Census Bureau.2014. *Macao Information (2013)*, Macao: Macao Statistics and Census Bureau.
22. Macao Statistics and Census Bureau.2017. *Macao Information (2016)*, Macao: Macao Statistics and Census Bureau.
23. Macao Statistics and Census Bureau.2015. *Macao Gaming Industry Survey (2014)*, Macao: Macao Statistics and Census Bureau, P.1.
24. Macao Statistics and Census Bureau.2016. *Macao Gaming Industry Survey (2015)*, Macao: Macao Statistics and Census Bureau, P.4.
25. Macao Special Administrative Region Statistics and Census Bureau,2017.*Survey on Manpower Needs and Wages - Wholesale & Retail; Transportation; Security and Public Sewage & Refuse Disposal Activities(2<sup>nd</sup> Quarter 2017)*,Macao: Macao Special Administrative Region Statistics and Census Bureau, August 2017, p.1.
26. Macao Special Administrative Region Statistics and Census Bureau,2018a.*Survey on Manpower Needs and Wages - Banking Sector(1<sup>st</sup> Quarter 2018)*,Macao: Macao Special Administrative Region Statistics and Census Bureau, May 2018, p.1.
27. Macao Special Administrative Region Statistics and Census Bureau,2018b.*Survey on Manpower Needs and Wages – Manufacturing, Hotels, Restaurants, Insurance, Financial Inter-mediation Activities, Child-care, Elderly care(1<sup>st</sup> Quarter 2018)*, Macao: Macao Special Administrative Region Statistics and Census Bureau, May 2018, p.2.

28. Macao Special Administrative Region Statistics and Census Bureau,2018c.*Survey on Manpower Needs and Wages - Gaming Industries (2<sup>nd</sup> Quarter 2018)*, Macao: Macao Special Administrative Region Statistics and Census Bureau, August 2018, p.2.
29. People Network,2014. "Poor Moderate Diversification of Macao's Economy," *People's Network - Hong Kong and Macao Channel*, <http://hm.people.com.cn/n/2014/1204/c39108126148-865.html>.
30. Xi Yan,2016. 'Macao has died, traditional Chinese characters have died': a study of netizens' comments on the choice of Chinese scripts in Macao. *Journal of Multilingual and Multicultural Development*,37(6): 364-575.
31. Ying-ho Kwong, 2017.Ruling Coalition Restructuring under Macao's Hybrid Regime. *China Review*,17(3):111-139.
32. Yim King Penny Wan,Xiangping Li.2013.Sustainability of Tourism Development in Macao, China. *International Journal of Tourism Research*,15(1):52-65.
33. Yim King Penny Wan,2012.The social, economic and environmental impacts of casino gaming in Macao: the community leader perspective. *Journal of Sustainable Tourism*,20(5):737-755.
34. Zhao Lingmin, 2006. "Where is the new growth point of the Macao economy? " *Southwind Window*, No. 23 (first half of December), p. 36.
35. Zheng Tianxiang, etc.1994. *Macao Population*, Macao: Macao Foundation.

**Special Report**

## Traveling “Belt & Road Initiative” Paths Toward Enlightened Superpower Intelligence Operations with Chinese Characteristics

James A. Schnell<sup>1</sup>

<sup>1</sup> Full Bright Scholar Association, james.schnell@fullbrightmail.org.

*James A. Schnell, Ph.D. (Ohio University) is a member of the Fulbright Scholar Association. He retired from the U.S. Air Force, at the rank of Colonel, with his final 14 years serving as an Air Force Attache at the U.S. Embassy in Beijing, China where he was awarded the Legion of Merit Medal in recognition of duties performed there. The views expressed herein are of the author and do not imply endorsement from the People's Republic of China or U.S. government.*

This report was made possible through support from the Fudan Development Institute (Think Tank) during Schnell's Visiting Scholar appointment at Fudan University in fall, 2017.

