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Studying The Selection of The Priority Industry And Lessons Learned for Local And Excessive Thai Nguyen

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Abstract

From the development reality of each country, each locality, due to its limited and scarce resources, can not simultaneously develop its branches and technical fields. Industry priority to develop in the most effective way, in accordance with the international context of each stage. To create a momentum for accelerating industrial development in the short term, it is necessary to identify and narrow down the scope of priority industries to focus on development, to avoid widespread investment. not tall. To develop priority industries in order to make optimal use of local comparative advantages, creating a spillover for the development of the entire industry.

Keywords: Industry, Job Priority, Leadership, Supporting Company, first development for development.

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1. Introduction

Industry is the main economic sector of the economy, industrial development is the indispensable task for successful implementation of industrialization and modernization of the country. The goal of our country is to strive to become an industrialized country in the modern direction. In order to achieve that goal, we need the continuous effort of all sectors of industry. However, it is not possible at the same time to develop all sectors of the industry effectively, which need to be selected, prioritized for development. They have to be the leader, have the strength and create the competitive edge to use the country's finite resources.

2. Theoretical bases for selection of priority industries

The choice and development of priority industries are in industrial policy. Industrial policy is defined as all policies that support the production and development of industries within a country. When policy makers weigh the question of what industrial policy is good for growth and development, to simplify this discussion, two types of solutions are often proposed. This is the result of the study of the topic at the level code T2018-07-04.

It can be said that the development of priority industries is a popular tool for implementing industrial policy. The development of priority industries to change the production structure of the priority industries. These are the basic, spherical and advantageous sectors of development. In the speech "Identifying Preferred Industries in National Industrial Policy" by author Vu Thanh Tu Anh, Fulbright University: The author has given some international experience of Japan , Korea, Taiwan on priority industrial development. The author argues that Vietnam should not pursue preferential policies for some specific industrial products. Instead, the Government should implement a policy of prioritizing the development of a number of "capacity areas" in line with the country's long-term development goals and strategies.The experience of countries in the world with many successes such as Japan, Korea, Taiwan (China), Thailand show that their industrial development process is in stages, The industry has a competitive advantage, in that precision engineering plays an important role in all industries. Based on analysis and comparison of development conditions across countries, the author mentions a number of principles for selecting priority industries for Vietnam based on 12 basic principles such as comparative advantage comparative, spillover effect, high growth rate, etc. The development of priority sectors for the development of priority industries is appropriate. the industry is strong, so that the nucleus pulls the development of other industries.

3. Experiences of some localities in the selection and development of priority industries

Experiences of Binh Duong

Binh Duong is an industrial province which has high growth rate and high contribution in GDP. In 2016, the industry accounted for over 63% of the total economy. For the whole country, the industry contributes more than 10% of production value and accounts for 11% to 12% of export turnover (2016). In the process of economic development, Binh Duong is always interested in developing priority industries because it is a breakthrough for the province to develop rapidly and sustainably in the process of industrialization. Therefore, Binh Duong has implemented the development of priority industries. The province strives to become one of the major centers of the country in terms of producing industrial products to support the textile and garment and footwear industries and achieve high competitiveness in the region by 2020. In addition, the fields of pharmaceutical, electronics, telecommunication, informatics and mechanical engineering will become the main growth drivers of the industry and contribute significantly to the province's export turnover in the period. 2010 - 2020 period.

Corresponding to each stage, in order to be suitable with local development conditions, the province has developed appropriate priority industries. In the period of 2008 - 2010, the province has prioritized the development of major industries such as textile and garment supporting industries; supporting industry of leather and footwear industry; agricultural, forestry and food processing; chemical industry, rubber (basic chemicals, pharmaceutical chemistry, cosmetics, natural rubber products). In the period of 2011 - 2015, the province has prioritized the development of supporting industries in the textile and garment industry; supporting industries in the footwear and footwear industries, agro-food processing industry; chemical industry, rubber (basic chemicals, pharmaceutical chemistry, cosmetics, natural rubber products). In the 2016-2020 period, the province shall prioritize the development of supporting industries in the textile and garment industry; supporting industry of leather and footwear industry; chemical industry (pharmaceutical chemistry).

Experience of Dong Nai

Dong Nai is one of the three corners of the southern development triangle, including Ho Chi Minh City - Binh Duong - Dong Nai, with a strong industrial development in the south. In the period of 2006 - 2015, the province has shifted to develop the industry in parallel with the strategy of sustainable development, the industrial growth rate is 13-14% per year. Thanks to investment in the right direction, priority is given to the development of key industries with comparative advantages, which make up a significant contribution to the economy of the province. In the process of development, Dong Nai prioritizes the development of hi-tech industries, the production of accessories and auxiliary materials for import substitutes, and the processing of agricultural products and foodstuffs. At the same time, the province encourages labor-intensive industries in rural, remote and isolated areas; Transferring some industries from the form of processing to the production of finished products, direct export to increase the value. To restructure the industry with the priority of attracting investment in hi-tech industries and supporting industries; Applying technology to save raw materials, fuel, materials and energy. To concentrate on intensive investment in developing high-quality and competitive industries. From 38 factories operating in Bien Hoa Industrial Zone (now Bien Hoa Industrial Zone I), after the liberation of the South, the province has 13,700 industrial establishments operating by 2015, including : 40 state enterprises (Central 32, local 14); 12,940 non-state owned enterprises, 725 foreign-invested enterprises. The industrial production value in 2014 has increased 200 times compared to 1986. Over 30 years of construction and development, Dong Nai industry has grown in both quantity and quality and is moving rapidly into the field. high technology, supporting industries, high value added under the green growth strategy and sustainable. Up to now, the share of industry accounts for over 57% of GDP, playing an important role in the annual economic growth of the province.

Experience of Bac Ninh

Bac Ninh is considered as a dynamic and modern industrial city in the northern part of Vietnam. Bac Ninh and Thai Nguyen are currently attracting large FDI projects, bringing about a breakthrough in industrial development. Significant development of high technology industry of Samsung Group - Korea in both provinces. In the last 5 years, Samsung Bac Ninh and Samsung Thai Nguyen have many relationships in the common use of labor resources, electronic manufacturing infrastructure. The province has set the target of striving to become a centrally-run city in the 20's of the 21st century towards civilization and modernity. In the 2016-2020 period, the total output of the province will reach 10.5% -11.5% / year, of which industry and construction will increase by 11.3% - 12.6%. In the period 2021 - 2030: industry and construction increased by 6.8% on average. To contribute to the economic restructuring in the direction of industrialization and modernization and trade in services of high level and quality.

Industries that are prioritized by the province include: Manufacturing of components and electronic equipment; Components and electrical equipment will prioritize the production of electronic products for industry, electronics, telecommunication, computer brands of Vietnam, mobile phones, electronic components for production and export; It can also be used in rural areas (through industrial promotion programs and supporting industry development programs). Machinery, equipment and metal processing industries are concentrated in manufacturing molds for the electrical, electronics and automobile industries; motorbike; dynamo; Agricultural Machinery; Machines used in the agricultural, forestry and fishery processing industry; Rapid development of the software manufacturing industry. This is one of the areas with the highest levels of gray matter, creating great added value and not consuming resources, energy or polluting the environment. In addition, Bac Ninh also develops pharmaceutical, pharmaceutical and hi-tech industries such as nanotechnology, biotechnology and agro-forestry-fishery processing. To serve the export and domestic consumption, especially for the Capital Region and export with the quality of international standards to target Japan, the US, the EU, ASEAN and some markets. other. Major industrial products will be prioritized for development, including: electric and electronic products; Precision mechanical products: mold, molding, plastic injection, metal punching; Pharmaceutical and pharmaceutical products; Products processing agricultural and forest products, food. Thus, from a pure agricultural province, Bac Ninh has emerged as an industrial province and attracted investment from large corporations such as Samsung, Microsoft, Canon, Pepsico and became a dynamic industrial province. the country in recent years.

4. Lessons Learned for Thai Nguyen in Choosing Priority Industries

Thai Nguyen is a province in the Northern Midland and Mountain area with potential and strength in natural resources and has a long tradition in industrial development. In the past years, especially since the re-establishment of Thai Nguyen province (1997), the provincial leaders have grasped the opportunities, put forth guidelines and policies for socio-economic development, industrial development right there have been some successes in economic development. The economic structure of Thai Nguyen province has been shifted positively towards the gradual increase of the Gross Domestic Product Product (GRDP). In the general economic structure, industry plays an extremely important role, contributing significantly to changing economic structure of the province. The development of Thai Nguyen industry in recent years has achieved positive results and is highly appreciated. However, to date, the development industry has not matched the scale and available resources, low business efficiency, Thai Nguyen is still one of the poor provinces, some socio-economic indicators. lower than the national average. A number of well-known enterprises, which were the driving force behind the economic development of the whole province, also fell into recession, leading to the bankruptcy of Thai Nguyen Iron and Steel. Industrial enterprises are heavily dependent on foreign direct investment and there is no strong integration to create breakthrough developments, moving from satellite enterprises to integrating deeper into the supply chain. global response. Therefore, in the industrial development strategy, the province has focused on developing a number of areas, emphasizing investment in supporting industries.

Supporting industries in Thai Nguyen have been developed since 2005 to promote the advantages of an industrial province. In 2017, the whole province has 209 supporting industries. Among them, the number of FDI enterprises producing electronic components accounted for the largest number with about 50 enterprises; followed by the production of metal products, the production of ball mill products, steel pipes, cast iron, casting parts of cars, gearboxes. The average annual growth rate of the supporting industry is 59%, accounting for nearly 40% of the province's industrial production value. Manufacturers of supporting industry products can meet the demand for various industries and directly serve the enterprises manufacturing products in the integrated way from the beginning to the end. Typically like: Machinery Parts Joint Stock Company No. 1, Diepel Song Cong, Narime Machinery and Equipment Manufacturing Joint Stock Company manufacturing mechanical products and integrated industrial equipment ... From 2013, many foreign enterprises has invested in support projects for Samsung Group. Notable among them are Dong Yeon Industrial Co., Ltd. (Korea), which manufactures monitors, boards, memory card slots on mobile phones; Bujeon Electronics (Korea) Co., Ltd with electronics factory Glonics Vietnam specializes in producing headphones for mobile phone manufacturers (typically Samsung); Alutec Vina Co., Ltd. (Korea) with factory specializing in manufacturing, processing products from aluminum supporting the field of construction and manufacturing of mobile ...

The products of the supporting industries in Thai Nguyen include diesel engines, gearboxes, motorcycle parts, construction products, electronics industries, etc. Labor force operating in the industry accounting for 32.5% of industrial workers in the province (2017). In terms of quality, the labor force operating in the sector is judged to have a higher level of professional qualifications than other industries, because the characteristics of the SI require workers to be modernized. , specialization and high co-operation. The number of trained workers in this sector accounts for over 90% and has partly met the production requirements of enterprises. In terms of technology level, only 02 enterprises are operating in hi-tech industry. Currently, Thai Nguyen has more than 1,000 individual households involved in the production of SI products, however, the size of the households is very small, each household has an average of 2 laborers, mainly producing steel fabrication work. Construction, machinery, equipment, tools, small tools, semi-craft to serve the needs of the local.

At present, most of supporting enterprises in Thai Nguyen are only supporting satellite for big companies such as Samsung - Korea, Toshiba, ... but not deeply integrated into the supply chain of supporting products. for large FDI partners to form a network in the global value chain. In 2018, a number of supporting companies such as Disoco will complete technology investments to meet the standards and meet the conditions required to join the global supply chain of major manufacturers in the world. Thanks to the large Samsung projects that are operating effectively in Thai Nguyen, there will be more opportunities for the province to attract Korean businesses to cooperate with local businesses to transfer SI technology. This will help local businesses gain access to new technologies to produce, upgrade their skills, and enable them to stand alone to produce SI to supply large production chains such as Samsung.

5. Conclusion

Prioritized industrial development is a right policy of the country and localities to focus resources to prioritize development in a selective way. Therefore, the first task is to identify the priority group of companies depending on each stage, each period of development. Such industries must be spearheaded by other sectors in order to exploit the inherent comparative advantages of the locality in order to bring into full play their comparative advantage, mobilize and efficiently use resources. , enhance competitiveness, promote economic restructuring in the direction of modern. On the basis of the selection of priority industries in a timely manner with the intervention of preferential policies will create the motivation to promote the development of the entire industry. This research will support a great deal in clarifying the research that T2018-07-04 is about.

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China's Rapid Economic Transformation and the Active Changes of its African Policy

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Abstract

The pace and scale of China's economic transformation have no historical precedent. Since opening up to foreign trade and investment and implementing free market reforms in 1979, China has been among the world fastest-growing economies. China is now the world largest economy (on a purchasing power parity basis). The paper examines China's rapid economic rise and the subtle changes that it has instituted in its foreign policy towards Africa. The author argues that since 1980s, China's foreign policy, more specifically, its African policy, has been decided by its strategy of development, and therefore undergone two strands of foreign policy changes in China Africa policy i.e. a shift from ideological considerations to economic diplomacy and a shift from a single form of aid to multiple channels of cooperation. In contrast to most analysts' claim that China's policy changed in recent years owing to its thirsty for oil and other natural resources in Africa. The change is closely linked with the transformation of Chinas' grand strategy. To analyze foreign policy change, the paper adopts Joakim Eidenfalk (2006) foreign policy change model which is one of the most relevant when applied to China's relations with Africa.

