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Huawei internationalization strategy in Africa: a case of Chinese “colonialism”?

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序言

本论文主要分析了中国企业华为在非洲大陆的运作模式，特别分析了其根据在东道国的比较优势和国际化战略所做的进入市场的决策。选择华为作为研究案例的原因有很多：首先，它是一家在 ICT 领域非常成功的跨国公司，是中国经济的领先行业。其次，该公司于 1998 年进入非洲市场，此后，将大部分对外国的投资集中在了非洲大陆，特别是撒哈拉以南地区。第三，除了在非洲重新部署生产和建立子公司之外，华为还为在非洲雇佣的员工提供了有组织的培训项目。最后，考虑到二战后中国在非洲的行动以及 19 世纪西方帝国主义在中国的殖民历史，本论文的主要目的是要确定华为在非洲的战略是否可以被视为某种形式的殖民主义。此外，还研究了华为在当地环境下的可持续发展和企业社会发展战略，其对当地和市场中的其他外国竞争对手的影响，以及非方对在非洲的中国企业的看法。

第一章回顾了一些关于国家间经济交流的文献，从消费和生产的概念开始再到贸易和进出口理论。首先提到了比较优势理论：先由 HOV 贸易模式模型进行解释，该模型肯定了国际贸易弥补了生产资源地理分布的不平衡，然后通过李嘉图框架和地心引力模型进行补充。在探索了贸易的相关经典理论之后，在全球化进程中它们得到了深化，之后贸易交换的不再仅仅是商品，还有技术和资本。此外，本章重点讨论了影响全球化和跨国公司发展的因素。在企业的国际化战略方面，重点关注了不同的进入方式、出口、策略联盟和外商直接投资，以及如何选择合适的进入市场的方式。国外市场进入模式的主要理论是邓宁的国际生产折衷理论，该理论认为，合适的企业外国市场进入模式的决定因素是该企业本身所拥有的所有权优势、区位优势和内部化优势。乌普萨拉模型，是一种动态能力理论，即通过出口进入国外市场，并进一步演变为风险更大的进入模式。Driscoll 模式认为，企业在选择进入东道国之前应该对其进行分析以便选择最佳的进入策略。本章的最后重点分析了外商直接投资的进入方式、选择这种进入方式的原因、市场寻求型投资、效率寻求型投资、资源寻求型投资和战略资产寻求型投资，绿地投资和收购的区别，外商直接投资在全球价值链背景下的含义以及它在低收入国家发展中的作用。

第二章着眼于中国主席更替的时间顺序和中国的经济发展，特别是从中央计划经济到社会主义市场经济的过渡。这一过程首先由毛泽东时代下以农民阶级斗争、企业公有化和人

民公社的思想模式为基础的专制制度开始，之后是邓小平的四个现代化，开放政策和建立合资企业和经济特区，再后是江泽民的国有企业改革，走出去政策和社会主义市场经济，接着是胡锦涛的和谐社会理念和合格机构投资者计划，最终以习近平的一带一路倡议和“中国制造 2025”计划作为本章的结尾。其中最重要的是 1978 年邓小平为吸引外资而实施的对外开放政策和 1999 年江泽民为促进外商直接投资而制定的走出去政策。前者通过建立合资企业和经济特区，使中国成为外国投资的接收国，向风险资本家开放了中国市场，后者则促进了中国将其资本储备投向海外，尤其是发展中国家。

第三章回顾了自 1949 年中华人民共和国成立至今，中国在非洲大陆特别是撒哈拉以南地区的行动。研究了中国在非洲的政治和经济举措，其主要分为三个阶段：第一阶段是依据第二次世界大战后的“第三世界团结”而制定的，包括中国在非洲大陆进行的援助措施，例如为解放运动而进行的军事干预，反对帝国主义力量和基础建设投资。第二阶段始于上世纪 90 年代，包括建立强有力的中非双边贸易关系、中国进口非洲的自然资源以及中国国有企业在撒哈拉以南的非洲地区进行投资。第三阶段以中国中小企业的参与为特征，并转向以前的国际化战略，其主要推动力是对外直接投资。为了确定中国进入非洲市场决策所涉及的因素，应用了 SWOT 分析框架，并将进入战略分为四个主要目标：自然资源的收集、政治参与、双边贸易和人力资本交换。

第四章着重于案例研究，阐明了电信行业在中国的发展，该行业是中国对非洲出口的主要行业，特别是在移动设备方面，在过去几十年里，非洲大陆的基础设施和通信网络的投资迅速增加。从华为的历史和创始人任正非的传记中，可以了解到华为的发展历程，以及他著名的经营理念。随后，深入分析了进入南非市场的案例，并应用了 PESTEL 模型从政治、经济、社会、技术、环境和法律方面评估了南非的电信行业，并应用五力分析框架来确定华为和市场上的其他国内外移动公司之间的竞争。

华为在非洲的战略重点是在尼日利亚、埃及、肯尼亚、南非、安哥拉、突尼斯、刚果民主共和国和摩洛哥建立培训中心，建设 5G 网络，开展研发活动，进行品牌推广，其目标是有潜力的非洲消费者们。

第五章和最后一章是本研究所得出的结论，从宏观上分析，中国在非洲的行动既不是某种传统殖民主义，也不是某种新殖民主义。相反的，由于中国的 ICT 公司在非洲使用的监控技术以及中国的传媒和通讯技术对非洲的影响，这种一国对另一国控制的新方式被定义

为“技术扩张”。从微观层面分析，尽管华为在培训项目和研发方面投入了大量资金，但其在非洲的业务仍然不被当地社区和市场视为可持续的业务，首先是由于华为公司产品的负面声誉其次是公司在非洲市场的有着相当激烈的竞争。

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Introduction

The present thesis analyzes the operations of the Chinese company Huawei in the African continent, particularly the entry market decision making based on its comparative advantage in the host country and the internationalization strategy applied by the firm. There are several reasons behind the choice of Huawei as a case study: first, it is a successful Chinese multinational company of the ICT industry, the leading sector of the Chinese economy; second, the firm entered the African market in 1998 and since then it has concentrated most of its foreign investments in the continent, especially in the Sub-Saharan region; third, in addition to relocate production and create subsidiaries in Africa, Huawei has offered structured training programs for the workforce hired in the host country. Finally, the main pursuit of this work is to establish whether Huawei's strategy in Africa can be considered as a form of colonialism or not, examining both Chinese historical presence in Africa since the post-WWII period and Western imperialism in China in the 19th century; moreover, it has been examined Huawei's sustainable development and corporate social responsibility policies adopted in the local context, their impact respect to local and foreign competitors in the market and African perception of Chinese business in the continent.

The first chapter resumes the literature about economic exchanges among countries, starting with the concepts of consumption and production and continuing with trade and import-export theories. An insight is dedicated to the comparative advantage theory, explained first by the Heckscher-Ohlin-Vanek model, which affirmed that international trade compensates the unbalanced geographic distribution of productive resources, and then revised through the David Ricardo's paradigm and the Gravity trade model. After exploring the classical studies conducted about trade, it has been deepened the evolution of trade in the globalization process, in which exchange is not only related to commodities anymore, but is intended also as flow of technology and capitals; furthermore, this section focuses on the factors affecting globalization and the development of multinational companies. Regarding the internationalization strategies of the companies, particular attention has been given to the different entry modes, export, strategic alliances and foreign direct investment (FDI) and to the choice of the adapt entry mode. The main theories about

the foreign entry decision making are the Dunning's Eclectic OLI paradigm, which enshrines that determinant factors in the choice of the suitable foreign market entry mode for the companies are ownership advantage, location advantage and internalization advantage; the Uppsala model, defined as a dynamic capabilities theory that implicates the access to the foreign market with export and a further evolution to more risky entry modes; the Driscoll's paradigm, that considers that a company should analyze before the host country to choose the best entry strategy. Finally, the chapter concentrates on the FDI entry mode, the reasons behind this choice, market-seeking, efficiency-seeking, natural resources-seeking and strategic asset-seeking; the difference between greenfield investments and acquisitions; the implication of FDI in the global value chains context and the role of FDI in the development of low-income countries and in the transfer of knowledge.

The second chapter is concentrated on the chronological sequence of the Chinese presidents and the economic evolution of the country, in particular the transition from a centrally planned system to a socialist market economy. This process is outlined first by the autarchy system of Mao Zedong, based on the ideological pattern of the peasants' class struggle, the centralization of enterprises and land communes; then is followed by Deng Xiaoping Four Modernizations, Opening-Up policy and establishment of Joint Ventures and Special Economic Zones; it continues with Jiang Zemin reform of State-Owned Enterprises, Going Out policy and Socialist market Economy; it proceeds with Hu Jintao concept of Harmonious Society and Qualified Institutional Investors Programme; and it finally closes with Xi Jinping One Belt One Road initiative and Made in China 2025. Fundamental attention has been dedicated to the Opening Up policy, launched in 1978 by Deng to attract FDI in the domestic economy and to the Going Out policy, established in 1999 by Jiang to promote outward FDI abroad; the first one has turned China into a foreign investments recipient through JVs and SEZs, opening the country to venture capitalists, while the second one has driven China to spend its capital reserves overseas, especially in developing countries.

The third chapter offers a review of the historical Chinese presence in Africa, in particular in the Sub-Saharan region, since the establishment of the People's Republic of China in 1949 up to now. It is examined the Chinese political and economical initiative in Africa, characterized by three phases: the first phase, developed through the post-WWII "Third World Solidarity", including Chinese aid initiatives in the continent, such as military

intervention in support of liberation movements against imperialist powers and infrastructure investments; the second phase, exploded in the 1990s comprehending the establishment of a strong Sino-African bilateral trade relationship, Chinese procurement of natural resources and Chinese state-owned enterprises investments in Sub-Saharan Africa; the third phase, characterized by the involvement of Chinese small-medium enterprises and the switch to a former internationalization strategy, which major driver is the OFDI. In order to determine the factors involved in the Chinese entry decision making in the African market, it has been applied the SWOT framework and the entry strategy has been divided in four main objectives: collection of natural resources, political engagement, bilateral trade and human capital exchange.

The fourth chapter concentrates on Huawei case study, illustrating the development of the telecommunication industry in China, which is the leading sector of Chinese exports in Africa, in particular the mobile industry, and has seen a rapid increase of investments of infrastructures and communication networks in the continent in the last decades. An important insight has been given to the history of the company and the biography of the founder Ren Zhengfei, that is crucial to understand the progressive growth of Huawei, and his famous business philosophy. A deeper analysis has been made about the access to South African market, where has been applied both the PESTEL model in order to evaluate the political, economical, social, technological, environmental and legal aspects of South African telecommunication industry, and the Porter's Five Forces framework to determine the competition between Huawei and the other foreign and domestic mobile companies on the market. Huawei strategy in Africa has been focused on the establishment of training centers in Nigeria, Egypt, Kenya, South Africa, Angola, Tunisia, Democratic Republic of Congo and Morocco, building of 5G networks, R&D activities, brand promotion and targeting of the potential African consumer.

The fifth and last chapter shows the results of this study, which states that on the macro analysis Chinese initiative in Africa can't be considered neither a form of traditional colonialism nor a shape of neocolonialism; on the contrary, this new way of exercising control by a country to another has been defined as "techno-distopian expansionism", due to the surveillance technology exercised by Chinese ICT companies in Africa and to the influence of the Chinese media and communications in the continent. Considering the micro

analysis, despite its considerable investments in training programs and R&D, Huawei's business in Africa is still not perceived as sustainable by both the host community and the local companies on the market, first because of the negative reputation of the companies' products, second for the unsustainable working conditions promoted by the MNCs and third for the low level of knowledge spillovers addressed by the Chinese firms to the African market.

Chapter 1: Why do countries need to have economic exchanges?

1. 1. Theories of consumption and production

Regarding the concepts of production, consumption and exchange, economists during the last centuries have studied different theories; in particular the development of classical economic thought in the 18th century in England has focused primary on consumption. In the work "The Wealth of nations" published in 1776, Adam Smith assessed that consumption was the unique aim of production, but differently from the previous judgement of consumption as a self-interest and personal-gratification activity, he considered the marketplace as a social platform where commodities and securities were traded, and merchants as well-behaved and rational consumers opposed to the immoral declining nobility. Consequently, he predicted that consumer-merchants would have become the foundation of a new social and political order (Sassatelli, 2010). The notion of consumption was later analyzed by Thomas Robert Malthus, who launched the Theory of Effective Demand and Growth, explaining that:

"Production and distribution are the two grand elements of wealth, which, combined in their due proportions, are capable of carrying the riches and population of the earth in no great length of time to the utmost limits of its possible resources; but which taken separately, or combined in undue proportions, produce only, after the lapse of many thousand years, the scanty riches and scanty population, which are at present scattered over the face of the globe¹."

Malthus defined the effective demand as a sufficient force to ensure a continuous process of production, and production as a factor relying on the existence of effective demand, which enables the producer to cover the cost of production plus profit. Moreover, he sustained that effective demand cannot rely only on capitalists, who save and invest rather than consume, and on the workers whose salaries are less than the price of the goods they produce; on the

¹ Eltis W. A., (1980). "Malthus's Theory of Effective Demand and Growth". Oxford Economic Papers, New Series, Vol. 32, No. 1, p. 20, Oxford University Press.

contrary, for Malthus every country with a high productive capacity should have an equal quantity of unproductive consumers. This unproductive consumption enables the capitalists to get the profit, that are essentials for recreate the cycle of production.

Karl Marx agreed the view of Malthus but put this theory to the extreme, defining the consumer as a product of the division of labor of the capitalistic system of production, and consequently a slave of the market with the only pursuit of buy and consume. Following the Marxian theory of consumption, the individual normal relationship with commodities as use-value was distorted by capitalism; in his famous work "The Capital", he explained that workers separated from the products of their labor, approach goods as objects unrelated to the conditions of production. The commodity exchange systems creates workers that consider goods as products that can be exchanged equally in order to satisfy human needs; in this perspective, the working class is expropriated of surplus labor time by the capitalists. For Marx, the quantity of consumption was a potential obstacle to the realization of surplus value; overcoming the barrier required both an increase in demand and a change in the types of goods consumed. Differently from the neoclassical theory, Marx focused on the social aspect of the capitalist system, particularly on the working class issues and relations; on the other hand, he agreed to neoclassical economists considering exchange as an equalizing process, but rather than marginal utilities it is the labor time transformed in different commodities that is the basis for their exchange. Marx described so the Alienation theory, in which human labor time is the common element that allows exchange of commodity prices; rather than psychological utility, social labor is equalized in exchange (McIntyre, 1992). Therefore, both parties, producers and consumers, must exchange something they have for something others want. Production process needs four types of resources: natural resources, human resources, real capital and enterprise. As a result, the economic activity is driven by the need to exchange.

1.2. Trade and import export

1.2.1. The HOV model

Considering trade influxes, a crucial switch in the world economy coincided with the Industrial Revolution, after which Europe became progressively more open to trade; intercontinental trade increased dramatically between 1500 and 1800 thanks to the Voyages of Discovery, that led to a deep fall in transportation costs. Despite this, the raise of the European overseas trade didn't rely on global commodity market integration, but on a decline of intercontinental price gaps and a shift in demand and supply in Europe, Asia and America. Only in the early 19th century, through the change of system from mercantilism to free trade and the construction of new transport technologies, the huge intercontinental price gaps began to reduce; in the same period, the large-scale intercontinental trade started with common goods like grain, animal products, coal and manufactured intermediaries. The cost of trading across national frontiers changed due to the different markets; as an evidence, before the 19th century there was no systematic evidence of intercontinental price convergence. For example, regarding Asian textile trade markups between 1660 and 1760, the relationship between the sales prices imposed by the East India Company to its Asian textile sales in Europe and the average prices paid by the Company for those textiles in Asia shows no sign of declining; trade expansion was due to outward shifts in demand and supply, rather than to commodity market integration. Two famous Swedish economists analyzed the effects of intercontinental trade on factor prices during 19th century, Eli Heckscher and Bertil Ohlin (O'rourke K. and Williamson J.G., 2005). Following Heckscher-Ohlin theory of comparative advantage, international trade compensates the unbalanced geographic distribution of productive resources; furthermore, traded commodities are dependent on different factors, such as land, labor and capital. The changes of commodities at the international level is an indirect factor arbitrage, which transfer the services and factors of production from countries abounding of these factors to countries lacking of them. In some cases, this indirect arbitrage can eliminate factor-prices differences; the most important characteristic of the HO model is that the possibility to sell factor services externally, through the exchange of commodities, transforming a local

market into a global one. As a consequence, the demand and taste of goods becomes similar across countries; in addition to an elastic demand, this system shows an aggregate GDP with a constant marginal productivity of capital. This is a critical limit because growth induced by capital accumulation is generally limited by the declining marginal productivity of capital; following HO model of an opened economy, the risk of decline of the marginal productivity of capital is compensated by a change in the product mix toward capital-intensive products. On the other hand, in a closed economy shifts in the product mix are limited because of the internal sales system. In spite of the academic recognition of HO model as a valid economic theory, many economists have refuted this model proving its impossibility on the practical level; starting with Leontief in 1953, who discovered that U.S. imports in 1947 were more capital intensive than U.S. exports, arriving to Leamer in 1980, Bowen and Sveikauskus in 1987, who found that the amount of capital invested in international trade was still low across countries, and finally Grubel and Lloyd in 1975, who cataloged two-way trade in finely disaggregated trade data. Moreover, until 2000 trade was particularly developed among industrial and advanced countries while developing countries still lagged behind them; despite this, the HO model suggested that third world countries and advanced countries should have been complementary partners, given that the firsts could offer low labor cost and natural resources, while the seconds technological and managerial capabilities (Leamer, 1995). The relative factor abundance theory of trade explained the HO model relates bilateral differences in country endowments to bilateral differences in factor contents; following this pattern, a capital-abundant country should export capital through the goods traded to the rest of the world, and labor abundant country should export labor. It is evident that there is a gap between skilled and unskilled labor of developed and developing countries; moreover, the Vanek's extension of the Heckscher-Ohlin theory (HOV model) contributed with academic research basing on data of many different countries and production factors. Vanek's contribution has underlined the need of reviewing some key assumptions of the model, like international identical technologies, absence of trade and transportation costs and factor price equalization. In fact, North and South trade has not been directly analyzed in the HOV model, but it is more concentrated on North-North and South-South cooperation (Debaere P., 2003).

1.2.2. The Ricardo's model

The theory of comparative advantage has been explored also by David Ricardo, who assessed that relative labor productivity determines trade patterns; his model played a crucial pedagogical role in international economics, but hasn't been fully recognized since 1960s. Indeed, the classical emphasis on productivity differences and labor costs has been supplanted by the neoclassical Heckscher–Ohlin focus on factor endowments; the Ricardian model ignores the factors of production besides labor, and wrongly assumes that countries specialize only in the production of tradable goods. Following his theory, the main critics are three: first, given that capital and raw materials are more tradable than labor in the international context, there is a disproportionate influence on comparative advantage; second, Ricardo focused on productive and sector-specific technological gaps among countries; third, old test of the model went successfully because of its simplification and its social approach. In fact, the Ricardian model focuses on labor productivity and labor costs as the determinants of comparative advantage, and labor is assumed to be homogeneous and perfectly mobile between sectors; furthermore, wages are expected to be equal across sectors within a country, and there is no consideration of product differentiation, productivity differences, incomplete specialization, and commodity price equalization (Golub and Chang-Tai, 2000). The Ricardo's classical numerical example is that a given amount of wine can be produced by the labor of 120 men in one year in England, or of 80 men in Portugal; similarly, a determined quantity of clothes requires the labor production of 100 men in England and 90 men in Portugal. Thanks to the autarchic price ratio differ (a unit of cloth can cost like $9/8$ units of wine in Portugal, $5/6$ units of wine in England), there is a potential gain from trade in Portugal, considering that Portugal has an absolute advantage in each product, even if is specialized in wine, while England is specialized in clothes (Dimand, 2000).

1.2.3. The Gravity Trade model

Another recognized theory of comparative advantage is the Gravity Trade model, which enshrines that trade between two countries affects them positively to both of their incomes

and negatively to the distance between them; this economical function derives from the law of gravity in physics. This theory was born against the traditional HO model, because of the theoretical inconsistency between them; the two models arrived to two different cases of HO-model equilibrium, one with frictionless trade and one without it. The case of "Frictionless trade" is intended as the commercial activity with no trade barriers, such as custom's tariffs and transportation costs, that results in a cheap trade activity in both domestic and international context. Furthermore, the Gravity Trade notion underlines that, instead of considering countries first satisfying demands out of domestic supply and then importing the left-over, it is crucial that demanders treat all suppliers (domestic and foreign) indifferently; suppliers likewise should have no prejudices about demanders and sell their products to them unconditionally. This international trade framework allows the selling activity to be expanded in more markets and the trade flows to be larger and to fall naturally into a gravity-trade equation configuration, in a frictionless model without a role of distance. Despite the theoretical foundation of this model, this configuration is very simple with identical preferences across countries, but it becomes more difficult with different preferences (Deardoff, 1998).

1.3. Globalization

Since the WWII, the common awareness of a global society has grown constantly and the interdependence among nations has become necessary to the survival of them; the decolonization process and the increasing expansion of the world political society has resulted in the explosion of the appliance of science and technology, with a consequent emphasis on human rights, welfare and environment. Globalization is mainly intended as "exchange", referring to the expanded interdependence and rate of transactions around the world; the concept is concentrated on the economic exchange, including activities like international trade, global production and commodity chains, flow of technology and intellectual property, exchange of labor, cross-national investments. The development of trade and investments has given an input to the interconnection among markets and has increased communication and awareness of business opportunities all around the world; products and services previously available within one country are made available to new

markets outside the country due to Globalization. The forces driving globalization are: increase of quality and expansion of technology, like reduction of communication and transport costs; liberalization of trade and resources movement with free trade and agreements; development of services that support international business; converge of customer needs, that means consumers tend to have similar or same tastes because of advertisement and international trade of multinational products; increase of global competition between companies (Meyer, 2007).

From an historical viewpoint we can identify three waves of globalization: the first called globalist, happened after World War II, enabled by technology and decline of maritime and flight transportation costs (and the relative development of the commercial and civil aviation), the second named skeptics, appeared at the end of the 20th century caused by the collapse of intra-European trade barriers, and the third called transformationalist or post-skeptic. Following this theory, at present we're living the third wave of Globalization, that can be defined as a revisionist phase and involves the emerging role of technology instead of the implementation of international movements. The first wave has been defined as "hyper-globalist", in which national economies are less significant respect to the leading role of capital mobility and multinational corporations; this resulted in reduced political restrictions on the movement of money and technological change in the shape of computerization and financial transactions, which converged in a flow with little constraint among national boundaries. In this context multinational corporations have emerged, due to their distribution of production facilities, work-forces and consumers abroad; famous multinational brands born during this phase are Coca-Cola, McDonald's and many news corporations. The second wave has been called "skeptic" because of the increasing critics about the globalization process; in particular regarding the lost of national governments sovereignty, such as of national identities, the dehumanization and exploit of the labor force and the standardization of culture and tastes. Skeptics have claimed that the global economy is not globally inclusive; for instance, the areas of Sub-Saharan Africa are much less integrated than the powerhouses of East Asia, Europe, and North America, with global inequality rising and protectionism still rife, for example in Europe and the United States, in response to imports from the growing Asian countries like China. There has been also an evidence of resurgence of nationalist movements against the global one, in

particular among religious and traditional groups of people all over the world. The third wave has been developing in the last years (the coronavirus is a crucial turning point of this change), and comprehends a continuous global transformation, but also differentiation of cultures and economies and embeddedness of countries and societies in the new system; in particular, this stage is characterized by an implementation of the use of technology in the labor context (such as smart working job options), and more sustainable activities in terms of tourism, environment, welfare and economy (Martell, 2007).

1.3.1. Dimensions of distance

At the beginning globalization was focused on the economic side of the world, such as trade, foreign direct investment and international capital flows, more recently the term has been expanded to include a broader range of areas and activities such as culture, media, technology, social, political, and even biological factors, like climate change. Despite the huge development of this phenomenon, we have to consider that there are still a lot of differences among countries, like GDP, percentage of investments abroad, competitiveness of some industries, geographic position, climate and quality of life, medium salary, level of education, percentage of employment, different types of government. We can summarize the forces that work against global integration in four dimensions of distance: cultural distance (religion, languages, habits, social norms), administrative and political distance (politic relationship between countries), geographic distance (physical distance and jet leg), economic distance (different type of consumers and incomes). These differences show us that the world is not flat and companies have to keep in mind this when they decide to internationalize (Lankhuizen, de Groot, Linders, 2011).

1.4. Market entry decision making

1.4.1. Dunning's Eclectic OLI paradigm

Firms that are about to start an internationalization process have to face the difficult choice of the entry mode; the most common options are exporting, licensing, strategic alliances, joint venture and sole venture. Following Dunning's Eclectic OLI paradigm,

determinant factors of the suitable foreign market entry mode for the companies include three categories: (O) ownership advantage of the firm, (L) location advantage of the market and (I) internalization advantage of integrating transactions. The level of risk is directly proportional to the entry mode selected, from a low level of risk (export and licensing) to a medium level (strategic alliances) to a high level (joint ventures and wholly-owned subsidiaries). As an evidence, the exporting mode has a high degree of control and needs low resource commitment, but it lacks of providing marketing control to the firm; the sole venture mode need a high resource commitment, with a low level of control but a high return on investment; the joint venture mode involves relatively lower investment and provides risk, return, and control commensurate to the extent of equity participation of the investing firm; the licensing mode is a low investment, low risk and minimum control to the licensing firm. In order to obtain information about the determinant factors of a single company, it is important to evaluate managerial perception about products differentiation, firm size, firm multinational experience (ownership advantage) market potential and investments risks (location advantage), costs and contractual risks, risk of deteriorating the quality of products or services and risk of knowledge transfer in the host country (internalization advantage). In practice, the Eclectic OLI paradigm of Dunning affirms that a firm should choose the most suitable entry mode to a foreign country, considering the three advantages and its competitive advantage in the international context (Agarwal S. and Ramaswami S., 1992).

1.4.2. Uppsala model

Another internationalization strategy framework is the Uppsala Model; differently from the Dunning's theory, which explains what makes possible for a company to enter and operate in a foreign market in a sustainable way (for both the same company and the targeted market), the Uppsala model was born to establish the different phases of the process whereby firms internationalize, basing on the heterogeneous resources and the learning capability of the company. This different approach has been defined as dynamic capabilities theory or evolutionary theory of the firm, because it shows how companies can develop their competitive advantage, not necessarily choosing the best entry mode, but starting with

a low-risk foreign entry to raising to a high risk entry. The original Uppsala model was the result of studies conducted on Swedish multinational companies, which had started their internationalization process on markets close to the home country in terms of cultural and psychic distance, and had gradually entered further markets; in other words, the companies should internationalize with an initial little investment and low level of risk, and later exploit the market potential with more resource commitment. This gradual internationalization strategy has also been defined as an entrepreneurial process, which grows gradually and focus more attention on uncertainty; in this way the company gains more time to develop an articulated network both in the domestic and host country, where there is an exchange of commodities and services, but also of knowledge and information (Vahlne J., Johanson J., 2013).

1.4.3. Driscoll's paradigm

The two aforementioned approaches based on the amount of the experiential knowledge that a firm possesses have been strongly criticized during the 1990s, because they didn't consider the nature and the position of firms' international involvement, taking into account only product-market factors, company's factors, host-countries' factors, global industry dimensions and company's bargaining power towards foreign governments. Some authors introduced a "factors moderating mode choice"; the greatest example is the Driscoll's paradigm, launched in 1995, which affirms that the choice of market should be determined by firms' factors (company's competitive advantage, experience and strategic considerations) and also by environmental factors (demand and competition on the given market, political, economic and cultural conditions). In contrast with the Eclectic OLI theory, which focused on the choice of the right entry mode respect to the company, and with the Uppsala model, which underlined the need of an evolution of the entry strategy depending on the progressive acquisition of knowledge, the Driscoll's paradigm required a deeper analysis of the market, rather than of the firm, in order to select the best entry strategy. In particular, Driscoll stated that the same company should adopt a different entry strategy for every foreign country which is interested in, because of countries' market differences (Samii, Aliouche, Wright, 2008).

1.5. Entry modes: why choose Foreign Direct Investment (FDI)

1.5.1. Motives for FDI

Companies decide to enter the international business for several reasons: to expand sales and reduce the cost of production, to acquire resources, to minimize risks like giving advantage to competitors in national markets, to exploit proprietary assets. Following Dunning's Eclectic theory pattern, the market entry decision making is based on three advantages: ownership advantage, location advantage and internalization advantage. The first one suits companies that have valuable assets like brands, competitive price, good quality reputation, technology or unique processes, so specifies that just that particular firm owns this advantage and has developed it in a long time. The second implies that a specific economic activity can be more successful and effective in a particular foreign country: the most common example is delocalization of production. The third one occurs when a fundamental activity of the company's value chain like the production process or the marketing strategy offers a better performance when is managed internally. In addition, Dunning evidenced three main entry-modes: export, strategic alliances and foreign direct investment. The first one because doesn't need subsidiaries in the foreign market, it requires only the sale of products abroad; the second one is a cooperative mode, because it's based on the partnership with a domestic company in the host country, which have a deep knowledge of local market, business laws and local trade; the third mode implies a company with a headquarter-subsidiaries structure and it allows the company to create a wider distribution network. As a result, a company might choose FDI entry mode only when it has all the three ownership advantages.