Forty years of my life have been spent working on matters in, or associated with, the global intelligence community—most notably issues involving China-U.S. relations. This has involved observation of dedicated efforts focusing on large scale operations involving painstaking focus on the most minute of details. Plans developed and executed. Advancements celebrated. Losses mourned. Stalemates endured. Careers, lives and dreams swallowed up with such things. Very much commensurate with a large complex game of chess.

Twenty-five years ago we heralded a new world order, a new age in global relations, offering hope for a post-Cold War era that could reimagine functioning of global intelligence systems. Techniques have been modified, especially in relation to the new communication technologies, but little has changed regarding the vision involved with what is being addressed and how that vision might mature in ways commensurate with our more interconnected global community, poised to build upon shared understanding and common goals. A vision that allows for assumed commonality rather than assumed adversarial positions.

Instead, we are seemingly still perfecting the art of extending adversarial relations in that our organizational cultures are locked into such frameworks and machinations. Reward systems and ways of functioning—foundations for promotions and career progression—so ingrained that innovative macro-level thinking is looked upon with suspicion. We are left rearranging the deck furniture on the Titanic. Alas, it is being done with precision and vigor. Oblivious to the icebergs that we need to be considering.

Parallels exist with armies who clash on the field of battle, sacrificing lives for days on end to take a "Hamburger Hill," and then—after the hill is taken—are left with no alternative but to abandon it and move on to the next hill to be taken. Only to have to return and re-take the same hill when it is re-occupied by enemy forces. So much lost but, in reality, very little gained—even by the victor in such contests.

We find ourselves at a point in history where we can reconsider such ways of thinking and functioning. Or, rather, the historical trend may simply bypass what we are doing as obsolete and larger social forces will focus on measures that can be more beneficial in moving the ball forward to goals that are truly worthy of our attention and resources. That is, no confrontation will be needed. The public mind will simply look elsewhere for answers to the questions it has.

The Chinese "Belt and Road Initiative" (BRI) exemplifies a panorama for this new order of thinking. As the world becomes more interconnected we find ourselves encountering a phenomenon that has been historically less common but is becoming more common with increasing frequency. Most namely, that peoples who have rarely been in contact with each other in the past are now dealing with each other on a frequent basis via business, travel, education and popular culture venues.

BRI offers an evolving venue for such interaction. China's president Xi Jinping announced creation of the BRI in 2013. It is intended to reorient relations among China and other countries in the Eurasian community. There are two aspects of BRI: an overland "belt" connecting China with Central Asia, Russia, South Asia, and Europe and a maritime "road" linking Chinese ports with those in Southeast Asia, South Asia, Africa, the Middle East, and Europe.

A key part of BRI is that it will be an egalitarian venture among the 68 countries that will be connected via the "belt and road." It will stress common interests rather than hegemonic intentions based on control and cultural imperialism. Trust, mutual benefit and shared governance will be key elements within this process. There will certainly be disagreements confronted but, with this type of egalitarian foundation, BRI will perpetuate an institutional culture that promotes fairness and consensus.

BRI will evolve in this manner, not so much because it is the politically correct manner to proceed, but because it will be the most expedient way to progress. Such an internationally oriented venture, with so many varied cultural constituencies involved, will not be able to exist with hegemonic practices by any major national power. Offering a carrot, rather than threatening with a stick, will be the order of the day.

This has potential of providing a model for the rest of the global social order that can be incorporated into institutional structures. The international intelligence community is one such institutional structure ripe for reorienting. The flow of information on the internet has made intelligence operations objectives from the past, that sought to uncover such information, obsolete. What took months & years of collection & analysis can now often be deduced in a matter of minutes via the internet. This is not only impacting how issues can be addressed but redefining the relevance of such issues.

For instance, the objective of establishing "cover" (false identity) in some settings has been a factor for operatives in the global intelligence community for well over a thousand years. In modern times this could simply be done by developing a plausible identity, memorizing it, printing some business cards & related false documents and presenting yourself with confidence regarding who you were pretending to be. The evolution of Google, and related capabilities, has practically rendered such techniques useless in that a false identity can be unmasked without much effort. Which ultimately calls into question the relevancy of such "cover" objectives in the first place.