Keywords: Africa, China, Economic Reform, Eidenfalk Model, Policy Change

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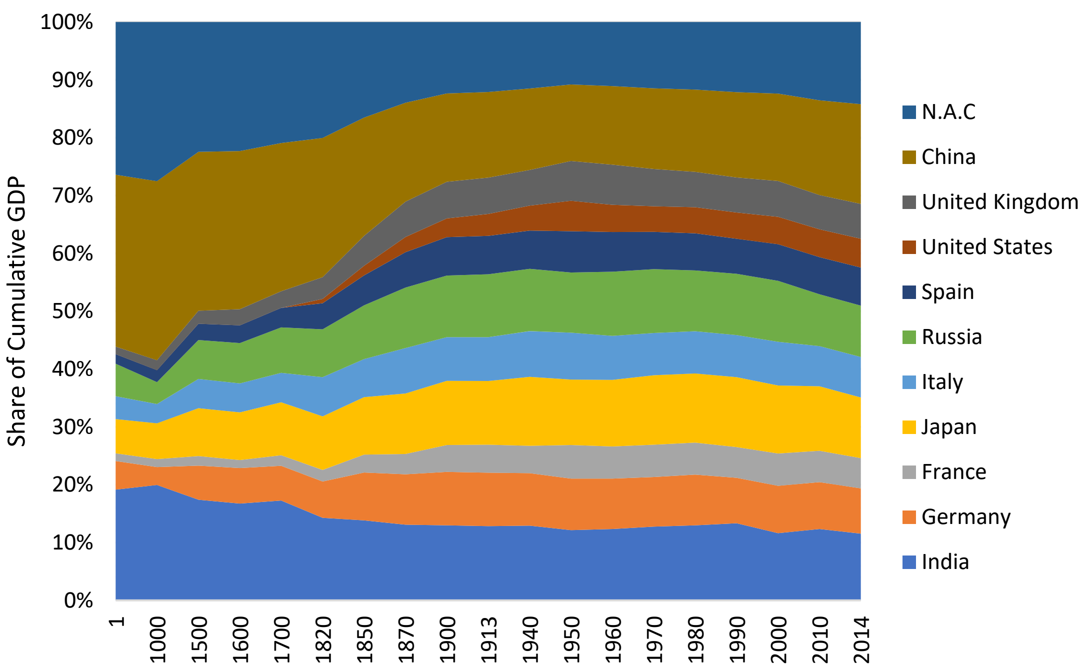
1.Introduction

China's rapid rise has puzzled several individuals, including economists. The meteoric rise over the past half century is one of the most striking instances of the influence of opening an economy up to the global market. Over that period China has undergone a shift from a largely agrarian society to an industrial powerhouse. In the process, it has seen sharp upsurges in productivity and wages that have permitted China to turn out to be the world's second-largest economy. How could China with over 1.3 billion people transform itself relatively suddenly from a vastly impoverished agricultural land into a formidable economic powerhouse when so many other small countries have been unable to do so in spite of their more favorable social-economic conditions? According to Yi Wen, among several conflicting opinions that have emerged to interpret China's rise, two stand out as the most popular and provocative. Firstly, the Chinese growth is viewed has hyper-growth as an enormous government-engineered bubble. Most analysts think it is not sustainable and will collapse because China has no democracy, no human rights, no freedom of speech, no rule of law, no Western-style system, no well-functioning markets, no private banking sector, no protection of intellectual properties, no capability to innovate (other than copying and stealing Western technologies and business secrets) nor a host of several other things that Western nations have possessed for centuries and have proved essential for Western prosperity and technology dominance (Wen, 2016). Based on this opinion, the bubble will burst at the expense of China's population and environment.

Secondly, other analysts view China's remarkable rise simply as destiny. They believe that China is returning to its historical position: the Chinese had been one of the wealthiest countries and greatest civilizations (alongside India) from at least 200 B.C to 1800, the dawn of the Industrial Revolution in England (See Figure 1) it was only a matter of time for China to reclaim its historical glory and dominate the world once again. "Let China Sleep, for when the Dragon awakes, she will shake the world." The saying is attributed to Napoleon[1] and he seems to have been right because the dragon is awake. However, neither view is supported by concrete economic analysis, instead of being either on prejudice or naïve extrapolation of human history. The question now is how could a country with all those adverse elements for innovation and business be capable to grow at a double-digit annual rate for many decades and transform itself in such a short time from an impoverished agricultural economy into a formidable manufacturing powerhouse? If culture or ancient civilization is the clarification, then why is it that Greek, the Egyptian, and other great empires are not bursting onto the global arena? (Wen, 2016).

[1] Napoleon and his view on China August 18, 2008. Retrieved from http://wanderingchina.blogspot.com/2008/08/napoleon-and-his-view-on-china.html.

Figure 1: Economic History of China and Other Major Powers



Source: Wen, 2016

Note: N.A.C represents Non-Asian Ancient Civilizations (Greece, Egypt, Turkey and Iran)

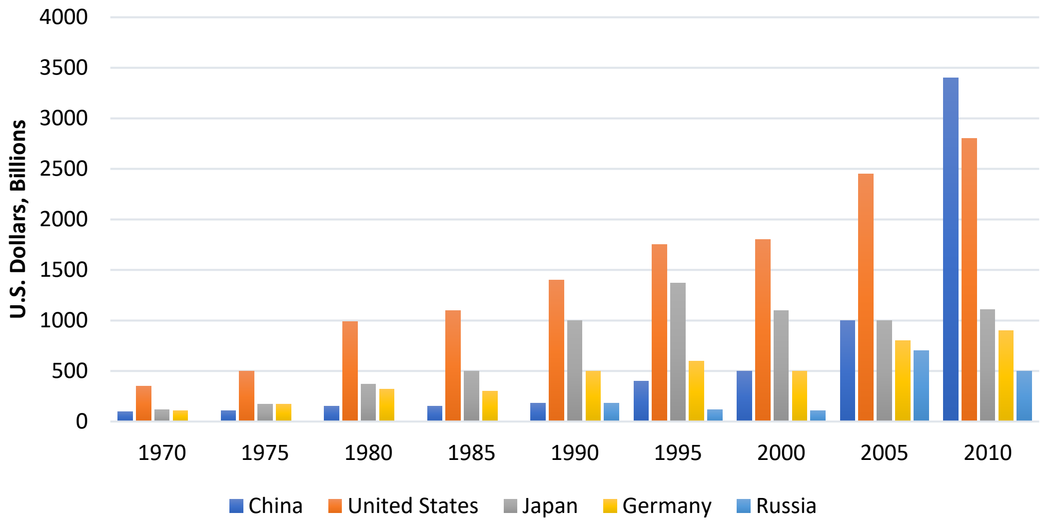
Note: The cumulative gross domestic product is that for all the nations listed and represents at least 70 percent of the total for the world at any given time, with the rest offered by smaller nations

The success of the Chinese economic reform that started in 1978 is frequently described by experts as one of the most remarkable success narratives in modern times. In 1978, China was one of the poorest nations in the world. The real per capita GDP in China was only one-fortieth of the United States level, and one-tenth the Brazilian level. China had a GDP per capita level similar to Zambia and lower than two-thirds of the African average. From 1979 (when economic reforms started) to 2016, China's real gross domestic product (GDP) grew at an average annual rate of approximately 10 percent[2], raising per capita GDP almost 49-fold. China per capita GDP soared from over $200 in 1978 to over $8000 in 2015. China is one of the few nations in the developing world that has made progress in reducing its total number of poor people. Chinese official documents indicate that the number of poor people in China fell dramatically. Between 2011 to 2015, the total rural population lifted out of poverty was 109.92 million (Xinhua, 2016). In total, 800 million people are now living a poverty-free life in the past thirty-two years – which amounts to over 70 percent of global poverty reduction over that period – an unparalleled accomplishment (World Bank, 2016). Following the process of China's phenomenal economic reforms and high rate of economic growth, the number of rural poor had fallen from 770.39 million in 1978 to 55.75 million by 2015, with the incidence of poverty dropping from 97.5 percent in 1978 to 5.7 percent in 2015 making China the first developing country to meet the Millennium Development Goals set by the United Nations. This spectacular achievement came as a result of China's poverty alleviation framework which consisted of three key components: pro-poor economic growth policies, a rural social safety net and development-oriented poverty reduction strategies and programs (Liu Jian et al, 2009).

[2] China's economic reform process began in December 1978 when the Third Plenum of the Eleventh Central Committee of the Communist Party adopted Deng Xiaoping's economic proposals. Implementation of the reforms started in 1979

China has emerged as a major global economic power. It is now the world's largest economy (on a purchasing power parity) manufacturer, merchandise exporter and importer, and holder of foreign exchange reserves. Figure 2 displays the manufacturing output of top five nations globally. In the early 1970s, China produced very few manufactured products – a tiny fraction of the United States level. Around 1980, China's manufacturing started to take off, surpassing the developed nations one by one, overtaking the United States in 2010 to turn out to be the number one manufacturing powerhouse globally. China's growing economic power has led it to become increasingly involved in international economic policies and projects, particularly in regards to infrastructure development. Such policies include the One-Belt, One Road initiative and the creation of two investment banks: the Asian Infrastructure Investment Bank (AIIB) and the New Development Bank (NDB). China is projected to spend over $1 trillion on these initiatives. If successful, China's economic initiatives could significantly expand export and investment markets for China and upsurge its "soft power." China's speedy economic growth has led to a substantial upsurge in bilateral commercial ties with African nations.

Figure 2: Manufacturing Output for Top Five Nations in 2013



Sources: Wen, 2016

This research paper provides insights into the status of the Sino-Africa relationship by offering background on China's economic rise; describe its current economic structure as well as China's Africa policy change. The rest of the paper is structured as follows: Section 2 present an overview of the miraculous growth rate of China's economy, by interpreting China's development strategies. The section further discusses the four basic types of explanation that will help us understand China's remarkable economic success. Section three considers the policy level, investigating the previous relationship from 'Five Principles of Peaceful Coexistence in the Bandung Conference in 1955, to 'Four Principles of Chinese Cooperation with Africa' in 1982, to 'a Fresh Strategic Cooperation' in 2006. The section also looks at China's policy towards Africa; it concludes that China's policy towards African nations has shifted from unconditional aid; and that 'mutual-benefits' has turned out to be the priority. Section 4 looks at the three signs of changes in China's Africa Policy and what it means for Africa nations. Section 5 concludes the paper.

2. The Interpretation and Understanding of China's Development Strategies

The People's Republic of China (PRC) was founded in 1949 by Mao Zedong. Over the past sixty years, we can clearly distinguish two major phases in China's economic development: the Maoist phase (1949-1977) and the reform phase (1978-onwards). The Maoist period in China is, above all, marked by self-reliance and isolation from the world economy. The Deng Xiaoping period in China is, above all, marked by opening up to the rest of the world. China's understanding of the recent theme has changed from "war" and "revolution" to "peace" and "development". The communication between diplomacy and economy was overturned, for instance, the idea that economy should serve diplomacy was changed to that of diplomacy serving the economy (Anshan, 2007). The three decades of transformation has brought a speedy growth of Chinese economy. China opted for an indigenous solution to their economic backwardness, their economic transformation holds a special lesson for African nations. The three decades of economic transformation is nothing short of a miracle; this remarkable achievement indicates what a nation with determination, sacrifice, vision, and confidence can attain.

In the international stage, conflict or fighting is not the single means to attain success, the international relation is not a zero-sum game, the win-win strategy does work (Anshan, 2007). The miraculous growth rate of China's economy has prompted a great deal of study, particularly among economist. One of the economists is Jefferson (2008) who offers an excellent review of China's reform experience and on how the economics literature has tried to clarify that experience. One strand of other economic literature decomposes China's economic growth into labor, capital, technology, and institutional change components. Most of these quantitative studies (Lin, 1992; Fan, et al., 2004) find that institutional change accounts for a significant proportion of the observed economic growth since the reform. Additionally, the structural change from low-productivity agriculture to more productive industrial and service sectors also contributed to rapid economic growth. This part of the paper will discuss four basic types of explanation of China's remarkable economic success: (1) "comparative advantage" (and conditional convergence); (2) "incentive matter" (fiscal decentralization and realignment of incentives towards growth-maximizing activities); (3) experimentation (as an economic and political discovery mechanism); and (4) pressure and crisis as inducers of reform.

The Issue of Realigning the Economy in the Direction of Comparative Advantage Counts

No credible perspective on the Chinese economy can ignore the amazing economic gains over the past 33 years during which growth of the economy augmented sharply creating hundreds of millions of employment and raising the incomes throughout China. Some experts argue that China's rapid rise since the reform is chiefly due to the rebalancing of China's development strategy away from a central focus on heavy-industry and in the direction of more labor-intensive sectors (Lin, 2007). When the People's Republic of China (PRC) was founded in 1949, there was the dearth of capital in China and the Chinese were isolated from the international community. Influenced by the experience and ideology of the Soviet Union, in the 1950s, the central planning of industry (with an emphasis on the heavy industry) was introduced, modeled on the five-year plans of the Soviet Union. During this period, the Chinese placed the development of the heavy industry as their top priority if the country was to catch up with the developed countries as soon as possible. In order for the Chinese to attain this objective, the Chinese government suppressed the procurement price for grains, restricted rural migration, and set up some barriers between rural and urban residents. Due to the fact that this strategy was capital intensive, it violated China's comparative advantage, which was defined by limited capital and abundant labor, and led to almost thirty years of stagnation in per capita income.

Based on the famous Heckscher-Ohlin theory in international economics, adopting the law of comparative advantage on basis of factor endowments, a nation could export more products and gain more speedy accumulation of physical capital so that it may have a sustainable growth in the economic development. As far as a labor abundant underdeveloped nation is concerned, it has the potential competitive power in the global market for labor intensive products. Since 1978, the government of China has been pursuing the outward-looking export-oriented strategies and with the advantage of vigorous FDI activities, it could convert its potential competitive power in labor intensive manufacturing into the actual one. Due to this advantage, the Chinese government has shifted its development strategies toward more labor-intensive sectors, to begin with, agriculture, and then progressively export-oriented rural industries. In the international context, the Chinese government possesses a clear comparative advantage in the labor-intensive manufacturing sector. There was an enormous inflow of foreign direct investment into China due to China's cheap labor after introducing the open-door policy.

As a result, both labor resources and capital were more efficiently distributed, which greatly bolstered economic efficiency. According to Krueger (1984), the author believes that the Chinese development path thus re-emphasizes the significance of adhering to comparative advantage in creating labor-intensive and export-oriented economic growth. Notably, a variation of this issue is that realignment in the direction of comparative advantage may be essential for augmented growth, but is not by itself adequate. According to Ravallion and Chen (2008), the authors debate that the Chinese post-1978 economy also profited from several social and infrastructural investments of the pre-1978 era, particularly pertaining to health, transport infrastructure, and education. Therefore, they raise a fairly standard idea of conditional convergence to clarify the Chinese post-1978 catch-up.

The issue of incentives Counts During Economic Reforms

Scholars have proposed a number of theories to explain the success of China's economic reforms in its move from a planned economy to a socialist market economy despite unfavorable factors such as the troublesome legacies of socialism, considerable erosion of the work ethic, decades of anti-market propaganda, and the "lost generation" whose education disintegrated amid the disruption of the Cultural Revolution[3]. Another theory focuses on internal incentives within the Chinese government, in which officials presiding over areas of high economic growth were more likely to be promoted. Scholars have noted that local and provincial governments in China were "hungry for investment" and competed to reduce regulations and barriers to investment to bolster economic growth and the officials' personal careers. According to Easterly (2002), the author argues that the most significant principle of economics is that the issue of incentives counts. Note that several of the reforms – dismantling of the communes and replacement by household farm plots liberalization of the Township and Village Enterprises (TVEs) and the opening of the coastal regions – were radical measures introduced quite rapid at the end of the 1970s and early 1980s. In these areas, there is little to distinguish the *pace* of the reform in China with that of Eastern Europe. The dismantling of the communes in 1979 covered approximately 790 million people, or 81 percent of the population, and was effectively attained in a brief period of 30 months. Irrespective of all these developments, Lin (1990) asserts that during the planning period China's rural communes were dogged by weak incentives because of free rider problems, particularly in agricultural production. During this period, the farmers did not want to work hard for the reason that the fruits of their toil were shared among others, rather than just themselves. In the same way, the state-owned enterprises (SOEs), shirking was also reported to be a widespread problem (Xu, 2003), and several SOEs made important losses. One

[3] Calhoun, Craig; Wasserstrom, Jeffrey N. (2003), "The Cultural Revolution and the Democracy Movement of 1989: Complexity in Historical Connections", in Law, Kam-yee, The Chinese cultural revolution reconsidered: beyond purge and holocaust, Palgrave Macmillan, p. 247, ISBN 978-0-333-73835-1, retrieved 2011-10-20

of the key issues of the market-oriented reform surveys on China is that the post-1978 government offer strong incentives for the individual – including farmers, managers, and local officials – to upsurge investment and improve productivity.