When a company decide to adopt Foreign Direct Investment immediately becomes a multinational company, that owns a local headquarter and a subsidiary abroad, so the MNC doesn't sell products abroad, but it directly controls operations in the other country. There are four main motivations to choose FDI: to sustain or protect existing markets and to promote new markets (market-seeking), to develop economies of scale, logistic infrastructures and risk diversification (efficiency-seeking), to ensure low-cost and high quality natural resources, such as minerals, oil, gas and agricultural products (natural

resources-seeking), and finally to absorb the capabilities of the acquiring firm in view of long-term competitiveness at home and in third-countries markets (strategic-asset seeking) (Meyer, 2015).

1.5.2. Greenfield investments or acquisitions?

Considering entry into a foreign market by foreign direct investment (FDI), a multinational enterprise (MNE) faces two strategic decisions regarding the organizational form of its foreign operation. First, the level of control over its local engagement, choosing between full ownership or joint venture; second, the mode of foreign entry, selecting between creating a new venture via greenfield investment or acquiring an existing company via brownfield investment or acquisition. Factors affecting FDI foreign entry mode are investment costs, differences of technologies, markets size and structure, level of competition. Greenfield investments are usually more expensive than acquisitions, for this reason if the company doesn't have many funds, it prefers the acquisition mode; if the technological gap between two countries is particularly evident, it is convenient to use greenfield investment. For the competition variable, when the market presents a very high or very low competitive level greenfield investment is the adapt entry mode, while for intermediate value of competition the optimal way is acquisition. Considering the market structure, in general acquisition is seen as the preferred mode of entry, while with a high cost of adaptation it is suggested the greenfield investment; similarly, competition rate enforces greenfield investment as the most suitable choice. It is important also to analyze cultural distance between the two countries, observing that with a high cultural distance is preferred the greenfield investment, rather than acquisitions; on the other hand, large and product diversified companies tend to choose acquisition, which is favoured both in fast growing markets and slow growing markets (Müller, 2007).

1.5.3. FDI and developing countries: focus on R&D

Foreign Direct Investment and multinational companies gained an important role in the development of emerging countries, that are suitable for this kind of investment because they have huge growth opportunities, low cost resources and a wider range of potential

customers. Despite this, treating with emerging countries means also face a difficult market because of their uneducated customers, wider range of cultures involved, differences between rural and urban areas, deep segmentation of population, weak institutions, inefficient economic infrastructures and absence of efficient local intermediaries; furthermore, in emerging countries there is usually a high liability of foreignness, that is the difficult of the foreign company to establish its influence in the local market. Many developing countries like China have taken advantage of the globalization process, before acting as manpower and manufacturing center, and then investing in different sectors, in particular information technology industry; in the last twenty years in developing countries were born a lot of successful multinational firms: the best examples are “dragon multinationals”, including Acer, Ispat International, Cemex, Lenovo.

As an evidence, developing countries have widely benefited from FDI, and their governments have launched several policies to attract FDI in many sectors; in particular, the competition for FDI in R&D (research and development) activities has been increasing in the last few years. In order to attract FDI in R&D, local governments have to apply consistent measures, such as supply of qualified professionals, adequate infrastructure networks, favourable laws and regulations, fiscal incentives, intellectual property rights, economic stability. UNCTAD report of 1996 affirmed that the globalization process has affected the switch from the traditional determining factors of FDI (like market size and trade barriers) to non-traditional ones (like cost differences, infrastructures and availability of capacity); consequently, globalization has driven the reconfiguration of the forms used by MNCs to define their objectives of resources-seeking, market-seeking, efficiency-seeking and strategic asset-seeking. This challenge combined with the competition among countries for FDI in R&D has highlighted two aspects of human capital, wage costs and abundant availability; an abundant and low cost workforce has become a key factor, especially in countries like China and India. As a result, institutional policies have had a crucial role in the attraction and promotion of FDI in R&D in developing countries; these welcoming policies should be applied mainly in four areas, human resources, research institutes, intellectual property rights and competition regulations. In the last years, the old comparative advantage based on low cost manpower has become outdated; in fact, the need to develop knowledge and innovation flows, constructing a common network with domestic and

foreign partners has had an important role in the attraction and development of R&D activities (Zanatta M. and Queiroz S., 2007).

1.6. Global value chains: investments and trade for development

In the last thirty years, world trade and production have become increasingly dependent on Global Value Chains (GVC): The GVC perspective is primarily distinguished by its approach to economic globalization, in particular globalization of production; the literature regarding GVC has underlined four main aspects of this process. First, GVC is related to globalization in a broader historical context, back to the early modern period; indeed, globalization of production originates during economic recession, such as the current wave of globalization has formed by the slowdown of demand of developed countries since 1960s, and later has been enforced by the fall of trade barriers, declining of transportation costs and development of communication technologies.

Second, the global division of labor has deeply changed during the second half of the 20th century; while in the past production was concentrated in every single country, now a finished product is a result of different phases of the process made in different countries like design, manufacturing, marketing and distribution, where every step adds value to the final product. The MNCs offshoring activity refers to relocating some of the company's operations abroad, because it gives an economical profit to the company, usually due to low labor cost, cheaper raw materials, more favorable tax rates; in this context, many developing countries have become important sites for basic manufacturing. As an evidence, the most geographically extensive GVCs are found in industries where entry barriers to basic production are quite low and consequently capital is relatively mobile; in the last decades globalization of production has become even more important in labor-intensive sectors and has had an impact on labor-rich countries that have emerged as a fundamental link in the chain.

Third, the globalization of industrial production is associated to the increased level of specialization and differentiation, both in developed and developing countries; economic activities in developing countries are concentrated on product design and development, finance, marketing and retail, while emerging countries are focused on manufacturing and

production.

Four, the current phase of economic globalization is bound to both disintegration of traditional production and changing patterns of ownership. In fact, economic globalization no longer consists only in developed countries' companies' offshoring of production or delocalization of branch plants in developing countries; on the contrary, in many emerging countries industrial capacity is owned either by nationals of the producing country or by those of developing countries. There are two kinds of production processes, named "snakes" and "spiders": snakes are production processes where a commodity follows a sequential process where each operation adds value in a predetermined order. Spiders are complex processes, where parts come together for assembly. In GVCs, usually production is a mix of both processes; they have changed the productive systems and countries can benefit from them through multiple channels, including trade development, regulation of business services, investments, business taxation, innovation, industrial development, conformity to international standards and wider business possibilities linked to entrepreneurship. For this reason, countries should identify measures that will complement their GVC strategies, like investment in education, environment and urbanization, infrastructure building and labor market mobility.

Following this content, we can say that through GVCs countries offer each other a particular know-how and cooperate together: the international exchange of competences among companies is the key factor of GVCs (Gibbon, Bair and Ponte 2008).

1.6.1. Do GVCs represent an opportunity or an obstacle of development of low income countries?

This is the question that the Global Value Chain Development Report of 2017 is trying to answer, analyzing the advantages and disadvantages of the economic relationships between advanced and developing countries. The main topics treated in the report are: the impact of the globalization process and digital technology on the national economies, the consequences of GVCs towards division of labor, growth, inequality and poverty in the globalized world, and the international trade effect on the inclusive growth of the world. Moreover, the paper analyzes the complex value-added structure of trade in goods and services, using the trade data collected by the World Bank and the World Trade

Organization; in fact, global trade should be described also in value-added terms, rather than as gross flows of imports and exports. In particular, studying the manufacturing value chains has emerged that services are extremely important and represent a value-added section of trade; these services are both upstream and downstream from the physical production of component and assembly. This scheme was designed as a “smile curve” in 1992 by Stan Shih, the founder of Acer Inc. (one of the dragon multinationals already mentioned), in order to explain the value-added variation across different stages of the IT industries’ GVC; nowadays the smile curve has been currently applied to figure the different participants along the global value chains at their stage of development (World Bank, Ide-Jetro, OECD, UIBE, World Trade Organization, 2017).

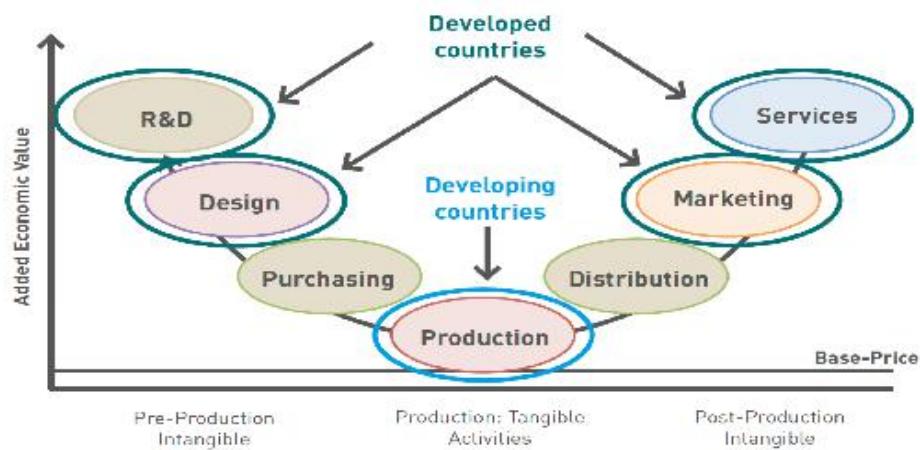


Fig. 1: LSE, (2018). Global cities, multinationals and trade in the age of Brexit. The Smile Curve of Global Value Chains.

As represented in Fig.1, the key factor of the success of GVC is the diversification of the activities in different locations: developed countries have specialized labor force and a high know-how to make R&D, design, marketing and services, while developing countries make essentially production and in some cases also purchasing and distribution. There are several positive aspects in GVCs, especially in the development of single economies; advanced countries has gained advantages like access to resources, offshore of production and cut of manufacturing costs, while developing countries have had the opportunity to access international trade. Firstly companies, in particular of developing countries, don't need to build a whole cycle of production capacity, but they just have to apply their

comparative advantages to concentrate their resources in a specific production process, joining the global economy; secondly, taking part of the GVC creates more employment opportunities for developing countries, particularly in the manufacturing phase; thirdly, GVCs also provide to emerging economies the chance to benefit from technology transfer and knowledge spillover to local firms and workers. On the other hand, for developing countries GVCs have a negative impact with exploitation of workers, child labor, gender gap for women, increase of unfair competition and low labor conditions; furthermore, developing countries usually don't have a deep integration of value added in the country's export (Meng, 2015).

1.6.2. Human capital in a globalized world

Having analyzed before the globalization process, that includes inflows and outflows of products, information and capitals, it is possible now to focus the attention on the flows of people, in order to understand how the human resources factor deeply affects economic exchanges. The concept of human capital is relatively new, because earlier economists didn't consider human resources as a form of capital in which to invest; in the last decades, workforce has played a crucial role in the international trade and it has affected companies' capacity value-added factors like skills, tasks, experience and education. Human capital is one of the most important determinants of growth and income; indeed, differences in the stock of human capital could account for the majority of the cross-country variation in incomes between rich and poor countries.

Despite its huge implications in the economic dimension, the drivers of human capital investments are still unclear; most of the research concentrates on the supply-side determinants of skill acquisition access to school and education, while less attention has been dedicated to the effects of trade on human capital, which influences opportunities and wages, shaping individual decision to invest in human capital. As an evidence, skill-abundant countries have a comparative advantage in relatively skill-intensive goods and viceversa; moreover, educational programs and export patterns are influenced by domestic characteristics including local policy reforms, technological process and institutional changes. Considering the skill composition of export, it is possible to note that

trade liberation usually causes economic divergence; in fact, less developed countries specialized in agricultural goods may see a decline in educational attainment, which will have a negative impact on the development of this states. At the same level, developed countries that export skill-intensive manufactured goods will see an increase of educational attainment, which will give an impulse to economic growth; on the other hand, at a national level exports could generate a positive aggregate income effect by increasing GDP, which could induce a growing educational attainment (Blanchard E. and Olneyz W., 2015). If we consider MNCs instead of exporting firms, it is possible to examine the role of workforce development initiatives especially in developing countries where the company offshores production; in particular, to minimize exploitation of low-cost manpower in developing countries advanced countries have applied different strategies. For example, offering educational systems and training to the host country, in order to prepare teachers and students for skilled professions; changing the management techniques basing on the local workforce; providing job training and mobility inside of the company; favoring interaction among workers coming from different countries and with a different cultural background; collaborating with local governments and non-governmental organizations to focus national policies around a globalized system, to avoid reactive barriers and litigation (McLean, 2002).

1.6.3. Spill-over effect

As evidenced in the literature regarding FDI, the advantages gained from foreign direct investment by multinational firms are relevant for the host countries; when MNCs relocate their operations abroad, they drive capital inflows, raise local employment and transfer know-how to the local economy. In addition to the macro-level analysis conducted by the economists, which includes countries' governments, industries, cultures and institutions, there is also a micro-level study of the effects related to the localization of MNCs subsidiaries and the relationship between the headquarter and the subsidiary and among the MNC and the local firms. These effects deal with the extent to which the strategic interaction between foreign and local firms changes their competitive positions, due to the impact of knowledge spillovers; knowledge spillovers have been defined as informal flows

of technological knowledge from foreign to local firms. Following the managerial research approach, it is crucial to take into account not only the host country perspective, but also the foreign firm's implications in the knowledge spillover process.

Considering FDI effects on both headquarter and subsidiary of the foreign firm, it is possible to identify three main categories: product market effects, that emerge when FDI forces MNC to modify the quantity of goods to purchase or sell in the home and in the host country; factor markets effects, that happen when MNCs change their demand of labor and capital in the home and in the host economy; FDI spillovers (Perri and Peruffo, 2014).

Spillovers can be divided in horizontal spillovers (from foreign to domestic firms operating in the same industry) and vertical spillovers, in turn divided in backward vertical spillover (from FDI in downstream industries) and forward vertical spillovers (from FDI in upstream industries). They can also be direct (basing on the raise of local subsidiaries' production due to the relationship between headquarter and subsidiary) or indirect (basing on labor mobility). Local firms benefit from foreign presence in the same industry and in downstream industry; the absorptive capacity of domestic firms is widely dependent on the size of spillovers: vertical spillovers are suitable for R&D-intensive firms, while companies investing in external types of intangible goods take more advantage on horizontal spillovers. At the same time, high competition facilitates backward spillovers, while market power increases the extent of forward spillovers; horizontal spillovers are usually related to services, while vertical spillovers are mainly driven by manufacturing.

The main principle of the spillover effect is that multinationals' ownership advantage of knowledge-based intangible assets are not generally available in the host countries; consequently, it is possible to assume that at least some of their technological superiority may spill over to domestic firms through different channels. For example, domestic enterprises could upgrade their technological capabilities imitating foreign companies' products and processes; on the other hand, knowledge can be absorbed by employment turnover or workers trained by the same MNC; finally, direct competition with foreign companies could force domestic companies to reduce inefficiencies and increase their production, technological and managerial capabilities.

As a result, it's important to underline the need of the foreign country to protect a fundamental asset like knowledge, an asset that subsidiaries don't have to share with other

local firms. Despite this, even if the spillover effect is usually referred to the transition of capabilities from the foreign to the local firm, we should also take in consideration the local networks and business gained by the foreign firm thanks to the collaboration with the local partner, as a spillover effect of the counterpart (Marcin, 2008).

Chapter 2: “The Chinese miracle”

China is the second largest economy by nominal GDP in 2019 (International Monetary Fund, 2019), with a GDP rate of 13,608.15 billion dollars and a GDP annual growth of 6,6% (The World Bank, 2018). The international context of Chinese development is undoubtedly related to the globalization process, the revolution of the communication systems and the liberalization of trade; if we consider the same benchmarks in 1990, 360.86 billion dollars and a GDP annual growth of 3.9% (The World Bank, 1990), we can observe the huge changeover from agricultural to market economy country. Despite this, the country still remains a socialist dictatorship where commodities, capitals and information are strictly controlled by the central power. How can be described this transition in order to understand the Chinese capitalism emerged from a communist regime?

2.1. Mao Zedong and the formation of the Chinese Communist Party

Firstly, it is important to analyze Chinese history and economic system under Mao Zedong, the “father of the country”, who governed from 1949 to 1978 and changed the face of China using both political ideology and economic reforms. In order to learn the implication of his politic choices and their impact on the national economy, the reporter Federico Rampini offers an enigmatic portrait of the leader with his work “L’ombra di Mao” (Rampini, 2006, p. 6-9.). The author describes Mao Zedong as a tyrant responsible for the death of seventy millions people , not different from Adolf Hitler and Iosif Stalin, but still of a symbol of the great power of China, rounded by the population’s esteem and respect and praised in the infamous Tiananmen square. He was able to attract the masses and to talk to them, encourage them and lead them to a main objective: despite the failure of his economic measures, he’s an example of social mobilization and involvement.

2.1.1. Mao’s ideological legitimacy

Mao’s political paradigm was articulated in three levels: the paradigm of personal example,

the strategy of revolution and the paradigm of politics (Womak, 1982).

“Mao’s most remarkable personal characteristic as an activist was his concern for effectiveness. Complemented by extraordinary dedication and energy, Mao’s orientation toward concrete results shaped his political participation from the May Fourth period on. Mao was not an opportunist, but he did aim for goals which he thought were attainable and he sought to mobilize broad support for them.”²

The emblematic strategy of the leader was the result of his political experience and the use of a strong ideology. Mao tried to adopt the Western theories of Marx and Engels, especially the concept of class struggle, in the Chinese rural context, with the creation of the peasants class revolution (instead of the proletarian revolution theorized by Marx). This rural-based revolution was legitimated by the fight of the oppressed peasantry, that was the majority of Chinese people, but it needed to be reinforced by other ideological elements. The Marxist theory, born in England to denounce the capitalistic exploitation of the proletarian class after the Industrial Revolution and already widespread at the beginning of the XX century in Europe, became an element of attractiveness for China in 1917, thanks to the Russian Revolution and the Japanese translation of European economists’ works. China’s transition from empire to Republic happened only in 1912: China was still an agrarian country with a semi-feudal society, that after just two years had to face the World War I, allied with U.S. and Great Britain, but still a colony, especially in the Shandong area (Samarani, 2017).

2.1.2. The “May Four Movement”

In 1919, the Treaty of Versailles signed with the end of WWI by the two alliances, unlike the previously agreements, required Germany to give former German territories in Shandong (eastern China) to Japan instead of returning them to China. On 4th May 1919 students from all China went in Tiananmen square in Beijing to protest against the weak government that hadn’t been able to defend the nation and his citizens. The protest failed and Japan obtained

² Womak B. (1982). The foundations of Mao Zedong’s political thought 1917-1935 (p.7). *University of Hawaii Press.*

a lot of Germany's former possessions in China, but the May 4th Movement opened a debate on numerous different themes and was a vehicle for the diffusion of forms of socialism and anarchism (Wasserstrom, 2019). Mao was an activist and shared important values of the "New Culture" Movement: the reaction against imperialism, the critic against the old values of Confucianism, the need of a new common culture available for all the population, the social class fight, the question of the relationship with Western countries and the emulation of their own culture, the debate on personal freedom and democracy, the rights of women. He understood the need of the country to change and he decided to adopt many of these values and unify them with the socialist thought (Wang, 2016).

The core themes of the May 4th Movement were supported also by the consequences of the imperial system's fall (Qing dynasty) and the social and political void. The question of the intellectuals was the future of China and the transition to the modern world: the foundation of the Republic in 1912 by Sun-Yat Sen seemed the right answer to this question, but the negligence of Yuan Shikai (Sun's successor as President) in the negotiation of Japan's Twenty-one Demands (1915) and the raise of the warlords' power (1916-1926) underlined the need of a stable government with a strong culture. The culminating point of the Treaty of Versailles was during Duan Qirui administration, who fully supported Japanese incursion in the Shandong province; after the protests, the evidence of political and social instability of China was influenced also by another giant, Soviet Russia.

2.1.3. Soviet Union and Comintern

From 1918 to 1920 Soviet Russia enhanced his interest in China, showing his support against Japanese imperialism and renouncing the czarist privileges in China with the 1919 Karakhan Declaration (Saich, 2008). The Karakhan Manifesto (signed by Lev Karakhan, the Soviet government's assistant commissar of foreign affairs) offered China a reaction to the injury of the Treaty of Versailles, and most important, the return of the Chinese Eastern Railway to China without payment. This political game was the key for Soviet Russia to obtain Chinese population's approval and sympathy and to find an important ally with a common socialist ideology (Elleman, 1994). Chinese people (and the same Mao) looked at Soviet Union as an example of brotherhood and reaction against the old government: the

October Revolution was the symbol of a radical change in a context of a poor and dismantled country. In addition, the Comintern (international organization of the communist countries) in its Second Congress in 1920 discussed the topic of the liberation of the colonial countries integrated with the world revolution and with the struggle of the proletarian revolution. These two big ideological patterns (communist shared value and fight against imperialism) were essentials for the development of Marxism-Leninism in China. During this context of ideological evolution, the Comintern understood the necessity of a political organized party that could embody all the communist values. In 1920, Voitinsky (one of leaders of the Comintern) visited China with the aim of evaluate the possibility to establish a subsidiary of the Comintern in Shanghai. In that period the radical communist intellectuals in China were Li Dazhao in Beijing and Chen Duxiu in Shanghai, but there were also a lot of activists of the May 4th Movement in all the country that were beginning to share communist principles. In order to organize the groups' activities and to create a common operational network, in 1921 Chen Duxiu and Li Dazhao founded the Chinese Communist Party.

2.1.4. Foundation of the Chinese Communist Party

Militants were organized in different sections all around China, with the main functions of labor movement and propaganda work; while Soviet Comintern was available to cooperate also with democratic governments and their representatives, the First Chinese Party Congress in 1921 adopted a strict proletarian line and enforced the concept of fight against bourgeoisie (Saich, 2008)

"The "Program" passed by the Congress called for the "revolutionary army of the proletariat to overthrow the capitalistic classes" and for the adoption of the dictatorship of the proletariat. The "Program" and the "Resolution" are uncompromising in their hostility to collaboration with other parties, groups or the "yellow intellectual class." The workers' movement was confirmed as the core of party work with the chief aim being the creation of industrial unions."³

³ Saich T. (2008). *The Chinese Communist Party during the era of the Comintern 1919-1943* (p. 11). Harvard university.

This is a crucial turning point for Chinese communist policy, because it implicates the progressive rupture with Soviet Union and the particularism of the Chinese socialist doctrine. Chinese Communism wished to be Leninist, but its Leninism was vague and poorly assimilated, focused on the main themes of social revolution of the working class and the emulation of the Russian communist party (Lew, 1975). The rejection of the bourgeoisie as a symbol of the ancient culture and science, knowledge and of the outdated Confucianism society was a central feature of Mao politics and one of the main obstacle to the “effectiveness” and the practical knowledge praised by Mao.

2.1.5. The First United Front

In 1922 Henk Snievleet (Maring), an agent of the Moscow-based Comintern, called a plenum of the Committee and forced the CCP to make an alliance with the Kuomintang (Chinese Nationalist Party governing China at the time), with the aim of cooperation against warlords, creating the First United Front of the two Chinese parties (1922-1927). Bruce A. Elleman in his work “Soviet Diplomacy and the First United Front in China” (1995) explains this action of strength as a strategic measure to obtain major control of the Chinese Eastern railway in Manchuria and in Mongolia. In 1925 Sun-Yat Sen died, leaving the weak alliance without a formal leader; despite this, in 1926 the Kuomintang led by general Chiang Kai-Shek launched a military campaign against the warlords , called “the Northern Expedition” and won thanks to the support of the CCP. Even if the Expedition was a successful common point for both Chinese parties, Communist Party was still disappointed with the First United Front formation, because of the different objectives and values of them and the necessity to complete the class struggle.

The culmination of the Alliance happened when, in January 1926, the warlord Zhang Zhuolin's imposed his military control over the Chinese Easter railway and arrested the Soviet director: with the aim of answering to this strike, Soviet Union tried to void the Karakhan Treaty and to regain the control over the railway. In 1927, the Kuomintang reaction was the breakup with Soviet Union and the purge against the Chinese Communist Party, that enshrined the end of the First United Front (L'Enciclopedia del Marxismo).

2.1.6. The early political experience of Mao

Mao was affected by the CCP experiences between 1921 and 1927: he took part to the First Chinese Party Congress in 1921 and two years later was elected at the central committee of the party. In 1927 he was sent to the Hunan province to write about the peasant movements organizations. At the beginning he was an assiduous political activist and he obeyed to the Comintern directives without worrying about Soviet strategies, but with the purge and the defeat of the CCP in 1927, two ideological trends appeared in China. The first one was a Stalinist side imposed by Moscow (since 1924 Soviet Union was influenced by the Stalinization process) and implied the recognition of the Soviet hegemony; the second one was the Mao side, less structured than the Stalinist one, without a strong army and apparently with a weaker theoretical pattern. It is important to note that Maoism appeared only after the events of 1927 as a regional movement born in the countryside, very far from the Stalinist ideology and more concentrated on the social action.

Even if it was ideologically far from Lenin's principles and consequently from the pure Marxist thought, the Stalinist experience was an important example for the organization of the CCP.

2.1.7. Chinese Soviet Republic

In 1931 Mao helped established and became the chairman of the Chinese Soviet Republic in China. The Constitution of the CSR had the aim to create a new alliance between Soviet Communist Party and CCP against the Kuomintang and to create the dictatorship of the proletariat and of the peasantry and ensure the triumph of the dictatorship in the all China and in the soviet districts (Kun, 1934).

"The First All-China Soviet Congress recognizes that this Constitution can be given full virtue and effect only after the rule of imperialism and the Kuomintang shall have been finally overthrown and the Soviet Republic shall have established its power throughout all China..."

"...It is the aim of this dictatorship to destroy all feudal survivals, to annihilate the might of the war lords of China, to unite China, systematically' to limit the development of capitalism, to

build up the economy of the state, to develop the class-consciousness and organization of the proletariat, to rally to its banner the broad masses of the village poor in order to effect the transition to the dictatorship of the proletariat”⁴.

2.1.8. The Long March

The Chinese Soviet Republic was crucial for the reformation of the Communist China and the implementation of political and military strategies of Mao, but he was recognized as the real leader of the CCP only after the Long March in 1934. The Chinese writer Sun Shuyun describes the Long March as the “founding myth” of China as a Nation, similar to the Exodus from Egypt for Jewish people (Rampini, 2006). The Long March was a military retreat of the Chinese Red Army from the Kuomintang five encirclement campaigns leaded by Chiang-Kai Shek; the communist army spent more than a year to transit from the Jiangxi area to the Shaanxi region and survived the conflict through the “mobile warfare” strategy of Mao.

Mao Zedong had been relieved on his duty of chairman because of his non-linear doctrine with the Soviet Communist Party and substituted by Zhou Enlai and other members of the “28 Bolsheviks” group. During the Long March, he understood the necessity of creating a Second Allied Front between CCP and Kuomintang to resist against the imminent Japanese incursion and after the abjuration of the same Zhou Enlai, in 1935 in Shaanxi he released the “Wayaobu Manifest”, a public request of the Nationalist party collaboration (Chang and Halliday, 2006). This political measure was a key point of Mao strategy, because it gave him the chance to end the Long March without dishonour and gain the Chinese people trust regarding his capability to fight against Japanese imperialism and defend the country before the communist party interests.

2.1.9. The Second Allied Front: Sino-Japanese War and World War II

In 1931 the Japanese army organized the an assault of the Japanese railway of Mukden (the Modern Shenyang), known as the Mukden incident; consequently, they gave the responsibility of this attack to the Chinese army, in order to get the pretext to invade the

⁴ Kun B. (1934). Fundamental Laws of the Chinese Soviet Republic. Constitution of the Chinese Soviet Republic (c. 1, p. 17-18).

Chinese Manchuria region and established a puppet government. Japanese possessions in China raised quickly, from the Jilin province to the Guanxi area; it caused great economic losses, especially in the South-East and central China, where whole enterprises were moved West into the hinterland beyond the Japanese advance (Hutchings, 1986). The occupation lasted from 1931 to 1937, culminating with the Marco Polo Incident in 1937 nearly Beijing.

The second Sino-japanese War persisted from 1937 to 1945 and in the same period the two countries were involved in World War II, even if only in 1941 China formally declared war against Japan and joined the conflict. The two wars ended at the same time, with the tragedy of the atomic bomb in Japan. At the end of World War II, China stayed at the winning side of the World, with Great Britain, France and U.S., leaded by Chiang Kai-Shek and the Nationalist Party. The Alliance was born to fight against a common enemy: Japan; as previously mentioned, since 1937 Japan had conducted a cruel war with China and was allied with Nazi Germany and Fascist Italy. With the aim to destroy Japanese power, Allied countries let China join the UN Security Council, becoming one of the five historical members. Moreover, through the Cairo Declaration in 1943, Allied powers confiscated Japanese former possessions in China and gave them back to the mainland Chinese Republic.

Despite this initial recognition of Chinese power, its influence wasn't so deep; in 1945 at the Yalta Conference China was admitted as one of the five major members of UN, but it had to sign shameless conditions regarding the Soviet Union presence both in the port of Dalian and in the The Chinese-Eastern Railroad and the South Manchurian Railroad (Ming, 2015).

2.1.10. The Civil War

After the Japanese defeat, the question of who would have definitively governed China emerged rapidly and it culminated in a civil war; even if the Kuomintang controlled more territories and could benefit from more weapons procurement and strategic alliances, during the last bloody military conflict in Manchuria Chiang Kai-shek was overthrown and forced to exile in Taiwan. It is possible to outline different reasons of the Communist success against the Nationalist Party. Firstable, the inadequacy of many nationalist commanders during the Sino-japanese war: inner Chinese parties hostilities didn't take second place for the Kuomintang, and its faction wasn't able to exploit their strategic resources. Second, the

Communist party was aware of his military and political inferiority, but was closely related to the Maoist doctrine and leadership. Mao was already a symbol of the Chinese peasantry and of their revolution: during the Long March he understood the importance of organizing popular support in his party and he was able to realize it. The third strategic point was the independence of each communist geographical unit and the expansion of all of them. In addition, Mao applied the “annihilation of the enemies” strategy, so the reduction of the enemies’ forces and motivation to fight (Boorman, 1966).