The internet has opened an entire panacea for cyber oriented intelligence operations. Hence, the U.S. Air Force has stood up an entire cyber command. This will not only offer new means for addressing issues of interest. It will make many of those issues of interest irrelevant. The relatively free exchange of information via the internet is redefining the social order. This is not happening all at once but, rather, such changes are progressing on varied levels with resounding impact. Ultimately, we will find that much of what the global intelligence

community does will become obsolete. Huge savings will be realized with the slashing of intelligence operations budgets—freeing up resources for newer tangential issues evolving on the horizon.

Related impacts can be recognized with journalism, specifically broadcast journalism, and resulting influence on the intelligence community. When Saddam Hussein invaded Kuwait, and we had the resulting Desert Shield/Desert Storm operations in the early 1990s, policy makers typically followed events more via CNN reporting rather than intelligence reporting. The CNN reporting was often live and prompted immediate response from global players. It was the landscape that the public was watching. It could not be ignored, even if it was inaccurate at times, in that it was accurate often enough to be consistently accepted as truth—or close to the truth.

For the aforementioned reasons, it is worth acknowledging that even the intelligence community started following CNN reporting. I was working in the “Watch Center” (intelligence unit) of the National Air Intelligence Center at Wright-Patterson Air Force Base on the night Saddam Hussein invaded Kuwait. Within hours of the event, a television was rolled into the “Watch Center” so we could follow developments on CNN. That television was on, with continual CNN reporting, 24/7 (24 hours a day, seven days a week). Within a month a television was permanently hung from the ceiling for ongoing viewing that has continued from well after Desert Storm ended into the range of events since then. Such journalistic news reporting has been primary for the intelligence community since that point in time.

Similarly, the internet and related new communication technologies are redefining the intelligence operations landscape. Those in the intelligence community can reform in relation to the changes or be rendered irrelevant by them. The Chinese BRI intentions, if legitimate and sincerely embraced, offer global superpower intelligence agencies the opportunity to be contributors toward this reshaping of global relations rather than existence as outdated challenges to it. The future is here.



# Balance of Power as Main Instrument of Equilibrium in Contemporary International Relations

Orazalina Korlan Burkitbayevna<sup>1</sup>

<sup>1</sup> School of Political Sciences and Public Administration, Shandong University, Jinan, China

## Abstract

It is noted that power for a long time is the main influence of states on each other. This is due to the fact that power has always been the most effective tool for achieving specific goals. This article notes that at present power has not lost its significance. One feature of power is that it serves not only as the main tool in achieving its own goals of the state but also as an instrument of peacekeeping. Power relations between states inevitably generate such a phenomenon of international politics as the balance of power. The difference between power and balance of power lies in the fact that power is recognized as the main means of achieving and protecting national security, and balance of power is the main instrument that guarantees international security. Emphasizing on the importance of creating a balance of power at the present time in which the interaction between actors of international relations would involve in accordance with the principle of equilibrium, their national interests which do not infringe the rights of other participants in international relations and serves as a mechanism for regulation and balancing. It is stressed that each of the "centers of power" in the new alignment of forces seeks to ensure their interests, so it is necessary to determine what kind of a geopolitical structure of the world is in the best interest of Kazakhstan. Ensuring the geopolitical interests of our state, maintaining the stability of the international system are the postulates on which the balance of power in the modern world is built, and the place of Kazakhstan in it is being formed.

**Keywords:** Power, Balance of Power, National Security, International Security, International Relations, Equilibrium Principle, Peacekeeping

## 1. Introduction

Throughout human history, the force was associated, first of all, with military might. Many prominent politicians believed that military power has been and remains the main indicator of the strength and prestige of the state in the international arena. Power is inextricably linked with the nature of social relations, it is in fact, rooted in the essence of human nature with the principles of good and evil laid in it. At the same time, either one or the other of these principles prevailed in different periods of history.