The development of the incentive approach also had the effect of immediately resulting in a much fuller utilization of long-term investments made by the State in agricultural research and development, and other infrastructure. According to Fan, (1999) and Lin, (1992), they asserted that within the space of some years, agricultural productivity almost doubled. This development occurred as a result of the rural reform that triggered the economic growth and reduced the number of poor people in just a short period of time (Ravallion and Chen, 2008). Numerous literature has paid more attention to fiscal decentralization as the key motivating factor in China's economic growth (Cheung, 2008). During central planning, local governments had to turn in most of their local revenues to the central government, and there was no obvious rule as to how central finances were to be devolved to lower governments. China has adopted a series of fiscal reforms since the 1980s targeting at improving the fiscal contract arrangements between diverse levels of governments. After the fiscal reforms, local and upper-level governments shared fiscal revenues according to a predetermined formula. Since local governments can keep a significant portion of the augmented local revenues, they face stronger incentives to upsurge local revenue. Strong incentives for local governments to attain speedy economic growth helps to clarify the reason China has grown so fast in spite of the well-defined property rights protection in the *de facto* legal system (Zhang, 2007). Also, the competition serves as the disciplinary mechanism by which local governments offer *de jure* protection of investors' property rights. The existence of strong growth-oriented incentives also clarifies the reason the protection of the property rights of other groups, like farmers, has been weak (Zhang 2006a). Above all, China's central government has employed both personnel policies and fiscal incentives to make sure that local governments employ their financial empowerment to augmented economic growth. Therefore, although the principle of incentives is rather universal, the particular forms employed to improve incentives in China may not be easily transferable.

The Issue of Experimentation Counts During Economic Reforms

Policy experimentation points to political-administrative procedures and initiatives that allow to discover or test novel instruments of problem-solving and thereby propel broader-based policy innovation or institutional adaptation in a given polity, economy or society. The term has come to renewed prominence in the discussion about the political processes behind China's economic rise since the beginning of Chinese economic reform policies in 1978.[4] In the economic stage, the Chinese reformers employed more explicit experimentation [5] to promote economic learning and overcome political resistance to reform. The economic role of this policy is self-discovery in the face of uncertainty. To quote the oft-cited phrase from Deng Xiaoping in the early reform period, he stated that China's reform has been "crossing the river by feeling the stones." The political role is more pragmatic which emphasizes the vital role that experimentation can play in overcoming political resistance to reform.

Pragmatism, trial, and error, evidence-based policymaking, and experimentation with small-scale policy reforms that are later scaled up, are all key features of China's reforms. Most successful reforms have experienced pilot experiments and impact evaluations before being scaled up. Learning by experimentation is an important strategy when reformers face huge economic and political uncertainty. Due to doubt, it is difficult to judge which option is more feasible from the *ex-ante* point of view. In such cases, experimentation can be a useful tool to search for more information and for testing and updating prior hypotheses. Experiments yield information to help comprehend what works and what does not. Therefore, even failures can be helpful for the reason that they can help eliminate unfavorable options, as displayed by Luo (2008). The failure of Luo laissez-faire price system experiment in Hebei Province helped him come up with the idea of dual-track price reform system, which is a vital instance of an experiment where "Washington Consensus" wisdom was contradicted. The creation of the Shenzhen Special Economic Zones is another example. Shenzhen was a very small town by the border between Hong Kong and mainland China with a population of 30,000 people in the late 1970s. In 1979, Yuan Geng, director of the China Investment Promotion Bureau in Hong, proposed to set up a special industrial zone in the Shekou area of Shenzhen as a pilot for market reforms, taking advantage of the proximity to Hong Kong.

The state council quickly approved the proposal, earmarking 2.14 square kilometers for the zone and granting it special rights to test the applicability of the market economy in the zone. The industrial zone turned out to be an instant success. The investment from Hong Kong quickly filled in the limited land generating hundreds of thousands of jobs. After observing this success, in 1980 the Chinese government established a larger Shenzhen Special Zones, which encompasses 1,953 square kilometers, to carry out full fledges market reforms on a larger scale. This is the first citywide special economic zone in China.

[4] Heilmann 2008. Policy Experimentation in China's Economic Rise. In: Studies in Comparative International Development, 43 (1): p. 1-26.

[5] Notably, although marginal reforms have some features of experimentation (like experiments, they maybe more reversible than wholesale reform, and they also promote learning), but they also have some distinguishing features relative to other experimental reforms.

Experimentation can help control the possible disastrous consequence of the wrong choice. A vital point to note here is that, in the context of the emergence of randomized microeconomic experiments within development economic (Duflo, 2005), is that most China's experiments were not random. Specifically, experiments were frequently initiated in isolated poor areas. The Chinese government purposively initiated the household responsibility system as a pilot reform in many remote provinces so as to circumvent and minimize the potential costs of failure and lessen the political resistance.

Similarly, the Wenzhou area, which used to be a remote region in Zhejiang Province but is now one of the most dynamic regions in China, received special permission to be a pilot region for rural industrialization precisely because of its isolation at the time (Zhu, 2008). Under the special policy, Wenzhou made bold experiments in reforming town-village enterprises (TVEs) and legalizing private companies. After observing its success, most TVEs and small and medium SOEs were privatized nationwide by the late 1990s. Although such experiments were not so rigorously conducted as to include control groups, the pilots enable researchers and policymakers to observe what worked and what did not work. Another benefit of the Chinese method is that it involved an element of experimentation in macroeconomic reform, whereas contemporary randomized experiments are confined to microeconomic experiments (Rodrik 2008). Dual-track prices and special economic zones as displayed above are such examples. Such experimentation has been particularly vital in overcoming numerous major obstacles to effective reform in China, related to the nation's size, its diversity, and the history and structure of its hierarchical political system. For a large and diverse economy like China, it is very hard to derive a single one-size-fits-all blueprint for reform simply by applying textbook economic theories. Instead, trial and error processes can help discover local best practice. Though the impact of reform experiments varies between policy domains, China's experimentation-based policy process has been essential for redefining basic policy parameters.

The issue of Pressure as a Catalyst Counts During Economic Reforms

The "pressure" which stimulated the earliest reforms of the post-1978 period was the threat of economic crisis. After the Cultural Revolution (1966-1976) China was on the verge of collapse under the planned economy system. More than two-thirds of the people lived under one dollar per day (Ravallion and Chen, 2008). With stagnant agricultural growth and fast population growth, food was in short supply. At the onset of the reform, it seemed China faced extremely high barriers to escaping the low-level equilibrium trap where poverty persisted. Nevertheless, one of the architects of China's rural reform was the crisis, which triggers reforms. After the end of the Cultural Revolution, most of the top leaders and the masses realized that the planned system was not a viable option anymore, even if there was still uncertainty and argument as for how next to proceed. Under this situation, Chinese top leaders were more willing to listen to diverse views and permit open policy debate. In other words, the crisis offered would-be reformers with a window of opportunity to push fresh agendas. Important reforms do not come automatically and require policymakers to "seize the day" in a timely fashion.

China's joining the World Trade Organization (WTO) was one instance of the use of an external pressure to invoke and lock in reform. In the 1990s, banking reform met huge resistance for the reason that State banks did not want to give up their monopoly position. Several local governments also opposed the reform because they were afraid of losing their ability to direct credit, which made it very hard for State banks to really operate as commercial banks. Largely as a means of forcing further reforms in the banking and other key sectors, the top leaders made a bold move to enter China into the WTO. Although the WTO gave domestic banks few years window protection, in the end, most of the barriers to entry in the banking sector had to be removed such that State banks were eventually forced to compete on a level playing field. By employing external pressure from the WTO accession the government was able to induce a series of reforms within State banks. Although not complete, most Chinese banks have shed off bad loans, many major state banks have listed their stocks in overseas markets and are subject to the scrutinizing of international financial markets, and local bank branches now find it much easier to refuse loans to local officials. Therefore, the use of external pressure largely attained its implicit objectives. This section was concluded noting that all these explanations are highly compatible and complementary with each other and that together they comprise a compelling and holistic clarification of China's miracle.

3. The Evolution of China's African Policy

This first part of chapter three debates the evolution of China's African policy from the founding of novel China to the contemporary period, by means of three turning points: the 'Five Principles of Peaceful Coexistence in the Bandung Conference in 1955, the 'Four Principles of Chinese Cooperation with Africa' in 1982, and a 'Fresh Strategic Cooperation' in 2006.

'Five Principles of Peaceful Coexistence' in the Bandung (Asian-African Conference) Conference in 1955

The relationship between China and Africa can be traced back to over six centuries ago. In 1415, the Chinese explorers Zheng He visited the East African Coast and brought back to China shiploads of Chinese commodities. He reached four times the eastern coast of Africa, where current Tanzania, Kenya, and Somalia are located. Zheng He and his fleet introduced tea, porcelain, silk and advanced technology to the visited regions. What Zheng He took away from Africa was only a giraffe. During his visit, he was able to help extend the influence of China in Africa. But the interaction in modern time started from Bandung Conference held in the year 1955, which was broadly regarded as a seminal event in Sino-African history. The Bandung conference in Indonesia was considered pivotal in defining a new era of China-Africa cooperation. The conference was anticipated to bolster economic and cultural cooperation of both parties and promoted the anti-imperialist and anti-colonial struggle. The conference was attended by representatives of the twenty-nine Asian and African nations. It marked a decisive and crucial change in China relations with Africa. Of the twenty-nine nations that participated in the conference, six were from African nations, such as Libya, Egypt, Ethiopia, Liberia, and soon to be independent then Sudan and Ghana. The Chinese delegation met with several representatives of numerous African liberation movements who attended as observers. During the conference, the former Premier Zhou Enlai use the opportunity to denounce imperialism and colonialism in Africa and pledge support for the independence movement in Algeria, Morocco, and Tunisia.

Premier Zhou Enlai presented the *Five Principle of 'Peaceful Coexistence'*, which covered mutual respect for sovereignty and territorial integrity; mutual non-aggression; non-interference in each other's internal affairs; equality and mutual benefit; and peaceful coexistence (Looy, 2006). The attainment of great diplomatic success followed the conference augmented China's interests in Africa.[6] Premier Zhou Enlai in 1963 embarked on his first ten-country tour of Africa to promote the second-Africa conference. Although few agreed on the need for the second meeting, during his visit to Ghana in 1964, he proposed the *Eight Principles* that were designed to guide China's engagement with African nations.[7] These principles obviously explained the Chinese intention to support African nations by the policy of economic and technical assistance. The assistance is to support African nations to gradually attain self-reliance,

[6] Followed the conference, political interactions were built between China and some African countries, including Egypt, Sudan, and Tunisia at the end of 1950s, Mali, Ghana, Somalia, Uganda, Kenya at the beginning of 1960s.

[7] The eight are: 1. Chinese government have persistently been providing assistance to foreign countries according to the principles of equality and mutual benefit, never regard the assistance as the grant by one sided……. 2. While providing foreign aid, Chinese government strictly respects the sovereignty of recipient countries, no strings attached and no privilege required. 3. in order to relief the burden of recipient countries, Chinese government provides economic aids in the way of interest free or low interest loan, the time limit of repayment could be delayed when it is needed. 4. The purpose of Chinese government providing foreign aid is not to make recipient countries being dependent on China, but to help recipient countries gradually develop on the track of self-reliance and economic development independently. 5. For the projects constructed through China foreign aids, Chinese government does its best to make quick effects through smack investment. Thus, the governments of recipient countries could increase income and accumulate money. 6. Chinese government provides equipment and materials made in China with the best quality, and negotiate the price in accordance with the price of international market….7. While providing technical assistance, Chinese government assures to teach recipients to fully master this kind of technology. 8. The experts who are dispatched by Chinese government to help recipient countries carrying out construction, should be paid as same as their own experts of recipient countries. They are required to not have any special requirement and enjoyment (Gountin, 2006).

independent development, offer best-quality equipment and material of its own manufacturing. China significantly augmented its aid projects in the continent in the 1970s, as demonstrated in the number of African nations (See Table 1a & 1b). Additionally, the principles displayed that the Chinese government offered the aid to African nations with and string attached, at least from an economic viewpoint. Some loans did not require repayment if African nations could not afford this. Nevertheless, for China's decision-makers, the aid diplomacy had both political and ideological purposes. On the ideological level, China appeared to give backing to any revolutionary movement against imperialism, including African revolutions. On the political level, the primary drive was to compete with Taiwan and then get African to support the People Republic of China (PRC) in global recognition and to compete with the Soviet Union in the African sphere.

Table 1a: Thirteen African Nations Receiving Chinese Aid in the 1960s

Country	Aid Agreement Date	Amount (US$ Million)
Algeria	1958	100
Egypt	1958	193
Ghana	1961	81
Mali	1961	148
Somalia	1963	220
Tanzania	1964	534
Kenya	1964	91
Burundi	1964	125
Central African Republic	1964	56
Congo	1964	205
Uganda	1965	77
Mauritania	1967	239
Zambia	1967	372

Source: Wu, 2008

Table 1b: Thirty African Nations Receiving Chinese Aid in the 1970s

Country	Aid Agreement Date	Amount (US$ Million)
Sudan	1970	230
Equatorial Guinea	1971	18.7
Ethiopia	1971	155
Guinea	1971	161
Sierra Leone	1971	94
Togo	1972	77
Tunisia	1972	97
Benin	1972	72
Mauritius	1972	48

Nigeria	1972	3
Rwanda	1972	56
Burkina Faso	1973	92
Cameroon	1973	124
Chad	1973	77
Senegal	1973	108
Niger	1974	64.7
Gabon	1975	26
The Gambia	1975	36
Guinea-Bissau	1975	18
Mozambique	1975	116
São Tomé and Príncipe	1975	12
Botswana	1976	19.4
Comoros	1976	10.3
Morocco	1976	32
Cape Verde	1977	17.6
Liberia	1977	37.4
Seychelles	1978	8.1
Djibouti	1979	12.9

Source: Wu, 2008

Four Principles of Chinese Collaboration with Africa in 1982

The success of China in Africa has strengthened the country's status as a global superpower. Also, Africa plays a significant role in the diplomatic jostling between the People's Republic of China (PRC) and the Republic of China in the United Nations. Out of the 76 overall votes backing the PRC taking over the Chinese seat from Taiwan in 1971, 26 votes came from African countries.[8] This incident led Mao Zedong to claim that "it was our African brothers who carried us into the United Nations. After the most significant objective, the United Nation seat, was attained, a mutual diplomatic recognition between China and America was established. The less intensive global environment was mirrored in China's foreign policy so that economic growth and domestic reforms instead of revolutionary objectives dominated the policy agenda. In 1982, two messages were sent by the 12th Communist Party Committee National Assembly that had implications for China's Africa policy: (i) China would pursue its independent foreign policy characterized with 'mutual benefits' in actual meaning; (ii) China would focus on domestic economic development (Li Anshan, 2007). Based on the 1982 trip to Africa, in line with these changes, the Prime Minister Zhao Ziyang provided an exclusively fresh '*Four Principles on Sino-African Economic and Technical Cooperation'*, which stressed on equality and mutual benefits, practical outcome, diversity in forms and common development (Onderco, 2007).[9] There is a

[8] "Marius Fransman, South African Deputy Minister of International Relations and Cooperation, Keynote Address to the Ambassadorial Forum on China-South Africa Diplomatic Relations at 15 Years", Pretoria, South Africa, September 19, 2013.