2.2. Chinese economic transition under Mao Zedong

On 1st October 1949 Mao Zedong declared the foundation of the People’s Republic of China. This historical moment is not just the emblem of the Communist revenge against Nationalist party and imperialism, but also the supremacy of the countryside on the urban areas. This caused a new political identity and the first concrete reunification of the country after the fall of the Qing Dynasty (Bidussa, 2019). The government of Mao extended from 1949 to 1976 and his economic strategy can be divided in three phases: the “economic recovery” from 1949 to 1952, the “socialist transformation” from 1953 to 1957 and the third one, that was the longest and lasted from 1958 to 1976, was characterized by economic reforms’ attempts and violent social and ideological campaigns (Wang, 2015) .

2.2.1. The economic recovery 1949-1952

In 1947 the Cold War between United States and Soviet Union begun and the world was divided into two big-blocks. According to the work “Chinese Foreign Relation Strategies Under Mao and Deng: A Systematic and Comparative Analysis” (Yu-Shek and Zhang, 1999), the attitude of China guided by Mao Zedong towards Soviet Union and U.S. passed through three different phases. The first is named (yibiandao) or the “learning to one side” strategy; it was based mainly on the alliance with Soviet Russia and its recognition as a communist model, particularly in the establishment of the CCP and the economic organization and the rejection of the U.S. imperialism. Even though the cooperation gave evident benefits to China, like capitals, investments and technologies, Mao recognized the need of an independent China.

At that point there was the necessity of a reconstruction of the country's fiscal structure: in 1950 despite the important economic reforms of this period, the government imposed the old empire inner fiscal system. It implied a rigorous tax system and the centralization of the cash control, with local governments that couldn't apply an independent collection of duties, but acted as agencies of the central government. In addition, to prevent the raise of inflation, the central authority issued government bonds instead of cash; the cycle of money had to be regulated and all cash transactions had to be divided in commodity equivalent units, that means every sum of cash had to cover the purchase of different goods' sectors (Zhang, 2018).

2.2.1.1. Centralization of enterprises

The government attitude towards the reform of the companies was ambiguous: on one hand it favoured a state-owned enterprises model, which revenues and activity was directly controlled by the central authority, and imposed a high taxation of the private companies; on the other hand it supported private capitalism and underlined the need of a private enterprises' system, applied for the development of light industry and trade. The reasons of this paradox are in the main objective of the Communist Party in this phase of Mao's mandate: the quick development of Chinese industry. Since the government was concentrated on the implementation of heavy industry, Mao recognized the importance of the "bourgeoisie activities" (actually not tolerated on the socialist ideological basis) and its key role in the improvement of commerce and retail (Hsia, 1953).

Despite this apparent freedom of trade, the CCP instituted some "control measures" addressed to the private-owned enterprises. The first one was the price-stabilization programme, which employed the superior financial strength of the state trading companies to drive speculative businessmen into bankruptcy. Another measure against private companies was the "Five-Anti campaigns", a CCP initiative with the aim of discourage bribery, tax evasion, fraud, theft of state assets, or leakage of state economic secrets. The most notable form of control was the government assistance in the productive and purchasing phase; the scope was the intervention of the state in the private sector such as

in the public-one and ,in my opinion, a fundamental influx for the creation of modern Chinese enterprises.

2.2.1.2. Land reorganization

The pre-reform rural conditions in 1950s China were characterized by technical problems, like old methods of cultivation, scarcity of arable land, poverty of soil and an excessive amount of the peasant labor-force; in addition, the political system based on a “feudalistic” organization of production favoured a disparity between the enrichment of the landlords and the exploitation of the peasantry (Chou, 1952).

In order to realize the Land Reform, the Communist Party, on the shape of the agricultural reform in Russia, promulgated “The Agrarian Law of the People’s Republic of China” in 1950; this law followed the previous “Basic Programme of the Chinese Agrarian Law” adopted in 1947. The main purposes of this Law were:

- the abolition of the landownership system, the confiscation of the agricultural resources of the landlords and their redistribution between cultivators through the support of the same CCP (with the important exception of the commerce and industrial resources and activities);
- the establishment of governmental Committees enable to control and enforce the reform represented by peasant councils and associations;
- the constraint for cultivators to maintain in good conditions agrarian supplies like lands, animals, crops, buildings and tools.

The ultimate function of the agrarian law was the formation of a socialist land system, including equal distribution of land, nationalization of the agricultural provision and development of collective farms; from that moment villages were organized in cooperatives based on the family farming and, just after few years (through the Great Leap Forward in 1958), in people’s communes. Actually, the Rural Reform offered a vocational retraining to peasants, their involvement in business and in local administration and their participation in the national politics. This was an historical change in agriculture’s system, not only for the reorganization of territories and of productive factors, but also for the political

legitimization of the chairman Mao (Gray, 1964). In fact, the collectivization of lands was forced also through the terror-policy that the CCP did against landlords: there was an institution of “examination teams” of peasants that were enrolled to control the success of the Land Reform and to complete the class struggle with every cruel measure. Moreover, a lot of cadres were corrupted and there was a formation of a rich-peasant class, similar to the landlords, that begun to exploit less enriched cultivators (Liu ,2012).

Despite all of this efforts, the Land Reform from 1950 to 1952 had a dead end: an evident example is the case of Taizhou, in the Northern Jiangsu province:

“Compared to 1950, for instance, the rice yield in Taizhou Prefecture dropped by 26.2 percent in 1951, and further by 12.7 percent in 1952. Despite the increasing number of land opened for cultivation, agricultural productivity kept declining throughout the movement and the total grain yield in 1952 therefore decreased by 0.15 percent than 1950”⁵.

Moreover, the process of legal redistribution of land was slow and inefficient; peasantry had to wait months to gain its “certification of properties”, that was the only enrollment to work in the field and, as a result, the production was decreased and the lack of food supply made impossible for cultivators to survive the hunger and to pay taxes to the Communist Party.

2.2.2. The socialist transformation 1953-1957

The second phase of the Cold War in China was characterized by the (lianggequantoudaren), the “fighting with two fists strategy”, based on the refusal of both the U.S. capitalism and the Soviet communism; the rupture with Soviet Russia was caused by the raise to power of Nikita Krushchev and his threatening behavior against China. He dismantled Sino-Soviet relationships and abrogated cooperative agreements between the two countries, in addiction to recall investments, projects and experts from the Chinese territory. At the same time, the relationship with U.S. remained sharp and the country persisted with a political observation and containment of China.

⁵ Liu W. (2012). Mao's agrarian reforms: the social rural transformation in an East China country, 1949-1965. University of Iowa.

The initial fully-centralized fiscal policy was quickly changed with the First Five Year Plan in 1953. During these five years, the government adopted the strategy of collocating resources according to the difference expenditures' needs of the regions. In 1956 Mao decided to delegate some fiscal powers to local authorities and to decentralized developmental approach in a major address dealing with 10 political, economic and social relationships in the new socialist country (Zhang, 2018).

In fact, during the Polituburo meeting of the CCP on April 25th 1956, Mao pronounced an important speech about the reconstruction of the socialist nation different from the Soviet example (in fact, he would have continued to apply Soviet model in different political and economical initiatives). He underlined the importance of ten social relationships that the new socialist China had to develop during his guide, underlining different aspects of Mao's mission: industrialization and the implementation of agriculture, development of both costal and continental industrial areas, raise of the production, need of a revolution.

2.2.2.1. The First Chinese Five-Year Plan (1953-1958)

These purposes were supposed to be realized through the first Chinese Five Year Plan (1953-1958): the main objective of the plan was the transition of China from agricultural to powerful industrial country, starting from the construction of technical machinery, heavy, metallurgical and chemical industries (Rosse, 1954). Moreover, the key point of industrialization was production and its realization. The activity was organized in five different areas: Manchuria (developed in transportation, electric power and heavy industry by the Japanese occupation), North China (including Beijing and the seaport city of Tianjin), Shanghai (one of the most important industrial centers of the country), Wuhan (continental area and point of contact between the north-south rail system and the Yangtze river system) and finally Northwest China (even if attention was dedicated also to the Canton side, in the South of China).

The Plan was actually based on the Soviet model, but China at that time was poor of resources, trained manpower, plants, power facilities and capitals, so the results were less than the government expectations; most important, Chinese industry was only the 10% of the national production, while in the Soviet Russian industry already the 48%. Even if the

total expenditure of just one year of the plan overtook 4 billion dollars, no more efforts were collocated in different sectors from the industrial one: this caused terrible losses in the agricultural sector, that had been the leading field of China up to that moment.

In 1952 the Land Reform was declared as complete; at this point, the CCP imposed the MAT (mutual aid terms) form of cooperation. These groups were composed by the new peasants landowners (usually organized in families), who had to share lands, workforce, tools and production resources; from this organizations took shape the first People's Communes, where also the ownership of land was transferred to the community, and to some extend, to the same Communist Party. In this way farmers were organized in collective units and their production was directly managed and collected by the state and redistributed to guarantee to every worker enough provision of grain (Liu W, 2012).

The formation of the socialist system needed not just the monopoly of the state on the food supplies, but also the rehabilitation of the ancient Hukou System. The Hukou organization was already adopted during the imperial China for social identification of people and families, migrations movement report and tax collection. During this phase of the communist China, redistribution of lands and enterprises reforms had caused an important and uncommon social mobility, that reflected the reinforcement of population control measures and information systems.

At the same time, agricultural provisions were collected by the CCP in order to be sold, becoming part of the national capital reserve, and reinvested in the industrial implementation. In order to play this trick, the government had to invest on three different kinds of social constraint: the monopoly of farm production, the communes system and the hukou system. The political investment in the heavy industry with the revenues of agriculture produced a huge outflows disparity from the countryside and the cities, and made many peasants tried to escape to the big urban centers; the hukou system was the strategic policy that disabled this leakage through strict document controls. To enforce this political measure, in 1958 the Chinese Communist Party under Mao Zedong promulgated the "People's Republic of China Hukou Law Regulation", based on the agricultural ownership (Chan, 2009).

2.2.3. Mao's departure from central planning 1958-1976

In 1958 Mao Zedong launched the Second Five-Years' Plan of the history of the People's Republic of China, namely "the Great Leap Forward" (1958-1972). The initiative was announced at the Politburo Conference in Beidaihe Conference (北戴河会议) in august 1958; the two main goals were the raise of the steel up to 10,7 million tons and development of People's Communes through the formal abolition of private property and the centralization of lands under the CCP power (Chung, 2013). In order to implement the communes system, peasants were encouraged to eat at the mess halls organized by the government, work hard in the land without the property of grounds, they couldn't move from the commune border and they were usually starving for the corrupted officials who adopted an unequal distribution of food supplies to favor their families before the peasants' ones. This situation of radical centralization of provisions caused the Chinese Great Famine, that comprehended a huge number of deaths, estimated between 17 millions to 30 millions (Qichun and Meng, 2016). The Great Leap Forward had also significant social implications, like the abolition of good relationship existing between the rural class: all ancient Confucian values were prohibited, individual freedom of choice, of movement and of belief was avoided. Even if the experimental removal of private property rights was abolished in 1961, the effects of the Great Leap Forward on social capital, disparities between incomes and development maximization of different regions are still visible in Modern China.

Even if Mao had a fundamental role in the implementation of the second Five-Year Plan, Deng Xiaoping (the future chairman of the CCP after Mao) had an important supportive function. In 1958 Mao had criticized the premier Zhou Enlai and the deputy premier Chen Yun to oppose the poltical of the "rush advance", that had been the key factor of the establishment of the People's Republic of China, based on the development of industry and the collectivization of agriculture. During that period Deng worked in the Central Secretariat of the party and was enrolled to lead national economy and delocalized committees; he was encharged also of an important function during the Anti-Rightist Campaign in 1957 (Chung, 2013). This political assault was implemented against all people who had showed CCP dissent, in particular intellectuals who favored capitalism and criticized collectivization, and was the answer to the previous 1956 "Hundred Flowers"

campaign. The “Hundred Flowers” Movement was enforced by the permission of Mao to express their opinions upon the communist regime and the results of the First Five Years’ Plan; it was a wave of flourishing art and progress of science, in which freedom of thought and of expression was enlarged. Mao was aware that his unsuccessful policies had just renovate the nationalistic orientation of hundreds of people, especially intellectuals, and declared the freedom of speech and of political discussion among different political point of views. With the aim of encourage ideological debate, Mao announced the common points that all Chinese people should follow, without exceptions: the willing to follow the Party, the socialist path and the progress gained by reforms (Dooling, 1961). In other words, all the academic system was influenced by the Marxist-Leninist doctrine, and intellectuals weren’t actually free to speak. In fact, after this charade, Mao organized a huge persecution of students, intellectuals, scientists, writers, artists, accused to be right-dissents and terrorists against the party. In 1959 at the Lushan Conference, a Politburo meeting of Chinese Communist Party Committees, Mao purged the defence minister Peng Dehuai, who dared to criticize the Great Leap Forward unsuccessful initiative.

After the evident failure of the Great Leap Forward and the disillusion of the infallibility of Mao Zedong, the chairman inflicted another bloody campaign in China: the Great Proletarian Cultural Revolution (1966-1976). The main principle of the campaign was the Revolution as the culminating point of the socialist revolution ran by the CCP up to that moment: the centralization of the Maoist doctrine, after the centralization of all the economic and social activities. In this purge against dissidents, the role of violence had been a key factor: since the beginning of the People’s Republic of China, the CCP had underlined the importance of violence for the success of the Great Revolution (Ji, 2004). The concept of revolution intended as the peasant class struggle against the middle-class had been the leitmotiv of Mao’s policy, and thanks to this aim he had been able to lead the masses and exploit farmers to reach his economic objectives. In this phase the battle against class enemies had become the battle against the party’s enemies. In addition, to create concrete and visible factions among people, he gave privileges with people of red-class backgrounds, seen as good soldiers of the party, while he identified a class of potential enemies among all people who encouraged freedom of thought, in particular students and intellectuals. From that moment, the Red Army committed atrocities along all China to serve his master. An

underestimated factor which addressed cultural revolution was the “language of violence”: the Maoist propaganda, symbols (Red flag, punch elevated), slogan, gesture and attitude towards class enemies was a relevant determinant of the revolution. In 1968 begun the “down the countryside movement”, were cadres were tortured and sent to the countryside for the “Re-education” process.

In order to eliminate the academic class, at the beginning of Cultural Revolution 1966-67], Mao closed schools in urban China and send students to work in the countryside, to purify their life and to learn useful labor activities; during 1968-69 schools reopened but teachers were only allowed to do lectures about farming and manual work activities. On this way, universities were closed from 1966 to 1970; after 1970, universities begun to recruit students according to the political participation and the family provenience. The intellectual class that missed its future during these years was called “lost generation” (Xin and Gregory, 2002).

The third phase of the foreign policy of China was named (yitiaoxian) or the “United front strategy”, which involved an attempt of alliance with U.S. to face an eventual attack of Soviet Russia. It involved an American diplomatic approach to China, with the formal meeting of president Nixon and chairman Mao in 1972. Finally, in 1971 China joined the United Nations after a negotiation of Henry Kissinger and Zhou Enlai (Cheng and Zhang, 1999).

2.2.4. The transition of power between Mao and Deng

After the Lushan Conference in 1959, Deng Xiaoping maintained the same attitude toward Mao's policy that had adopted during the Great Leap Forward implementation: he supported and incited him to complete the Anti-rightist campaign. In addiction to this initial approval, Deng worked with Peng Zhen and Zhou Enlai to draft a new economic plan in 1960, based on a 1960 steel plan of 18,4 million tones and a grain target of 300 million tones: the project was approved in 1960 at the Shanghai meeting. After this goal, Deng travelled in the south of China, to make inspections about the real agrarian conditions after the Great Leap Forward's push. In Zhanjiang he was impressed by the water conservancy projects of Guangdong First Party Secretary Tao Zhu, based on sea dykes and irrigation

systems. In 1961 Deng bravely admitted that the excess of workforce hired in the heavy industry had caused a lack of manpower in the countryside and that also agricultural technology needed important attention and struggle. Despite this humble considerations, Deng kept supporting Mao, especially about the chairman choice to persist on the Great Leap Forward realization, even though he was aware of all the economic losses and the famine that the country was facing. It is evident that Mao trusted the technical competences of Deng, and he left part of the organization of the agricultural production in Deng's hand. Moreover, Deng gave to the president the bucolic image of the countryside that Mao withstood in his ideological policy (Chung, 2013, p. 9-20). The cultural revolution was a turning point for Deng Xiaoping, because during this period he openly disagreed the fanatic ideology of Mao for the first time, underlining the necessity of an economic recovery more than another political campaign. After his critic, he was prosecuted by the Red Army, lost his position and was send to exile. He was rehabilitated only in 1973, thanks to the suggestions of Zhou Enlai; the reasons of his return on the scene were still unclear: on one hand Mao was aware of Deng abilities as a statesman; on the other hand Deng promised a public review of the Cultural Revolution phenomenon (Russo, 2013).

The revolution offered the scenery for some considerations about Chinese factories, such as the relationship between economic development and Marxist-Leninist principles. In 1974 Mao published the "study of the theory" that concerned these important themes and in 1975 Deng was named vice-premier. One of his core targets was, of course, the development of factories and a change in the industrialization process; although his pre-revolution apparent enforcement of Mao's politics and ideology, he comprehended the necessity to recreate an order after the revolution disaster. He was a pragmatic economist but he despised political ideology as a mean to achieve power; for this important reason, he understood the necessity of depoliticization of the country in order to achieve a concrete modernization.

2.3. Deng Xiaoping reforms: the blossom of Chinese Modernization

The “Four Modernizations” symbolized an important first-step in national reconstruction after the Cultural Revolution: they included agriculture, industry, defence, science and technology. After Mao’s death in 1976, Hua Guofeng assumed the control of the Party and declared the formal end of the revolution with the arrest and the execution of the “Gang of Four”⁶. In 1978 Hua was deposed by Deng, who became the chairman of the CCP (Liu, 1979). This historical conquest enabled the actualization of the Four Modernization, firstly theorized by Zhou Enlai in 1963, and in 1978 announced by Deng Xiaoping with the official opening of the modernization plan (Mishra, 1988). The focus of modernization were the economic recovery and the expansion of production, both strictly dependent to the technology development: China had a relevant gap to cover towards Western countries. To achieve these ambitious purposes, the academic system restoration was the first stone; the lost generation is a shaming chapter of the cultural revolution, and the rehabilitation of all of the school workers, from teachers to students, is still an important achievement of contemporary China. Other notable macroeconomic initiatives of the Four Modernizations were the improvement of domestic savings, reduction of speculations and financial reform, change of the local administration system, investments in transports and communications.

Although the urge of economic reforms, the Four Modernization were not sufficient for the transition of China; the main aim had to be the construction of a socialist harmonized country, following Chinese characteristics. Thanks to the previous political experience of Deng, he underlined the importance of considering China as a nation at the first stage of socialism, to pursue any kind of development; in order to change the country, it was essential to increase the population wealth and cultural progress, raising their living standards and stimulating them with an evolution framework. This human-centred concept was a new important standard for Chinese political vision, principally “stolen” from Western countries modernization, which focused attention on “social” development more than “socialist” transformation (Cao, 2009).

⁶ The “Gang of Four” was formed by four Chinese Communist party officials: Zhang Chunqiao, Yao Wenyuan, Wang Hongwen and Jiang Qing (Mao’s last wife). They were arrested and executed by Hua Guofeng with the charge of military coup.

2.3.1. Reforms and Opening Up policy

In 1978 Deng made some concrete actions to achieve the program of “socialism with Chinese characteristics” and the transition to a “social market economy”. The first step of this economic revolution was the de-collectivization. During Mao government, the economic activities were ruled by a central planned system and the enterprises had to follow business operations according to the CCP directives. In 1982 Deng declared the establishment of the market economy system based on commodities: “the socialist commodity economy”. The three base principles of the Reform and Opening Up policy were:

- the attractiveness of foreign capital and the expansion of exports;
- the contract system with remuneration linked to output.
- the interdependence between enterprises (which most remained state-owned companies).

2.3.2. Joint Ventures and Special Economic Zones

With the aim of expanding international cooperation and favor the attendance of technologically advanced foreign enterprises in China, Deng promulgated two important law on Chinese Foreign Equity Joint Ventures (sino-joint ventures and wholly foreign-owned enterprises), the “Law on Income Tax on Chinese Foreign Equity Joint Ventures” (1980) and the “Law on income Tax on Foreign Enterprises” (1981) which legally enabled the status of JV and the protection of their properties (Chen, 2010). Meanwhile, in 1980 chairman Deng ratified the regulation of the Special Economic Zones (SEZs). The first SEZ regulation passed first in Guangdong and then it was enlarged to other costal areas (Wang, 2013). Through this law foreign investors gained important facilities like :

- private property rights protection, that gave an impulse for foreign entrants to establish new factories or companies by their own or with a JV with a Chinese partner and maintain the right of ownership of assets and profits;

- tax incentives, like reduction of the corporate income tax, free custom duties and free materials' duties;
- land use policy: even if the CCP was the owner of all Chinese lands, foreign investors had the right of use, lease and consume of the national land for business purposes. The only important condition was the minimum investment of ten million dollars or projects recognized as technologically advanced.

The SEZs started with Shenzhen, Zhuhai and Shantou in the Guangdong province and Xiamen in the Fujian province raised quickly. In 1988 they already comprehended the Pearl River Delta, the Yangtze River Delta, the Min Delta in Fujian, Hainan island, Shanghai Pudong , Tianjin Binhai; in 1992 they were 35, and in 2010 they reached the number of 69 (Zeng, 2012). The main impact of SEZs in Chinese economy was on the creation of industrial clusters, that are deep geographic concentration of firms ranged in the same sector; clusters are a widely-used way for developing countries to promote the increase of economy with the support of government. Consequences of industrial clusters were inflows of FDI (Foreign Direct Investment), raise and diversification of export, technology and knowledge transfer thanks to the Spillover effect and the relative boost of human capital.

All of these elements have impacted on the GDP growth (Gross Domestic Product). GDP was taken as a valuable index to measure Chinese economic growth target only during Deng Xiaoping reforms; he firstly referred to the GNP (Gross National Product) only in 1979 at a meeting CCP, defining the goal of GNP per capita over 1000 dollars as a fundamental goal that would have been reached by the end of the XX century, in order to gain the position of developed country and consequently help Third World countries. Thanks to Deng Xiaoping GDP Plan, China will have been able to quadruple its GDP by 1997, transit from a low income-country to a upper-middle income country (Liu, 2018).

2.3.3. The land reform: introduction of the household responsibility system

In 1979, Deng enacted another reform of the agricultural production: the “contract system with remuneration linked to output”. Based on this contract system, peasants and farmer families had been able to product autonomously and be granted their profits. With the

Constitution of 1982 (the first was in 1954) he definitively enshrined the separation between political and economic power and in 1984 the People's Communes system was abolished, even if formally only in 1993 (Chen, 2010, p.11). This historical change on one hand caused institutional benefits like the raise of the agricultural productivity and the property right of farmers commodities, on the other hand inflicted deep wounds in rural areas. In 1981 the central government recognized the "household responsibility system" as a valuable alternative of the collective system. One of this organization deficit is the lack of incentives by the state, and consequently on the productive effort itself; another one is the transitions cost of this institutional exchange in terms of negotiation and redefinition of each one's obligations and rights (Lin, 1988). Actually, the real tragedy of the de-collectivization was the collapse of the health public service offered by the People's Communes until that moment and the privatization of basic healthcare (Milcent, 2016).

2.3.4. The first industrial revolution and the enterprises reform

Throughout the formalizing of Deng's reform, China was able to achieve its first Industrial Revolution: there were different fundamental factors involved in this process (Fortier and Wen, 2016). Firstly the abolition of the collectivization system and the land reform, which encouraged farmers to invest their crops surplus and sell it on the market: this commercialization of agriculture supplies marked the transition between a subsistence economy and a surplus economy. Secondly the implementation of township villages enterprises, that favoured the formation of small rural industries; TVEs were usually organized as units that could be collectively-owned by residents of that specific area or owned and controlled by the peasants. According to the research paper of Fu and Balasubramanyam at the Lancaster University of Management in 2003 named "Township and Village Enterprises in China", they covered the 61% of China's total industrial production in 1999: a phenomenon which needed to be taken into account. TVEs were essentially collective-owned but market-oriented, they were autonomously managed but their revenues were partly recollected by local governments. Township villages enterprises were governed by leaders of the villages or by professional managers paid with a fixed-wage contract, while workers were paid on commission. The third and most

important factor was the development of mass production and the implementation of the “industrial trinity”, composed by energy, motive power and infrastructures.

In order to legalize these new forms of enterprises and industrial production, in 1979 the government issued a Chinese state-owned enterprise reform, based on the raise of state-owned enterprises autonomy of operation and management and enforced by different laws, like the Provisional Regulation on Worker Representative Congresses in state-Owned Industrial Enterprises (1981), the Provisional Regulation on Factory Managers of State-Owned Enterprises (1982), the Regulation on Rewards and Penalties for Enterprise Employees (1982), and the Provisional Regulation on State-Owned Industrial Enterprises (1983). In addiction, for the purpose of protecting both emerging private enterprises and government interests, the CCP in 1988 enhanced the Provisional Regulation on Private Enterprises (Chen S., 2010). As before mentioned, another important source of private enterprises regulations was the establishment of the Special Economic Zones and Joint Ventures.

2.3.5. Tian'an men protest

Despite the concrete results of the economic reforms, Chinese population was still wounded by the Cultural Revolution and the Great Leap Forward, that infected the country with persecutions, tortures, murders of entire provinces, public humiliations, temples and book burning. The suppression of the “hundred flowers” movement previously encouraged by Mao itself and the fight against culture and technical knowledge, the closure of the academic system and the “lost generation” were still deeply felt by the society (Rampini, 2006, p. 98-107). Moreover, Deng Xiaoping had never applied the “de-Maoization” of China; he strongly believed in the dictatorship as the only type of government that could unify China again after the trauma of the revolution. In 1981 Deng, during the Central Committee meeting, gave the last judgement of Mao Zedong, admitting that he had make some mistakes but that overall he had been a great communist and leader (Rampini, 2006, p. 172-177). The party had used propaganda as the usual mean to control people's political and labor orientation, and had rewrite the story of Mao, correcting the past mistakes and making

unavailable past information: the censorship was the greatest strategy of the system (Shell, 2018).

Although the economic reconstruction and the employment efforts made by Deng, on one hand the education state system wasn't already restored and there weren't enough young graduated to satisfy the market demand; on the other hand social science and humanities students suffered of unemployment. On 15th April 1989 university students and intellectuals walked through Tian'an men square asking more investments in education, transparency about politicians' income, newspapers without censorship and democracy. On the 4th June 1989, after one month and a half of protest, Deng ordered the CCP army to execute protestants with the tanks.

2.3.6. Post Tian'an men leadership

After Tian'an men events, Chinese Communist Party faced a particular disorganized phase. The same Deng understood the magnitude of the situation: the world press had seen him break up the protest and murder thousands of young students. He needed to retire, but he felt proud to have conduct China through economic liberalization and modernization.

In November 1989, at the plenum of the Central Committee Deng was deposed and Jiang Zemin was named as the new chairman of CCP. After 1989, Deng Xiaoping had a strong debate with Chen Yun; they had been both responsible of the defeat of Hua Guofeng in 1978 and they had been in competition to achieve power after Mao's death. While Deng promoted market economy and open-door policy, Chen Yun was filo-maoist and believed in socialist principles. In 1991, after the fall of Soviet Union, Chen Yun used the press to emphasize the necessity of a restoration of Mao principles and enforced criticism against Deng policy. Despite this, Deng persisted to appear in different public occasions, with the aim to restore his reputation. In 1992 he did a tour of the South of China, where he visited Wuhan, Shengzhen, Zhuhai and Shanghai; his purposes were achieve accomplishment for the economic reforms and control SEZs results, to concretely demonstrate that the validity of his reforms was stronger than the disillusion of the dissidents widely disseminated after Tian'an men incident. He finally won the press battle thanks to the support of newspapers like Renmin Ribao, that published articles in favor of Deng policies and the targeted use of

capitalism. Most important, at that point Jiang Zemin gave him total support in the continuity of Deng economic reforms and Opening-Up policy (Zhao, 1993).

2.4. Jiang Zemin and the Socialist Market Economy (SME)

In order to guarantee the continuity with the economic reforms of Deng, Jiang Zemin during the 14th Congress of the CCP in October 1992 introduced the concept of Chinese “Socialist Market Economy” (SME). This innovative economic pattern was born by the fusion of Chinese socialism and the development of market economy; in other words, it was based both on public ownership of means of production and Chinese state-owned enterprises, and on different sets of ownership that could regulate the market economy (Cui, 2012).

The first to talk about SME was James Meade, the Englishman Nobel prize of economy in 1977, who considered it as a form of “liberal socialism”, theorized by the same Meade in 1935 with the paper titled “Outline of Economic Policy for a Labour Government”. In 1988 at the Italian Conference of the Lega Nazionale delle Cooperative e Mutue, Meade presented the concept of the “Social Dividend”; he described it as a free income payed by the state to every citizen, independently on his economic and employ situation, his age, his health status. The purposes of this economic action were “Liberty”, intended as freedom of choice of the population towards employment ambition, “Equality”, seen as abolition of poverty and equal opportunities, and “Efficiency”, meant as the proper use of resources with the goal of raising common living standards for everybody. Social Dividend would have been useful to stimulate investments, buying of goods, and make the economy run. Another tool that Meade theorized to this aim was the use of “consumer credits”, a sort of meal vouchers for different uses. Moreover, Meade thought that there was the necessity of a basic state interference in a modern economy, especially regarding the regulation of inflation and deflation, prices, markets and equal distribution of profits. At this point the relationship between Social Dividend and Social Market Economy became clear: market socialism was applied as an instrument to control and distribute the profits of socialized industries. It could be compared to the concept of distribution of the equity among shareholders of the same company under the capitalistic system (Van Trier, 2018) .