Our world is an arena of constant confrontation of various world forces. In all geopolitical theories and concepts, this struggle is represented as the struggle of opposites. And this struggle cannot be abolished, however, it can be balanced. That is why the balance of power category is one of the main categories of geopolitics that reflects the struggle and unity of world forces.

The theory of the balance of power goes back deep into history. Where countries have been drawn into the battle for leadership and influence, the relationship between them has always been based on the principle of balance of power. Any other state that does not face obstacles certainly tries to expand its power and influence on as large a territory as it can get and which can effectively manage. But in practice, we can see that the obstacles arise necessarily.

Basically, there are other states that also have the desire to increase their influence or have an adverse effect on others. Therefore, there is a clash of all kinds of interests and aspirations, where the strength of the state plays the main role. From this we can conclude that the principle of balance of power is needed not to preserve peace or express assistance for international understanding, but serves to preserve the independence of each element in the system of states, preventing the rise of any of them to such an extent that it begins to threaten all.

## 2. Literature Review

Today, it is difficult to imagine an analysis of international relations, world processes and even specific events in a particular region or country, not to mention the studies and attempts to forecast global politics without resorting to the foundations of the systemic approach laid down in the work of Morton Kaplan (1957) "System and process in international politics", which was published more than half a century ago. Today this research is not so widely known (in comparison, for example, with the works of G. Morgenthau, K. Waltz, St. Hoffman), but it is no exaggeration to say that his appearance left a significant imprint on the subsequent development of international political theory. It is no accident that already in the 1960s M. Kaplan's book caused a huge flow of specialized literature, which led the author to clarify his positions and approaches, which remain relevant today. The typology of international political systems developed by M. Kaplan became one of the bases, on which he derived various types of political behavior of states in the sphere of international relations. Having identified five types (models) of such behavior (associated with the criteria for organizing the decision-making process, sharing benefits from interaction, preferences in creating coalitions, the content and direction of political activity, and the ability to adapt to the conditions in which decisions are necessary) for this purpose, the author turned to a direct examination of each of them, trying to show how the behavior of an actor will change depending on its type of international system.

The author of the treaty, English lord Bolingbroke (1788) notes the following: "Since the formation of two powers - France and Austria - and as a result, competition has arisen between them, the interests of their neighbors were to fight the strongest and most active and conclude an alliance and friendship with the weaker. Hence - the concept of the balance of power in Europe, which rests on the safety and tranquility of all. In turn, to break this balance was the goal of each of the rivals. The principle on which all the wise decisions of the European meetings relating to France and Austria were based and determined by the desire to prevent the imbalance, not allowing the balance to bow to one side. This principle has been in effect for the whole period, and it keeps its will until now."

Of course, the important works in this area are the works of Kenneth Waltz (2010). Waltz's theory, as he makes clear in the "Theory of International Politics," is not a theory of foreign policy and does not attempt to predict or explain certain acts of state power, such as the collapse of the Soviet Union. The theory explains only the general principles of behavior that govern relations between states in an anarchic international system, and not certain actions. These repetitive principles of behavior include balancing power that is individually tailored for optimal arms races and display restraint in proportion to relative power.

It is impossible not to leave without due attention to the work of P.A. Tsygankov (2003) in the field of the theory of international relations and diplomacy, devoted directly to the study of topical problems of international relations and global cooperation.

The next source is the scientific works of M.T. Uteubayev (2016) E.R. Khayrullina (2015) and S.V. Budaeva (2014) in which theoretical aspects of balance of power conception, their evolution, as well as the practical implementation of the concept of security in the history of international relations from the ancient period to modern times, are examined.

## 3. Balance of Power as the Main Category of Geopolitics

Hard power, for many centuries, was the main way for states to influence each other. This is noted by the fact that force has always been the most effective tool for achieving certain goals. Until now, the force has not lost its

significance and continues to serve not only as the main tool for states to achieve goals but also as an instrument of world regulation and domination.