[9] The Four Principles include: 1. In carrying out economic and technological cooperation with African countries, China abides by the principles of unity and friendship, equality and mutual benefit, respects their sovereignty, does not interfere in their internal affairs, attaches no political conditions and asks for no privileges whatsoever. 2. In China's economic and technological cooperation with African countries, full play will be given to the strong points and potentials of both sides on the basis of their actual needs and possibilities, and efforts will be made to achieve good economic results with less investment, shorter construction cycle and quicker returns. 3. China's economic and technological cooperation with African countries takes a variety of forms suited to the specific conditions, such as offering technical services, training technical and management personnel, engaging in scientific and technological exchanges, undertaking construction projects, entering into cooperative production and joint ventures. ……4. The purpose of China's economic and technological cooperation with African countries is to contribute to the enhancement of the self-

notable dissimilarity when comparing the *Four Principles of the 1980s* to the *Eight Principles in the 1960s*. The dissimilarity was that China asked for mutual promotion of the two economies, as displayed in principle 2 and 4. Certainly, economic aid between the poor nations could not be sustained in the long term if it was only limited to a one-way flow. By that time, China was no longer interested in sustaining its position as an influential actor in Africa but was eager to develop own economic capability. In other words, Africa lost its significance in China's eyes and was marginalized as the Chinese concentration moved to its own modernization. In the era when the Chinese itself relied on external funds, there was little that the Chinese could offer for African nations.

A Fresh Strategic Cooperation in 2006

There was a pause in China-Africa relationship that lasted until Tiananmen Square event of 1989. The turmoil saw China faced with serious global isolation and Western sanction. It was six African nations (Zambia, Zimbabwe, Mozambique, Lesotho, and Botswana) that stepped up and saved China from the quagmire. In appreciation for the tremendous political favor, China has reciprocated by making Africa the first destination of Chinese foreign minister visit. So, after the turmoil, China intended to focus its diplomacy on the developed nations, but China was confronted with harsh condemnation of human rights and punishment exemplified by political isolation and economic sanction. These made the Chinese government aware of the insurmountable value divergence between itself and Western countries. For that reason, the only strategy for China was to look back and strengthen its ties with developing nations as a defensive mechanism. This meant a reappraisal of the role of the third world nations, including ASEAN nations and African nations, which expressed their understanding towards China's action in handling this internal problem. As part of an effort seeking political support, China's top leaders made high-level visits to Africa in 1979 (Li Xiannian), 1982-1983 (Zhao Ziyang), 1984, 1997, 2001 (Li Peng), 1992 (Yang Shangkun), 1996, 2000, and 2002 (Jiang Zemin), and 2002 (Zhu Rongji- twice). Vice-premier and the Chinese Foreign Minister, Qian Qichen visited over thirty-six African countries between 1990 and 1998. The flurry of activity we see today has deep roots and therefore laid the foundation for an intense diplomacy that continues unabated today. The trip highlighted China's intention in looking for potential political assistance from African nations. During 1996 national visit, President Jiang Zemin suggested building a long-term and stable Sino-African cooperation of all-round cooperation and relationship geared towards the 21st century.

In 2006, the Chinese government specifically published a vital white paper, *China's African Policy*, which was the first Africa policy paper of its kind in China's diplomatic history with African nations. The white paper explains Africa's strategic significance to the Chinese, which embodied China's long-term plans. Over the past decade, the policy has been carried out fully and effectively, playing a significant guiding role in the all-round development of China-Africa relations (Li Anshan, 2007). Through the white paper, the Chinese government showcase to the world that the goal of China's Africa policy is based on *establishing and developing comprehensive and new kind of strategic and cooperative China-Africa partnership and consolidating and bolstering the community of shared future between China and Africa* on the basis of advancing the fundamental interests of both parties. The white paper captures the Chinese government's attempt to further clarify China's determination and goodwill to develop friendly and cooperative relations with Africa and expound the new vision, approach and measures of China's Africa policy under the new circumstances with the aim of guiding the multi-faceted exchanges, cooperation and strategic relationship between China and Africa in the years to come. The Chinese government

reliant capabilities of both sides and promote the growth of the respective national economies by complementing and helping each other. (Brautigam, 1998:49-50).

repeatedly addresses the issue of mutual benefit under the framework of strategic cooperation. Apparently, the gain the Chinese government is referring to does not purely refer to the political benefits in 1955-1978 or the economic interests during 1978-1989. Instead, the Chinese government established strategic objectives via pragmatic pursuits, including cultural exchanges political cooperation, and economic interactions as displayed in the white paper.

3.1 The Application of Eidenfalk's Model of Foreign Policy Change

According to Eidenfalk, he asserted that any analysis of foreign policy transformation has to be balanced in the manner in which it considers factors that affect or influences changes in foreign policy. Speaking of factors influencing change, in the section on factors influencing China's foreign policy change, domestic and international factors that is to say the role of public opinion, business interests, government bureaucracy, China's competition with the West and the socializing effect of being integrated into the community of states (UN), are taken into consideration. These factors do not operate individually instead influence one another. For example, demands from commercial interests and snowballing nationalism compel the government to shorten bureaucratic processes and hasten foreign policy changes. The impact of these domestic factors on foreign policy is not significant given the style of governance in China that is to say civilians concern do not affect the policymaking process. On the other hand, factors emanating from the international system wield great influence and have a higher propensity to inspire change. Such influence derives from the fact that, they affect the identity or image of the nation. In this situation, the steepness of China's foreign policy bureaucracy, public opinion, increasing intentions of individual and large cooperation's intentions to extend their operations to Africa are all represented by China's existing foreign policy. A change in the structure of the international system, brought about by security threats in the form of civil war, refugees, terrorism, and poverty, require states immediate action, mandated by the collective action element that defines characteristics of expected state behaviour in the contemporary international system.

Furthermore, defying these anticipation mandates criticism by other nations. The Chinese government has been a recipient of such critics, which have affected the country's image as a potential worldwide leader. In addressing such negative perceptions on its image, The Chinese government recently shifted the country's form of policy from non-interventionist stance to a proactive one. This close interaction and blending of such factors can influence foreign policy transformation as well as determine the degree to which foreign policy changes. From the examples of policy change discussed initially and drawing from the earlier discussion and differentiation of change and a shift in foreign policy, China change its foreign policy from disbursing aid in form of gifts to a strategy that returns political and economic advantage back to Beijing. This move did not significantly diverge from China's foreign policy. Instead, it only changed the objectives and goals within the same aid policy framework. The move from non-interference to active engagement is regarded as a shift and not a change in China's foreign policy. This becomes an issue of categorization. For example, the non-interference principle is codified in the five principles guiding China's international conduct but active engagement is not. Since the two are not classified in the same category, the movement cannot be regarded as a transformation but a complete shift in the Chinese government policy from one category to the other.

3.2 The Changes in China's Foreign Policy Towards Africa

As stated in the previous chapter, the Chinese strategic rise brought about the change in China's foreign policy. Several experts subscribe to the notion of change in foreign policy among them Herman (1990) who argues that 'change is a pervasive quality of government's foreign policy.

But irrespective of Herman's views and that of other experts, foreign policy surveys have paid less attention to the possibility of change in favor of stability and continuity in foreign policy. It was only after the 1980s that global development for example, the European Union, the demise of the Soviet Union, the spread of democracy as an ordering principle, and the rise of China, coupled with the necessity to improve theories that led experts to start displaying augmented interest in why, when, and how states need to reorient their foreign policies. This part of the paper proceeds by initially presenting a brief discussion on one of the most neglected terms in foreign policy analysis, foreign policy change (Huxsoll, 2003). Various theoretical models of foreign policy change have been constructed by diverse experts (e.g. Goldmann 1982, Holsti 1982, Hallenberg 1984 Hermann 1990, Carlsnaes 1992 & 1993, Rosati et al 1994, Jian 1996, Oldfield 1998, Ataman 1999, Gustavsson 1998 & 1999, Kleistra & Mayer 2001). However, each of these models either ignores or does not deal adequately with certain factors, making them insufficient to fully explain foreign policy change in relation to China's cooperation with African nations. Based on that, this section will focus on the model presented by Joakim Eidenfalk (2006) which is one of the most relevant when applied to China's relations with Africa. Also, making use of the influencing factors, this part of the paper analyses the diverse examples in which China has instituted changes in her foreign policy towards Africa. The analysis is presented within the context of Joakim Eidenfalk's model. Joakim Eidenfalk (2006) sufficiently captures and advances the key debate on China's changing policy towards Africa, in the extent of change model.

This model is most appropriate to analyze China-Africa cooperation as a result of its balanced approach when bearing in mind factors and actors in the policymaking procedure. Joakim Eidenfalk encompassed factors such as the role of leaders, the media, public opinion, the global and regional dimension in opening the windows of opportunity. All these factors were either previously side-lined or no significant impacts in other theoretical models. The ultimate objective of any theoretical model is to break down a given phenomenon into simple and understandable terms. In like manner, by incorporating all possible factors in Eidenfalk (2006) model and made it relatively easy to explain the reason foreign policy changes and clarify that change is not influenced by a single factor but an eclectic array of factors. Bearing in mind these factors, individually, it also bolsters our capacity to comprehend the reason nations change their foreign policies. Joakim Eidenfalk also warns against the tendency of merely stating the factors that influence the policy procedure, stressing, instead, the significance of the interactions and influence that these factors have on each other as well as with the actors in the policy procedure in comprehending the reason foreign policies change and the accompanying policy effects. Joakim Eidenfalk called his model the 'extent of change' in that it 'looks at the scope, domain, and effects of change, thereby measuring the extent of change.' Unlike other models Joakim Eidenfalk's focus on the dimensions and aspects of change itself.' In another scenario, Doeser (2013) debates that foreign policy change can also be as a result of a single initiative by the state leaders. The author asserts that this kind of policy change 'is the result of an alternative policy-maker, often the head of government, who imposes his own vision of the basic redirection necessary in foreign policy. It is the leaders' determination and vision, which is vital in determining changes in foreign policy.

Speaking of leader, Deng Xiaoping transformation of China from the ideological and confrontation conduct during Mao's era, to emphasis more on economic openness, integration and friendly partnership, in some way fits Doeser's conception of leader motivated foreign policy change (Botchway, 2011). However, the timeframe in which Deng's changes happened to fallout of the scope of this study. One of the greatest challenges and concern of Xi Jinping in Africa is security issues for China's citizens and investment. The challenges create a window of opportunity that the Chinese government could explore, but Xi Jinping's personal initiative in this regard is yet to be determined. Since Xi Jinping inauguration, China has adopted a more assertive stance in Africa by engaging directly in diplomatic negotiations and helping to deploy combat troops in conflict zones (Sun, 2014). The preceding part of this paper presents the most vital discussion of this paper, especially the discussion on the actual changes in China policies towards Africa. In order to comprehend China's engagement in Africa, we have to understand the transformation of the strategy following the Chinese opening up in 1978, and what brought about the change of its foreign policy, especially China's Africa policy.

China's approach to Africa has already shifted from providing political support and the dominance of ideological considerations to sort of economic diplomacy that is focused on facilitating win-win cooperation through the market economy. Once referred to as a "hopeless continent," Africa has undergone structural economic adjustments and encouraged privatization over the past decade, as opposed to the past practices of relying heavily on policy adjustments and foreign aid. Compared with Western nations, one sees that the Chinese foreign policy towards Africa is relatively more unique and suitable. This is because Chinese and African industrial chains and economies have proven to be highly complementary. As one of the world's vital centers for industrial productions, China's economic development is currently in the midst of transition and needs Africa's energy and resources. Similarly, China can offer African nations with low-cost industrial goods and civil engineering teams. The interconnection of these industrial chains will only be able to continue developing in a politically stable environment. It will be difficult for the Western nations, especially, European nations and the United States to accomplish this, for the reason that their levels of industrial development are comparatively high. African markets do not strongly favor cutting-edge technological goods, while Western nations are not especially interested in making investments in the small risky market.

So, Africa and China's closely integrated economic development is not merely a result of the policies by either party. This development is more a result of the connections and interactions between China and Africa which has led to the possibility of the global industrial chains as well as the economic diplomacy resulting from the changing China's Africa policy. According to Anshan (2007), the author asserts that two factors caused the transformation: the transformation of the Chinese strategic thinking (emphasis is shifted to the internal economy) and the judgement of the international situation (peace and development, instead of revolution and war turned out to be the major issues). Two significant changes followed the transformation; the initial argument is based on the fact that China foreign policy has changed from ideological considerations to economic diplomacy and the other argument is that there is a shift toward a new type of international relations from a single form of aid to multiple channels of cooperation. All these changes are summed up to determine the degree of change needed by the modified Joakim Eidenfalk's model of foreign policy change. The next chapter will look at these two significant changes that followed the Chinese transformation regarding China's Africa policy as well as what it means for African nations.