In 1990s Jiang Zemin understood that to achieve a Chinese Social Market Economy there was at first the need of a redistribution of capitals among national government, local governments and private economy. In order to achieve this goal, the Party had to regain control on the fiscal and financial system and to pursue the principle of “grasping the large and releasing the small”; this strategy’s pattern is the cut of unproductive state-owned enterprises and the development of scale economies particularly in sectors directly managed by the state. The SME framework was criticized by different Chinese personalities, because of its similarities with the pure capitalism and the consequent discordance with Chinese socialism. Despite these conservative critics, SME was strictly linked to the Marxist concept of “historical materialism”, which described the implementation of the productive forces to the achievement of a socialist planned economy. At the 14th Party Congress of 1992 Jiang Zemin asserted that in the new SME system, the market would have played the major role in the development of productive forces. In this way, factors directly dependent to the market like competition, demand and prices would have been the path to follow to implement the economy. SME system establishment included three big changes: the differentiation of ownership and property rights, the responsibility of investors only on the invested capital, and the intervention of state mainly on macroeconomic issues, like industrialization, creation and distribution of economic capital, market regulation and collection of standard taxes for enterprises (Brødsgaard and Rutten, 2017).

2.4.1. Going Out policy

In 1999 Jiang Zemin launched the Going Out policy, an initiative supported by the same CCP to assist Chinese companies in the development of a common internationalization strategy to reach foreign countries; the main objectives of this programme were the increase of OFDI (overseas foreign direct investments), favoring the diversification of industrial production, the participation in the international trade and the creation of a strong brand reputation and awareness of Chinese brands abroad. As an evidence, Chinese domestic political economy has been a major driving force of the Going Out policy; in fact, the emerging issues of the old growth mode, the changing relationship between government and SOEs and banks and the general dissatisfaction about the central management of the foreign reserves

has contributed to the increase of the outgoing FDI and the aid programs. In contrast, the unconventional characteristics of this initiative, like the relationship between Chinese foreign aid and exports, the expected return on many investment projects and the low attention paid to corporate social responsibility by Chinese companies going overseas, has deeply affected Chinese multinationals' reputation abroad. Another key-factor of the Going Out policy was the need of the CCP to promote the international use of the rmb currency, even monitoring the credit inflows and outflows of the country; Chinese OFDI has been concentrated more in infrastructural projects, such as telecommunications networks and railways, schools and hospitals and MNCs subsidiaries (Wang, 2016).

2.4.2. Property Rights

The first challenge was mainly oriented on the redefinition of property rights; during the 15th Congress of the CCP in 1997, Jiang Zemin enhanced the state-owned enterprises (SOEs) reforms. There were three "schools of thought" about the relationship between state ownership and shareholding system. The first one, named "the clarification of property rights system", argued that SOEs had actually an uncertain owner: in other words, nobody could pragmatically follow the interests of the SOEs. Through the Deng Xiaoping "contract responsibility system", SOEs gained four fields of autonomy: management, budgeting, decision and development. These grade of autonomy caused corruption and lack of accomplishment of the state's interests. Enterprises were able to do tax evasion counterfeiting contracts with government agencies and retaining their profits. To manage these situations Jiang proposed the modern enterprise system, which followed three principles: corporatization, conversion of state assets into state-owned shares and definition of a set of property rights defended by the board of directors against the managers' frauds.

The second pillar was oriented on the concept of economic democracy, intended as the possibility for the workers to hold shares of the enterprises. Trade unions retained that a worker should have the right of ownership of the company's shares compared to his labor contribution. This school of thought influenced CCP on the promulgation of the 1994

Chinese Corporation Law, which enabled workers' directors to take part at the board of directors of SOEs and to invest some capitals being responsible only of this one.

The third school was not about the redefinition of the enterprises ownership, which were considered as clearly of the state, but about the enforcement of the state ownership and influence. The problems were principally two: the corruption of local officers and the under evaluation of the state assets of Joint Ventures and partnerships due to the managers' pursuit of their own interests. In addition, SOEs were less competitive in the market because of their focus on the heavy industry, which needed high capital investments, long time of waiting, more responsibilities and obligations and redundant workers (Cui,1998).

2.4.3. The Tax Sharing Reform

Since Mao's mandate until the beginning of the 1990s, state-owned enterprises acted as an important source of state revenues and were directly managed by the government through budget, forecasts and profit plans. Every fiscal decision was set at a central level, including tax collection, salaries, school standards and sanitary standards, unemployment benefits. Local agencies were just an extension of the national policy and had limited finances calculated by the central force, independently on the local administration revenues amount. This sharing system had the objective to cover losses of some areas and redistribute the high revenues of rich industrial centers.

During Deng economic reforms, the unique central planning collapsed: SEZs caused the implementation of industry and industrial clusters and the market oriented economy abandoned the fixed planned prices and revenues. In addition, young private enterprises became competitive against national companies and subsequently the central authority lost an important part of its revenues in spite of local expenditures which grow from 45% to 70% of the national revenues from 1980 to 1990. The dispute between central and local administration and the old fiscal system unsuitable for the socialist market economy caused a progressive fiscal decline (Wong, 2000).

In order to solve this gap, in 1994 Jiang enacted the Tax Sharing Reform, based on three goals: healing of the fiscal default and creation of an efficient revenues system for the central government, increasing transparency of the tax collection system and renovation of

national and local relationships and obligations about the tax system. As a matter of fact, the tax sharing system (fenshuizi) replaced the previous fiscal contracting system: by this way the central government regained the power of collecting the majority of taxes and manage it in the best way. Operationally this system reduced the corporate income tax from 55% to 33% and imposed a value-added tax (VAT) on goods and services. Another important step was the institution of the National Tax Office, which was engaged to collect VAT, personal taxes and income taxes from companies. Furthermore, local administrations collected business taxes on intangible assets and real estate properties, income taxes, agricultural taxes and land taxes. On the contrary, expenditures like urban construction, environmental protection, water supply, education, social welfare and public safety were managed by the local government (Zhou, 2016).

2.4.4. China's entrance in the WTO

As previously evidenced, China during 1990s was facing different crisis: unproductive state-owned enterprises that were involved in corruption, protectionism and industrial monopoly, emerging competitive private sector, ancient tax system, excess of the military power. On 10th November 2001, after six years of negotiations, People's Republic of China joined the World Trade Organization (WTO). Since that moment China had to follow the international market obligations, including transparency, price control, import and export taxes in compliance with the uniformed system, sanitary measures (WTO, 2001, p.1-12). This was a significant event for China, which had registered 20 billion dollars of foreign trade in 1978 and 474 billion dollars in 2000. Fewsmith in his article "The political and social implications of China's access to the WTO" (2001) analyzed both benefits expected from the entrance in the international trade and evident limits of this agreement. In particular, he noticed the social impact of the probable increase of the gap between costal industrial developed areas and inner countryside. In fact, employment, development of new technologies, more entrepreneurship initiatives and the 1994 Tax Reform in his opinion would have had a concrete positive impact only on the central government and on the industrial areas, while in the villages the price of grain had already felt of the 30% and rural population welfare had been forgotten. On the other hand, the standardized market would

have implemented productive forces and also agriculture, enforcing crop specialization and rural supplies' export.

2.5. Hu Jingtao and the Harmonious Society

During the 16th National Congress of the Chinese Communist Party Hu Jingtao became the chairman of the CCP, but Jiang Zemin remained responsible for the Central Military Commission; Hu was determined to ensure the continuity with Jiang government. In order to maintain "peace and stability", he enforced censorship, both on newspapers and on websites and implemented an anti-crime campaign; but in contrast, Hu focused his economic action on the pursuit of harmony and equilibrium among the society, especially because in that period there was an emergence of populist feelings. In fact, new technologies brought series of innovative kinds of system violation, like online copyright piracy and political dissidents (it was notable the Falungong sect, a religious practice based on meditation and qigong principles and already contrasted by Jiang Zemin). Acquired technology brought industrial specialization in different sectors, especially the automotive and the communication field; in order to fight against emerging monopoly companies, in 2002 the phone line service China Telecom was divided in two, China Telecom and China Netcom. After this measure, different mobile agencies came on the market increasing competition and the government gained domestic revenues in the stock market.

Thanks to Jiang reforms and the recent access to WTO in 2001, Chinese GDP raised till 10 trillion yuan and export grew by 8%. Despite this, the security, financial and banking areas still had a slow development and this problem affected also import and export activities (Dali, 2003).

2.4.5. The Western Development Strategy

Talking about the disparity between different regions of China, as previously analyzed, industrial and technological clusters in China at the beginning of the century were usually localized on the external coast. In order to implement the other geographical side of the country, in 1999 Jiang Zemin launched the Western Development Strategy. This plan was based on the construction of infrastructures in Chinese hinterland, particularly in three

areas: Chengdu, Xi'an, Chongqing, Sichuan. Today these SEZs include Chengdu-Chongqing Economic Zone, Guangxi-Beibu Gulf Economic Zone and Guangzhou-Tianshui Economic Zone for science and technology R&D (Huang, Ma, Sullivan, 2010).

2.5.1. Qualified Institutional Investors Program

To solve this gap, in 2002 Hu Jintao launched the Qualified Foreign Institutional Investors (QFII) Program, which allowed foreign investors to access Chinese inner stock market. This strategy of stock market liberalization enabled the country to get stock returns and followed Jiang Zemin strategy shown during the reopening of the Chinese stock market in Shanghai (1990) and Shenzhen (1991). To prevent control on local firms, Hu imposed legal restrictions of foreign ownership on domestic equities (Chan and Yu, 2003). Provisional measures included: occupy the management, security or insurance companies status; having managed at least ten billion dollars securities in the previous fiscal year; be financially stable. Since 1984 selected SOEs were allowed to reorganize joint stock companies and issue securities; these companies could issue five types of shares, A, B, C, H and depositary-type shares. A shares were limited to domestic investors, B were treated in U.S. dollars in Shanghai and Shenzhen, C were related to Chinese legal entities like institutions, enterprises and departments, H for the shares issued in Hong Kong. After China's access in WTO, foreign banks began to operate in China using rmb currency (Wu, 2006). Stock market liberalization had a positive impact on FDI net inflows, which reached 53.074 billion dollars in 2002 and after only ten years in 2012 got the 241.214 billion dollars (The World Bank, 2018).

2.5.2. SARS Epidemic

In 2003 Hu Jintao had to face the SARS epidemic, or “severe acute respiratory syndrome”, appeared in Guangdong and impacted about 10.000 people in different countries. The disease impacted Chinese economy, especially the tourism field such as export and trade. Chinese GDP lost the 3,1%, FDI suffered a reduction of 7,12 billion dollars, while domestic tourism lost 3,5 billion dollars (Keogh-Brown and Smith, 2008, p.116 table 4). While at the beginning of the contagion the CCP remained silent with the press, after some months Hu

Jintao decided to ensure transparency of news and fired the health ministry; of course the international press and the World Health Organization criticized Chinese attitude against the world community (Rampini, 2006, p. 134). Despite the mentioned notable effects due to the virus, the impact on Chinese economy presented short-term consequences.

In fact, Hu Jintao in his famous speech at the 17th Party Congress on October 15th 2007 in Beijing described the battle against SARS as successful and victorious, thanks to the improvement of the health care system. His words were full of pride about Deng Xiaoping and Jiang Zemin economic reforms and about his first five years of government (2002-2005); furthermore he set the goal of the 11th Five Year Plan (2006-2010), which was the realization of an harmonious socialist society. Another goal initiated by Hu was the construction of infrastructures, transport and communication facilities and an ecological plan to protect the environment. Hu seldom admitted that there were still different objectives to realize, first of all ethical progress, private property and equal distribution of wealth. An important step of Hu was the modification of 1982 Constitution and the introduction of guaranteed property ownership and human rights; in addition in 2009 the same Hu signed the National Human Rights Action Plan, with the aim to protect population from torture, unfair judgement and guarantee basic the basic rights of political participation (Kielsgard and Chen., 2013).

2.6. Xi Jinping and the Chinese Dream

Xi Jinping became the successor of Hu Jintao as general secretary of the Chinese Communist Party in November 2012 and as chairman of the People's Republic of China in March 2013; at the moment he's still the premier in charge. He had a particular influence on Chinese and international public opinion because of his concept of "Chinese Dream", similar to the old American Dream, intended as the pursuit of individual happiness and social welfare. Moreover, while Hu was more concentrated on the development of domestic economy and the harmonious society, Xi ambitions were mainly related to create a specific position of China in the world and for this reason he enforced foreign relationships. A notable event for introducing the "China brand" in the international context during Hu Jintao mandate had been the Beijing Summer Olympic Games in 2008; thanks to Hu, China also participated

actively in the UN peacekeeping initiatives and became a strong member of developing countries group BRICS (Brazil, Russia, India, China, South Africa).

In contrast with precedent presidents of CCP, who were still frightened by the ghosts of Mao's Cultural Revolution and of Deng's Tian'an men protests, Xi restored the socialism with Chinese characteristics ideology as a strong mean to unify Chinese population and generate consensus (Ferdinand, 2016, p.1-8).

2.6.1. “One Belt, One Road” initiative

In 2013 Xi launched the “One Belt, One Road” project, which aim is the restoration of the old Silk Road (丝绸之路) and its trade channels through maritime and land connections with Asia, Middle East, Africa and Europe. As observed in Fig. 2, the Silk Road Economic Belt crosses China, Mongolia, Russia and areas of the Middle East as Kyrgyzstan, Kazakhstan, Uzbekistan, Pakistan, Iran, Turkey, European countries like Ukraine, Poland, Belgium and France, Italy and Greece, while the 21st Century Maritime Silk Road create a linkage between South East Asian countries like Vietnam, Malaysia, Indonesia, India, Sri Lanka and African countries, particularly Kenya and South Africa.



Fig.2 The map of “One Belt One Road” initiative. Source: Liu and Zhang, (2018). “Analysis of logistic service supply chain for the One Belt One Road initiative of China”, Tsinghua University.

The initiative is estimated to cover more than sixty countries, including four billion people and one third of the global GDP; moreover, it is not just an international trade agreement, but also an infrastructure-economic integration plan, based on intensive construction projects of buildings, ports, railway stations and airports of the trading partners (especially developing countries) with the support and the interest of China. Chinese institutions which are funding these development projects are mainly the Silk Road Fund and Asian Infrastructure Investment Bank (AIIB). The foreign objectives of this initiative are access to natural resources, particularly in Middle East (Pakistan) and in African countries, promotion of Chinese economic model, increase of export, raise outward FDI in strategic countries (Du and Zhang, 2018).

Meanwhile, domestic objectives include keep developing the Western side of China and reduce the gap with the coastal areas, find investments abroad to implement SOEs' competitiveness, introduce rmb as the currency for international markets, reduce the unbalanced development of China between inner production and consumption. However, there are still important risks to take into account; political risks due to Middle East, African and some Asian countries' instability, turnaround risks of countries which could suspect the good and cooperative Chinese intentions, legal risks depend on the laws in force in different areas (Ferdinand, 2016, p.11-13).

2.6.2. Made in China 2025

China has been renamed “the World Factory” since early 2000s because of its great production capacity and the low labor cost and these characteristics have also ensured the country a strategic manufacturing position in the emerging global value chains formed during the Globalization process. For these reasons, China has gained a lot from the entrance in the WTO in 2001 and from the fall of trade barriers due to Globalization of markets. Following this tendency, from 2002 to 2008 the Chinese annual growth rate increased to 27.3%; thanks to this development, China has exported the “Made in China” brand to the world. Suddenly, Chinese exports suffered important losses during the 2007-2009 Global Financial Crisis and to recover some profits it moved orientation from export to Outward Foreign Direct Investment (OFDI), which overthrown FDI in 2007, also

thanks to the “Going Out” strategy supported by Jiang Zemin in 2000 (Wang and Li, 2017, p. 1-4). The FDI attracted by China during those years caused a Spillover effect of new technologies, production know-how and marketing strategies. With the aim to continue this acknowledgement of industrial capabilities, innovation manufacturing and increase sustainable productive techniques, in 2015 Xi Jinping launched the “Made in China 2025” project, following the pattern of the “Industry 4.0” German strategic plan. Considering the leading sectors of Chinese industry, which are high-tech goods like communication devices (like mobile phones, personal computers, tablets) and electrical appliances (including household appliances), the ten years plan has focused its efforts on the inversion of the usual value chain, transforming China from a mere manufacturing country to a technologically advanced industrialized power (Li, 2018).

2.6.3. Trade war

After the end of the Cold War, the leading country was the U.S., the American democracy top leader of industrial power and multinational companies. But regard its supremacy, something went wrong: developing countries like China have unexpectedly emerged in the international market in a fast and silent way. Globalization has seemed a huge opportunity for Western countries; American companies like Apple and General Motors have exploited Chinese low labor cost and JV benefits for thirty years, becoming strictly dependent on the red dragon. In the meanwhile, China has learned how to create a successful final product at a competitive price, particularly in the high-tech industry and has developed its inner industrial productivity, infrastructures and transportation connections. Chinese “soft power” is visible especially in the technological hegemony; at the moment China is launching the 5G connection, has implemented robotic industry and Deep Learning artificial intelligence. Furthermore, Chinese population doesn't need Google, What's App and Amazon, which are substituted by Baidu, WeChat and Alibaba; through WeChat it is now possible to pay directly from a Chinese bank account with a QR code and soon with facial recognition. The question highlighted by actual U.S. president Trump is the way that China used to reach this acknowledgment; he accused Xi Jinping to have promoted the violation of intellectual property, the enforcement of “technology transfer” between foreign investors

and Chinese partners and the utilization of spy-software both in technological devices and in the internet network to steal reserved information. Moreover, unfair competition based on Chinese export commodities have resulted in Trump trade embargo and customs duties against China. This measure has exacerbate the economic relationship between the two powers and among countries all over the world: it can be defined as a Second Cold War. Consequence of this conflict is the exclusion of U.S. from the Belt and Road initiative and the research of different commercial partners by China; in March 2019 Italy has been the first signatory European country of the “Memorandum of Understanding” with China, a trade agreement involved in the New Silk Road project (Rampini, 2019, “La seconda guerra fredda”).

Chapter 3: Chinese strategy in Africa

The first section of the chapter is dedicated to the overview of the three main phases of Chinese presence in Africa. The first period has been marked by the “Third World solidarity”, in which China offered moral and political support for the decolonization of African countries; the second phase exploded in the 1990s and included the development of a bilateral trade relationship between the two countries, the Chinese exploitation of African natural resources and Chinese state-owned enterprises investments in Sub-Saharan Africa; the third stage has been characterized by the involvement of Chinese private companies and the establishment of Special Economic Zones in Africa, following the Chinese model (Kaplinsky and Morris, 2009).

The second stage has been focused on the former internationalization strategy promoted by Chinese government in Africa since the Going Out policy of the chairman Jiang Zemin in 1999, which was aimed to address OFDI to countries that owned a comparative advantage; in this section the Dunning's paradigm has been applied to understand the potential gained assets of the Chinese access to the African market, including natural resources-seeking, market-seeking, efficiency-seeking and strategic asset-seeking. Following this paradigm, it has been examined the entry strategy of China in Africa, considering for the first three assets respectively the large availability of oil and cobalt, the young, wide and unexplored market and the potential human capital, while for the strategic asset-seeking factor has been chosen the advantageous political position of Africa (especially South Africa) in the international context. To deepen this study, it has been utilized the SWOT model to explore Sub-Saharan African region's internal factors, such as strengths and weaknesses, and external factors, like opportunities and threats.

Finally, it has been analyzed the role of Chinese industry clusters in Africa, from SEZs and industrial parks to a more structured initiative as the One Belt One Road programme.

3.1. Third World Solidarity

Through the entrance in U.N. in 1945 and the Bandung Conference in 1955, China changed

from an isolated to a cooperative country involved in the international scenery. The Conference was settled in December 1955 in Bandung, Indonesia; the main purposes were: promote cooperation among Asian and African countries, consider important questions of developing nations like social, economic, cultural, racial problems and face the important decolonization process through the recognition of the sovereignty of the states and the guarantee of world peace and stability. Countries involved were: Afghanistan, Cambodia, the Central African Federation, China, Egypt, Ethiopia, the Gold Coast, Iran, Iraq, Japan, Jordan, Laos, Lebanon, Liberia, Libya, Nepal, the Philippines, Saudi Arabia, Sudan, Syria, Thailand, Turkey, Vietnam and Yemen. The conference agenda was discussed with the support of three committees, respectively Racial discrimination and problems, Weapons of mass destruction and disarmament and Human Rights. The resolution of the Conference included common points as the reciprocal technical assistance, trade and exchange plans and fixed prices, establishment of a U.N. Fund for Economic and Development and International Finance Corporation to favor equity investments. Moreover, on the cultural point of view, the main objective was the achievement of a common knowledge sustained by institutions of Asian and African studies, cultural exchanges and communication networks among the nations (Appadorai, 1955, p.1-8).

In 1950s China openly refused European and U.S. imperialism and embodied the role of Third World liberation guide against colonialism and capitalism. Despite this, since 1960 China has begun to conduct some initiatives in Africa. Its initial interest was captured by three main factors: first, the idea that Chinese socialist pattern, like the peasant struggle, should inspire African and Latin American countries to regain power through the revolution; second, the role of African countries in the recognition of China as the Communist party and the relative expulsion of Taiwan from the United Nations; third, after the beginning of the Sino-Soviet conflict in 1960 and the independence of China from the strict control of the Russian Communist Party, Africa became the main theatre of the fight against Soviet Union and of the Sovietic exclusion from Asian and African cooperation projects. With this aim China supported some liberation movement in Africa as the Uniao Nacional Para a Independencia Total de Angola (UNITA) and Zimbabwe African National Union (ZANU) (Yu, 1988).

In 1961 Mao Zedong established in Africa the Central Party External Ministry and the

Chinese Academy of Social Sciences. In 1963 and 1964 Zhou Enlai travelled among ten African countries (The United Arab Republic, Algeria, Morocco, Tunisia, Ghana, Guinea, Ethiopia, Somalia, Mali and Sudan); in 1965 he did a journey to Tanzania. This visit increased the diplomatic relationship between China and these different governments and enhanced the common principles of non-intervention towards states' sovereignty, equality, anti-colonial and anti-imperialism struggle and bilateral support (Strauss, 2009). Zhou Enlai "soft power", intended as the diplomatic and rhetoric ability to attract other countries esteem and cooperation, wasn't supported by Mao, who seen Zhou as a threat to his supremacy; while Mao was focused on the Great Leap Forward and the Cultural Revolution, Zhou bid on the foreign policy. One of the most important goal of Zhou was the human capital exchange among nations (Tung, 2017); he formally enforced the "Five Principles Governing the Development of Relations with Arab and African Countries" and "Eight Principles for Economic Aid and Technical Assistance to Other Countries". Another important Chinese communication tool to influence African public opinion was the most important weapon of CCP: the propaganda. Chinese propaganda was widespread through different channels, as radio programme, newspapers and billboards and direct contact among Chinese and African population. In 1960 they transmitted 70 hours at the radio per week, when in 1964 they reached 110; moreover, radio programs were broadcast in different African languages, like Swahili, Hausa, English, French and Portuguese (Alden and Alves, 2008).



Fig. 3 "Serve the revolutionary people of the world, 1971". Cheng-Hin Lim, 2015. "Africa and China's 21st Century Maritime Silk Road", The Asia-Pacific Journal.

In Fig. 3 it is possible to observe an example of propaganda made through a manifest of CCP; a Chinese worker in Africa is represented as a symbol of the Chinese effort to give substantial aid to the other countries who had to fight against imperialism. The Maoist rhetoric was particularly important for the assessment of successive Chinese influence in Africa.

3.1.1. Political intervention: China's support to the liberation movements

The role of China in the African decolonization process was ambiguous; one on hand China supported many liberation movements; on the other hand the country was concentrated on the conflict with Soviet Russia and U.S., and it seemed to have important interests in the black continent. Decolonization of Africa extended from 1950 to 1975; China gave its support to rebel movements as Frelimo in Mozambique, MPLA (Movimento para a Libertacao de Angola) and FLNA (Ente Nacional para a Libertacao de Angola) in Angola, FLN (Front de libération nationale) in Algeria, Ghana, Niger, Burundi and riots movements in Congo Kinshasa in 1960s.

In particular, in 1964, China was implicated in one of Africa's major crisis at the time: it helped Nkrumah to establish secret training camps in Ghana in preparation for guerillas to fight the pro-French government in the Niger Republic (Alden and Alves, 2008). Chinese instructores stayed in a camp located at the site of the Nangwa gold-mine in Ashanti about five miles from Konongo and 40 miles south-east of Kumasi. The main objective of Chinese aid was the introduction of a training programme based on guerrilla strategies, assembly of weapons and manufacture and use of explosive. In 1965 almost two hundred African students, coming mainly from Niger and Congo completed the course and were enrolled to fight (U.S. Senate, 1971). Another notable case was Chinese aid to the liberation of Mozambique against the Portuguese empire; Frelimo (Frente de Libertação de Moçambique) was born in 1962 as a nationalist movement which enhanced independence and revolution, following Marxist and Leninist principles. China offered military equipment and training in both Mozambique and Tanzania to the movement and in 1963 a part of the group was sent to China in order to get the best army exercise. The role of Maoist rhetoric was crucial in the relationship with Frelimo; the struggle against capitalism and imperialism transformed the

banal fight for independence of the group into a communist movement. In 1975 Mozambique finally reached independence and China was one of the first countries which recognized it.

Moreover, between 1967 and 1976, Chinese weapons with the value of 142 million dollars were taken to Africa to sustain the rebels; in contrast, different African governments expelled Chinese diplomats with the accuse of overthrowing of African leaders (Chichava, 2008).

3.1.2. Chinese assistance in different economic sectors

The first Chinese engagement in African agriculture was actually promoted by Taiwan in 1961, with the name of “Operation Vanguard”; the programme was focused on small and medium-scale rice and vegetable state farms combined with technical assistance to smallholders and in 1968 it involved more than 1200 agricultural experts in 27 countries. The Chinese mainland project was based on large state-owned farms, which principal activities were irrigation of rice fields, water station, farm and poultry, cultivation of sugar or tea; the plantations were controlled and owned by the state in Tanzania, Mali, Togo, Sierra Leone, Zanzibar, Benin, Madagascar. In 1971, thanks to the People’s Republic of China entrance in United Nations, Taiwan was defeated from the African scene and many Taiwanese demonstration farms in Africa were recollected by the CCP (Bräutigam and Xiaoyang, 2009, p.5-6).

Health assistance was another form of Chinese aid; the first Chinese medical delegation was sent to Algeria in April 1963. This group of 23 doctors, translators, and supporting staff from central China’s Hubei province spent two years in Algeria delivering medical care. Health sector became the most important for Chinese initiatives: the donations comprehended medical equipment, doctor teams and construction of hospitals. For example, the important hospital and training projects were addressed to the Benadir hospital in Somalia, which integrated three wards, gynecological, obstetrical and pediatric (Morgan and Zheng, 2019, p.12-15).

With the introduction of an infrastructural intervention programs, Chinese government sponsored the Tazara railway, which covered 1865 kilometers and was built from 1970 and

1975 and formally opened in 1976; the name is the acronym of Tanzania-Zambia-Railway and the workers involved in the construction were both Chinese and African. The infrastructure project had not just an important geographic advantage, but it was considered as a social initiative: three nations were cooperating in synergy with the common goal of building a network to create a new modern phase of history after colonies. Moreover, the development of infrastructures was linked to the affirmation of a "new African industrial man", who would have made the history of his nation. The mutual aid of African and Chinese workers was based on one hand on the physical labor and on the other hand on more technical skills; this implicated also an important training of African workers, regulated by an agreement dated 1969, which included theoretical formation. For this purpose, a group of African workers was sent to the Beijing Jiaotong University in China and Chinese construction schools were established in Tanzania and Zambia (Monson, 2013).



Fig. 4. Zhongwei and Xudong, (2013). Chinese and African laborers work at the construction site of the TAZARA railway. China Daily.

This kind of practical knowledge was actually the pursuit of the Maoist idea of dignify man's physical labor and concrete actions; only a few years before the Tazara railway construction, in China the Cultural Revolution had killed millions of innocent people and closed schools and universities. Through the Revolution, Mao took China to an isolated context again and dismantled Chinese diplomatic relationships around the world (Aydin and Tekin, 2015).

3.1.3. Chinese aid failure

The Chinese way of aid to Africa was mainly concentrated on investments in light and heavy industry, transportation and infrastructures, agricultural initiatives like water control and irrigation, sports and cultural activities. Even though this kind of solidarity was completely different from Western countries initiatives in Africa, China wasn't able to catch the actual needs of African populations and the country just cooperated with some African leaders who took advantage from its former donations. In fact, the apparent failure of the early Chinese strategy in Africa was determined by the ignorance and inefficiency about the real political and cultural differences between China and Africa and among the many regions of the continent (Mohan and Power, 2008). Chinese aid system collapse was particularly evident also during Deng Xiaoping regime; the Opening Up policy and the reforms of enterprises, as the establishment of Special Economic Zones were successful measures to gain inward investments and raise domestic development. In addition, the cooperation between China and United States initiated by the meeting between Mao and Nixon in 1971, addressed Deng orientation on the implementation of the relationships with developed Western countries, which could give real economic benefits to China (Konings, 2007, p. 7-9).