Thinkers of different countries and generations, supporters of various theoretical schools and directions offered their own concepts of the security of international relations. The first such concept is considered to be the concept of balance of power, developed within the traditional direction of the theory of international relations. The concept of the balance of power is the oldest in international relations, the elements of which can be observed already in the era of antiquity (goes back to the writings of Thucydides), but the emergence of the concept of "balance of power" is associated with the name of the Italian thinker Francesco Guicciardini, who wrote the history of Italy from 1490-1534.

The use of the balance of power in international practice was recorded in the Treaty of Utrecht. The author of the Utrecht Peace Treaty is the English political philosopher, statesman, and writer Henry St. John Bolingbroke. In his work "Letters on the Study and Benefits of History," he gave the first in political philosophy a detailed substantiation of the concept of "balance of power" in the example of European history. The balance of power is one of the basic concepts in the theory of political realism and neo-realism. Representatives of these theories believe that the balance of power is the main way to stabilize the international system, the basis of international order and security.

The balance of power in international relations is the distribution of world influence between individual centers of power - poles. It can take various configurations: bipolar, three-pole, multipolar (or multipolar), and other configurations. Proceeding from the above, it can be concluded that the balance of power is connected to the world order. According to the theory of the balance of power, the world order can have three types:

Unipolarity is when the power is concentrated in one center, called the hegemon.

Bipolarity is the division of the world into spheres of influence between the two states, the creation of military-political blocs. In history, the most famous example of bipolar world order is the Cold War between the Soviet Union and the United States of America (1945-1991). The second half of the 20th century was the only period when the whole world was divided into two camps. In Aron's opinion, the bipolar system has a direction for instability, because it is based on fear, and also calls the two warring parties to cruelty against each other.

Multipolarity is a type of world order in which a large number of states have approximately equal economic and military capabilities. In theory, it is considered the least stable of all. With the development of history, multipolarity implied military action rather than peaceful co-existence of roughly equal states. But nevertheless, this system is the most stable one.

Comparing the world devices mentioned above, one can conclude that sooner or later one side will be the winner in a bipolar system, and a unipolar system will come to degradation and failure in the course of time, and the last multipolar system is the most stable of all existing ones and there can be unlimited time interval.

The "balance of power" system differs from other international systems in the following characteristics. This was interpreted by the American professor of political science, a specialist in international relations, geopolitician M. Kaplan. The "balance of power" system is characterized by the following basic rules:

1. Act to expand their capabilities, but better by negotiation than by war.
2. It is better to fight than to miss the opportunity of expanding opportunities.
3. It is better to stop the war than completely destroy one of the main national actors.
4. Act against any coalition or single actor that seeks to acquire a dominant position vis-à-vis the rest of the system.
5. Act against actors who support supranational organizational principles.

The first rule indicates that each major national actor seeks to strengthen its influence. However, this should be achieved, if possible, without war, without those equilibrium-destroying consequences that the war may have for the "balance of power" system.

According to the second rule, the duty of every national actor is to protect his own interests. This means that if the main actor cannot protect its own interests, then these interests, as a rule, will not prevail. Thus, opportunities must expand even at the cost of war.

The third rule meets the classical standards. Major national actors should not expand so much as to exceed the optimal size of a just and legitimate community. This rule is observed both in relations between legitimate

dynastic regimes and between modern national territorial states. Going beyond this rule is an explicit exception or incompatible with national identity.

The fourth and fifth rules are simply rational requirements necessary for the preservation of the international system. The formation of a dominant coalition or the desire of the main national actor to dominate the system or subordinate the other main actors poses a threat to the interests of national actors that do not belong to this coalition. In addition, if the coalition succeeds in establishing subordination relations in the international system, the dominant member (or members) of the coalition will be able to exert political pressure also on the less significant members of the same coalition. Therefore, coalitions, as a rule, receive a counterbalance - opposing coalitions are formed. They arise when the first coalitions begin to threaten states that are not participating in them and therefore become vulnerable, and when they begin to threaten the interests of their own members. At the same time, states that are under pressure from the dominant members of the coalition may find it more advantageous to take a neutral position towards the coalition or join the opposing coalition. These rules overlap with the third rule. It is necessary to limit some aspirations of states and not to destroy other main national actors; then in the future, they can, if necessary, enter into any coalition.