4. The Two Significant Signs of Changes in China's Africa Policy and What It Means for Africa

4.1 From Ideological Considerations to Economic Diplomacy

According to Anshan (2007), the author acknowledges the close relationship between China's foreign policy and its ideology. Actually, China's ideology works as the guiding principle and cornerstone of how the Chinese interact with other nations, especially African nations. This study argues that if ideology, as the guiding principle of foreign policy evolves, then foreign policy will follow as well. As a result, the connection between these two factors presents one of the most distinguished and important instances in which China has shifted from the way it normally interacts and engages African nations. The Chinese relations with African nations were strongly driven by ideological deliberation before the 1980s, particularly directed towards curtailing Soviet expansionism, European colonialism and American imperialism in Africa. It all started after the founding of People Republic of China, China initially adopted the one-sided policy of pro-USSR and anti-U.S. in the 1950s, then the policy of double-attack of anti-imperialism and anti-revisionism (1960s), and later the policy of alliance with the United States while opposition to USSR in the 1970s (Anshan, 2007). During this period, the focus of China's foreign policy towards Africa was that the Chinese should stand at the frontier of anti-colonialism, anti-imperialism, and anti-revisionism. Following such commitment, the Chinese government sponsored and assisted radical African liberation parties with rhetorical financial and military training and equipment (Shinn & Eisenman, 2012). According to Mashingaidze, these parties include South-West People's Organization (SWAPO) in Namibia, the African National Congress (ANC) in South Africa (Worden, 1986), the Mozambique Liberation Front (FRELIMO) in Mozambique, the African Party for the Independence of Guinea and Cape Verde (PAIGC) in Guinea-Bissau, Zimbabwe African National Union ZANU in Rhodesia (Zimbabwe) amongst several other (Mashingaidze, 2016). The Chinese continent-wide coverage displays the level of commitment the country had towards realizing its ideology and more significantly, the attainment of the goals and objectives that mandated the Chinese presence in the continent of Africa.

Li Anshan asserts that against former instances in the 1960s in which the Chinese Communist Party refused to have contact with non-communist political parties in Africa. However, the 1982 Chinese Communists Party conference ushered a fresh plan for engaging other progressive political parties. The plan comprises of the guiding principles like the mutual respect for each other's territorial integrity and sovereignty, mutual non-aggression, mutual non-interference in each other's internal affairs and equality and cooperation for mutual benefit, which are principles driven by the 1954 principles of peaceful co-existence (Anshan, 2007). The principles originally represented a vision of international relations that was highly principled and not based on realism necessarily. In line with Li Anshan claim, Mohan & Power (2008) shared a similar opinion that Enlai and Mao period paid special attention to ideology and applied ideology in establishing the principles that were to govern partnership and provision of development assistance to developing nations. The Chinese ideology cocooned the ideas of independence and nationalism, ethical values that were meant to bolster the image of the Chinese in Africa while simultaneously demonizing Western nations and their ideologies of domination based on imperialism and colonialism. The positive trends in the manner in which the Chinese government engaged African nations were no longer motivated by ideology as stated earlier on; this shift from ideology reshapes China's Africa cooperation. This change can be interpreted this way: (i) the first aspect focus on the partnership of interaction that is not confined to the ruling parties alone, but also to the non-ruling parties; (ii) the cooperation between African nations and the Chinese government is no longer based on socialist ideology, but now comprises of all parties irrespective of their ideological perspectives; (iii) the cooperation between Chinese government and African leaders is no longer based on party politics but now encompass interaction between sub-national players like the Ministries of Finance, Trade, Foreign affairs, individual provinces, Non-governmental Organizations (NGOs), and multinational cooperation's (Mashingaidze, 2016).

In essence, the Chinese foreign policy towards Africa changed from the Cold war ideology to a more pragmatic and classical pursuit of economic self-interest in the form of access to raw materials and the construction of spheres of influence via military assistance, investment, infrastructure financing, building capacity, and trade. The establishment of the Forum on China–Africa Cooperation (FOCAC) signifies a mixture of all these pragmatic considerations and also, the several pledges made by the Chinese government indicates the Chinese commitments to this fresh plan. The shift from ideological emphasis also altered the strategy through which the Chinese sought cooperation with its African counterparts. The Chinese government slowly altered its strategies by greatly strengthening its interaction with African parties, and the Chinese government relations with others is characterized following a shift from emphasis to Neutrality, from confrontation to partnership, from revolution to economic development, and from isolation to worldwide engagement (Mohan & Power, 2008). The transition has helped to strengthen China-Africa cooperation. High-level visits have been frequent and numerous talks have been held on how China and Africa should assist each other economically to support each other in the regional and global affairs. The opening up of political and economic relations has significantly augmented China-Africa cooperation, which also turned out to be a significant component in China's African policy.

A Shift Toward a New Type of International Relations: From a Single Form of Aid to Multiple Channels of Cooperation

China's Africa foreign policy shift reflects new realities for African nations. The new reality has shifted China's Africa policy from political contact to exchange through multiple channels of cooperation. Africa is one of China's diplomatic 'new frontiers' as exemplified by new Chinese leader Xi Jinping's maiden foreign trip to Africa in 2013. For that reason, the Chinese primary concern behind China's relations with African nations is the adherence and realization of the five principles guiding China's foreign policy. However, out of the five principles, the Chinese government actions, judge via nations visits and monetary commitments, mutual economic development ranks higher than subsequent commitments to eradicate poverty and make sure independence in African nations become a reality. This paper argues that China's foreign policy towards African nations has changed in two phases that is to say it has shifted from ideological considerations to economic diplomacy and from a single form of aid to multiple channels of cooperation. In order to demonstrate how this form of collaboration transformed, the paper presents the discussion of the different phases in the next paragraphs.

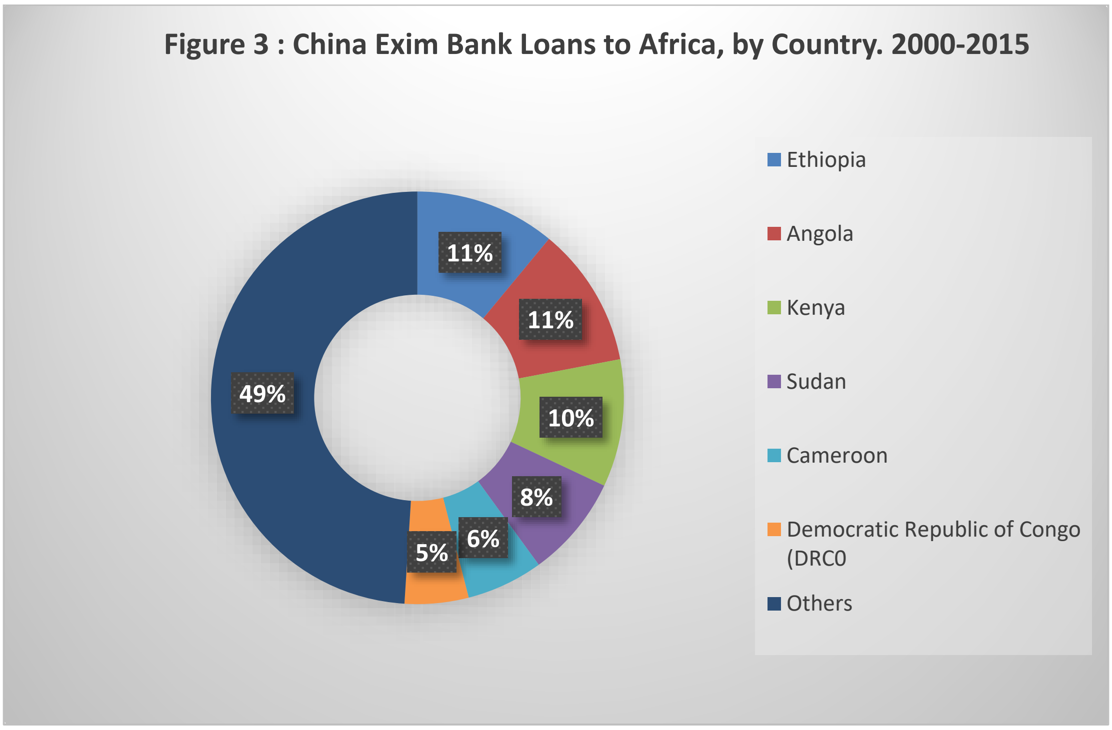
As stated by the 2011 White Paper on China's foreign assistance, China is a developing nation. Over the years, while focusing on its own development, China has been offering assistance to the best of its capability to other developing nations with economic difficulties and fulfilling its due global obligations. In the 1950s, soon after the founding of the People's Republic of China, although it was short of capitals and resources, China started to offer economic assistance and technical aid to other nations, and gradually extended the scope of such assistance. Since China adopted the reform and opening-up policies in the late 1970s, its economy has been developing speedily, with the overall national strength growing notably. The purpose of China's assistance during this period was to 'strengthen (the recipient nation's) self-development capacity, enrich and improve their people's livelihood, and promote their economic growth and social headway.' The 1964 declaration of the Eight Principles for Economic Assistance to other nations offered the premises on which the Chinese government offered foreign assistance to other nations. The core principles of providing foreign assistance comprise of the guiding principles like the mutual respect for each other's territorial integrity and sovereignty, mutual non-aggression, mutual non-interference in each other's internal affairs and equality and cooperation for mutual benefit. After being carried to the United Nation by African nations, the Chinese government augmented its aid to Africa. A good example of China's commitment was the completion of the iconic construction of the Tanzania-Zambia Railway (TAZARA) (also known as *Tansa Tie Lu*); a symbol of China-Africa relations. The railway 50 anniversary was commemorated in September 2017; there is also high impact infrastructural development projects in Africa like the mega-projects inaugurated on May 31, 2017 – the Standard Gauge Railway (SGR). Another good instance in terms of assisting African nations was the support the Chinese government rendered to African political parties during their liberation struggles. Through that support, Egypt turned out to be the first African nations in 1956 to receive this type of support from China (FOCAC, 2015).

As stated by Li Anshan (2007), the author asserts that African leaders proposed that traditional assistance was less efficient in ensuring self-sufficiency in Africa. For that reason, African leaders proposed and encouraged external donors to offer development aid and foreign investment that would bolster developing productivity in Africa. Following this, the Chinese government started reorienting its aid policies by trying a fresh form of assistance. For example, after realizing Africans incompetency to operate and maintain projects it had funded under the total present aid policy, the Chinese government turned out to hands-on in the operations and training of staff at the Segu Textile Plant in Mali and Aniye Sugar Plant in Togo (Mashingaidze, 2016). The issue of capacity building schemes and economic exchange programmes were meant to revolutionize the effectiveness of China's assistance as well as equip African leaders and professionals with the necessary technological management skills and experience necessary to initiate and manage development in their own nations. As stated earlier, China as a developing nation and the country identifies with African nations and considers itself as a friend to other developing nations, therefore, China is in a better position to demonstrate to its African counterparts how to successfully develop their economies. In other to proof this and strengthen its relations with African nations, China organized seminars in which the country trained African professionals as well as capacity building for African officials. A good example was the 2003 Seminar on Economic Reform and Development Strategies that attracted twenty-two officials from sixteen African nations and seven from the African Development Bank (Anshan, 2007).

Additionally, China has helped to accelerate the development of African human resources. In recent years, the Chinese government has set up an African Human Resources Development Fund. By offering government scholarships to students, China has helped develop education and human resources in African countries. Between 2008 and 2011, there were 252 trainees from 40 different African nations participating in these programs (MOE, 2012). Between 2000 and 2012, it was estimated that no less than 45,000 African professionals took part in the short-term training in China; these programs were funded by the African Human Resources Development Foundation (King, 2013). Also, from 2010 to 2012, China ran training sessions with an overall capacity of 27,318 trainees for officials and technical personnel from 54 African nations. The training sessions covered the field of foreign affairs, agriculture, forestry, animal husbandry, fishing, medicine, manufacturing, healthcare, inspection and quarantine, climate change, industry, public management, energy, and social security (Shoko, 2016). Also, Chinese medical teams, agricultural experts, and enterprises situated in Africa have trained local people in an effort to enhance local technological capabilities and upgrading China-Africa cooperation in science and technology (Tambo et al, 2016). In the 5th Ministerial Conference of the Forum on China-Africa Cooperation, the Chinese government announced "African Talents Program" to train 30,000 African professionals in various sectors such as agriculture, industry, economic infrastructure, public facilities, education and medical and healthcare, with the intent on improving African nations' industrial and agricultural productivity, laying a solid foundation for their economic and social development, and improving basic education and healthcare.

China's aid policy in Africa underwent major reforms between 1994 and 1995. These were effected in three main ways: (i) new instruments that connected aid, trade, and investment between China and Africa were introduced and implemented; (ii) programmes that combined foreign aid with economic cooperation were developed and funded, and (iii) the Chinese redefined their portfolio of tools to assist domestic restructuring. Also, the second summit of the Forum on China-Africa Cooperation in Johannesburg in December 2015, Chinese President Xi Jinping announced the "10 major plans" to boost China-African cooperation between 2015-2018. This includes establishing a number of regional vocational hubs and several so-called capacity-building colleges" to address the continent's dearth of skilled workers. This will train 200,000 technicians and offer 40,000 African students with chances for professional training (FOCAC, 2012; MOFCOM, 2015; Shoko, 2016). Based on these increased numbers, the Chinese government placed particular emphasis on the *'quality'* of its training

Also, China's investment in Africa is having a positive impact on research; one example to support this fact is China's African Talent program. The program has trained 30,000 Africans in various fields as well as given 66 African researchers the chance to do post-doctoral research in China and donated 150,000 Yuan ($24,000) worth of research equipment to each of the 24 researchers who had returned to their home countries to work upon completing their joint research projects in China (Tambo et al., 2016). Another comprehensive example of the change in China's assistance towards the African nation is evident in how the Chinese government now applies a win-win situation when offering assistance to African nations instead of the traditional presents (Anshan, 2007). A win-win strategy entails the realization of the need to derive mutual benefits from cooperation. For that reason, the institutionalization of FOCAC meetings was a way of officializing, operationalizing and executing the win-win cooperation between both parties. Furthermore, China pays more attention to investing in "hardware projects" such as roads, bridges, and other infrastructure, which deliver tangible benefits to the local economy of numerous African nations. The Export-Import Bank of China (China Eximbank), founded in 1994, plays an important role in offering loan support to these infrastructure projects. China has provided almost 900 aid projects to African nations since 1956. The aid includes assistance supporting textiles factories, hydropower stations, stadiums, hospitals, and schools. Although China assists African nations with infrastructure which Africa needs in terms of closing the infrastructure deficit, these projects do not come cheap or free. They are funded with Chinese loan from China's largest financier of African loans – China's Export-Import (EXIM) Bank. The billions of dollars China commits to Africa are repayable, long-term loans. From 2000 to 2015, China Eximbank contributed US$63 billion in loans to Africa. largely aimed at road, railroad, airport and harbor construction. The top Africa nation recipients of China Eximbank financing from 2000-2015 are Ethiopia at US$7.2 billion, Angola at US$6.9 billion, and Kenya at US$6.3 billion (EOM, et al, 2017) (see Figure 3). The largest China Eximbank commitment was a US$3.8 billion loan (in two tranches) in 2014 to build the Standard Gauge Railway from Mombasa to Nairobi in Kenya. The second largest loan was a commitment of US$3 billion (split between Ethiopia and Djibouti) in 2013 for the construction of the Addis Ababa-Djibouti Railway (EOM, et al, 2017).