Despite this, in 1982 prime minister Zhao Ziyang visited ten African nations (like Zhou Enlai in 1963), which were Egypt, Algeria, Morocco, Guinea, Zaire, Congo, Zambia, Zimbabwe, Tanzania and Kenya. The two main reasons of this tour were the consolidation of the Third World policy and the development of economic cooperation among developing countries (Wren, 1982). China was aware that both Chinese and African independence were the first stage of industrial and agricultural reforms and that the implementation of Chinese role in Africa would have given to China an important advantage in the international scenery.

3.2. New Chinese interest in Africa and internationalization strategy

The turning point of this static phase was the Tian'an men incident in 1989; this episode of violation of human rights jolted the consciences of Western countries, which resulted in the end of the truce between China and U.S. and in the return of a South-South cooperation. In

this new context Africa became again the spearhead of Chinese interests, due also to the African institutional support to the Chinese government's operations. In fact, on one hand the PRC applied the principle of non-interference in the foreign state sovereignty, on the other hand China offered large investments in many sectors (Konings, 2007, p. 9-10).

From 1990 to 1992 Chinese officials regained their important presence in Africa; the diplomatic trips and the progressive growth of Chinese domestic market and SEZs let Chinese government understand that Africa could be considered not just as an attractive country for agricultural and economic aid, but also as a new profitable market for Chinese commodities and for business opportunities. In fact, since 1995 China transferred the African strategy from government to enterprises, changing aid and agreements with investments and trade (Nelson and Ma, 2015). As a result, in 1995 chairman Jiang Zemin went to an African tour in six countries, respectively Kenya, Egypt, Ethiopia, Mali, Namibia and Zimbabwe (Ministry of Foreign Affairs of the People's Republic of China, 2014), with proposed five actions for developing Sino-African relations, including friendship, equality, non-intervention, cooperation and mutual benefit. Thanks to this political initiative, China set eleven "Investment Development and Trade Promotion Centers" in ten African countries: Mozambique, Cameroon, Gabon, Tanzania, Zambia, Nigeria, Ivory Coast, Guinea-Conakri, Mali and Egypt. These institutions served as foothold for Chinese entrepreneurs who wanted to invest in Africa and offered them legal, accounting, financial, material and technical assistance. In 1998, China's State Planning Committee formulated the "African Investment Planning" and Africa became the core nation of the Jiang Going-Out strategy.

3.2.1. Drivers of internationalization: OFDI

The entrance of Chinese enterprises in the African market was favored by the intervention of the state, both at a domestic and external level. Foreign Direct Investment (FDI) has been developed in China only since Deng Xiaoping reforms of 1978; inward investments were considered as part of the national trade and development programs. In 1979 Chinese State Council allowed some state-owned enterprises to invest abroad and initiated the FDI outflows; but the real impulse was given by the SOEs reforms and the Going Out policy launched in 1999 by president Jiang Zemin (Kragelund, 2009, p. 8-9). Going Out policy's

main objective was the implementation OFDI, which could have important consequences like allocation of resources, obtainment of international competitiveness entering new markets, improvement of product diversification and quality of commodities, development of financial and trade networks and exchange of knowledge and know-how with foreign countries (Salidjanova, 2011). The Chinese Corporation Law in 1994 and the SOEs reform in 1997 differentiated the state ownership and the shares holding of national enterprises; these measures gave them more economic independence from the central state, but at the same time put SOEs in the international context and let them face both domestic and external competition. This new condition encouraged them to enter foreign markets through OFDI projects, concession loans and foreign assistance, especially in the African context. In 1993 Chinese State Council increased the control of the banking system on SOEs and three policy banks were established: Agricultural Development Banks (ADB), China Development Bank (CDB) and Export-Import Bank (Exim); Exim in particular was addressed to develop SOEs overseas investments (Xu, 2014, p. 6-7).

In addition to Chinese government support, there were also international and African local institutions which provided strategies to attract FDI in Africa, named Investment Promotion Agencies (IPAs). The United Nations Industrial Development Organization in 2001 launched the Africa Investment Promotion Agency Network (AfrIPANet) Programme, which offered to all IPAs on the territory (nowadays they are thirty-eight) a common platform to study investment and promotion plans ruled by an African leadership. During the first meeting of AfrIPANet, the organization individuated Sub-Saharan Africa as the area which attracted most FDI, in particular in Ethiopia, Nigeria, Uganda and Tanzania. UNIDO IPAs different networks share common goal of developing FDI and offer similar services, as industrial and technology implementation, business and commodities growth and climate and environment protection (United Nations Industrial Development Organization, 2020). Considering South Africa's example of local IPAs, it is possible to understand the agencies' network and activity. The country presents nine provincial IPAs, which are enforced to promote investment and trade in their respective areas and abroad, offering to potential foreign investors information about political stability, financial stability and availability of labor force. South African IPAs applies different incentives in order to attract targeted investors, as tax benefits, cash and R&D incentives (Pietersen and Bezuidenhout, 2015).

3.2.2. African market entry decision making

The majority of Chinese FDI in Africa was characterized by greenfield investments and was heavily concentrated on Sub-Saharan Africa (SSA), which includes Angola, Botswana, Democratic Republic of the Congo (DRC), Ethiopia, Ghana, Kenya, Madagascar, Niger, Nigeria, South Africa, Sudan, Tanzania, and Zambia. This group of countries represented 78% of the SSA GDP and 92% of the Chinese FDI outflows from 2003 to 2009; it is evident the contribution of Chinese OFDI to SSA GDP growth, especially in the previous year of the world financial crisis (Whalley and Weisbrod, 2012).

The choice of the location to address FDI relies on the motivation for undertaking the investment activity; the reasons to make a foreign direct investment outlined by Dunning OLI paradigm are natural resources seeking, market seeking, efficiency seeking and strategic asset seeking. For natural resources seeking, most important factors influencing the choice of the host country are availability, costs and quality of natural resources and their potential development, infrastructural network's conditions. Regarding market seeking, key factors are the size of the local market, the presence of favourable trade policies, agglomeration economies and service support systems. In the case of efficiency-seeking, significant factors are skill and professional elements of labor, competitiveness of the related firms, human resource development and availability of specialized clusters. Lastly, strategic-asset seeking can be influenced by many factors, like knowledge-related assets (process and product technology, management expertise), institutional variables influencing access to these assets by foreign investors, access to different cultures and political systems. FDI is a fundamental asset for developing countries, in particular for SSA, because it raises national development through the access to international markets, growth of competition, productivity and integration of African domestic economy in the global value chains' activities (Cleeve, 2008).

In order to understand the real potentiality of the access to the African market for China, I have applied the SWOT model for Sub-Saharan African countries, following the Chinese perspective. This research method is useful to underline SSA countries' internal factors as strengths and weaknesses, such as external factors, like opportunities and threats. The aim is to emphasize both positive and negative aspects of Sub-Saharan Africa region, which role

could assume China towards this area and how China was able to take advantage from all four sections.

STRENGTHS	WEAKNESSES
natural resources	previous exploitation
big and young population	high unemployment and illiteracy rate
unexplored market	internal disorders
diversity	low level of institutions
governments' collaborations	unsustainable health condition and starvation
low cost of living and labor force	lack of a social welfare
bilateral trade	lack of transportation networks
OPPORTUNITIES	THREATS
high growth potential	Internal and global disorders
engagement for students in Chinese training programs or universities	terrorism
suitability of the Chinese model	corruption
new market for Chinese commodities	government instability
Construction of infrastructures and telecommunication channels through Chinese OFDI	lack of consumers
	negative reputation of Africa
	lack of industrial clusters

Fig. 5. SWOT model of Sub-Saharan market under Chinese perspective. Author's considerations.

The first evidences about the scheme in Fig. 5 are about the internal factors; in fact, advantages of SSA were similar to the majority third-world countries. Giving that China between 1990s and 2000s was already throwing the transition to a socialist market economy and had already been named the “world manufacturer”, it’s obvious that it was interested in an area rich of resources and low labor cost; in fact, thanks to these assets, China could implement its production capacity and guarantee enough resources to its industries. Moreover, the Chinese tendency of addressing OFDI fitted perfectly with the desperate African attempt of attracting FDI, that means both countries had strong interests in building a consistent relationship. But looking at the disadvantages of SSA, it’s immediate the reaction to the other side of the coin; cheap manpower was related to unemployment and illiteracy, which implicated low wages and starvation of people, completely absence of

institutions and abandoned population.

The second consideration is related to the external factors and their involvement with the first pair; at which point strengths became opportunities and weaknesses could evolve in threats? But most important, how could China switch weaknesses in opportunities?

The following insight tries to answer these important questions and to explain the complicate relationship between factors of interest and constraining factors of Chinese investment in Sub-Saharan Africa; the research method is based both on historical highlights and economic data, likewise on examples and SSA countries case studies.

3.3. Entry strategy

3.3.1. Natural resources-seeking

3.3.1.1. Petroleum

The energy sector is obviously the leader one in Africa, thanks to its important presence of raw materials and fuel sources, oil in particular. Between 1990s and early 2000 the biggest African exporters of oil were Sudan, Congo, Angola and Nigeria; due to the industrialization process of China during that years and to the huge population, oil supply was a crucial problem for Chinese government and companies. It was notable that all of Chinese oil companies was part of the SOEs and, as a result, supported by China's Exim Bank (Corkin, 2007). Oil investments determine the political integration of a country in the world market; in order to implement oil trade provision in China, Chinese government issued oil import bans in 1994 and 1998. Although the importance of this political action, to ensure constant import of oil, China begun to diversify oil imports among different countries; in 1999 Africa satisfied almost the 20% of Chinese oil demand, against the predominant Middle East which covered the 46%. At the beginning of XXI century Africa gained an emerging role towards the Chinese procuring of oil, mainly because oil demand exceeds supply in the Asian regions (like Indonesia), Africa saw a growing oil surplus and African crude oil was suitable for Chinese request (Li and Leung, 2011, p.3).

Oil is also the main ingredient in the manufacture of plastic, which is part of commodities like footwear, vehicles, communication equipment; China became a net importer of oil products in 1993, and a net importer of crude oil in 1996. From 1993 to

2000 the problem of the oil foreign provision gradually became the question of how to finance the oil expenditure; as a consequence, China had to find an equilibrium between the domestic oil production and foreign import, paying attention on the global oil flux (Leung, Li and Low, 2011). During the 1980s China was a modest oil exporter and the important areas of production were oil wells in Daqing, Shengli and Liaohe in the north and north-east part and offshore oil ranges Xinjiang, in the East China sea. The Xinjiang area in particular presented a complicated geological structure, which needed high technology extraction instruments and great costs; the cost of production of an oil barrel in the Middle East was around 2 dollars, while in China between 9 and 23 dollars. For these reasons, Chinese government understood that China had to be reliable on oil imports and the three main Chinese state-oil companies, The China National Petroleum Corporation (CNPC), The China National Offshore Oil Corporation (CNOOC), and The China National Petrochemical Corporation (Sinopec), were empowered of the right to conduct operations and to establish subsidiaries overseas (Troush, 1999).

Nationalization of the petroleum industry was an important tool in the 1970s for developing countries like Middle East and Africa to force the establishment of new limitations against Western oil companies; for this reason at the beginning of the 1980s Western countries initiated a privatization of national companies. The collapse of Soviet Union in 1991 after the First Gulf War drove the progressive privatization of centrally-planned economies and after a while in Latin America and Asia. The breakpoints of the Chinese National Oil Companies overseas strategy were mainly two, the Asian Financial Crisis and the entrance in World Trade Organizations. The Asian Financial Crisis developed from 1997 to 1999, during which the price of the barrels fell to 9-10 dollars each; in this context of oil under evaluation Chinese government decided that the best choice would have been direct import of foreign petroleum rather than overseas outward investments. Moreover, in order to raise the competitiveness of Chinese oil industry in the access of WTO, the government relaunched the oil price between 1998 and 2000; in this phase CNPC and Sinopec became two integrated oil companies and all the four NOCs put their assets on domestic and foreign stock markets. Despite this, the NOCs overseas expansion raised again in the early 2000s thanks to foreign investments, especially in the African market (Bo, 2009, p. 61-65).

In 2018 China became the first oil importer of crude oil in the world and the 15% of the Chinese oil import was occupied by three African countries, Angola, Congo Republic and Libya; as an evidence, Angola was reported as the fifth oil exporter in 1999 with 2,9 exported oil million tones, and raised the second position (just after Saudi Arabia) in 2009, with 32,2 million tones (Leung, Li and Low, 2011, p.11). The alliance between China and Angola is profitable for both countries: China seeks oil and other natural resources, while Angola needs investments to rebuilt the nation after the civil war (Sandrey, 2009). Most notable Chinese activities in Angola were the financial support in the health, education, transport and communication sector; in 2004, almost 30% of the Exim Bank loans in Angola was spent to schooling and health projects. Although the important collaboration has created important benefits for Angola, Chinese loans can still be considered as a form of control of the state's capital and commodities inflows and outflow. The impressive construction capacity of China created some modern cities that are still unavailable for African citizens, due to the low medium income of population and of high costs of apartments; moreover, African government often utilize petroleum revenues instead of tax revenues to afford a minimal level of social welfare. At least, it's crucial to analyze also the country risk factors, like the reliance of Angola with oil export (in case of under evaluation of petroleum the state should sell much more tons), the Chinese lack of employment creation initiative for African people (so they're still not an important consumers' piece of cake) and the risk of inflation (Begu, Vasilescu, Stanila and Clodnitchi, 2018).

3.3.1.2. Cobalt

Cobalt is the fundamental mineral in the production of lithium batteries and superalloy turbine blade and, by extension, it is largely employed in the high-tech and telecommunication industry such as in the electric vehicles and jet aircraft industry. As a result, a lot of countries are competing for the monopoly of this resource and for the manufacturing of these technologically advanced products. China has gained a prominent role in the provision of cobalt and also in the third phase of the cobalt supply chain, the refinery capacity (Gulley, McCullough and Shedd, 2019); in fact, China was indicated as the first non-member country of the Cobalt Institute refined cobalt producer in 2018, with

78.360 tonnes, as suggested by the Cobalt Institute Statistics (2019). Even though China shows this important record in the cobalt refinery, its domestic production was insufficient to satisfy the internal demand; for this reason, China individuated Democratic Republic of Congo as the most suitable recipient of OFDI during the Going Out Policy at the end of the 1990s. Although it is known that the first aim of this policy was linked to the foreign resource allocation, Chinese OFDI in DRC was guided also by the need of protecting China from supply risks and limit other countries' influence in Congo. Since 1978 Cobalt Crisis, DRC was recognized as the leading producer of mined and refined cobalt; after the invasion of cobalt producing countries, the price doubled and the country faced an impressive reduction of cobalt export. In addiction, in 1990 a collapse of the main copper-cobalt mines in the DRC reduced dramatically the domestic production; since 2000, DRC cobalt mine production has constantly grown and in 2015 it has reached the peak of 50% of global cobalt production (Shedd, McCullough and Bleiwas, 2017).

Chinese strategy in Congo was based on two sides: on one hand Chinese SOEs, which have improved their financial and infrastructure investments on the territory and agreements with local governments; on the other hand Chinese private enterprises, that developed investments in the market economy. In Lubumbashi, DRC capital of cobalt mines, China has taken thirty-five mining companies and merged them in the Union of Mining Company. Moreover, in 2007 the Exim Bank issued 6 billion dollars for infrastructures and \$3 billion for copper and cobalt mine activity and Chinese capitals were committed to save the DRC flag company "Gécamine" (FP Analytics special report, 2019). In fact, at the beginning of 2000s, Gécamine company suffered massive losses and the World Bank invited the Congolese government to share mine's and industrial assets, in order to attract foreign investments, in particular Chinese capitals. Giving that, China's SOEs and private firms have bought equity shares of different mines, like the Tenke-Fungurume mine, one of the biggest cobalt mine, Kinsevere, Luiswishi and Kamoa-Kalula mining sites (Rubbers, 2019).

3.3.1.3. Agricultural investments

Part of the Going Out strategy of Jiang was also concentrated on domestic food security; for this purpose, at the beginning of 2000s, China developed different aid programs in order to

implement Sino-African cooperation and Chinese enterprises undertook agricultural investments in Africa. Chinese actors of this initiative were state-owned agricultural corporations and enterprises, like the China National Agricultural Development Group Corporation, China State Farms Agribusiness Corporation, China Oils and Foodstuffs Corporation, while Chinese banks involved were state-owned banks, such as the Exim Bank and China Development Bank (CDB). These banks have distributed important loans to African countries; in 2009 China's investment in SSA agriculture was more than \$134 million and it established 50 agricultural enterprises and over 100 farms. China in 2011 became the world's largest importer of oilseeds, vegetable oil, palm oil, soybean and rapeseed and is a modest corn and cotton importer; but its interest isn't only concentrated on the mere trade. In fact, China has recently increased its investments in biofuel agricultural products, in order to minimize the impact of fossil fuel on the environment; this tendency has increased Chinese investments in SSA agriculture. Notable SSA recipients of Chinese agricultural FDI were DRC with oil palm in 2009, Mozambique with rice and cotton in 2006, Sudan with corn in 2010, Tanzania with rice in 2009 (Sun, 2011).

Moreover, China has established "agricultural demonstration centers" in Africa, which are training programs concentrated on the cultivation of rice, vegetables and the use of agricultural machinery. They are also addressed to conduct experiments in farming techniques (fertiliser, phytosanitary products, biofuel) in the field of crop and vegetable production (particularly rice, manioc, corn and market gardening) and teach these methods to local farmers. These centers are located in Togo, Mali, Mozambique, Ethiopia, Cameroon, Ivory Coast and Benin. These projects of R&D can offer mutual benefit both to China and Africa, because they increase productivity and reduce poverty, while give new technologies of production and know-how to the farmers. In some cases, demonstration centers have a dual leadership, for example in Cameroon it is managed by a Chinese expert of agriculture and the local Ministry of Agriculture and Rural Development (Gabas and Ribier, 2015).

3.3.2. Strategic asset-seeking: Chinese intervention against Apartheid in South Africa

3.3.2.1. Historical highlights of Apartheid regime

Since 1910 South Africa had become a possession of British colonists, who won the South African war (1899-1902) against Afrikaners and established the Union of South Africa, directly controlled by the Commonwealth. After WWII, South Africa was embodied in the Cold War global context, where the Western and the Eastern bloc contended for technological and political supremacy. Both American and Sovietic factions moved to Africa seeking labor force and natural resources; as a result, between 1950 and 1980 South Africa faced an industrial boom and manufacturing of commodities, making the first step to become an exporting country. In addition, people from all the other African countries was forced to move to SA, because after the war it was the only industrialized and urbanized country, while in the other areas people was starving and unoccupied. Thanks to these conditions, in the first post-war phase African GDP registered a medium annual growth of 6% and the population had an explosion thanks to worker migrants. Despite these important achievements, WWII created also the conditions for the Apartheid politics; white minorities embodied by British colonists felt the necessity to reinforce their “white supremacy” and control over the territory. In this direction, the Purified National Party won the elections in 1948 and established a racial segregation regime, which lasted until 1994 (Ojewale, 2018).

Despite the People's Republic of China officially broke its relationship with South African government in 1960, China and Pretoria (the administrative capital of South Africa, while Cape Town is the legislative capital and Bloemfontein the judicial one) continued with their illicit activities, in particular regarding trade. The main products imported from South Africa by China were copper, diamonds, lead and zinc, while SA enjoyed Chinese grain supply; this goods' exchange was in contrast with the 1960s-1970s Chinese aid policy and anti-imperialist support against African colonies and Apartheid regime. During that years the conflict between China and Soviet Union strengthened and PRC tried to extend its influence in Africa, competing with URSS and United States. After a short cooperation with the two biggest liberation movements in SA, ANC (African National Congress, founded in

1912) and PAC (Pan Africanist Congress, established in 1959), China was defined by the SACP (South African Communist Party, founded in 1921) as a Maoist and anti-soviet country which pursued only its national interests and played with imperialists. Indeed, China strategically played both sides: on one side the PRC in 1973 was part of the four members who voted against Pretoria during the UN Security Council, on the other side thanks to the meeting between Nixon and Mao in 1971 China tried to resume pacific relations with U.S. and to include American interests in the anti-soviet initiative. Following this doubled policy, Deng Xiaoping in 1979 theorized a Third World struggle against the First World (U.S. and U.R.S.S.) and in particular the enrollment of the Third World in a unified anti-Apartheid front; by doing so, China begun to reduce the white threat and enforced its own influence in SA. In fact, during the 1980s China regained credibility with the ANC and the organization abandoned Soviet Union to reach the support of the PRC. Moreover, the pragmatism of Deng was the key to overthrow the Sino-African ideological discrepancy about violence, which was justified and stimulated by Mao and refused by the anti-Apartheid movements. This political ambiguity of the PRC emerged particularly during the Tian'anmen protest in 1989, when the fake democratic face of China was underlined by the international press. Despite this, Chinese policy in South Africa beard its fruits and in 1990 Nelson Mandela met the PRC ambassador to Zambia and praised China for its anti-Apartheid support. At this point the PRC seized the opportunity and reopened the doors to SA and during a diplomatic visit to the country discussed the possibility of making Joint Ventures. In 1992 Mandela visited China and met Jiang Zemin chairman; the African leader of ANC expressed its endorsement in a deepen cooperation between PRC and SA and emphasized that the economic experience of China could have been an important model for South Africa. In 1994 the first democratic election of South Africa saw the victory of ANC and Mandela's raise to power, that implicated the end of the Apartheid (Taylor, 2000).

3.3.2.2. Motives of Chinese intervention

Considering Chinese political intervention in South Africa, it is possible to identify three different factors. Firstly, the PRC anti-Soviet struggle and the rejection of the U.R.S.S. communist model imposed by Mao were crucial elements for the further competition

between China and Russia during the Cold War; Sub-Saharan Africa acted as a battlefield for the “foreign-aid race” between the two countries and China was finally able to overthrow the counterpart in South Africa. The reasons of the ANC shift of partner was driven by the progressive internal economic problems during the 1980s of Soviet Russia, which couldn’t afford to support SA liberation movements anymore (Burke, Naidu, Nepgen, 2008) and its involvement in the First Gulf War, that capitulated in 1991 with the collapse of Soviet Union and communist regimes in Eastern Europe (Griffo, 2016). The rivalry between China and U.R.S.S. had exploded also due to the Sino-Vietnam war in 1979 when Soviet Russia, with the aim of containing Chinese expansion in Southeast Asia, offered aid, alliance and mutual assistance to Vietnam and signed the Soviet-Vietnamese Treaty of Friendship and Cooperation. At this point, China menaced to invade Vietnam; to seek international support, Chinese government involved United States, Japan, and Southeast Asia in a diplomatic campaign which considered China as a victim of the mechanization of Soviet Union and Vietnam. The punitive campaign was a successful action for China, that thanks to the support of U.S. technological and military equipment was able to isolate Vietnam and U.R.S.S., containing the Sovietic foreign influence in Asia and Africa (Gompert, Binnendijk and Lin, 2014).

Secondly, China was competing also with United States for the control of South Africa, even if U.S. had been particularly useful for the anti-Soviet policy and the war against Vietnam. Indeed, despite American active support for international human rights’ safeguard, its attitude towards SA Apartheid was undoubtedly ambiguous. Although during the 1960s U.S. had already faced the struggle for racial equality and in 1963 Martin Luther King had pronounced his famous speech “I have a dream” at the Lincoln Memorial in Washington, it was just in 1980s that United States expressed their full opposition to Apartheid. From 1950 to 1970 political and financial aid to rebel movements was sent only by Soviet Union, China, Cuba, Libya, and the Palestine Liberation Organization; the reasons of the entrance of U.S. in SA was mainly related to the containment of these communist states and to American investments in South African trade, industry, banks, and mineral resources, especially gold. Moreover, SA was linked to the Cape of Good Hope, that was the most crossed maritime channel for the transportation of oil and gave direct access to West Africa, Indian subcontinent and the Persian Gulf (Goldstone, 2005). In addition to the economic interest of

U.S. government in maintaining the Apartheid regime, in the 1980s Western leaders like Ronald Reagan and Margaret Thatcher still considered Nelson Mandela as a terrorist, because of his involvement in political violence of ANC. In fact, U.S. and U.K. governments saw South Africa's apartheid regime as a Cold War ally, and the opposing ANC as an enemy based on spreading communism. Mandela had been captured in 1962 after the Sharpeville Attack and the repression of the general strike, and after 27 years of imprisonment he was freed in 1990 and elected South African's president in 1994 (Boehmer, 2005). The PRC leader Jiang Zemin in this case adopted a forward-looking strategy, using China's communist nation status and its role of guide of the Third world liberation to enforce its presence in SA and cooperation with Mandela. In addition, United States were involved in the First Gulf War with Soviet Russia and their growing interest in Middle East let China's approach to South Africa more accessible.

Thirdly, China needed to restore its international reputation after its violent attacks in Tibet. In fact, after the establishment of the CCP in 1949, China had launched the liberation campaign of Tibet from British and American power, assuring to the local population regional autonomy and protection of Tibetan culture. Actually, with the excuse of decolonizing the area, Mao in 1954 had invaded Tibet and had forced the Dalai Lama, spiritual guide of the country, to escape from his summer residence in Norbulingka and go to exile in India, annexing Tibetan territory to China. On one hand Tibet was a strategic outpost for China to enter in India, on the other hand Mao's communist ideological pattern enshrined the importance of the fight against religions, and the People's Liberation Army was enrolled to destroy all the temples and the sacred symbols in this Buddhist nation (Patterson, 1960). In 1989, the same year of Tian'anmen incident, Dalai Lama won the Nobel Peace Prize and reaffirmed its intention to fight for Tiber political autonomy, announcing elections in 1991. In 1994 the exile government of Tibet was still waiting for regular elections and in 1999 China kept refusing to separate Tibet from the mainland. In 2006 China opened Qinghai-Tibet Railway, the world's highest railroad, with the purpose of modernize and develop Tibet. Tibet's reaction was a refusal of Chinese intervention, that had been imposed and could have changed the fragile high-altitude environment (Murdoch, 2008).

3.3.3. Accessing new markets: bilateral trade between China and Africa

3.3.3.1. Bilateral trade analysis

Considering previous analysis, it is evident that determinant factors for Sino-African economic exchanges were China's comparative advantage in labor-intensive and capital-intensive production, Africa's richness of natural resources, China's fast economic growth, China's emphasis on infrastructure building at home and in Africa and the emergence of economies of scale in China's light industry. In order to better explain the patterns of this atypical bilateral trade, different researchers have applied three prominent theories of trade: relative factor abundance theory, gravity trade theory, and political trade (Eisenman, 2012).

Following Relative factor abundance theory, China offers an excellent case study of the Heckscher–Ohlin–Vanek (HOV) model of international trade, which enshrines that trade is driven by relative differences in the endowments of factors of production among countries. A country can have abundance or scarcity of production factors as resources, labor and capital, and basing on its own endowments it will choose a particular trading partner. Since the early 2000 China has earned the role of "World manufacturer" by exporting labor intensive commodities but with low level of labor productivity; this gap was caused by the little specialization of Chinese workers and by the extremely rapid growth of export-oriented production (Marshall, 2011). Chinese export of low value-added product is coherent with David Ricardo's theory of comparative advantage, related to the HOV model, which endorsed that under a liberal economic system of free trade, an agent produce more and consume less the commodities for which he has a comparative advantage; in other words, a country's trade is enrolled by its primary factor endowments. Although comparative advantage is particularly effective in the determination of countries' bilateral trade, in the case of growing industrialized economies like China during the 2000s this theory could be not perfectly suitable. Adam Smith "vent for surplus" principle argued that the raise of market demand implements division of labor, creating the phenomenon of economies of scale; this tendency of producing more goods than the domestic demand forces the country to trade the surplus of commodities abroad, selling them and obtaining

revenues in excess of the cost of production. This theory is more adaptable to the Chinese case, which thanks to the raising trade was able to get a 9% medium growth rate in the 1995–2001 period, while other Asian and European countries were facing economic crisis or stagnation (Rima, 2004).

Gravity trade theory states that the bilateral trade between two countries is an increasing function of the incomes of both the countries and a decreasing function of the distance between the two countries. The GDP of the exporting country corresponds to the supply capacity, while the importing country's GDP indicates the total demand. In this analysis the transportation costs are recognized as the most affecting factor of trade and the distance between two countries determines the quantity of products they will involve in the trade. Cultural and historical factors are also included in the gravity model; in fact, if the two countries share a common language, habits and customs, this will increase trade by facilitating communications and making transactions easier. Similarly, if two countries share a colonial links and background, like China and Africa, this will have a positive impact on bilateral trade volumes; preferential trade channels between two countries usually improve bilateral trade.

3.3.3.2. The role of domestic and international agreements in China and Africa trade

Since 1980s the world economy has followed the path of trade liberalization among countries; the explanations of this tendency are focused on trade policies of domestic actors such as national governments, but also on changes of international institutions and evolution of the international political system. After WWII trade barriers have been significantly reduced, while different means of commercial control like import quotas, local content requirements, public procurement practices, anti-dumping laws and foreign exchange restrictions have played a major role in the international markets. International trade negotiations have supported free trade among industrialized and developing countries, adopting agreements as General Agreement on Tariffs and Trade (GATT) signed in 1947 in Geneva and culminated in 1994 with the Uruguay Round, that was the last and most important deal and included resolutions about custom duties, services and intellectual property and the establishment of WTO. The Uruguay Round promoted the reduction of

trade barriers on many lead products of developing countries, making them adhering to the WTO and involving them in the global market community. Moreover, the transition of many communist countries to a market-based economy during the 1990s gave an impulse to global trade liberalization (Milner, 1999).