1. the policy of the country or several countries, which aims to achieve a certain state of the system;
2. the very state of the system, characterized by a certain correlation of forces between the leading powers;
3. the mechanism operating in the international system, regardless of the will of its participants.

#### **4. The phenomenon of power in international relations**

There are many definitions of the phenomenon of power in international relations, here are just a few of them:

G. Morgenthau - "Power is power over the minds and actions of people";

G. Kissinger - "In the international environment, force is influence";

R. Kline - "Power is the ability of the government of one country to force the government of another country to take any action that it would never have committed on its own free will," while singling out the three main methods - persuasion, coercion or use of military force;

R. Keiohein, J. Nye - "Power is the ability of one subject to force others to do something that they would otherwise not undertake, and at the same time, at a price acceptable to the person in charge";

D. Stossinger - "Power is the ability of the state to use real and potential resources in such a way as to effectively influence the way of life and behavior of other states."

All these definitions have one affinity - States are eager to influence the behavior of other states in a suitable way for themselves. In this case, different types of power are used.

Military power is a means of state policy, whereby the state is able to influence the events taking place in the world, primarily in the name of its interests.

The scientific and technical power acts as the achievements of the scientific and technological revolution. The principles of countries in the world arena are growing due to the application of scientific and technical force.

Information power is completely random because humanity has entered the age of information and information systems, but as you know whoever has information has the world.

Ideological power - reveals its own formulation within the country and also have an external aspiration, acts as a generalized characteristic, revealing the level and nature of the impact of the leading ideology, morality, way of life in general to other countries. Although the effectiveness of its action cannot be measured quantitatively, qualitative indicators are clearly visible in the desire of other countries and individual people to follow the ideals brought from outside.

Political power is the possibility of influencing the international arena through diplomacy. An example is the diplomacy of the ancient Romans at the end of the Roman Empire, which was bequeathed to Byzantium and Italy, the survival of their own state by withdrawing from armed conflicts, collision and weakening of competitors, imposing their own religion among influential countries, bribing border states to create a buffer zone around their borders and so on.

Different countries are determined by the possession of one or the other of the aforementioned species or group of types of force. Nevertheless, strong power with the ability to influence the behavior of other countries determines the three main types of power - economic, military, political.

Mr. Nicholson wrote that the engine of diplomacy has always trades, which is developed between states according to one's own laws, but having a common orientation with the laws of development of mutual relations

between states is the extraction of own benefits to the detriment of others. Indeed, the development of the economy cannot last long within the borders of a particular state, and it actively requires integration into the world market, which inevitably entails the establishment of trade relations. The closer trade relations are more closely and politically, since the nature of trade relations is in the interest, and if objectively trade relations exist, then states derive mutual benefit.

## 5. Balance of power in the world arena

With the collapse of the Soviet Union, the current world geopolitical order was destroyed. And of course, after the collapse of the USSR, the US took a key place in the international arena. But now the world is in a transitional state. Some political scientists believe that the modern balance of power exists within the framework of "unsettled multipolarity." The second part of the political scientists believes that the alignment of forces is unilaterally militarily: US domination, the tripolar economically - the United States, Japan and Germany, and the five-polar in organizational and political - the United States, Russia, China, England, and France.

In a new alignment of forces, each country seeks to secure its own interests. Which model of the geopolitical structure of the world is more suitable for the interests of Kazakhstan. In theory, three models of the balance of forces are possible: unipolar, bipolar and multipolar.

A unipolar model of the device implies a global American hegemony. The US is trying to control and establish hegemony through the approval of military presence in all significant geopolitical regions. NATO is a powerful military-political bloc, created by US imperialism to achieve the goals of the established world single-pole order. Kazakhstan does not like such a model, and it contradicts the principles and norms of international law. Kazakhstan's foreign policy is based on national interests based on law and justice.