Source: EOM et al, 2017

On the part of the trade, China surpassed the United States to become Africa's largest trade partner in 2009. The trade data portrays an obvious picture for mutually beneficial cooperation. Africa China trade figure augmented remarkably from US$10 billion in 2000 soaring to US$18.5 billion by 2003 reaching US$198.5 billion in 2012; in 2014, the figure grew to $220 billion (MOFCOM, 2015). However, the developing tale of increase in trade between China and Africa changed in 2015; from January to October 2015 the trade between both parties' decrease to $147.6 billion; the trade volume decreased by 18 per cent year-on-year, but in 2016, the trade volume increases to $149.2 billion making China Africa's largest trading partner for the eighth consecutive years (MOFA, 2017) (see figure 4) However, the discourses on trade relations at times propose that the Chinese stands to profit more, as the stronger power in this partnership, such texts shy away from quantifying the profits accruing to African nations in terms of sector development, job opportunities, capacity building and access to resources (Mashingaidze, 2016). In addition, the impact of upsurges in trade figures is highest in Africa compared to China.

Source: Ehizuelen, 2015, MOFCOM, 2015, MOFA, 2017

5. Conclusion

Over the past three decades of reform, China has successfully followed a resource-intensive and outward-oriented economic development model. Since the execution of reform policies, China has progressively embraced the principles of a market-based economy. It transformed its economic structure from a state dominated, self-reliant economy towards a dynamic private-sector-led open economy. China's rapid economic growth over the last few decades has largely been driven by capital accumulation and integration into the global economy through FDI and trade. China has successfully exploited its comparative advantage in abundant cheap labour and specialized in the production of labour intensive manufacturing goods. Improvements in technological efficiency, better reallocation of resources across sectors and structural transformation have substantially raised its productivity.

Generally, the argument in this paper has set the ball rolling for an interesting and intuitive debate on China's foreign policy. Notably, the Chinese re-emergence globally and particularly in Africa has been firmly premised on a strong ideological impetus that pushes for the establishment of a fresh global political dispensation. Ideologically, the Chinese perceive the prevalence of peace both regionally and deliberately as vital in the achievement of this novel dispensation. As a result, it highlighted the issue of peaceful development and co-existence as the basis of its conduct internationally. The five principles of mutual respect for sovereignty and territorial integrity, mutual non-aggression, non-interference in each other's internal affairs, equality and mutual benefit, and peaceful coexistence recognizes specific matters and areas in which the Chinese government foreign policy would identify and implement a plan of penetrating and soliciting partnerships with countries in Africa.

The paper identified and conceptualized the notion of change in a country foreign policy as a significant and central anchor of this survey. The paper presented a brief discussion on Joakim Eidenfalk (2006) model in analyzing foreign policy change as well as the various matters that influence changes in foreign policy. Joakim Eidenfalk's model is recognized as the most appropriate model for analyzing changes in China's Africa policy as a result of its balanced viewpoint and its emphasis on bringing out the degree of change. From this model, domestic and international factors that influence the policy changes are explored. The survey established that worldwide more than domestic factors, in China's circumstances place more demands on the evolution of its foreign policy. The constructivist idea of socialization and structural changes in the global system has contributed more towards China's global behavior. As a result, China's foreign policy towards Africa has transformed from offering aid as gifts to aid provided on a win-win basis. Also, the transformation is apparent in the Chinese government assertive conduct in Africa and in how it has shifted from ideological considerations towards pragmatic considerations.

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How Did Money Market Fund Perform In Its Earlier Years Of Inception In Developing Economies: A Case Of Kenya Fund Market

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Abstract

This research evaluates the performance of money market fund in Kenya for the period 2005 to 2009. The choice of the period was to demonstrate how the fund has been performing in early years when the product was perceived to be new in Kenya and Africa at large. The objective of the study was to compare performance of different funds. This research was motivated by the fact that there was hardly any research on money market funds carried out in less developed economies. The target population was all money market funds in Kenya. The research mainly used secondary data on daily returns and annual reports for the period 2005 to 2009 so as to calculate the net asset value and hence the performance evaluation models proposed by Sharpe (1966), Jensen (1968) and Treynor and Mazuy (1966). In order to establish consistency of performance over the research period using different performance models, a normality test was carried out using Koglomorov-Smirnov and Q-Q plot to establish whether parametric or non-parametric test were to be used. However, as the population was small, Kendall tau-b was used. Over the research period, the finding was that the funds did not perform better than the market on a risk- adjusted basis using various performance measures.

Keywords: Money market fund, Risk adjusted returns, Net asset values, performance

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INTRODUCTION

Investment in financial assets like money market fund was new phenomena in developing countries, Kenya included. Lately, there has been proliferation of many financial products in Kenya financial markets. The investors should understand how the money market has been performing in the past, around the time the trading of such products was adopted.

In order to make optimal investment, history of past performance is also important. The performance of money market fund in its early years is also pertinent to researchers as a way of demonstrating where the started from.

According to Johnstone and Carnes (2010), several potential problems may arise for individual investors in their pursuit to invest, namely; limited knowledge of stock and bonds, limited amount of investable funds making the investor to purchase few issues and each subsequent investment may require revaluations of holding to ensure an appropriate mix. In order to counter such problems, an investment company offers viable solutions through advisory services on financial assets.

For money market funds to perform, professional fund managers should be able to earn above average returns through successful securities analysis. Most of the time, fund managers face challenges to pick mispriced securities into the portfolio in order to earn excess return for the investors. The excess return is earned when the individual portfolio has higher than that of the aggregate which acts as a benchmark. Money market and income securities are intended for the stability of the capital. It is invested in treasury bills and is ideal for investors with a short-term horizon.

Generally, worldwide funds industry grew significantly during 1990s due to a shift by individual investors from real estate and tangible assets to financial assets, increase of such investors to preferences to indirect ownership of stock and bonds through mutual funds and the growth of tax deferred investing for retirement through pension plans which were used to own mutual funds (Fabbozi, Modigliani, Jones & Ferri, 2002)

For example, the number of funds grew substantially in the United States of America (USA) from 1980s. At the end of 2005, the combined assets of U.S. funds approached $9 trillion, up from $370 billion in 1984, while the number of individual funds grew from 1,200 to almost 9,000 over the same period (Bliss, Potter & Schwarz, 2008). This reflected increased levels of sophistications of investors in terms of their knowledge of and appreciation of alternatives to commercial bank services (Johnstone et al, 2010).

In Kenya however, this industry did not take off as early as in developed countries. According to Capital market authority (CMA) investor education handbook (2010), there were only eight funds as at 2010 which were in operation and making necessary reporting, having an average value of Ksh.17.6 billion. These funds included African Alliance, Old Mutual, British American, Stanbic, Commercial Bank of Africa, Zimele, Suntra and Insurance Companies of East Africa (ICEA). This number grew significantly from virtually zero in 2001 to 11 in 2008 while the asset portfolio had grown by an average of ksh.1.9 billion annually to ksh.17.6 billion in the past 9 years to the year 2010.

The evidence of fund performance in those early years was numerous. However, almost all the researches were carried out in developed markets. Miller, Panther and Mazunder (2008) on cross autocorrelations among asset classes in USA mutual funds; Huhmann and Bhattacharyya (2005) on whether USA funds advertising provide the necessary investment information; Ramasamy and Yeung (2003) on funds in emerging markets by looking at Malaysia; Kothari (2001) on mutual funds' performance in New York stock exchange; Thanou (2008) on funds evaluations during up and down market conditions in Greek equity mutual funds.

With no much study on funds' performance in Kenya in the past, investors may not be fully informed in order to make rational investment decision making their effort vainness. It is therefore important from the onset to establish criteria which can be used by investors base their choice depending on their risk profile over their investment horizon. This research therefore shed some light on how the money market performed in the past.

This research used the theory of Portfolio optimizations that involve the selection of securities to be included in the portfolio and the determination of portfolio funds in each security (Jones, 2004). Harry Markowitz (1952) developed the theory of portfolio analysis that provides the basis for scientific portfolio construction that result in efficient portfolio. He examined the problem of finding the portfolio with the maximum expected return for a given level of risk. That is, using the combinations of risk and returns of the portfolio to predict efficient and inefficient portfolios (Varian, 1993). The goal of portfolio managers should therefore be to minimize portfolio risk for any levels of expected returns (Bhalla, 2002). His tasks therefore were to translate security performance to portfolio performance and to select efficient portfolios among large numbers that were available. The task of the individual investor was to select desirable portfolio from efficient ones based on his risk profile (Varian, 1993). The lesson drawn from this theory is that different funds have different degrees of risks and returns due to intentional or unintentional predictions. In addition, holding mispriced securities or undiversified portfolio could lead to poor performance. Therefore, Alpha, beta and R squared that were used in performance evaluation were derived from Markowitz theory of portfolio construction.

The empirical findings on fund performance are mixed. Gruber (1996) finds using a four-factor model that a fund underperforms by 65 basis points per year. Since the average expense ratio in his sample is about 113 basis points per year, this implies that funds earn positive risk-adjusted returns, but charge the investors more than the value added. Wermers (2000) on his part carried out a research on funds' performance in America and found that funds hold stocks that outperform by market 1.3 percent per year, but their net results underperform by one percent. Out of this, 1.6 percent is due to expense and transaction costs. Taib and Isa (2007) also carried out research on Malaysian funds aggregate performance over the period 1991-2001 by employing different performance measures. Their results show that on average, the performance falls below market portfolio and risk free returns. Arugaslan, Edwards & Samant (2008) used 50 US based international funds to evaluate their Risk-adjusted performance during1994-2004.Their empirical results show that the funds with the highest average returns may lose their attractiveness to investors once the degree of risk embedded in the fund has been factored into the analysis.

As evident from the empirical researches drawn from developed economies, the result gave mixed findings. Some give positive results while others gave negative results. The study explored on funds in Kenya as a developing economy with unique characteristics different from those of developed nations so as to establish whether the findings in developed nations can be replicated.

METHODS

The study employed descriptive cross sectional and longitudinal research design. The data collected was quantitative in nature and were collected from each fund. The research used mainly secondary data obtained from funds data base and annual reports requested from fund managers. The population of the study constituted all the funds in Kenya between 1st January 2006 and 31st December 2009. The monthly returns for each scheme were calculated from the daily net asset value (NAV) of each fund. The daily NAV was then used to calculate the monthly and yearly returns for individual funds and that of the market over the study period.

In order to increase reliability for the secondary data, the data was obtained from the funds data base and annual reports which were certified. The content in these sources are heavily regulated according to law and are therefore considered to be reliable. To test the validity of secondary data, Karlsson and persson (2005) argue that the quantitative empirical study requires a long observation period and the inclusion of as many funds as possible in the study. They chose five-year study and included many funds as possible. This research also chose a four-year study and included all the funds that were in existence from 2006 to 2009 so as to reduce survivorship bias. In order to increase the validity, the net asset values were calculated from monthly data.

The analyst from Old Mutual was then used to gather data from the target population. The monthly data pertaining to the unit trust performance covering the period from 1st January 2006 to 31st December 2009 was collected from the funds data base and annual reports which were available in the business daily newspapers and in some cases from fund managers themselves. In order to determine which model to use, the funds normality were tested. According to Razali and Wah (2010) the normal quartile–quartile (Q-Q) plots is the most commonly used and effective diagnostic tool for checking the normality of the data. The fund returns were therefore tested for normality using Kolmogorov-Smirnov test and Q-Q plots. Kolmogorov-Smirnov test is appropriate in a situation where the parameters of hypothesized distribution are completely known (Razali et al, 2010). As the data on funds were found to be normal, measures using capital asset pricing model were ideal. Therefore the standard performance measures developed by Sharpe (1966),Treynor (1965) and Jensen (1967) were used to measure performance

Performance of Money Market Funds

During the year 2005, there were only three mutual funds, which were trading in money market namely; Old Mutual, Britak and African Alliance. The number grew to seven funds by 2009. All the funds in 2005 earned higher returns than the market index. However, in 2006, all the funds had negative returns except OMK which had a slightly higher return of 0.45% compared to the market index of 3.1 %. In 2007, all the funds managed to earn higher positive returns compared to the market except African Alliance which had a negative return of 0.4% against a positive market return of 0.2%. Again, in 2008, the funds earned a higher positive returns than the market against Britak which had a negative return of 0.03 % against a negative market return of 3.2 %. The market return for 2009 was also negative while the individual funds had positive returns except Zimele, Suntra and ICEA. Generally, OMK had consistent positive returns over the research period. These summaries of returns and risk as measured in standard deviation and beta for all the funds were provided in Table 1 below.

Table 1: Returns and Risk (RP δP and βP) for the Money Market

Funds name			2006			2007			2008			2009
	R_P	δ_P	β_P	R^2	R_P	δ_P	β_P	R^2	R_P	δ_P	β_P	R^2
OMK	0.0045	0.1585	-1.389	0.0100	0.0683	0.0969	0.0139	0.1059	0.0843	0.0115	0.0760	-0.3623
BRITAK	-0.0180	0.0616	0.2561	0.0071	0.0682	-0.3975	-0.0004	0.0183	-0.0457	0.0353	0.1158	-0.1364
African	-0.0182	0.0498	-0.2343	-0.004	0.0227	0.0889	0.0090	0.0556	-0.3111	0.0110	0.0351	-0.0419
Stanbic	-0.1868	0.3439	5.4921	0.0168	0.0644	0.0385	0.0106	0.0557	-0.1838	0.0261	0.0839	0.0054
CBA	-0.045	0.1128	0.1870	0.0282	0.1750	1.5213	0.0058	0.0661	0.3303	0.0113	0.1215	0.1703
Zimele				0.0169	0.1860	3.8046	0.0199	0.0661	0.2581	-0.002	0.0062	0.0186
Suntra							0.0123	0.0953	-0.6536	-0.002	0.0953	-0.3071
ICEA							0.0386	0.0755	-0.1640	-0.009	0.0556	0.0452
Market	0.0306	0.042		0.002	0.039		-0.0322	0.0816		-0.002	0.0947	

During the year 2005, all the funds were more risky than the market as measured by standard deviation. The risk of the market was 5.1% while OMK was the most risky with 17.38%. African Alliance had the least risk of 9.4%. In 2006, again the market was less risky with 4.2% while the least risky fund was still African Alliace with 4.98% and the most risky fund was Stanbic with 34.3%. African Alliance was less risky with 2.26% in 2007 against the market risk of 3.9%. However, Zimele was the riskiest with a standard deviation of 18.6% closely followed by CBA with a standard deviation of 17.5%. In 2008, Britak was the safest with 1.8% against the market risk of 8%. The most risky fund was OMK with a standard deviation of 10.6%.

All the funds are less risky as compared to the market except Suntra with 9.5% and OMK with (10.6%). In 2009, all the funds were less risky than the market except CBA (12.2%), Britak (11.6%) and Suntra (9.5%) against market risk of 9.4%. Zimele was the safest with a risk of 0.6% followed by African Alliance with 3.5%. Generally, African Alliance was relatively the safest security for investment during the study period.