China's conversion to a Socialist Market Economy (SME) since 1992 during Jiang Zemin mandate is a perfect example of communist countries' economic evolution; its expansion strategy to the African market made use of trade as a way to create cooperation and mutual benefit between the two countries and reach a common development. China's initial export to Africa was facilitated by two important domestic policy shifts in the 1980s. The first decision was to abolish state trading companies, that until 1985 had the exclusive right to import, export and operate with foreign exchange; this change attracted Chinese entrepreneurs that, encouraged by Exim Bank and China Development Bank, entered the African market. The second fundamental reform was the liberalization of emigration in 1985; in 2009 statistics calculated the number of Chinese immigrants on the African continent in a range from 580.000 to over 800.000, which were mostly Chinese SOEs, managers, professionals and employees who wanted to establish their own business (Haugen, 2011). In 2000 China and Africa established the FOCAC (Forum on China-Africa Co-operation), which was a common platform with the scope of developing South-South cooperation and trade. The first ministerial conference of FOCAC was held in Beijing and headed by president Jiang Zemin, premier of the State Council Zhu Rongji and vice president Hu Jintao (forward president of the PRC); during this event Chinese government cut obligations on 156 loans owned by the African countries. At the third meeting the PRC canceled other 10 billion yuan of debt and the next year declared debts' settlement to eleven African countries; in 2007 China Development Bank with the approval of current chairman Hu Jintao set up the China-Africa development fund, a private equity fund which objective was the attractiveness of Chinese companies' investments in Africa, particularly in the energy, infrastructural and resources sectors (Wang, 2007). During the second ministerial meeting of FOCAC placed in Addis Ababa in Ethiopia in 2003, China and Africa established two joint committees, one for trade and one for technology. After the good resolutions of the second meeting, in 2004 chairman Hu Jintao made a tour of several African countries, including Egypt, Gabon and Nigeria, while vice president Zeng Qinghong

visited Tunisia, Togo, Benin, South Africa; in addition, presidents of Mozambique, Madagascar, Tanzania, Uganda, Mali and Namibia went for a diplomatic trip to China. The third ministerial meeting was located in Mexico and saw the creation of an alternative G20, the G20DN (developing nations), which included BRICS (Brazil, Russia, India, China and South Africa). The fifth ministerial meeting was held in Beijing in 2012; the core topic of the conference was the global response to the world financial crisis of 2009 and the increasing role of developing countries in the international scenery (Fernando, 2014).

3.3.3.3. Sino-African bilateral trade data

Considering the period between 1995 and 2005, China's import from Sub-Saharan Africa (especially from Sudan, Burkina Faso and Ethiopia) have increased significantly, and in 2008 South Africa became the major Sub-Saharan African exporter of manufactured goods to China. The bilateral trade between China and SSA was due to different factors, including the growth of Chinese market since the 1990s, China's entrance in the WTO in 2001 and the formal recognition of China's market economy by South African government. Since 1992 and 2012, South Africa's exports share raised of 10%; in the meantime, its exports to U.S. and UK decreased. The majority of South African exports to China are mineral resources, vehicles, aircraft, vessels and mechanical appliances (Angomoko and Malefane, 2018).

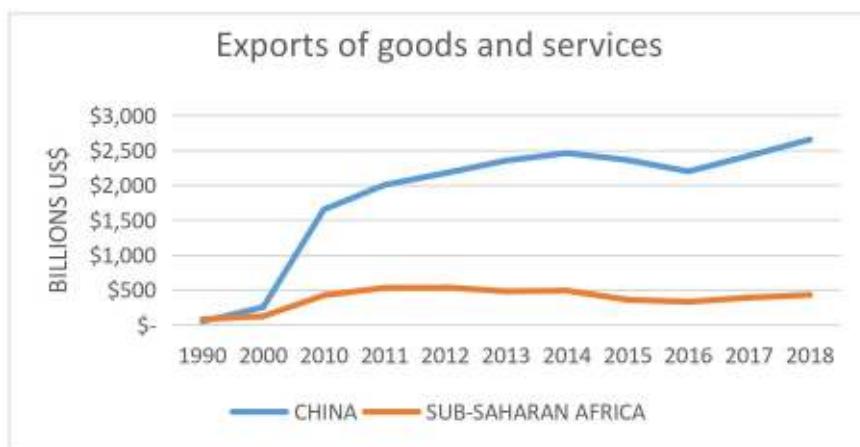


Fig.6. Exports of goods and services (current US\$), China and Sub-Saharan Africa. 1990-2018. The World Bank. World Development Indicators.

Fig. 6 shows both China and SSA exports' growth from 1990 to 2018; it is interesting that in 1990 the value of China's exported commodities corresponded to 49 billion dollars, about a half of the 81 registered in Sub-Saharan Africa. Despite the early setback, in 2000 China had already doubled SSA with 253 billion dollars against African 123; in 2010 China quadrupled SSA with billion US\$ 1.654 counter to African 424; finally in 2018 SSA accounted only 430 billion dollars while China the impressive amount of 2.655 billion US\$ (The World Bank, 2018).

Reporter	Partne r	Year	Trade Flow	Product Group	Export US\$ Thousand	Import US\$ Thousand
China	SSA	2018	EXPIMP	All Products	74716777,38	89693709,88
China	SSA	2018	EXPIMP	Capital goods	21630698,88	104879,56
China	SSA	2018	EXPIMP	Consumer goods	32669898,86	2581865,14
China	SSA	2018	EXPIMP	Intermediate goods	19764546,43	22425859,15
China	SSA	2018	EXPIMP	Raw materials	629419,89	62770678,59
China	SSA	2018	EXPIMP	Animal	511590,12	154483,68
China	SSA	2018	EXPIMP	Chemicals	4586108,43	530486,39
China	SSA	2018	EXPIMP	Food Products	1073323,88	978451,63
China	SSA	2018	EXPIMP	Footwear	4363639,97	9605,24
China	SSA	2018	EXPIMP	Fuels	1283690,57	41731391,67
China	SSA	2018	EXPIMP	Hides and Skins	1016162,1	171959,25
China	SSA	2018	EXPIMP	Machinery, Electric	18852632,72	29422,02
China	SSA	2018	EXPIMP	Metals	9452518,17	11097013,87
China	SSA	2018	EXPIMP	Minerals	53610,49	14831223,93
China	SSA	2018	EXPIMP	Miscellaneous	4639712,54	1794657,9
China	SSA	2018	EXPIMP	Plastic or Rubber	4899346,07	153067,91
China	SSA	2018	EXPIMP	Stone and Glass	2560854,4	13624179,01
China	SSA	2018	EXPIMP	Textiles, Clothing	13192897,9	607007,01
China	SSA	2018	EXPIMP	Transportation	5780285,62	71198,96
China	SSA	2018	EXPIMP	Vegetable	840064,16	1247963,34
China	SSA	2018	EXPIMP	Wood	1610340,22	2661598,07

Fig.7. China Product exports and imports from Sub-Saharan Africa 2018. Data imported from World Integrated Trade Solution.

China in 2018 was both the top export and import partner of Sub-Saharan Africa, with an export worth of US\$ 37,570 million with a partner share of 13.33 percent, and an import worth of US\$ 45,010 million with a partner share of 16.47 percent. In Fig. 7 it is possible to see the leading sectors of Chinese export to SSA, that are consumer goods, capital goods, machinery and electrical products and textile; in contrast, Chinese import from SSA is concentrated on raw materials, fuels, metals, minerals, stone and glass (World Integrated Trade Solution, 2018).

3.3.4. Efficiency seeking: low labor cost, development and exchange of human capital

3.3.4.1. Relocating Chinese manufacturing enterprises in Africa

As previously analyzed, most important Chinese advantages in the choice of Africa as a manufacturing destination for Chinese enterprises were low labor cost and direct access to local resources. Relocating production abroad means to individuate an industrial location that can respond to different needs, as strategic geographic position, extensive transportation network, favorable logistics, perfect integration in the company and global value chains, local market size and labor management skills. The majority of African countries wasn't able to respond to these crucial factors, that's why foreign investors were more concentrated on the black continent mining and extractive industries. Despite low workers' specialization, it was evident that African workforce was more affordable than other competitors on the market. It was possible to identify three different groups of African countries: middle-income (South Africa and Botswana), lower income (like most part of the other states) and poverty-stricken countries (for example Ethiopia and Democratic Republic of Congo). During the last decade, China has been particularly active in Ethiopia, which manpower cost can be compared to Chinese low-wage manufacturing in the 1980s; Chinese and foreign companies, especially in the fashion industry, have recently moved production to this country. The reasons behind Chinese offshore production to Ethiopia were the increasing cost of Chinese workforce in the mainland, Chinese shrinking population, the

generational turnover that included less motivated workforce for physical labour and the overall unemployment situation in the host country (Gelb, Meyer, Ramachandran, and Wadhwa, 2017). The relocation of labor-intensive industries has traversed a sequential development across East Asia; since the end of WWII Japan and further new industrialized economies such as Hong Kong, South Korea, Taiwan and Singapore, followed by Thailand, Malaysia, Philippines and Indonesia have transferred their abundant labor for export industries. As a result, this comparative advantage has been moved through FDI activities from higher industrialized countries to lower developing countries, following a progressive process of local cheap labor-intensive production, raise of labor cost and currency appreciation, and outflow of industries and manpower. This phenomenon can be justified through the “flying geese” theory and was firstly expounded by the Japanese economist Kaname Akamatsu in 1930s. The reasons of the preeminence of Chinese workforce in Sub-Saharan Africa respect to the other developing countries are due to different factors. First, the country has managed a huge number of low-cost factories for decades, with a secondary sector amount of workers equivalent to 200 million; second, the transition of China from agricultural to industrialized country has created employment for more than 400 million people, removing them from starvation; third, Chinese successful domestic policy of building SEZs and creating industrial clusters can be replicated abroad and represents an important opportunity for the modernization of third world countries in Africa (Ozawa and Bellak, 2011).

3.3.4.2. Human capital development and cultural exchange in Africa

Although researchers have widely debated about Chinese investments and export in Africa, less attention have been dedicated to China's role in the development of human capital in the continent. African governments tended to attract Chinese presence on the territory in order to create local employment, provide training to local workers, implement infrastructures and know-how transfer. Chinese MNCs contributed to local employment through direct recruitment of native workers and indirect hiring with the creation of local supply chains. In addition to the bid of more job opportunities to local population, MNCs usually pay higher wages to the employees, that is an important goal of developing

countries' workers. Another advantage of working in a foreign MNC is the easier recognition of personal skills and potential: this can give the chance to autochthonous laborers to make career and to get knowledge spillover. This method of operating gives a substantial advantage also to Chinese corporations, which can manage labour turnover internally and avoid know-how transfer to local and foreign competitors (Agbebi, 2019).

Training is the most common way to create skilled workforce; it can be formal or informal and can be applied with classic educational methods (lesson in classroom or seminars) or job-related courses; any kind of competences building is extremely useful to developing countries, because of their relevant lack of organized and accessible public education. The embeddedness of Chinese MNCs and African context influences the organizational practices of the corporations, including human resource management practices, such as employment and training. Traditional Chinese social norms and values deeply affect modern Chinese HRM strategies, for example the articulated performance metrics adopted by Chinese managers is a mirror of their culture; despite this, the adoption of particular HRM policies in China is quite recent and substantially inspired by Western countries. There are cultural similarities between Chinese Confucian principle "ren" and African "ubuntu"; indeed, both are concepts related to benevolence, humanity and compassion of people. Another key concept related to ren is the "guanxi", that is the Chinese traditional form of relationships among people; the ethic behind these relationships is based on trust, loyalty and sense of duty. In addition to the cultural aspect, also the ownership structure of the company is a determinant factor for the development of HRM. In fact, SOEs are more linked to Chinese government, and by extend they have a formal hierarchy and less efficiency; on the other hand, private enterprises and MNCs are characterized by entrepreneurs and their pursuit of making profit, so they usually have a deep penetration in the country (Xing, Liu, Tarba and Cooper, 2016).

As a result, cultural exchange, intended as the interaction between sociocultural influences and business ideology, is crucial to understand the level of adaptability of Chinese management models to the African labor context. Since 1970s the dominant theory in cross-cultural management was the Hofstede's cultural dimensions, based on power distance, individualism against collectivism, uncertainty avoidance, long-term against short-term orientation and masculinity against femininity. Analyzing these dimensions it is

possible to find the distance between Chinese and African cultural patterns and which obstacles have to face Chinese enterprises accessing this market (Jackson, Louw and Zhao, 2013). Inequality is deeply inside the African society, so the power distance is particularly high and local governments and entities, such as local unions, are the most important authority in the negotiations of salaries and working time. African countries are more orientated to a collectivist model, with a strong commitment of communities above individuals. Ambiguity and uncertainty is widely tolerated in the African continent; in fact, absence of social welfare, unfavorable environmental conditions and less education accessibility with relative lack of skilled manpower are linked to a living hand-to-mouth attitude. This habit characterize a short-term orientation and an opposite time perception compared to Chinese tendency to planning. Considering masculinity and femininity as orientations toward work (and not as machismo or feminism), Africa can be considered as a feminist society, in which people look at work as a mean of survival, and not as a way to achieve success like in the Chinese paradigm (Oppong, 2013).

In addition to the on-the-job training, Chinese government in the last two decades have offered many scholarships for higher education in China, especially in the engineering, medical and economic university courses. The number of international students in China had already grown by 400% between 1999 and 2008, achieving 238,000 in 2009. Scholarship for African students are both a symbol of the Chinese aid to the continent and a potential further source of income; in fact, the skills learned during the Bachelor Degree in China could be an opportunity for the development of specialized labor force in Africa and also for the employment of graduated young Africans who desire to move to China permanently. Chinese universities' attractiveness is due also to low-cost living and welcoming visa policies, that can enable African students to choose to attend university in Asia instead of Europe and America. Another important asset that China could improve with its educational strategy is the ideological influx; indeed, Chinese academical pattern is mainly practical and market-oriented, it attempts to contain public speaking and presents relevant living restrictions as strict rules and daily curfew. Guangdong and Zhejiang are two coastal provinces with booming markets and export-oriented manufacturing sectors which attract most African students in China, even if also in the north, as in Beijing, there's a notable presence. Chinese educational cooperation with Africa and other foreign countries

is split into different forms; most famous example is the Chinese language test service for the achievement of HSK (Hanyu Shuiping Kaoshi) certification and relative preparatory courses, mainly supported by Confucius Institutes, already present in more than 20 African countries (Haugen, 2013).

3.3.4.3. Spillover effect

Knowledge and technology transfer can happen thanks to horizontal and vertical spillover. Horizontal spillover is an intra-sector spillover between MNCs and local firms at the similar stage of the production process and it is mainly widespread through labor turnover and mobility. Vertical spillover is an inter-industry transfer of know-how and technology through the supply chain from foreign suppliers to domestic producers; through FDI, MNEs usually transfer their expertise to the subsidiaries in the local market (Newman, Rand, Talbot, Tarp, 2015). Most of the studies conduct on developing countries have no evidence of horizontal spillover and underline the importance of vertical spillover as a mean to increase productivity and acquire technical knowledge in the host subsidiary. There are two ideological patterns about spillover effect: one enhances the positive spillover, which argues that considering the technology disparity between the home and the host country, FDI acts as a conduit for technology transfer from developed to emerging countries and can be implemented through competition, network and employment. In contrast, the emerging countries' reliance on FDI usually creates negative spillovers; indeed, in this case MNCs may attract the most specialized employees from local firms, causing productivity and quality damages to local firms and sometimes gaining dangerous monopolies in the host country. Given that MNCs should prevent spillovers to protect their competitive advantage, they have to make a strategic choice about FDI and subsidiary location, that can enable MNCs to obtain inward knowledge spillover from the host country and minimize outward knowledge spillover. Other important decisions of the companies are relative to the entry strategy, that has to take in consideration also the orientation of the company; in order to increase control on foreign activities, MNCs usually choose joint ventures or wholly-owned subsidiaries. Analyzing the effects of trade openness and FDI outflows from China to Sub-Saharan Africa, results suggest that African countries most impacted by Chinese spillover effect from 2008

to 2014 were Lesotho and Zambia; in fact, there's a clear link between Chinese OFDI and both countries' growing productivity and technical efficiency, which enabled them to move to an optimal scale. Moreover, Algeria, Ethiopia, Ghana, Madagascar, Mozambique, Tanzania improved their technical efficiency, while Malawi, Namibia, Senegal, Uganda and Zimbabwe didn't benefit from Chinese investments; in Mauritania, despite the growing efficiency, productivity has slowed down. As an evidence, for SSA manufacturing firms there is not a clear link between Chinese investments and growth of firm-level productivity or increase of living standards in the host country. In addition, the prominent role of China as first exporter to SSA can have a negative impact and reduce African productivity and competitiveness of commodities (Zeng, Shan, Amankwah-Amoak, Lin, You, 2017).

3.4. Clustering development strategy: SEZs and OBOR initiative

3.4.1. Infrastructural projects

Chinese infrastructural development projects in Africa begun with the Tazara railway in 1976; the train line served as a transport corridor for African nations and favored the commercial channel between China and Africa. After the renovation of Chinese interests since the early 1990s, the Beijing Action Plan (2007-2009) emphasized the collaboration in the construction sector; Chinese companies, especially SOEs, have invested in the African continent road and railroad lines rehabilitation. Countries with the most impact of the Chinese footprint were mainly Sub-Saharan African ones, as Angola, Nigeria, Sudan and Zambia, therefore rich nations in terms of natural resources; for the validity of the plan, the Exim Bank spent more than 12.5 billion of dollars for large-scale infrastructural projects. Chinese state-owned enterprises dominated the African market thanks to the commitment of the PRC, which offered liquidity and selected directly the fitting construction companies. Ahead of the access to the market, SOEs engaged a host of private Chinese sub-contractors specializing in different fields of construction, like plumbing, electrical engineering and air-conditioning. With the approval of the project, companies could use the opportunity to have an initial experience of the local environment and its construction conditions. Chinese construction sector in the mainland was deeply competitive, so the African market

represented a good recipient for infrastructural investments; China's competitive advantage respect to the other players in Africa consisted in access to capital, supply-chain costs and labor productivity. Moreover, while normally local and foreign companies had a profit of 15-25%, China operated with a margin of 10% or less, which let its price strongly competitive (Corkin, Burke and Davies, 2008).

3.4.2. Chinese SEZs in Africa

The Beijing Action Plan included also the PRC initiative to develop at least three Special Economic Zones in Africa, that acted as Chinese investment recipients. The first two SEZs were built in Zambia for the mining activities, and Mauritius as a trading hub. These areas should have promoted Chinese soft power in Africa and the effectiveness of its developmental model; in addiction, these strategic zones could have supported China's local reconstruction, allowing less competitive industries to move offshore. Finally, China's SEZs establishment in Africa responded to three main necessities: search for new markets, acquirement of natural resources and development of Chinese logistics in Africa. Successful examples of Chinese SEZs in Africa were: Zambia Chambishi, with the China Nonferrous Mining Group which owned 85% of shares of copper and cobalt activities; Egypt Suez economic and trade cooperation zone, leaded by the Tianjin TEDA, that invested especially in textile, oil, construction and chemistry sector; Nigeria Lekki free trade zone, occupied by the China Railway construction corporation, that operated in transportation and telecommunication sector; Nigeria Ogun-Guangdong free trade zone, managed by the Zhongfu Industrial Zone Management Company, which invested in construction materials, furniture, hardware, electrical and medical equipment; Mauritius Jinfei Economic and Trade Operations Zone, controlled by Shanxi Jinfei Investment Cor., which activities were linked to logistics and storage, business, training and education, real estate, tourism and green energy; Ethiopia Eastern Industrial Zone, owned by Jiangsu Qiyuan group and responsible for metallurgy, electric machinery and construction materials. Except the zones in Ethiopia and Mauritius which are 100% Chinese-owned, the other SEZs are joint ventures, usually supported by African national or state-level governments as minority partners. For example, Nigeria's Ogun State government holds 18% of the shares in the Ogun zone, while the

government of Lagos State and Lekki Worldwide Investment Ltd hold 40 % of the shares in the Lekki zone (Santos and Ma, 2015).

3.4.2.1. Actors involved in the development of SEZs

SEZs involve three players: Chinese central government and provincial administrations, African governments and Chinese enterprises. The Chinese governmental institution that launched the project was the Ministry of Commerce of the People's Republic of China (MOFCOM). The national favorable fiscal policies supporting Chinese investors in the African SEZs were US\$44 million grant, US\$294 million long-term loans, 30% coverage of operational costs, such as travelling, market studying and initial land rent expenses, export and import taxes reduction, access to foreign exchange and eligibility to the Trade and Economic Cooperation Zone Fund of MOFCOM. Moreover, the China Africa Development Fund (CADF), an equity capital fund created by the China Development Bank (CDB), decided to invest in at least three of the seven pilot zones (Nigeria Lekki, Mauritius and Egypt) and to Zambia for a total of \$100 million. Some municipal governments gave additional support to the most important zones; Jiangsu province and Suzhou municipality provided funds for \$15 million. Furthermore, in 2009 Chinese government offered 1 billion credit for African small and medium enterprises (SMEs); during the same year, the chairman Hu Jintao visited Mauritius and established a committee to speed up the delayed projects.

African governments give additional control and offer incentives to SEZs, including tax exemption and waivers on import tariffs for raw materials; companies investing in the Egyptian SEZ obtain Egyptian facilities as certificates of origin for their commodities and benefits from Egypt's various international trade agreements. Host governments usually provide infrastructures out of the areas, in addition to public services like electricity, water and gas, communication networks and ports, while Chinese companies have a duty to construct infrastructures inside of the SEZs land; but there are some exceptions: in Mauritius for example, the African government and the Jinfei consortium shared the expenses of external construction investments. Also the Egyptian government built electric lines and infrastructures on the border of the Suez Zone, and in Ethiopia the leadership reimbursed 30% of consortium installation costs (Bräutigam and Xiaoyang, 2011).

In summary, there are five main phases of Chinese enterprises engagement in the African market; the first was related to the aid strategy (1949-1980), the second saw SOEs trading companies as protagonists (1989-1995), the third involved the entrance of large-scale SOEs in the manufacturing and infrastructural sector (1995-2000), the fourth included the development of spillover effect due to the growth of investments and since 2005, the fifth stage incorporated the access of small-scale private sector. The crucial characteristic of private enterprises is that they normally act autonomously from the government bilateral programs, sustaining their operational activities mainly with business associations, embassies, chambers of commerce and consular facilities. SMEs internationalization strategy usually begins with an initial phase of export activities, which are fundamental for the decision to invest or not in the country, then they move to the second stage, that is driven by greenfield investments, and finally they establish industrial parks, which offer mutual support and coordinated production.

Despite SOEs have been a major role in the development of OFDI to Africa, Chinese private firms are growing constantly and taking their own slice of the African market. Chinese private companies in Africa are especially small-medium enterprises (SMEs), which have a strong entrepreneurial pattern and follow commercial rends more than political needs. Therefore, there is a weak linkage between SMEs and China's public administration; since the initial SMEs access to Africa, this gap has caused difficulties in the calculation and estimation of Chinese private companies abroad, which are constantly boosting. For the reasons set out, in order to enhance Chinese business gains in Africa, it is necessary to designate a "two-way street" approach, where public and private sector can have an interactive relationship in the African market (Gu, 2009).



Fig. 8. China-Africa Research Initiative, (2020). "Gross annual revenues of Chinese companies construction projects in Africa". Johns Hopkins School of Advanced International Studies.

Chinese SEZs developers include both state-owned and private enterprises; in the chart in Fig. 8 it is possible to see the growing trend of Chinese companies construction projects in Africa. In 2018, the gross annual revenues of Chinese companies' engineering and constructing projects in Africa amounted US\$48.84 billion. The largest construction-contracting countries were Algeria, Angola, Kenya, Nigeria, and Ethiopia, which covered the half of all Chinese companies' 2018 infrastructural project gross annual revenues in Africa. The dramatic raise of this data from 1998 to 2018 represents the result of both governmental SOEs initiatives and emerging private companies in the infrastructural field (China-Africa Research Initiative, 2020). In 2013 Chinese private construction projects in Africa covered only 6% of the infrastructural sector, while government-led projects owned the 42%; in addition, the SMEs extractive industry accounted 16% of the field, while SOEs had the 22%. On the other hand, private led-investment projects registered important results in trade and logistics with 24%, agriculture with 8% and manufacturing with 31%, against public investments rates respectively 9%, 4% and 4% of the market (Shen, 2015). An important consideration is the emergent role of Chinese private enterprises in the One Belt One Road initiative; in 2017, private firms covered already the 38.5% of Chinese total foreign trade amount and the flow of the import-export exchange have increased of 600 billion dollars thanks to the New Silk Road traffic. In addition, private companies accounted the 25% of the national OFDI (UNDP, 2019).

3.4.3. One Belt One Road initiative: focus on Africa

One of the important drivers of the OBOR initiative launched by president Xi Jinping in 2013 was the necessity of implementing the infrastructural sector, both in the domestic country and overseas; Africa have had an important role in this project, that covers mainly three countries of the continent, Egypt, Kenya and Djibouti.

The horn of Africa area have been historically controlled by Western and U.S. countries, because of its strategic position in terms of maritime securities and traffic of oil. Given than the Suez Canal links Indian Ocean and Mediterranean Sea, without Egypt the maritime Silk Road couldn't be realized; indeed, in 2016 the Egyptian president Abdel Fattah Al-Sisi signed a memorandum of understanding with China regarding the OBOR initiative. The project has been financed by 1 billion dollars donated by China to Egyptian Central Bank and 700 million loan always given by China to the National Bank. Moreover, Chinese government will cover the expenses for a ten-year project in the Suez Canal, which amounts 230 and 45 billion dollars; Chinese Suez Economic Zone is expected to give employment for 10.000 Egyptians and to create a business and administrative capital, in addition to Cairo.

Kenya is the entry point of the maritime silk road from Asia to Africa; the core infrastructural projects of the OBOR initiative in the host country are upgrading of the Mombasa Port, building of a new modern port in Lamu, constructing a railway line that links Mombasa port, the capital Nairobi, and the land locked neighboring countries. The railway will connect the ports in Kenya, to oil fields in South Sudan and Uganda, while also joining with Ethiopia, Rwanda, Burundi facilitating exports for these countries commodities; the main investor for this project is China Exim Bank, which covers the 90% of the 25 billion dollars requested (ZiroMwatela and Changfeng, 2016). In 2015 China and Djibouti signed for the construction of a Chinese army logistics facility in Djibouti for naval operations; in fact, Chinese economy largely depends on the security of global navigation, which is the channel for the transport of raw materials, energy and finished goods. The Chinese interest in the security of the sea lines focuses its attention on strategic marine passageways, such as the Straits of Taiwan, Malacca, Hormuz, and the Suez Canal; Djibouti is located at a critical place on the Bab el-Mandeb Strait, the main shipping route connecting the Mediterranean Sea, the Suez Canal, and the Red Sea to the Indian Ocean and Asian markets. In addition, it is

connected with the Arabic peninsula, which is an important oil exporter for China. Other notable foreign military bases in Djibouti are owned by U.S., France, Germany and Japan, which have the aim of fighting against piracy and terrorism; China's outpost in Djibouti offer a new political and economic corridor to China, that will support the realization of the "Chinese dream" enhanced by Xi Jinping (Orion, 2016). Moreover, Djibouti offers different industrial parks, including the Chinese Touchroad Djibouti SEZ and the Djibouti International Free Trade Zone; in fact, in 1990s the local government decided to shift Djibouti into a platform offering trade and services. In the early 2000 the government established a partnership with DP World, a leading logistics company from Dubai, which extended the Doraleh port, already an important oil terminal. The firm had already the control of the Jebel Ali Free Zone and get the Jabanas Free Zone. The crisis of this partnership in 2004, caused by the monopolistic intentions of DP World, gave the chance to China Merchants to convince president Guelleh to sign a contract for the expansion of the free zone; in 2017 the agreement was stipulated, supported by Djibouti government (60%), China Merchants (30%) and the Port of Dalian (10%) (Pairault, 2019).

Chapter 4: Huawei case study

After examining the Chinese intervention in Africa since the post-WWII period and its investments in four principal economic sectors, in this chapter is presented the case study of the Chinese company named Huawei Technologies Ltd and its entry strategy to access the African continent.

In order to explain the leading role of Huawei in the domestic and foreign market, firstly I reviewed the development of Telecommunications industry in China, in particular of mobile industry, and the major players involved in this sector. After that, I focused on the technology and know-how transfer policies applied by Chinese government since 1980s, such as FDI, Venture Capital Investments (VC), Joint Ventures (JV) and Licensing agreements, favoured by the construction of Special Economic Zones and other Telecommunications industry clusters; in this section I deepened the crucial role of U.S. in the technology transfer phenomenon, which was a driver of intellectual property for Chinese communications companies. Moreover, I investigated the engagement of American mobile companies in the Global Value Chains context and their involvement in technology transfer; an evident example is Apple's choice to offshoring production and establish all iPhones manufacturing centers in China, which has acquired technological and design capabilities.

Secondly, I described Huawei's history and the biography of its founder, Ren Zhengfei, with the aim to explain the company's business orientation and managerial approach; it has emerged that Ren's personality and military education has deeply affected Huawei performances, especially with his tactics called "Culture of Mattress" and "Culture of Wolf". Huawei's success is due also to its marketing strategy and brand awareness, analyzed with the 4P framework, that reflects the beauty and the fighting spirit of China; another key feature is the company's internationalization strategy, based on the Driscoll's paradigm, which implies the evaluation of internal and external factors before accessing a targeted market.

Thirdly, I studied Huawei entry strategy in Africa and its competitive advantage powered by its human capital development activities, in particular the construction of training centers for local workers, situated in Nigeria, Egypt, Kenya, South Africa, Angola,

Tunisia, Democratic Republic of Congo and Morocco. Starting with South African market, I applied the PESTEL Analysis in order to evaluate the political, economical, social, technological, environmental and legal aspects of South African telecommunication industry and the Porter's Five Forces Analysis to determine the competition between Huawei and the other mobile companies on the market. Finally I explored the company's intervention in all the eight countries already mentioned, including training programs in both Africa and China and their part in the technology transfer process, cooperation between the local governments and partnerships with local telecommunications companies and carriers.