The second model of the balance of power is the balance of forces within the bipolar world order. There are those who consider this model to be suitable for maintaining stability in the world, here one can agree. This point of view in the 70's. American political scientist K. Waltz put forward. In Theory of International Politics, the importance of bipolarity lies in the fact that it minimizes uncertainty since the number of participants in a confrontation in such a model is limited.

To maintain international stability, the bipolar model of the world order is the most suitable, but for Kazakhstan, this model does not fit because Kazakhstan has no potential and the opportunity to become the second pole. The latest model of a new balance of power - multi-polar - the organization of an international political system on the basis of polycentricity. The formation of such a model is more likely. The main role in structuring the international system of the largest states forming its upper level is evident. For the right to join the core of the international political system, 10 ... 15 states are competing with each other. Of course, Kazakhstan cannot enter this state, but nevertheless, it has a key position in Central Asia. It is this model of the world order that fits the interests of Kazakhstan to a greater degree.

President of Kazakhstan N.A. Nazarbayev 9 years ago in March 2009 in his speech at the 11th Congress of the Association of Eurasian Universities in Astana said that one of the most important consequences of the global economic crisis is the onset of a multipolar system of international relations. At this time, the multipolar system has come and is in the process. Multipolarity should determine the policy and strategy of Kazakhstan. The best policy for Kazakhstan is the desire for balance between the main centers of world power (Russia and China). Kazakhstan is interested in the politically stable, economically sustainable and secure development of Central Asia, and not only, today Kazakhstan is a factor of stability in the global world. Our multi-vector policy means the development of friendly, predictable and balanced relations with all countries of the world. The Republic of Kazakhstan has repeatedly managed to seat the conflicting parties at the negotiating table, then achieve mutually acceptable solutions and with honor to emerge from crisis situations.

## 6. Conclusion

Thus, we understand that the balance of power is an irreplaceable part of the contemporary international relations, it is the regulator of international politics. The balance of power affects all processes in this world. And so it is very important that the multipolar balance of power maintains stability on the planet.

At the present time, mankind lives in an era when constant changes are taking place in the balance of power. Between the West and the East, there is a struggle for influence and domination. That is why a multipolar world

order is necessary in order to maintain the balance of power and to prevent the strengthening of the influence of any one state. The main task of the balance of power and Kazakhstan is to prevent a violation of the strategic balance of forces to maintain security in Central Asia and, of course, the whole world.

That balance of power, which developed after the Second World War, ensured the absence of global conflicts. Unfortunately, the number of regional and local conflicts has only recently increased. However, the existing balance of power avoids global conflicts. Therefore, it is so important to maintain this balance of power. The universal balance of power depends on the decision by all the states of the world to one of the main problems that have been created in the world in recent decades - the prevention of nuclear war.

## References

1. Bolingbroke G.S.-J. 1978. Letters on the study and use of history.
2. Budaeva S.V. 2014. Balance of forces as a general principle of equilibrium in contemporary international relations. Messenger ZabGU Series "Political Science" № 09 (112). P.75
3. Kaplan M. 2002. System and process in international politics // Theory of International Relations: Reader. Moscow: Gardariki. P. 220-235.
4. Khayrullin E.R. 2015. "Balance of forces" as a concept of security in the theory and practice of international relations. Bulletin of Omsk University. Series "Historical Sciences." № 3 (7). P. 115
5. Tsygankov P.A. 2003. Modern schools and directions in the theory of international relations. Dispute of neo-realism and neoliberalism // Theory of International Relations. Moscow: Gardariki. P. 131.
6. Tsygankov P.A. 2003. The problem of the laws of international relations // Theory of International Relations. Moscow: Gardariki. P.84.
7. The Concept of the Foreign Policy of the Republic of Kazakhstan for 2014-2020.
8. Uteubaev M.T. December 16 - Independence Day of the Republic of Kazakhstan. [www.http://ast.social/641-16.html](http://ast.social/641-16.html) (Accessed date 09.12.2016.)
9. Walt K.N. 2010. Theory of International Politics [Theory of International Politics]. Waveland Pr. Inc., 256 p.