The aggressiveness or volatility of the fund is measured by use of beta coefficient. Beta measures the systematic risk of the fund. African Alliance was the most aggressive fund during 2005 with a coefficient of 1.29. During 2006, Stanbic was most aggressive with a beta of 5.49 followed by Zimele with a beta of 3.8 and then by CBA with a beta of 1.52. In 2007, Zimele was most aggressive with a beta of 3.8 followed by CBA with a beta of 1.5. During the year 2008 and 2009, none of the funds was aggressive as all had a beta of less than one.

Table 2 below shows year-to-year risk adjusted Sharpe, Treynor and Jensen performance measures. Sharpe gives reward to variability ratio. All the funds including the market return had negative returns in 2005. However, in 2006, all the individual funds had negative returns while the market had a positive return of 0.73. In 2007, 2008 and 2009, all the funds including the market portfolio had negative returns. Despite negative returns, all the funds underperformed the market during the period of study.

Table 2: Sharpe, Treynor and Jensen Measures of Performance for Money Market Fund

Funds name	2006			2007			2008			2009		
	P	P	A	P	P	A	P	P	A	P	P	A
OMK	-0.401	0.046	-0.116	-0.849	-0.598	-0.051	-0.577	-0.7249	-0.052	-0.821	0.1724	-0.09
BRITAK	-1.400	-0.337	-0.077	-0.892	0.153	-0.089	-4.115	1.6508	-0.080	-0.334	0.284	-0.05
African	-1.73	0.369	-0.095	-3.178	-0.81	-0.066	-1.188	0.2122	-0.099	-1.795	1.5026	-0.066
Stanbic	-0.741	-0.046	-0.049	-0.794	-1.329	-0.049	-1.1572	0.3507	-0.084	-0.572	-8.930	-0.048
CBA	-1.003	-0.605	-0.106	-0.227	-0.026	0.0670	-1.0468	-0.2094	-0.034	-0.516	-0.368	-0.05
Zimele				-0.274	-0.013	0.2162	-0.8326	-0.2133	-0.027	-12.3	-4.086	-0.075
Suntra							0.6578	0.0959	-0.133	-0.797	0.2472	-0.099
ICEA							-0.4786	0.2203	-0.054	-1.497	-1.84	-0.08

Treynor performance measure also gives the same result Sharpe measure except that it uses Beta as a measure of risk. Similarly, none of the fund outperformed the market according to Treynor measure.

On average, the Jensen alpha should equal zero, which implies that the return is commensurate with the underlying risk. A positive alpha implies that excess return is attained for value, while a negative value reflects underperformance by that amount (Traynor, 2010). The result shows that in 2005, all the funds outperformed the market. However, in 2006, none of the funds outperformed the market. In 2007, only Zimele and CBA outperformed the market but in 2008 and 2009, none of the funds had outperformed the market. Generally, the funds did poorly as compared to the market during the study period.

DISCUSSION, CONCLUSION AND SUGGESTIONS

On average, all the funds during the study periods performed poorly against the market index. The inferior risk adjusted performance measures was in agreement with findings by Taib and Isa (2007) who studied Malaysian funds aggregate performance. A mixed finding was made in the studies by Mehreen & Nawazish (2011) that show the funds outperformed the market as revealed by Jensen alpha while Sharpe shows that no funds were preferable. According to them, Mutual Fund industry's Sharpe ratio is 0.47 as compared to market that is 0.27 risk premium per one percent of standard deviation. Results of Jensen differential measure also show positive after cost alpha. Hence, overall results suggest that funds in Pakistan are able to add value. Whereas results also show some of the funds under perform, these funds are facing the diversification problem. According to them, funds industry outperformed the market proxy by 0.86 percent.

However a different finding was made in the study by Lai and Lau (2010) who examined the performance of 311 mutual funds from January 1990 to December 2005 in Malaysia by using composite portfolio performance measures and found evidence that fund performances yield superior returns with relatively lower systematic risks.

African alliance was the most aggressive fund in the money market as shown by positive betas. Both the equity and blended were generally aggressive in 2006 and 2007 even though they had negative betas in subsequent years. The funds generally have lower standard deviation implying that all the portfolios are well diversified. It was noted that young and small firms perform better than big and old firms which is in consistent with the study by Karoui and Meier (2009) who used different model and found that newly launched funds outperform their counterparts significantly using Carhart four factor models. This is because newly launched funds are afforded greater autonomy in portfolio choice because they have a smaller base of investor capital to allocate to individual securities.

Generally, none of the funds outperformed the market index as almost all the funds had negative Sharpe and Jensen alphas for the sample period. However, treynor index were positive for some funds and negative for others in money market funds and therefore neither underperforms nor outperforms the market.

The objective of the research was to measure the performance of money market funds in Kenya. For the five-year period, the funds performed no better than the market on a risk- adjusted basis using various performance measures. The funds were neither preferable nor outperform the market. Further, there were no portfolio diversifications as shown by lower coefficient of determination. However, the individual funds risks were generally lower compared to that of the market as measured using standard deviations and beta. This was consistent with many other empirical findings.

The study suggest research to be carried out on the effect of recent government regulation of funds on its performance, the impact of outreach activities by the funds on its performance and the adoption of county government on the performance of in Kenya

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Protecting Copyrights and Related Rights in the Digital Dilemma: Some Challenges

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Abstract

Intellectual Property plays a vital role in modern economies as a valuable intangible asset. Particularly, copyrights and related rights can be considered as a one of the most viable intellectual property rights which can easily be acquired as well as unduly exploited. Notably, the violation of the legitimate rights of the copyright owners has been gradually increased with the proliferation of modern technologies. It is evident that it is easier to make unauthorized copies of copyrighted works with using technologically advanced equipment within mini seconds without consuming much effort. Inevitably, such a misappropriation of property rights would challenge the interests of the owners who devoted their skills, interests and labour to create that work with a financial motive. Therefore, the existing intellectual property law is being modified in order to cater the new challenges on copyrights which occur due to the expanding nature of digital environment. The primary objective of this paper is to identify and anlyse the changing nature of the challenges on copyrights and related rights in an era of digitalization. Also, it aims to analyse the recent developments of international law for the purpose of gaining better understanding of how and to what extent these issues have been identified and addressed in international level. Furthermore, it discusses the experience of some selected jurisdictions such as Unites States, United Kingdom and European Union, in order to make out some recent trends in protecting copyrights and related rights in a digital environment. Finally, this research intends to identify the loopholes of Sri Lankan law and propose some suggestions to enrich existing law relating to copyrights and related rights so as to strike a balance between the rights of the owners and general public.

Keywords: intellectual property, copyrights, related rights, digital environment, striking a balance

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Introduction

> "Digitization has made it much easier to manipulate, reproduce, and distribute protected works. Digital content can be combined, altered, mixed, and manipulated easily. By enabling the making of perfect copies of copyrighted works for little cost, digital technology threatens to undermine the distribution systems and increase unauthorized use of copyright works…" (Rafiqi and Bhat, 2013)

Copyright can be recognized as an exclusive right of an author in relating to his or her creation. As Karunarathna (2010) pointed out, "the law of copyright concerns the rights of the authors of literary, artistic and scientific creations - commonly known as 'works'-and legitimate interests of the users of such creations." However, it is notable that, copyright law protects only the form of expression of ideas not the ideas themselves. (*WIPO* ,2008)

As recognized by Article 2 of the Berne convention of 1971, copyright protection includes diverse forms of creativity, such as, for example, writings, musical compositions, films, drawings, photography or architectural creations and etc. In addition to that, the WIPO Copyright Treaty of 1996 (WCT) introduced computer programmes, considered as literary works.

As well, there are related rights or neighboring rights attached to the copyright protection. It can be identified under three categories, the rights of performing artists in their performances, the rights of producers of phonograms in their phonograms, and the rights of broadcasting organizations in their radio and television programs (*WIPO*, 2008). These related rights protect the interests of the persons who contribute to develop the creation by expressing some kind of creativity or skills.

the proliferation of technology leads the copyrights and related rights regimes towards rapid changes which would be pervasive enough to cater to the needs of the 'creators' on the one hand, and society at large on the other. Whereas the ultimate aim of copyrights and related rights is to make a fair balance between the rights of those two parties. For the purpose of achieving a tradeoff between these conflicting interests, moral and economic rights and a specific time period for economical rights are defined by law. However, the scope, purpose and the applicability of the copyrights and related rights are being challenged by the digital environment. Thus, to overcome these various challenges put forward by the expanding nature of the modern technology, a need arises to expand the frontiers of copyrights and related rights and to renovate the existing legal framework relating to protect those rights in networked and digitalized environment.

In analyzing the international legal context of copyrights and related rights we can identify some initiatives which address this specific issue of protecting copyrights and related rights in a digital environment. However, the Sri Lankan context is still not in par with international legal regime and need to be revised with more developed legal principles.

Thus, this paper aims to discuss the effect of digitalization on the scope and enforcement of the copyrights and related rights. Secondly, it discusses the international legal framework and recent developments of the European Union (EU), United Kingdom (UK) and the United States of America's (USA) to gain a better understanding of digitalization and its effect on the copyrights and related rights. Thirdly, this paper focuses on the existing Sri Lankan legal framework and its capability of safeguarding the rights of the creators in a digital environment.

Finally, it concludes with suggestions to enhance existing law relating to copyrights and related rights which can be suited into the digitalized future.

Theoretical Framework

Among most other theories related to Intellectual Property Rights (IPR), the economic theory and utilitarian theory are central to this discussion. The economic theory mandates the certain exploitation of inventions or creations by the owners. Accordingly, this theory justifies the copyright owner's right to have a limited monopoly over his or her intellectual creation. However, the ideology of utilitarian theory is useful in harmonizing conflicting interests in the interface of IPR. As Fisher (2001) argues, the first and most popular of the four employs the familiar utilitarian guideline that lawmakers' beacon when shaping property rights should be the maximization of net social welfare. Therefore, it is evident that, while economic theory tilted on protecting the interests of the copyright owners, utilitarian theory emphasizes of striking down a balance between the rights of owners as well as the general public. This paper is constructed on the rationales of above mentioned theories.

Research Methodology

This research is a normative research which primarily based on an extensive literature review. The research comparatively studies United States, European Union and United Kingdom jurisdictions of copyrights protection in digitalized environment. The purpose of selecting comparative methodology is to identify the recent developments in this field and discuss it's applicability into the Sri Lankan context.

As primary sources, international instruments, legislations and case law such as WIPO Copyright Treaty of 1996 and WIPO performances and Phonograms Treaty, Intellectual Property Act No 36 of 2003 in Sri Lanka and US Digital Millennium Copyright Act have been used in this research. Furthermore, journal articles, web resources and text books have been referred as secondary sources in order to enrich the research.

Results and Discussions

Copyright and Related Rights

As pointed out by the World Intellectual Property Organization (WIPO); 'copyright is the legal protection given to the creator of an original work'. (*WIPO*, 2008) Nonetheless, it can be described as 'an encouragement that takes the form of valuable or enforceable rights that motivate the production of literary and artistic works of lasting benefits to the world'. (*Washington Co. v. Pearson* ,1939) Thus, it is meant that copyright is the exclusive rights granted by law to the creator of an original work to do, authorize or prohibit certain acts in relation to such work.(http://www.cott.org.tt/). The most remarkable fact is that copyright protection does not require any kind of registration to be entitled to Intellectual Property (IP) protection.

Rights of a copyright owner can be basically divided into two phases; namely, economic rights and moral rights. Economic rights of a copyright owner encapsulates certain rights which can be exploited by the owners and gain economic advantages such as right to produce the work in various forms, public performance rights, right to broadcasting the work via radio, cable or satellite, right to translate/adaptation of work and right of distribution of that work. However, for the purpose of having a fair balance between the exclusive rights of the copyright owners' interests and the interests of the society, these bundles of exclusive rights are limited to a specific period of time.

Where moral rights are concerned, these rights are independent from economic rights and can be considered as paternity rights attributed to the particular creation. Thus, it is clear that the economic rights coupled with moral rights grant an owner of copyrights an exclusive control over his or her rights. However, as lucidly pointed out by many scholars, as well as in the Berne Convention, 'fair use' exemptions and other limitations such as limitations on reproduction rights etc. can be used to limit the authority of the copyright owners. When anlysing the Sri Lankan situation, it is clear that the domestic protection of copyrights also more or less equal to the international legal framework.

Related rights are another set of similar rights which protects the rights of performers, producers of sound recording and broadcasting organizations. Related rights also hold an important place in the realm of IP, as the rights of inter-mediators who assist authors to communicate their intellectual creations to the general public. (WIPO, 2008) Related rights are very much linked with copy rights and sometimes can be considered as a result of copyrightable creations.

Table 1: Relationship between Copyrights and Related Rights

Copyrights	Related Rights
Composer	Musician
Play writer	Actor
Author/composer	Recording industry
Author/composer	Performer/singer

The related rights owners are given a bundle of exclusive rights to use and enjoy his or her intellectual creations. However, related rights are also limited by virtue of 'fair use' and the duration of protection. As per the Article 14 of the International Convention for the Protection of Performers, Producers of Phonograms and Broadcasting Organizations of 1961 (Rome Convention), the term of the related rights protection is limited to a period of twenty years from the date of incorporation, fixation and broadcast.

The Sri Lankan IP Act embraces three categories of rights- the rights of performing artists, the rights of the producers of sound recordings, and the rights of and broadcasting organizations. Though, IP Act grants this protection to the related rights in Sri Lanka, it is not dealt with complexities in a digital environment. Therefore, it can be argued that performers, producers of sound recordings and broadcasting organizations' rights are vulnerable in the Sri Lankan context and the time has reached to explore the prospectus of widen the existing protection.

When considering the both contexts of copyrights and related rights it is very clear that the international law relating to these regimes are rather comprehensive and well established in their own territories. However, the question is whether these established principles are able to cater to all complexities that have arisen with networking and digitalization in the current context. Thus, we have to consider the challenges that have occurred in using, transmitting and storing copyrighted and related righted works in computers and digital networks.

Digitalization and challenges to copyright law.

As some scholars correctly opined, the rapid evolution of digital technology, and in particular the internet, enables the copy of a song, article, movie, or photo to be made without permission and to be disseminated around the world through the click of a button. (Dimock and Punniyamoorthy,2006) Contrast to the analog system, digital systems could be able to record and transmit information in higher quality in less time and at higher speed (Fleischmann,1987). Therefore, it can be argued that, the foundation of traditional copyright law protection has been challenged significantly after introducing the digital technology.