4.1. Telecommunications industry in China

The evolution of the telephone switch technology can be divided into three phases: the manual switches (1880s–1920s), the electro-mechanical switches (1920s–1960s) and the electronic switch (1965–till now). The first one included magneto telephone switchboards and batteries (1878), the second one comprehended step-by-step switches (1891) and crossbar switch (1920s), the third one was electronic stored program controlled switch, divided in analogue electronic switch (1960s) and digital electronic switch (1970s). After the establishment of the People's Republic of China, a telecommunication administration system and a communication network were built in Beijing and in 1957 was found the first step-by-step telephone switch equipment factory, named Beijing Wired Factory. In 1966, the Tenth Research Institute of the MPT developed the first coded crossbar telephone switching system, but only after the open door policy in 1984, it was developed and produced in Tianjin. Despite this achievement, in 1980s China still lagged 20–30 years behind the developed countries and the market was dominated by the Japanese Fujitsu, which imported the first SPC (Stored Program Controlled) in Fujiang province in 1981. Thanks to the Opening Door reforms of Deng Xiaoping, China attracted FDI from foreign investors and several Telecommunications' Joint Ventures were set up. In 1984 was established a JV between Shanghai Bell Telephone Equipment Manufacturing Corporation and Alcatel, in 1988 another JV was signed between Siemens and a Chinese electronic company (Mu and Lee, 2005). These Sino-foreign JV projects attracted overseas telecom equipment suppliers and were part of the "Trading market for technology" (TMFT) strategy, which aim was

technological development and know-how transfer. TMFT strategy supported also favourable taxation for foreign investors; in fact, in 1991 Chinese government offered tax reduction of 15% for foreign companies exporting in China and exempt from tariffs for technological equipment imports. In addition, through the access to the WTO in 2001 China obtained affiliated tariff policies (Pawliki, 2017).

4.1.2. The players

Since 1980s, the Ministry of Post and Communications had the monopoly of the telecommunication industry in China; despite this, the company Jitong was established in 1993 as an alternative network for the collection of data. In 1994 China United Telecommunications (China Unicom) was born as a competitor carrier of Chinese Post and Telecommunications monopoly; the company was a venture owned 25% by the Ministry of Railroads, 25% by the Ministry of Energy, 25% by the Ministry of Electronics industries and the remaining by state-owned investors. The exclusion of foreign equities was formally applied until 2000s, but secretly about fifty agreements were concluded with overseas investors. Despite the legal and defamatory war of China Telecom against China Unicom, the company was able to make an IPO (Initial Public Offering) and was listed on the stock market. In 2000 Internet users in China were estimated to be 22 million, while mobile network registered 98.3 million lines; from 1996 to 1999 Internet grew between 130% and 500%, attracting several foreign investors such as Intel, Dow Jones, Softbank, Microsoft and Reuters and anticipating WTO liberalization of overseas investments. The WTO regulations about the telecommunication sector were enrolled mainly to protect fair competition and avoid monopolies, involving also foreign entrants; the State Council established two kinds of investors, Class One (state-owned equity owners) and Class Two (a mix of national and foreign investors). Moreover, China gave important concessions to WTO, like fixed ownership structure of line telecommunications (25% shares in Beijing, Guangzhou and Shanghai), gateway facilities, internet accessibility, mobile services, additional cost to foreign investors (30% shares in Beijing, Guangzhou and Shanghai) and the subscription of BAT Reference Paper, which enforced the principle of transparency (De Woskin, 2001).

As a result, after an initial period of government's direct investment, which in 1978

occupied the 90% of total investment in post and telecom institutions, and later a bank-oriented phase from 1982 to 1997, since 1997 the telecommunication sector has become strictly reliable on foreign capital markets and in the same year the carrier China Mobile was listed in the stock market, as a competitor of China Telecom and China Unicom. In 1997 the telecommunication industry was separated from the post service and changed from a traditional company to a modern enterprise; at the early 2000 the sector obtained 21.5 billion dollars in foreign capital markets (Wu and Zhu, 2003).

4.1.3. Technology and know-how transfer

The telecommunication industry can be divided in two main activities, manufacturing and service provision. The manufacturing sector has been affected by the attracting FDI policy of Chinese government during Deng Xiaoping regime, which was based on supporting local manufacturers to acquire foreign capital, advanced technology, managerial skills and market access. Since the signature of the WTO agreement between China and United States, foreign investors in the telecommunication sector were able to buy the 49% share of many value-added service corporations. In 1995 through the "Government Guidelines for Foreign Investments in Telecommunications", FDI projects were encouraged to improve digital wireless systems, optical SDH transmission systems, digital microwave systems, ATM switching systems, satellite communication systems, and communication software. Subsequently, since the middle 1990s, China saw an annual increment of communication lines of 15 million and after the installation of the first SPC in 1981, most important SPC multinational manufacturers begun to export directly to China their SPC switches; the suppliers included famous brands as Fujitsu, Alcatel, Ericsson, Siemens, NEC, Nortel, Itatel, Nokia, and AT&T. After the establishment of the first two Joint Ventures in the 1980s, MNC suppliers of LP, semi-knocked down assembly and completely knocked-down assembly, utilized JV as a channel to sell their switches to the Chinese market. As an evidence, the growth of FDI enabled the change of the Chinese switch industry from an import market to a JV market in the 1990s; in addition, the improvement of telecom networks and the raise of JV presence in China fostered the transfer of technology know-how across the country. This know-how shifting involved R&D, production techniques, sub-contracting, marketing and

sales, customer service and human resource management; moreover, Chinese engineers and entrepreneurs took the chance to develop local products. Consequently, the four major domestic manufacturing companies Great Dragon, DaTang, ZhongXing, and Huawei passed from 10% market share of China's SPC market in 1992 to 43% in 2000, and the government supported local manufacturers with favourable policies and loans and R&D facilities (Tan, 2002).

4.1.4. Technology transfer from United States

Although from 1949 to 1978 the major source of knowledge for China was Soviet Union, with the Four Modernization programme of Deng Xiaoping in 1978 the development of technology has assumed a key role in Chinese politics, and United States became the target country for technology transfer. Since mid-1980s the central government enhanced more structured research and development projects, which followed the principle of "Anchor at one end and let the other end be free"; in other words, the PRC (anchor) provided only an initial support, while extensive programs were self-financed with companies' bank loans or sales revenues. Following U.S. model, in 1986 China established a National Science Foundation (NSF), that was enrolled to foster and fund talented researchers, increase international cooperation and promote socioeconomic development. In 1995 the Chinese State Council announced the Plan for Accelerating Scientific and Technological Development, which included "863 project" for industrial technology, "Spark project" for agricultural technology and the "Torch program", for the application of technologies derived from 863. In addition, during the 1990s the government set up the "Golden Projects", in order to build new commercial and communication infrastructures; these ambitious plan was able to create fiber-optic communication networks in different fields, like banking, customs and tax collection, telecommunication infrastructures, medical and health information and scientific research. These sponsored-programs have involved foreign investors, particularly U.S., that joined the programs in order to support and collaborate in the research; for example, Intel took part of the "Golden Card Project" to establish a credit card system in Shanghai, and US computer and telecommunications companies such as Motorola, Bell South, IBM, Cisco, Sun Microsystems and Hughes have assisted China's Ministry of Posts and Telecommunications

(MPT) and its provincial offices (PPTs) in establishing the various Golden Projects networks (Bureau of Export Administration Office of Strategic Industries and Economic Security Defense, 1999). In order to acquire technology, intellectual property and know-how from U.S. firms, Chinese companies have applied different methods, some official and some off the record; the high-tech capabilities absorbed by Chinese companies involve also artificial intelligence, biotechnology and virtual reality. Most important drivers of technology transfer have been FDI, Venture Capital Investments (VC), Joint Ventures and Licensing agreements. Being an important producer of high-tech products, U.S. is a strategic country for Chinese know-how transfer purpose, which is withstood by the local government through direct assistance and incentives; these Chinese companies techniques have caused to U.S. a loss of 600 billion dollars annually until 2019.

During the period 2011-2018, information and telecommunication technology covered the third largest target of Chinese FDI in U.S., with an estimated amount of 14.4 billion dollars, while transportation and infrastructures raised to 16.9 billion dollars. According to China's Ministry of Commerce data, in 2015 more than 6.000 Sino-foreign JV were created in China, accounting for 27.8 billion dollars; many industries required the formation of a JV with a Chinese partner as the only possible way to operate in China, and the local company usually ask to the foreign firm to share technology and know-how. In 2019 the Chinese government approved the Foreign Investment Law, which should protect the rights of foreign partners' intellectual property.

Between 2015 and 2017, China invested 24 billion dollars in U.S. Venture Capital, that enabled Chinese companies to acquire easily technology assets; in 2018 Chinese VC in U.S. reached a peak of 3.3 billion dollars, with the platform Alibaba as the leader investor with 200 million dollars in the social media company Snap, 250 million dollars in the ride-sharing app Lyft and \$793 million for the virtual reality startup Magic Leap. In addition, the Chinese social network Renren was the major investor of VC in U.S. fintech startups like Fundrise and Motif, while Baidu, Alibaba and Tencent have established subsidiaries in California for R&D activities and Venture Capital investing.

The Chinese licensing system favoured local investors attributing additional costs and delays to foreign companies; Chinese government imposed licensing requirements such as patents, permits and certifications on more than one hundred business activities, including

telecommunications services. Chinese data protection law enabled the PRC to acquire U.S. intellectual property and technology through localization requirements for foreign technology companies; this means that foreign firms wanting to invest in China have to use data servers controlled by the central government or hire a local server provider like Huawei, Tencent or Alibaba (O'Connor, 2019).

4.1.5. Clusters of telecommunications industry

The establishment of Special Economic Zones in China as part of the “Opening door policy” supported by Deng during the 1980s has had an important role in the technology transfer phenomenon. At the beginning SEZs were mainly export and free trade areas designated to attract FDI and experience the Socialist Market Economy with Chinese characteristics; from 1984 to 1992 many industrial clusters were built in the coastal cities to attract foreign manufacturing investments seeking low cost production locations. In 1994 the State Council approved the BDA (Beijing economic-technological Development Area) as a state-level development zone situated in Yizhuang, the South-East suburb of Beijing; in May 2005 the zone accounted already 1.691 enterprises with an investment of 9.6 billion dollars, including 17.2 million dollars of foreign companies. Telecommunications and Information technology form the main important industry of the BDA, and Nokia cluster was the first driver of the development zone; in fact, in 2000 was set up the Nokia-center Xingwang Industrial Park, one of the world’s most notable mobile communications manufacturing cluster. This industrial park has been promoted by Nokia China Investment Co. Ltd (NCIC) and the BDA to merge the Beijing Capitol Nokia Mobile Telecommunications Ltd and its suppliers to create a specific industrial cluster with a wide production capacity. The Park is a cooperative JV between BDA (which provides land) and NCIC (that offers buildings) and it is Nokia’s largest JV in China, the local leading producer of mobile telecommunication equipment and Beijing’s leading exporter. The success of the Xingwang Industrial Park is due to two main location-specific factors: the strong support of the central government (called Beijing capital city effect) and R&D and labor market capabilities in Dongbei (the region of Beijing). In fact, in 2005 the R&D expenditure in Beijing per year was estimated to 23.4% of the total expenses and the city offered educated labor force, thanks to the local

prestigious universities (Yeung, Liu, Dicken, 2005).

Another example of telecommunication industrial cluster is the Shenzhen SEZ, born in 1980 as one of the first four SEZs in China, including Shenzhen (near Hong Kong), Zhuhai (near Macao), Shantou and Xiamen (in proximity to Taiwan). Although before 1979 Shenzhen was an agricultural-based economy with 20.000 people, after twenty years the city reached 3.5 million people and became a centre of high-tech industries; in 1998 Shenzhen accounted for 70% of Chinese output in liquid crystal displays (LCDs), 33% of Chinese sale of digital wireless telephones, 30% of PCs and 85% of floppy disks. During the same year, the SEZ attracted more than 12 billion dollars of FDI, thanks to low-cost labor surplus in the countryside, preferential terms for FDI and geographical proximity to Hong Kong.

The acquirement of technological capability in Shenzhen SEZ has faced different phases; at the beginning investments were more concentrated on tourism and real estate, and for this reason the local government in 1982 invested about 265 million U.S. dollars in building infrastructures. After this political intervention, manufacturing projects increased, particularly supported by Hong Kong and foreign investors, which could operate through different forms of financial participation, such as cooperation production, wholly-foreign owned companies and joint ventures; other direct investments included processing and assembly, compensation trade and international leasing. Given that Hong Kong investors enjoyed Shenzhen low-cost manufacturing manpower, the city had to foster access to foreign capitals and technology asset; the most influenced were processing and assembly companies, which benefited from technology transfer in the sector. At this point the PRC understood the necessity of a specific plan for Shenzhen SEZ, comprehending national incentives for high-tech industries with tax holidays for technologically advanced ventures and supply of local technicians and engineers; in addition, the government offered technological infrastructure support, including information services and intellectual property protection. These initiatives transformed Shenzhen SEZ in a high-tech center with a particular cluster for telecommunication industry, due also to the presence of the leading companies Shenzhen Huawei Technology Co. Ltd and Shenzhen Zhongxing Telecommunication Co. Ltd; in 1995 Chinese market for telecom equipment was the second largest in the world after U.S. and more than sixteen mobile multinational companies

decided to export or relocate production in China, including Siemens, Lucent, NEC, Alcatel and Fujitsu (Wei, 2000).

4.1.6. The role of Global Value Chains in the electronic industry

The electronic industry comprehends different products and services and supports many aspects of communication, education, finance, amusement and information; for this reasons, the sector is perfectly suitable for operations like outsourcing and offshoring. In fact, GVCs in the electronic industry are more interconnected and geographically extensive than the other sectors; GVCs role in this field is underlined by the intermediate goods trade, because fragmented production processes need that parts, components and partially manufactured assembly cross borders are shipped to final markets. The share of total manufactured intermediate goods trade of electronic industry raised from 11.5% in 1988 to 20.3% in 2006; during this period developing countries like China have emerged in both production locations and final markets of electronic appliances. As a result, in 2008 China mainland with Hong Kong and Taiwan owned the 35.5% of intermediate electronic exports. In the electronic industry there are three main players, that are lead firms, contract manufacturers and platform leaders.

Lead firms are companies with an important brand reputation that sell final branded products or services to the final customer; examples of lead firms are IBM, Fujitsu, Siemens, Hewlett-Packard, Dell, Apple, Acer and Lenovo for computers, Alcatel, Nortel, Cisco, Motorola, Juniper, Huawei, Ericsson, Nokia and Tellabs for mobile telecommunications.

Contract manufacturers make products for lead firms and sometimes are reliable for design activities. The important role of contract manufacturers have emerged in the GVCs context, which implies the separation in two distinct phases between design and manufacture; in contrast, there are companies that offer both activities that are known as Original Manufacturing Design (ODM) services, usually based in Taiwan, while manufacturing activities are more concentrated in China mainland. On the other hand, production services alone such as comprising component purchasing, circuit board assembly, final assembly and testing are referred to in the industry as electronics manufacturing services (EMS) frequently based in U.S. and Canada.

Platform leaders are companies which have implanted their technology (software and hardware) in products of other companies; sometimes platform leaders can be the most profitable player in the chain, even more than lead firms' brands. The most notable example is Intel, which is the major platform leader in the PC sector, that has the technological capability and market influence to change the location of different activities of the GVC; mobile phones platform leaders are Nokia (Finland), Ericsson (Sweden), Qualcomm (USA), Motorola (USA) and NTT DoCoMo (Japan). Other platform leaders are functional semiconductor intellectual property blocks sustained by companies like ARM (U.K.), CEVA (USA) and MediaTEK (Taiwan) (Staritz and Gereffi, 2011).

4.1.7. China's Mobile Phone industry engagement in GVCs

China is the major exporter of labor intensive goods and of electronic devices as PC, mobile phones, digital cameras and ICT (information communication technology) products; Haier is a Chinese leading company for electronic appliances, while Lenovo owned the 24% of the PC global market in 2018. Moreover, Huawei, OPPO and Xiaomi are part of the top five global smartphone brands. China has taken advantage from the reorganization of MNCs production along GVCs, getting access to knowledge, technology and global distribution networks; many Chinese and foreign high-tech exports are made with imported technology components that are assembled in China. Following the GVCs framework, lead firms define products, standards and parameters; exchange and communication between lead firms and suppliers favour transfer of know-how and thanks to this learning process, many Asian suppliers shifted from OEM to ODM. China has assumed the role of assembly center of smartphone global brands, such as Motorola, Nokia, Samsung and Apple; in fact, China was the unique assembler of iPhones and this gave to the country the chance to absorb innovation design and graphic characteristics. The common technology platforms for Chinese mobile companies are Qualcomm and Android, applied by leading Chinese smartphone manufacturers such as ZTE, Vivo, Xiaomi and OPPO.

Chinese mobile companies strategy is based on the deep knowledge of their target consumers, Chinese population; the firms usually start with a low price strategy, but adding some niche market elements, like dual SIM function, selfie specialization and long life

batteries. Chinese mobile firms production raised by 52.5 million mobile handsets in 2000 to 2 billion smartphones in 2016, within 1.3 billion destined to foreign markets.

Apple instead offers a typical example of GVC organization; the company has relocated production activities of iMac, MacBook Air, iPad and iPhone in China, while product design, R&D and development of software are operated in the headquarter. After twelve generations of iPhones, Apple has become a luxury high-tech gadget company, and Chinese mobile industry has been the exclusive assembly location for since the first iPhone in 2007; Chinese mobile industry has taken the opportunity to earn and learn from the popularity of the American brand, becoming the core country for the global components assembly. In 2010, the Taiwanese company Foxconn that owned production facilities in the mainland China received only 6.5 dollars for the assemblage of a finished iPhone 3G, that covers only 3.6% of the total product manufacturing cost and 1.3% of the retail price. It represents the value added owned by China in the manufacturing process of this product, which let China enter into the Apple GVC; this value added gave to Chinese mobile firms the opportunity to raise their quality up to Apple standards (Xing, 2019).

4.2. Huawei

Huawei Technologies Company Limited is a Chinese telecommunications equipment and services multinational born in Shenzhen, Guangdong; the company is a leading global ICT solutions provider, and was founded in 1987 by ex-military officer Ren Zhengfei and formed as a private company owned by its employees. Its core missions are building telecommunications networks, providing operational and consulting services and equipment to enterprises inside and outside of China, and manufacturing communications devices for the consumer market. Huawei started as a sales agent for a Hong Kong company that manufactured switches and after thirty years it has become the world's largest ICT solutions and services provider; the company utilized basic imported engineering foreign products to develop more complex technologies, and finally creating its own patents. In addition, Huawei strategy focused on R&D activities and aggressive discount policies, such as on human capital training. The company has expanded over 140 countries, obtaining a market segment of more than one third of the global population, and generates the 67% of

its revenues outside China; it cooperates with 45 of the world's most important carriers, including BT Group, Vodafone, Orange and T-Mobile.

Today, the three main categories of products and services offered by Huawei are carrier networks, enterprise solutions and consumer product and services. The firm begun with fixed phone line switches and in 1990 it produced the first commutator BH01 SPC (stored program control) with 24 ports, which applied an outdated technology for that period, but broke the competition thanks to its affordable price; nowadays this products' group includes not only fixed lines, but also wireless networks, telecom softwares and core networks for telecommunication operators. The second category, enterprise business, comprehends developing and manufacturing ICT products and solutions, like enterprise network infrastructures, cloud-based data centers, companies' information security, unified communication for governmental institutions and public utilities such as energy, power and transportation. Finally, B2C products are mobile broadband devices, domestic devices, tablets, smartphones; in addition, Huawei provides also the applications related to these devices to the consumer business segment, competing with Apple and Samsung and their operating systems (iOS and Android). Despite the considerable growth, Huawei has faced several problems: first of all, its products are often perceived as low quality due to their country of origin and competitive price; second, the aggressive low-cost strategy has reduced the profit margin in some markets; third, the company is frequently accused of intellectual property violation; fourth and last, the military background of Ren Zhengfei has dissuaded many Western countries to trust and invest in the company (Chong, 2016).

4.2.1. The founder's education and business philosophy

Ren Zhengfei's family was originated in Rendant village, in the Zhejiang province; his grandfather Ren Sanhe was a famous producer of ham and his father Ren Moxun was the first university student coming from Rendant. During his economic studies, Ren Moxun took part of a group of young communists, fighting against the Japanese occupation and the Chinese Nationalist Party. After the death of his parents he left the Beijing university and went to Nanjing to work as a teacher, but when in 1937 the Japanese army invaded the city he decided to move to Zhenning, Anshun; in this remote mountainous region he got married

and in 1944 he had a child. He decided to call him 正非 “Zhengfei”, a name formed by two characters, 正 “Zheng” that means “good” and “fei” 非 that means “bad”, while the surname 任 “Ren” means “responsible and trustful”. Ren Zhengfei was the first of seven brothers and his parents’ job wasn’t sufficient to feed their own children; despite this, he understood the value of sacrifices and hard-working and he passed the entry exam of the Architectural and Engineering University of Chongqing in 1963. After only three years, in 1966 the Cultural Revolution constrained many students to leave universities, but Ren Zhengfei was an exception and kept learning privately with the secret support of his professors; after the graduation, from 1974 to 1982 he entered the Chinese People’s Liberation army as a member of the Capital Construction Engineering Corporation, working in the communications division. In 1984 he left the army and was hired by the largest construction company in Shenzhen, the Shenzhen Nanyou Group, where he moved with his wife and children; suddenly his business partner deceived him and he was fired with a debt of two million renminbi, while in the same period he divorced with his wife, who was a manager in the same company. Despite this initial failure, Ren Zhengfei didn’t give up and in 1987 he established the Shenzhen Huawei Technologies company, a collective enterprise with a registered capital of 20.000 yuan. The company became immediately famous for the competitive prices of its switches, but the quality of the product was still far from the other telecommunications giants on the market.

Ren’s business philosophy was closely influenced by his military experience, which made him a restless worker determined to reach his goals by any means necessary; this approach was shared also to Huawei engineers of the R&D team, who were available to work unceasingly for twenty hours a day, in order to reduce the gap between the company and its competitors. The attitude of both Huawei’s founder and employees was named “the Culture of Mattress”: every member of the R&D staff received a towel and a coiled mattress and put it under the desk, aimed to take a nap during the pause and often to sleep directly in the office at nights. The Culture of Mattress was strongly criticized when in 2006 Hu Xinyu, a young engineer of Huawei, died for viral encephalitis after having worked for months more than twenty-two hours a day; after this dramatic event, Ren established an internal health

and security department, and Huawei began the first Chinese company to offer a sustainable work schedule and medical and psychological counseling to its employees.

Another famous military strategy promoted by Huawei was “the Culture of Wolf”; Ren Zhengfei affirmed that the development of an enterprise needs many people with similar characteristics to wolves, in particular powerful senses, aggressiveness and sense of belonging to a branch. The wolf intended by Ren was famished, wild, fierce and resilient. Ren ordered to the R&D department in Beijing to hire all the best engineers of the country and let them work without a specific assignment, because he was “famished” of innovative projects; having no tasks, the new engineers decided to form a team to elaborate a software protocol for digital products, which became the base of all the future devices of Huawei and the starting point of the new company’s path. This “wild” behaviour of the R&D section was the key factor in the development of the new digital switches C&C08 2.000 and C&C08 10.000, which were successfully sold on the domestic market; at this point Ren Zhengfei established the “collective participation clause”, that enabled all the employees to own the company’s shares and to “feel part of the branch”. The “fierce” approach of Huawei was a military technique applied to survive and beat the competition; Ren made huge investments in R&D resources and decided to sell its products the rural areas first, sending at least eight sales agents in every district of China. In 1996 Chinese Minister of Post and Telecommunications organized a tender in Beijing, where Huawei sent its team of department directors, project managers and 400 agents; at the same meeting the competitors were Shanghai Bell and Qingdao Lucent, but they were not prepared enough and Huawei won the tender. In the early 2000s Tianjin government had signed a Joint Venture with the Japanese telecommunications company NEC, but due to the high costs of line installation, NEC hadn’t provided yet a telephone network for the university of Tianjin; Huawei developed a system based on NEC switches, that enabled the installation of one telephone in every dormitory of the Tianjin University. The university refused its projects, considering it unreliable, but the company shown its “resilience” and decided to install the telephones at his own expense; the result was a success, because the university telecom department gained ten times of the normal revenues and signed a new contract with Huawei (Li, 2018).

4.2.2. Marketing strategy

The name 华为 “Huawei” is formed by two characters that have a double meaning: 华 “hua” indicates “China”, but it can also be referred to 花 “hua”, that means “flower” and is the symbol of the company, while 为 stands for “achieve/achievement”. The complete translation is “China achievements”, referring to the many successes that the country has collected in the past and will collect in the future; as a result, the brand name is a patriotic hymn to China, and the flower logo is an important reference to the beauty and refinement of Chinese products. Moreover, the company’s slogan is 心系中华，有所作为, that means “Thinking for China, making a difference”.

Huawei was licensed to produce and sell mobile phones in China in 2005, and up to that moment its products reached an impressively fast development; in 2010 its C8500 handsets surpassed 1 million in 100 days and in 2012 the company sold over 20 million Tianyi handsets for China Telecom. In addition, at the WMC exhibition in Barcelona in 2012 Huawei became the first producer that built a self-developed quad-core processor and a K3V2 chip; during the same year it released the Emotion UI operating system, based on Android system but with a deep orientation to the customer tastes and needs. In 2013 the company launched Huawei P6, the world’s slimmest smartphone with a thickness of only 6.5%, and promoted the Mate range of products for the business segment; thanks to this quantum leap, Huawei took part of the high-end mobile phone club, proceeding with Mate8, Mate9, P9 and P10 models and gained the third position in the global high-end phones ranking, following Apple and Samsung. The firm has a strong customer-centered orientation and applies a low-cost strategy (also for the business products), with a design adapted to customers’ needs and a price that fits all the clients’ economic possibilities. As a result, Huawei’s flagship product lines presents two different items, P30 and Mate10, which follow the high-end mobile phone strategy-high-performance boutique; it is possible to understand the marketing strategy adopted by Huawei through the Marketing Mix 4P (Product, Price, Place and Promotion) Analysis.

In order to develop its innovative products, the company has invested a lot in R&D and market research, offering a tailor-made customer-centric product system; for instance, the

Mate line is addressed to male politicians or businessman and is characterized by long battery life, GSM and business style U design, while the P line is meant for fashionable female users. Moreover, product brand strategy is based on two trademarks, Huawei and Honor, where the first covers high (Mate and P series), medium (Nova and G series) and low (Y series) market segments, and the second is predominately sold with e-commerce platforms.

Huawei's pricing strategy is a combination of the three main product pricing methods, that are cost-oriented pricing, competition-oriented pricing and customer-oriented pricing; in fact, the company's high-end models are divided in Mate series, P-series and Porsche plate-making. The target income pricing method applied by Huawei establishes the prices according to investment costs, expected sales quantity and investment income of the company; the competition-oriented method determines the costs basing on the competitive environment, considering in particular Apple and Samsung price gap; the customer-oriented pricing strategy is linked to the customer perception of the product's value, and for this reason requires partnerships with luxurious brand, such as Porsche.

The place strategy of Huawei in the internal Chinese market has passed through three stages: manufacturing, distribution and direct retail of mobile phones. In addition to the cooperation with traditional sales channels operators, Huawei Terminal Company has set up a Vmall online mall aimed to work with big e-commerce companies, like Tmall and JD.Com.; this expansion of channels was implemented to increase the sales and market segments.

Huawei promotion strategy is developed through advertising, promotions, brand ambassadors, gift promotions, e-commerce promotions, cross-border brand cooperation; in particular the company focuses on public relations management, including participation to fairs and exhibitions, advertising campaigns for movie reviews, internet and media promotions and partnerships, for example with Porsche and Leica dual cameras (Gao, 2019).

4.2.3. Internationalization strategy

Huawei Technology Corporation is a successful case of internationalization, born as a telecommunication equipment manufacturer small private firm and switched to a

multinational enterprise, with eight regional headquarters and twelve R&D centers. In the domestic market, he applied a process called “encircling the cities from the countryside” strategy; Huawei firstly focused on Chinese rural regions unconsidered by famous companies, where he first consolidated its name on the market; secondly, the firm entered small and medium cities and finally big cities.

Considering Dunning's Eclectic OLI paradigm, Huawei applied a gradual internationalization strategy, starting from developing countries to reach more advanced economies; in fact, the firm began with Hong Kong, then Russia, Africa and Latin America, and finally arrived in Europe and North America. The 1990s became the golden period of the telecommunication industry, thanks to the government supporting funds and reforms; from 1991 to 1999 Chinese telecommunication industry incredibly raised 2050%. In 1996, Huawei reached RMB 2.6 billion revenues, becoming the leading telecommunications equipment supplier in China.

Huawei overall entry strategy was projected following its position respect to its foreign competitors at that time; compared to Western telecommunications industry, the company had disadvantages in terms of technology, design and brand reputation, so it chose to move to developing countries first, in order to offer high-tech products (compared to those in developing nations) with competitive prices. The company internationalization process can be divided in three phases.

The tentative stage (1996-1999) was characterized by the principle “from the easiest by the most difficult”; Huawei started from the nearest point from Shenzhen, Hong Kong, continuing with Russia, Latin America in particular Brazil, Asia in Yemen and Laos and Africa especially Ethiopia. In this phase the firm enhanced brand building and R&D investments.