There are two extremes of arguments which are relevant to the copyrights and related rights in a digitalized environment. On the one hand, the commentators argue that the copyrights has no place in the digital environment whereas traditional copyrights cause to curtail, access and disseminate of knowledge. (Copyright News, 2012) On the other hand, it connotes that copyrights are needed for greater public good because it gives the authors an incentive to create and it encourages the dissemination of knowledge (IFLA, 2001). This notion equally applies to the related rights issue as well. The second argument is rather realistic and should be upheld on the basis that in order to ensure correct distribution, reproduction and selling of intellectual capital need to be monitored to avoid piracy of creations even in a digital environment.

Admittedly, there are third parties who are making a lot of money by selling or distributing copyright works electronically (Copyright News,2012). Illegal downloads of movies, TV series and software which are sold at very low prices effects the relative rights of the legitimate right holders such as film exhibitors, broadcasting organizations, performing artists and etc.

Two three decades ago the physical copies of the books and other literary works were more popular in disseminating knowledge. However, today the trend is using technology in selling, reproduction or even having digital versions of books and other literary works. Nevertheless, online selling of these works would be based on the payments and other encrypted mechanisms; we can find the pdf versions of most of works in the internet which amounts to a violation of the economic rights of the authors of those works.

Furthermore, the collections of books, journals, articles, musical works and other similar works are found on digital libraries, online archives and repositories such as Google books, Open Library etc. However, the lawfulness of these activities still remain uncertain and digital archives are challenged on the basis of non-clearance of copyrights. Sometimes, the 'fair use' limitation would permit the digitization projects to have digital archives of copyright protected works. (*Authors Guide Inc v. Google Inc.*, 2012). For an example, in Sri Lanka, it is very easy to find the unauthorized copies of software, even though those are protected as literary works. Furthermore, the availability of thousands of fine arts, paintings and photographs have paved the way for violation of the rights of the authors of those creations.

Another contentious issue is digital technology has made copyright enforcement difficult to achieve due to its cross territorial nature. In the online environment, works such as videos, recordings of musical performances, and texts can be posted anywhere in the world, retrieved from databases in foreign countries, or made available by online service providers to subscribers located throughout the globe (Rafiqi and Bhat, 2013). So the issue is, how and whose law should determine whether the reproduction of protected work constitute infringement?

Accordingly, it can be argued that, modern digitalization has challenged the existence, scope and protection of the rights of owners of copyright and related rights by making the tasks of the traditional copyright law more difficult and complicated. Therefore, it is obvious that, copyright law should be able to strike a balance between copyright holder's rights and millions of user's rights in the digital environment. Some mechanisms have been introduced in international and domestic jurisdictions particularly addressing this issue.

World Intellectual Property Organization treaties, 1996

World Intellectual Property Organization (WIPO) has introduced separate legal framework for addressing this contentious issues in digital environment. The WIPO Copyright Treaty (WCT) and the WIPO performances and Phonograms Treaty (WPPT) provide for a Berne-consistent update of the international copyright regime. (IFLA, 2001).

According to the Agreed Statement to Article 10 of the WCT, signatory nations are allowed to extend exceptions in the digital environment.

> "It is understood that the provisions of Article 10 permit contracting parties to carry forward and appropriately extend into the digital environment limitations and exceptions in their national laws, which have been considered acceptable under the Berne Convention. Similarly, these provisions should be understood to permit contracting parties to device new exceptions and limitations that are appropriate in the digital network environment."

As mentioned earlier, the international consensus on providing better protection to copyrights and relate rights are primarily encapsulated in the WCT and WPPT. The preamble to the WTC connotes that the main objective of implementing this convention is to introduce new international rules and clarify the interpretation of certain existing rules in order to provide adequate solutions to the questions raised by new economic, social, cultural and technological developments. On the other hand, the WPPT is also designed to facilitate related rights in a very smooth manner which upholds the interests of both creators and general public in a digital environment.

When analyzing WCT and WPPT very closely, the both treaties incorporates the 'three-step-test' and further mandates members to devise new exceptions and limitations appropriate for the digital environment. Thus, it can be admitted that the WCT and WPPT have the effect of expanding the canvas of Berne Convention. Nonetheless, the courts also look into the matters relating to copyrights and related rights infringement in a lucrative manner well suited to have a tradeoff between the rights of the authors, as well as general public in modern context.

Nonetheless, Article 11 of the WTC provides;

> Contracting Parties shall provide adequate legal protection and effective legal remedies against the circumvention of effective technological measures that are used by authors in connection with the exercise of their rights under this Treaty or the Berne Convention and that restrict acts, in respect of their works, which are not authorized by the authors concerned or permitted by law.

Similarly, Article 7 and 11 of the WPPT provide protection of reproduction rights enjoyed by performers and phonogram producers respectively. As it is stipulated in the agreed statement, the Article 9 of the Berne Convention shall apply *mutatis mutandis* to the protection of reproduction rights in the digital environment.

Accordingly, it is evident that, both WCT and WPPT permit contracting parties to adapt suitable exceptions to protect copyright holder's rights in digital environment. Most of the developed nations have implemented WIPO treaties very progressively by enacting enabling legislations. The US Digital Millennium Copyright Act is considered as the most well-known and controversial implementation of the WIPO Treaties (IFLA, 2001).

United States and European Union law.

As mentioned earlier, the US Digital Millennium Copyright Act (DMCA) incorporated the WIPO law by specifically providing protection for copyright holders in digital environment. Section 1201 of DMCA implements the obligation to provide adequate and effective protection against circumvention of technological measures used by copyright owners to protect their works.

Section 1201 divides technological measures into two categories: measures that prevent unauthorized access to a copyrighted work and measures that prevent "Copying" is used in this context as a short-hand for the exercise of any of the exclusive rights of an author under section 106 of the Copyright Act (Copyright Summary.1998). However, some scholars argues that even though the DMCA have enhanced the ability of copyright owners to wield electronic protective measures to control new kinds of exploitations, the goal of copyright law should not be control over works of authorship (Ginsburg, 2001).

Furthermore, there are six additional exceptions mandated in the DMCA to strike down a balance between the interests of the owners and general public namely, non-profit library, achieve and educational institution exception, reverse engineering, encryption research, protection of minors, personal privacy, and security testing. Thus, it can be argued that the USA experience is well complied with the international standards.

As well, the European Union Copyright Directive (EUCD), the Directive on the harmonization of certain aspects of copyright and related rights in the information society also contains a number of prescriptive non-mandatory exceptions which national governments may include in their EUCD implementation legislation if they so wish. It includes exceptions such as temporary reproductions, photographic reproduction of copyright materials, private use and etc. However, the real application and effectiveness of these expanding limitations, scope and protection relating to copyrights and related rights in a digital environment is notably controversial.

Liability on copyright infringement in digital environment: Examples from case law

When examine the US case law, it can be found series of cases which have extensively discussed the nature of liability on copyright infringement in the digital environment. Particularly, in *Sony v Universal Studios* (1984), also known as the *Betamax decision*, the US Supreme Court considered whether Sony is liable for manufacturing and marketing home- use video cassette recorders (VCR). After concerning the competent interests of copyright holders and others who are involved in commercial enterprises, the Court held that, there was no contributory copyright infringement where the product is 'capable of substantial' or 'commercially significant non-infringing uses'.

Furthermore, in *Metro-Goldwyn-Mayer Studios v Grokster Inc.* (2005), also dealt with the issue of indirect or contributory liability. In this case, entertainment companies sued the manufacturers of file-sharing software that allows computer users to download music and movies from each other's computers. It was argued that such downloads violate copyright protections and amount to stealing. However, the Court was mindful of the balance between supporting creativity through copyright protection and promoting the innovation of technology by limiting copyright infringement liability (Dimock and Punniyamoorthy, 2006) and held that,

> "…distributors of P2P sharing software may be liable for inducing copyright infringement even if the software is capable of substantial non-infringing uses. Infringement is possible when a device is distributed with the object of promoting its use to infringe copyright, as shown by clear expression or other affirmative steps taken to foster infringement".

As well, in *A&M Recording v. Napster Inc.* (2001) case the US Court held that, Napster was liable for contributory or vicarious copyright violations because it was allowing millions of users to download music for free. The same approach can be seen in the *New York Times Co v Tasini* (2001). In Tasini , the majority of the US Supreme Court held that electronic databases and CD-ROMs are not simply 'revisions' of periodicals, and therefore explicit permission was required from the authors. The databases were found to infringe the freelance author's right to determine the individual reproduction and distribution of his literary work. (Dimock and Punniyamoorthy, 2006)

Warner Brothers and J.K Rowling v. RDR Books (2008) case is another prominent example which imposed liabilities on copyright infringements. In this case the Court issued a permanent injunction to prevent the RDR Books Co. from print-publishing the online guide created by Steve Vander Ark.

According to aforementioned case law it can be argued that the court has tended to impose indirect or vicarious or secondary or contributory liability on the part of service providers and hosts to protect the copyright owner's right in digital environment. However, the issue is, if the liability is imposed on the every issue, how it impacts on protecting and promoting freedom of expression and information.

Striking a balance

Even though, digitalization has created the greatest challenge to the copyright law, the law itself cannot restrict the advantages of digitalization for the boarder community perspective. As Dimock and Punniyamoorthy (2006) correctly pointed out, as a result of the digitalization,

> "Creators want to ensure that their rights to the work they produce is protected and that others do not appropriate any benefits generated from it. In contrast, users such as teachers, researchers, students, internet service providers (ISPs) seek to ensure that restrictive copyright laws do not inhibit a free and fruitful exchange of digital information."

The Universal Declaration of Human Rights (UDHR) also emphasizes the need for balancing these competent interests. According to the Article 27(2) of the UDHR , "Everyone has the right to the protection of the moral and material interests resulting from any scientific, literary or artistic production of which he is the author." On the other, Article 27(1) connotes the right of general public as "Everyone has the right freely to participate in the cultural life of the community, to enjoy the arts and to share in scientific advancement and its benefits".

When examine the copyright law in relating to digital environment issues, court also emphasize the importance of harmonizing users and creators rights in the digital environment. It is evident that in *Sony v Universal Studios* case the US court has taken a balanced approach to decide the competent interests of copyright holders and others who are involved in commercial enterprises.

As well, in many instances, the court applies fair use doctrine to strike a balance. As mentioned earlier, the acts of fair use include the use of a work for the purposes such as criticism, comment, news reporting, teaching, scholarship or research (Karunarathna,2010). In *Kelly v Arriba Soft Corp* (2002) US Court of Appeals affirmed that unauthorized linking to thumbnail images was a non-infringing fair use. On the other hand, US court in *Universal City Studios, Inc. v. Reimerdes* (2000) case, dismissed the fact that there might be legitimate fair use reason for copying all the part of a DVD film using a software device.

Accordingly, it is noteworthy to point out that, the copyright protection in digital environment must encompass a fair balance between copyright holder's right and user's rights.

Sri Lankan Experience

The Sri Lankan IP law does not provide any specific protection for the copyright infringements in digital environment. However, according to the Section 9(1) of the Intellectual Property Act No. 36 of 2003 (the Act) in Sri Lanka, owner of copyright of a work shall have the exclusive right to carry out or to authorize the following acts in relation to the work, such as reproduction, translation, adaptation, public distribution and etc…

On the other, Section 11(1) of the Act spell out the fair use doctrine as, "the fair use of a work, including such use by reproduction in copies or by any other means specified by that section, for purposes such as criticism, comment, news reporting, teaching (including multiple copies for classroom use), scholarship or research, shall not be an infringement of copyright".

However, the notable fact is that, the Act imposes both civil and criminal liability for infringement of copyright and related rights. Section 170 of the Act allows the court to grant an injunction restraining copyright violations. As well, Section 178 states that any person who willfully infringes any of the rights protected under Part II of the Act shall be guilty of an offence and shall be liable on conviction after trial before a Magistrate.

In *Hudson Samarasinghe v. Upali Sincoba Enterprises* (2001) case Commercial High Court issued an interim injunction restraining the live performance of a song and producing, marketing and distribution of CDs and cassette named "Rangahala Gee 16" on the basis that the copyright over the lyrics of the song was with the plaintiff.

According to above legislative provisions and judicial interpretations it can be argued that though there is no express provision or law in Sri Lanka which specifically deals with copyright protection in digital environment, the existing IP legal framework could be used to address some issues arise in the digital platform.

Some Possible Solutions

After unveiling the existing problems on copy rights and related rights it is worthwhile to consider the possible solutions to overcome these obstacles. Accordingly, the following steps can be considered:

1. Protection of technological measures such as conditional access systems and encryption which limit the access, as well as unauthorized copying and reproduction of copyrighted and related rights works.

2. Providing automated monitoring and registration of the works in respect of management of copyrights and related rights in a digital environment. This can be used as an assurance to the owners to find a record of every request and utilization of their works transmitted over the network.

3. Protecting the rights of the owners of copyrights and related rights by monitoring the conduct of service providers.

4. Defining the jurisdiction of the law suits on the infringements of copyrights and related rights in a digital environment. This would immensely help to obtain a speedy and cost effective remedy in the infringement of copyrights and related rights.

Furthermore, it can be suggested to initiate collective management system of copyrights and related rights which are specifically aimed to mitigate the violations and infringements of those rights in a digital environment. Thereby, the collective management organizations would serve as links between rights owners and users. Nonetheless, the owners of copyrights and related rights can get the assistance of these collective management organizations to enforce their rights.

When analysing the existing legal framework, it is clear that the remedies available in Section 170 of the IP Act of Sri Lanka, are not pervasive enough to provide effective damages for all kind of infringements occurred in digitalized environment. Nonetheless, it is worthwhile to explore the possibilities of introducing indirect or vicarious or secondary or contributory liability for the producers of modernize digital devices which can easily be used to infringe copyrights and related rights in digital era.

Thus, the existing legal framework should be re-envisaged by considering more sophisticated legal frameworks such as DMCA in US and the Australian Copyright Amendment (Digital Agenda) Act 2000 which is pervasive to cater to all issues which arises in a networked and digital environment. The above suggestions also can be considered while developing a comprehensive legal framework in the Sri Lankan context.

Particularly, the liability on internet service providers include, Google, ebay and etc. should be subjected to certain guidelines and principles (Copyright News, 2012). Therefore, another contentious issue might be arising, whether, the provisions of IP Act wide enough to cover the service providers' infringement? Accordingly, it can be argued that, as one option the provisions of the IP Act could be expanded to cover that kind of situations. Secondly, the provisions of Computer Crime Act No 24 of 2007 can be considered to apply imposing the liability for this kind of situation

Conclusion

As Rafiqi and Bhatt (2013) correctly opined, the puzzles and paradoxes underlying the digital dilemma, by nature are connected with the dichotomy between the notion of 'information wants to be free' and the demands for stronger proprietary control of information in the digital environment. Accordingly, it is evident that there are plethora of complicated issues to be addressed in copyright and related rights law which arise as a result of modern digitalization.

Therefore, as mentioned, on the one hand strong legal mechanism is essential to ensure that authors and artists are safeguard against commercial exploitation. On the other hand, there should be serious consideration that any change in policy or law should not restrict the reasonable use of digital advancement.

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