The take-off stage (1999-2001) was the fastest internationalization period, with the launch of “The New Silk Road” marketing project and the organization of guided visits at Huawei headquarter in Shenzhen for foreign customers; in 1999 the company accessed new markets, such as Thailand and Malaysia in South East Asia, Saudi Arabia and United Arab Emirates in Middle East, South Africa and Egypt in Africa. During the same year, Huawei set a R&D center in India (Bangalore), improving its software capability and achieved Capability Maturity Model level 4 accreditation in 2001 and level 5 accreditation in 2003.

The mature stage has lasted since 2001 up to now and includes Huawei operations in the European market; in 2001 the company developed 10Gbps Synchronous Digital Hierarchy (SDH) system in Berlin and in 2004 it formed a JV with Nokia Siemens Network for TD-SCDMA technology development, marketing and manufacturing activities. Always in 2004 Huawei established a foreign headquarter in UK and signed a distribution agreement with Marconi (English company); in 2005 the firm was selected by British Telecom as the supplier of its 21st Century Network (21CN) for Multi-Service Access Node (MSAN) and optical transmission. In 2006, Vodafone selected Huawei to build the radio access part of its UMTS Network in Spain; this was the key access to European mainstream market. Finally, Huawei successfully entered the European countries like Germany, France, Spain, United Kingdom, Sweden, Italy through product reselling, cooperation, joint ventures and creating offices. Huawei wasn't so lucky in U.S.: in 2003 the company was involved in a litigation with Cisco Systems and lost the lawsuit, having to recall all of its product from the market; in addition, the American Committee refused its JV proposal with Bain Capital corporation (Zhu, 2008).

The internationalization strategy adopted by Huawei was different depending on the target country. In Russia the company established the Beto-Huawei Joint Venture, with the Beto Konzern and Russia Telecom to enter Russian market in 1997; the country was chosen for its weak telecommunication infrastructures but its considerable growth potentiality, and in the selection process were involved also cultural and political factors, such as the similarities between the governing communist parties. In South America, Asia and Africa Huawei applied the export entry mode, sending sales and service engineers from China to these countries; this method was chosen for its characteristics of high flexibility, low resource commitment and minimum risk level. Finally, to get into North America, West Europe and other developed countries, the company applied the contractual entry mode, such as co-reseach, co-production and co-sales; for instance, the previously mentioned cooperation between Huawei and Marconi offered a channel for Huawei to sell its product in Europe, while for Marconi the possibility to deepen product development and marketing.

As an evidence, Huawei Technologies didn't follow the Uppsala Model, but adopted a different entry mode (export, strategic alliances and JV) due to the particular characteristics of the targeted country. According to Driscoll's paradigm, there are situational influences

and moderating variables that deeply affect a firm's entry strategy. Situational influences include firm factors, such as specific advantages, experience and strategy, and environmental factors, such as demand and competitive conditions, political and economic conditions and socio-cultural conditions; moderating variables are government and policies regulations, corporate policies and firm size. On one hand, it is evident that Huawei internationalization strategy fits with Driscoll's theory, on the other hand its model has particular similarities with the other high-tech firms. In fact, ICT (Information and Communication Technology) companies have to consider the network and the infrastructures system of the country before accessing it, given that their products don't have an intrinsic value, but their functions are strictly dependent on the external environment; for this reason, Huawei's foreign entry mode is based on the host market environment and industry features (Zhao, 2007).

4.2.4. Offshore hiring: acquirement of R&D capabilities

Latecomer companies, especially in knowledge-intensive industries as the ICT sector, have emerged in the international context of the last decades for their global R&D activities; one of the measure adopted to build capabilities is the hiring of experts at offshore locations. Huawei embodies a perfect example of this phenomenon, because the company is known to hire R&D experts outside its home country, gaining an important reputation of intensive knowledge sourcing and overthrowing leaders of the telecommunications sectors such as Samsung and Motorola. With the aim to acquire capabilities through the hiring of senior experts, Huawei built R&D units closed to competitors in the host countries; the success of this strategy demonstrates that hiring offshore experts can provide competitive advantages.

As a result, Huawei is a latecomer's greenfield investor of the telecommunications industry in the international market; this position of latecomer of OFDI has favored the company to harness the domestic country abilities and at the same time gain new opportunities abroad, overcoming liabilities of origin and creating a wider network in the cost country. The major disadvantage faced by latecomers MNCs is the liability of origin, intended as the discrimination against firm coming from particular countries, because of their real or perceived conflict with the regulative, normative or cultural-cognitive elements

of the host country institutional environment; the liability of origin includes stereotypes about the cost and quality of products, the brand reputation, the domestic industry and the working conditions of the MNC (Ramachandran and Pant, 2010). Emerging markets in particular have to deal with stereotypes at a corporate level, such as at governmental level; Huawei's operations abroad has been always been hindered by Western countries, especially U.S., while in the case of Africa local governments have generally adopted a cooperative approach towards Chinese MNCs investing in the continent.

Huawei presents an atypical case of knowledge acquisition; in fact, while the economic literature suggests that acquisitions of FDI are addressed to gain strategic assets like technology, brand reputation and to enter the local business network, the company chose the establishment of greenfield R&D subsidiaries to acquire knowledge (Schaefer K., 2020).

4.3. The approach to Africa

Telecommunication industry in Africa is leaded by Western and East Asian firms, which try to avoid knowledge transfer to African actors, in order to protect their control and intellectual property; this phenomenon is particularly common in this sector, because companies need to do R&D activities, such as software development, that can easily fall outside control. Since its approach to the African market in the early 2000, Huawei has become a leading brand in the continent, especially for its structured training programs that involve many young African employees. Huawei competitors in the African market are Original Equipment Manufacturers (OEMs), that comprehend Consumer business, Carrier business and Enterprise business: Consumer business refers to the producers of phones, tablet, laptops, PCs such as Apple, Samsung, Tecno and Oppo; Carrier business is the area responsible for construction and management of infrastructures, like towers, base stations, cables, and the licensing on LTE devices; Enterprises business covers Institutions with sensitive technological information and software, such as Cisco and IBM. Huawei operates in all three areas, representing the 28% of the Global Telecom Equipment Market Share in 2018 and overthrowing Nokia, Ericsson, ZTE, Cisco and other OEMs. One of the advantages of Huawei on Western competitors is the credit from China Development Bank and China Exim Bank; in particular the CDB provided US\$ 10 billion to Huawei in 2004 and US\$ 20

billion in 2009, and this loans allowed the company to beat the competition with flexible payments for customers and more R&D investments. In addition, in 2018 there were 49 projects in 22 African countries promoted by Huawei and funded with US\$ 2.9 billion by China's Exim Bank. Compared to the other world's regions, Sub-Saharan Africa still presents the lowest penetration rate of mobile phone subscribers, but has a huge growth potential, due to its young population, progressive economic development and investments in the telecommunication industry made by companies like MNT (Nigeria) and Airtel (Kenya). All these local companies are engaged with Huawei, that is the biggest OEM vendor in the region; in fact, 55% of MNT Nigeria's revenues come from customers that acquire Huawei equipment, 25% from ZTE equipment and 20% from Ericsson equipment. In addition, SSA is the targeted region for the development of 3G, 4G and 5G networks and broadband connections. Nigeria's operators' market includes both private international companies and private local companies; in Kenya the leading firm is Safaricom, a state-owned enterprise regulated by the government; in South Africa the European company Vodafone has established a subsidiary called Vodacom; all of these companies are committed with Huawei customers. Huawei most successful corporate strategy in Africa is the establishment of training centers, that are eight in the continent: Abuja (Nigeria), set up in 2004, Cairo (Egypt) in 2005, Tunis (Tunisia) in 2006, Nairobi (Kenya) in 2008 and 2017, Johannesburg (South Africa) in 2008, Luanda (Angola) in 2008, Kinshasa (Democratic Republic of Congo) in 2012 and Rabat (Morocco) in 2012. African lecturers are usually sent at Huawei Shenzhen campus in China for at least two months to learn about new software and hardware technologies. Huawei's training programs involve three actors: customers, subcontractors and channel partners. Lessons for customers are aimed to let the carriers' staff familiarize with Huawei equipment. Subcontractors are small local firms that have signed a managed service contract with Huawei, that outsources simple tasks like equipment installation, repairing and maintenance of the equipment. Channels partners are third parts (groups or individuals) usually technicians and engineers that market and sell products, services and technologies on behalf of manufacturers or service providers through a partnering relationship; the OEM involved is usually Cisco, that is also the historical formative institution of channel partners in Africa, but Huawei is extending its training programs in the SSA area, copying the Cisco's accreditation system CCIE (Cisco

Certified Internetwork Expert) with its HCIE (Huawei Certified internetwork Expert) (Tugendhat, 2020).

4.3.1. Entry market decision in South Africa

In order to understand the competitive advantage of Huawei in the South African market, it is necessary to study first the telecommunication industry performance in the country since the end of the last century; in this phase I have analyzed Huawei presence in different African countries, starting with South Africa, the state where the company boasts the most consolidated presence in the continent. After the fall of the Apartheid regime, South African government has liberalized fixed telecommunication lines to market competition; in the early 2000 the sector covered the 4% of the total GDP, growing of 50% from 1994. Despite the important national investments in the telecommunication industry, the necessity of an additional support became evident and the government promoted different policies with the aim to attract foreign investors in this field.

Following a single-business company prospective, there are different factors to consider to choose whether invest or not in a particular market; the two most important ones are local industry and its competitiveness (external environment) and the company's internal situation and competitive position (internal environment). External environment factors can be divided in three main categories, that are factors in the remote environment, factors in the industry environment and factors in the operating environment. Remote environment is related to Political, Economic, Social, Technological, Environmental and Legal aspect of South Africa and therefore can be explained through a PESTEL analysis; industry environment is linked to entry barriers and competitors, substitute availability, buyer power, supplier power and competitive rivalry and is traceable to Porter's Five Forces analysis; factors in the operating environment are global and local actors in the targeted market, such as competitors, creditors, customer, labour and suppliers (Moorgas, 2003).

4.3.1.1. External Analysis: South Africa PESTEL

POLITICAL	<ul style="list-style-type: none"> - member of the SADC: South African Development Community - member of ATU (African Telecommunications Union) - Liberalization of telecom market through WTO - ESAPs: Economic Structural Adjustment Programmes promoted by World Bank and IMF - infrastructure bias and quality of service index - SAPT: SA Post and Telecommunications - Commercialization of Telecom SA Ltd through Post Office Amendment Act (1991) - Introduction of mobile telephony services (1992) - introduction of a third cellular licence, Cell C, recommended by ICASA (2001) - Introduction of fixed line competition (2005)
ECONOMICAL	<ul style="list-style-type: none"> - GDP of 128 billion dollars - inflation targeting - middle income emerging market - developed infrastructures sector - efficient distribution networks of goods - rapid growth of mobile telephony thanks to the privatization of SOEs and introduction of competitors - attraction of 8.5 billion dollars FDI - job losses for 67.000 workers of Telecom SA due to the end of the monopoly - generally low quality of service - agreement with Chinese ZTE in 2010
SOCIAL	<ul style="list-style-type: none"> - rural society with emerging urban centers - increasing mobile users penetration - necessity of low-cost mobile manufacturers and carriers - diffuse illiteracy

	<ul style="list-style-type: none"> - unskilled labor force - Brain Drain
TECHNOLOGICAL	<ul style="list-style-type: none"> - technological spillover - 300 licensed VANS: Value Added Network Services - ISDN: Integrated Services Digital Network - MTN and Vodacom use 900 MHz - GPRS, VSAT, WASC/SAT3 - GSM technology network - 3G in 2008
ENVIRONMENTAL	<ul style="list-style-type: none"> - natural resources availability and exploitation (oil and coal) - deforestation - air pollution - water scarcity - ex-Apartheid context - migrations from other African countries
LEGAL	<ul style="list-style-type: none"> - Telecommunications act 103 (1996) - SATRA: South African Telecommunications regulatory activities (1997) - IBA: Independent Broadcasting Authority - Telecom SA privatization (strategic equity partner called Thintana communications Ltc.) - ICASA (2000) - phase two of Telecom SA privatization: Telecom SA is sold to Ucingo Investments (2001) - phase three of Telecom SA privatization, listed on the Johannesburg Stock Exchange - Electronic Communications Act (2005) - Vodafone PLG bought Telecom SA (2008)

Fig. 9. PESTEL Analysis of the Telecommunication industry in South Africa. Author's analysis.

The present PESTEL Analysis underlines the development of six main different aspects of South African Telecommunication industry development from 1980 to 2010. From 1981 to 1991 the leading institution of the sector was South African Post and Telecommunications

(SAPT), a government department ruled by the Minister of Transport and Communications with the Post Master General (PMG). The SAPT was quite sophisticated and counted 3.32 million lines in 1991, equal to the 40% of all African telecommunication lines; despite this, SAPT was still paying for the transition between electromechanical switching system to digital technology. Entrepreneurs claimed to the government the inefficiency and excessive bureaucracy of SAPT; in addition, the lines were concentrated on the white and mixed-race areas, while black districts were isolated.

The public sector reform process (1991-2009) involved many challenges, particularly related to the political and legal factors. Thanks to the Post Office Amendment Act of 1991, Telecom Ltd was commercialized (even if the only shareholder remained the government) and was enrolled to make profits, pay taxes and look for investments, in addition to face competition with other emerging companies; moreover, the national company was split in two legal entities, Telecom SA Ltd and SA Post Office Ltd. In 1992 the Minister of Transport and Communications provided licenses for Mobile Telephony Service, which reduced dramatically the level of governmental control. For this reason, in 1996 was approved the Enactment of the Telecommunications Act 103, which had the function to develop telecoms infrastructures; in 1997 was established an independent regulator, SATRA , with the aim to regulate fair competition, price policies and licences; in 2000 SATRA was merged with IBA (Independent Broadcasting Authority) and from this union was born ICASA, which supervised broadcasters and telecommunications carriers. In 2001 was introduced a third additional licence to Vodafone and MNT, called Cell C and in 2005 was established the fixed line competition and Neotel was awarded as SA second network operator.

Telecom SA faced three phases of privatization. In 1997 it sold the 30% to a strategic equity partner, Thintana Communications LCC, which turned Telecom SA into an efficient and competitive telecom operator, letting to the company the possibility to supply international calls; the partner spent 1.7 million to renovate infrastructures and guarantee phone networks to hospitals and schools. The second phase included the sold of another 3% of Telecom SA to Ucingo Investments, and the third saw the sold of another 20% to a company listed at the Johannesburg Stock Exchange. The economical consequences of Telecom SA privatization were the fast growth of mobile telephony, with an amount of subscribers that reached 52.2 million in 2010, with Vodacom 48.5% of market shares, MNT

36% and 15.5% owned by Cell C and 8*ta; the attraction of a 8.5 billion dollars FDI, especially in ICT products and infrastructures, and the establishment of agreements with foreign mobile carriers for the development of innovative technologies, like the deal signed by Cell C and China's ZTE for the provision of 3G networks; increase of quality of service with Regulation 4.9 and growth of governmental control (Chanakira, 2013).

South African environment presented a huge presence of natural resources, in particular oil and coal, but scarcity of water due both to the warm climate and to the lack of infrastructures. In addition, the rapid and uncontrolled urbanization of the country has caused the rise of air pollution, deforestation and migration from other African countries, that caused a lot of low-wage illiterate manpower. Moreover, the post-Apartheid society caused a disparity between white and black areas, which have completely different services, networks and infrastructures, while lack of education, rural-based society and poverty caused also the diffusion of sexual diseases as HIV and AIDS (Plessis, Irurah and Scholes, 2010). For the reasons mentioned above, South Africa could be defined as an emerging market for mobile industry, with a targeted customer who needs low-cost phones and favorable carrier tariffs, and with an increasing users' penetration.

4.3.1.2. Internal Analysis: Porter Five Forces of Huawei in South Africa

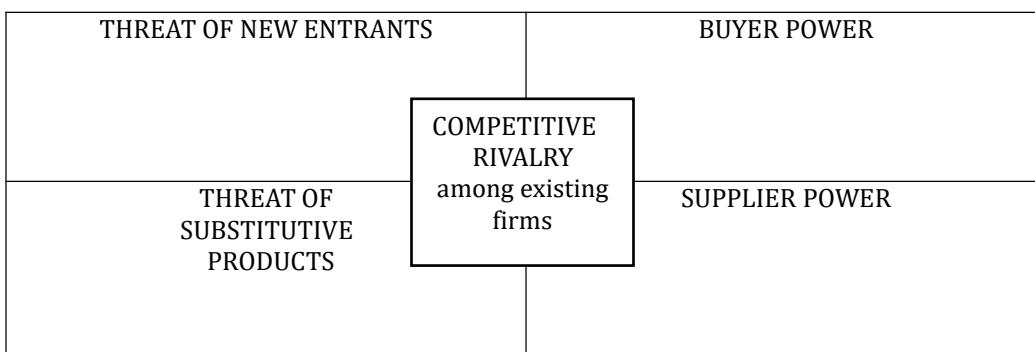


Fig. 10, Porter Five Forces Analysis of Huawei Technologies in South African Telecommunications market. Author's Analysis.

Competitive rivalry is intended as the competition among existing firms in the targeted market; this force can be intensified by different factors, such as size of companies, market growth perspectives, fixed costs, extra production capacity, high entry and exit barriers.

There were four local mobile telecom operators in South Africa until 2009, Vodacom, MTN, Cell C and 8.ta and two fixed line network operators, Telkom SA Ltd. and Neotel. With the introduction of mobile services the companies involved were Mobile Telephone Networks (MTN), a consortium of South African pay-television providers M-Net (30%), UK-based Cable and Wireless (30%), the NAFTEL association of black businessmen (30%), and state-owned Transtel (10%) (*ibid*), Cellstar Cellular Networks and the Reunert Group.

Threat of new entrants can be avoided through the establishment of a strong competitive advantage, that enables the given firm to maintain a leading position in the market. This edge can be gained applying different strategies: brand promotion activities, such as advertising, high quality products, customer service and brand license protection, which can attract and retain customers; low production costs, that can affects the final price, making it affordable to a wider segment; market capacity of offering profits to different actors; entry barriers. When Huawei accessed SA market in 1998 its brand was weak compared to local and foreign competitors, but its price strategy perfectly fitted the African market; the company obtained its competitive advantage investing in promotion campaigns and advertisement, focusing on human capital development through the construction of training centers in the country and making partnership with domestic actors.

In the case of Huawei, substitute products were the other Chinese companies competing for a slice of the African cake, such as ZTE Communications, Alcatel Shanghai Bell and China Mobile. ZTE was the second telecommunications equipment manufacturer and wireless solutions provider in China after Huawei, and entered the market with a partnership with Vodafone Group in 2007; Alcatel Shanghai Bell is the Chinese flagship company of Alcatel-Lucent in Asia Pacific and in 2002 has signed a contract of 60 million dollars contract with Angolan Telecom in order to expand its influence in Angola and in other African countries; China Mobile Limited is China's major telecom company and mobile services provider, in 2007 the company bought a stake of the South African MNT.

Bargaining power of buyers is high, because Huawei operates in a competitive market where new brands continue to emerge and to launch low-cost high-quality products; in the meantime, customers can switch anytime their retaining brand, following the market tendency and as switching costs are so low, they have a decisive control power.

On the other hand, bargaining power of suppliers is low, because Huawei can account

for more than 2000 global and 50 core suppliers; moreover, in order to check suppliers' trustworthy, the company has adopted the Supplier Sustainability Agreement parameter (Hegde and Altaf, 2019).

4.3.1.3. South Africa

Huawei entered the South African market in 1998 in Pretoria, and moved to Johannesburg in 1999. It is a Telecom SA strategic partner with 21CN integrated access network, and a platform that provides voice, IP and video; in addition Huawei became a global partner of MTN in 2005, with a guarantee of three year agreement of 600 million dollars and supply of equipment, and in 2008 provided Vodacom with advanced 3G networks and Cell C with IP networks and value added services. Taking advantage of the growing labor force, Huawei has focused its strategy in South Africa on training programmes, such as the SA Talent Plan funded by Zululand University, which provide postgraduate students with scholarships and research projects in collaboration with Telecom SA and the training programme of the Cape Town university for telecoms engineers. The company has also built an IP network training and certification center in UCT in order to offer free IP engineering, technical training and certification for other African countries and in 2008 created another training center in Woodmead, additional to the other facilities in Nigeria, Kenya, Egypt and Tunisia; in 2007 more than 4000 African students graduated in Huawei sponsored centers. In 2016 Huawei launched an ICT programme with the Tshwane University of Technology, providing equipment, software and ICT certifications; the project called "Huawei Authorized Information and Network Academy" was a successful partnership that offered direct employment to the participants.

4.3.2. Egypt

Egypt has been the Middle East and North African operational center of Huawei since 2000, and was also chosen as the northern most important training center of the company, while in the south the leading is in South Africa. The partnership formed by Telecom Egypt and Huawei has been crucial for the country's telecommunications development; Huawei

acquired a FIN (Fixed-line Intelligent Network) active in the all country and provided a CDMA WLL service to both fixed and mobile subscribers, with voice and data services. Moreover, Telecom Egypt established a MSAN (Multi Service Access Network) including 500.000 lines linked to Huawei'a Honet access network solution; in addition, Telecom Egypt has applied Huawei'a OptiX 10G equipment to build the Cairo Metropolitan Network, that now owns over 50 nodes. Huawei utilized Raya NS to make the installation of Huwaei CDMA2000 WLL switches, based in Upper Egypt and Suez Canal, in order to extend the network to suburb zones. Huawei provided IN Hardware Installation Networks for eight Egyptian areas, Roda, Abbassia, Alexandria, Suez, Tanta, Mansura, Sohag and Menia, and established four fibre optics rings in seventeen sites. In 2005 Mobinil, the flag Egyptian mobile company, subscribed a contract with Huawei for Softswitch trials and the expansion of the network capacitu to five million users. During the same year, Huawei opened a technical assistance center and a training center in Cairo, with fifty-eight training programs available. In 2006 Telecom Egypt selected Huawei to offer DWDM (Dense Wavelenght Division Multiplexing) technology, which included video, audio and data transmissions through one fiber network; this innovative technology has widely been applied in Tunisia, Algeria and Morocco (Institute of Developing Economies Japan External Trade Organization, 2009).

4.3.3. Nigeria

Huawei arrived in Nigeria in 1999, investing US\$10 million for a training center in the capital of Abuja in 2004; in particular, this center has formed more than 50.000 students, applying different activities such as formal classes, on-the-job coaching, learning by doing and remote sessions by company headquarter experts. The firm-specific training based on Huawei equipment, machinery and processes, that are different from the other foreign telecommunication manufacturers, ensures employment to the engineers, specialized workers, employees of partner firms, telecoms carriers, clients and suppliers. Thanks to the collaboration with the Nigerian government, Huawei has established the 1000 Girls in ICT Training Programme and the ICTFORCHANGE-Nigeria 2000 Youth ICT Training; the first one comprehended two months of training at Huawei centers and was funded both by

Nigerian government (1 million dollars) and by the company (1.3 million dollars), while the second one is the result of a Memorandum of Understanding signed by China and Nigeria and consist in a programme for 2.000 students in Nigeria ICT. Moreover, Huawei supports African students through scholarships in science courses at the University of Lagos and at the African University in Science and Technologies in Abuja. Despite the growing role of the company in Nigerian employees training programs, these initiatives still covers only a little part of the interns; for instance, the 1000 Girls in ICT Training Programme guarantees a stable job only to the 5% of all participants. The important intervention of the government in these MNC projects has been fundamental to training and other CSR activities, and by extent on the human capital development (Agbebi, 2018).

4.3.4. Kenya

The first telecommunication network in Kenya, the “Eastern & South African Telegraph Company”, was set up in 1888 and connected Zanzibar, Mombasa, and Dar es Salaam; in 1896 it was linked to the railway system, while in 1908 the first public telephone line was established in Nairobi and Mombasa. Through the liberalization of the telecommunication sector in Kenya in 1999, internet networks and mobile phones market became to grow fast and the local government encouraged the country to become the East Africa's leader in Information and Communications Technology. After the liberalization, Communications Commission of Kenya (CCK) was built to license and regulate communications and post service in the country; moreover, with the introduction of four fiber-optic international submarine cables, the country's international bandwidth raised dramatically between 2009 and 2013. Following the market entry of 3G and 4G technologies, Kenya has recently faced a strict competition among operators, due also to the opening approach of the government that enrolled foreign companies to enter the Kenyan mobile market. The driving factors of Huawei's approach into this market were the growing mobile phones users' penetration and the fast internet network, while the main constraining factors were the liability of foreignness of Kenya related to large cultural distance, import and investment barriers and legal protection. Considering this, Huawei chose licensing as the best entry strategy, forming a licensing agreement with Safaricom, the biggest mobile operator in Kenya, with

the aim of establishing its owned subsidiaries and create high-technology competition in the country (Wanjiku, 2013). The strategic activities applied by Huawei in order to beat the competition were Marketing Mix related, like product differentiation, adaptation of prices to the competitors, sales and promotions, ease access to products for customers, consumers' perception of the firm's quality and affordability; on the other hand, the company had to overcome some difficulties related to the economy of the country, such as inflation, low population income, high taxation of telecommunication industry, lack of transparency and corruption. Another important source of Huawei competitive advantage in Kenya was Market Intelligence, that is the monitoring of the company's market trends, competitors, customers and potential customers, thanks to the collection of reliable data about the targeted market (Mutema, 2017).

4.3.5. Democratic Republic of Congo

The first Chinese investing company in the DRC telecommunication sector was ZTE, which became a shareholder of the local company Congo Chine Telecoms (CCT) in 2000; since CCT was a low-cost carrier that didn't offer high profits, in 2011 ZTE sold its shares to France Telecom-Orange. Huawei and China International Telecommunication Construction Corporation (CITCC) were both late-comers in the DRC market; Huawei's agent Liu Kang arrived in Congo in 2005, looking for new business opportunities, but the country was in the middle of a civil war, the environment was hostile and infrastructures were nonexistent. Despite these initial difficulties, in 2006 Huawei subscribed a contract of 100 million dollars with the mobile operator Oasis Sprl for the construction of a GSM line; this technology could improve the network's efficiency and reduce installation and maintenance costs. Another important achievement was the supplying equipment contract with Tigo, a mobile phone operator owned by the Luxembourg company Millicom for the value of 120 million dollars; the second major contract was signed with OCTP in 2008 for the installation of code-division multiple-access technology for its network in Kinshasa and then in the all country (Mthembu - Salter, 2011).

4.3.6. Tunisia

Since its establishment in 1999 in Tunisia, Huawei changed from the status of network infrastructure provider for operators to manufacturer and distributor of its own brand of mobile phone. At present it is the leading provider of operators with internet 3G USB keys and internet 3G modems marketed under other trade names by the carriers. In Tunisia Huawei opened in 2006 a training center in the El Ghazala Technopole to supervise its partners in Tunisia and Africa. Huawei Marine Networks also participated in the establishment of a 170km system of submarine cable, connecting Kélibia to Italy for Tunisie Telecom (Invest in Tunisia, 2019). In 2014 Huawei and Tunisia Foreign Affairs Ministry signed a Memorandum of Understanding called “Telecom Seeds for the Future”, aimed to launch an innovative programme of Digital Economy and Information Society for Tunisian students; moreover, the government expressed its support to all of Huawei initiatives in Tunisia (Huawei Technologies, 2014). In 2015 was promoted the “Tunisia Digital 2020” strategy, which enabled the country to invest in ICT sector (that represents the 7.5% of the Tunisian GDP) and Huawei to build a 4G mobile network, the first of its kind in Africa; this challenge has involved also other important sectors, like infrastructure construction, e-commerce and e-learning. Esprit Tunisia, the most prestigious engineering university in the country, aligned with the governmental technological initiative and decided to develop the first smart campus in the country, involving advanced technologies such as Virtual Reality, Augmented Reality and 4K Video. For this purpose, the campus needed high-bandwidth access network and Wi-Fi 6 appeared the best solution; Huawei was selected by Esprit university for the construction of Huawei AirEngine Wi-Fi 6, firstly projected by Huawei in 2017, and turned to be global success in a few years (Huawei Technologies, 2020).

4.3.7. Morocco

Huawei's education initiative is considered a unique model of social involvement and particularly fits Morocco, in fact in 2012 the company established a training and certification center in the capital Rabat, with the scope of transferring know-how and ICT

competences to the local industry. In 2014 Huawei Morocco held the GENI Forum for information technology universities, that was appreciated by Moroccan Minister of Higher Education and Scientific Research; he defined Huawei strategy in the country as a win-win initiative, including both the company's profit and the country's development. As an evidence, the company has also underlined the importance of working and learning in a secure environment, praising the hard-working employees and considering them as the most important asset of a successful firm; for this reason, Huawei set up a series of policies and programs, in order to ensure an healthy labor condition to the local workers. In addition, the company know-how transfer programme comprehends the GSM project, in collaboration with ONCF, Morocco's railway operator and a high-speed trains network project; in order to solve the territorial problems of the country, the GSM network utilizes both distributed base stations and macro base stations. The key feature of Huawei is the attitude towards African countries; the Chinese flag company hasn't just sold its products on the market, but has offered impressive growth opportunities for the local community (Global Times, 2018).

4.3.8. Angola

The turning point of Angolan Telecommunication sector was the end of the civil war started in 1975; during this period, the industry was managed by the MPLA government (Movimento Popular de Libertação de Angola), which separated telecommunications and postal services. From 1992 to 2001 Angola Telecom had the monopoly, but with the liberalization of the sector in 2001 the country became a recipient of foreign investments; despite this, the SOE Angola Telecom remained the leading players on the market and opened different subsidiaries, including Movicel and Multitel. The Angolan Institute of Telecommunications stated that there are five main actors in the local industry, Angola Telecom, Mercury, Nexus, Mundo Startel (Sonagol) and Wezacom; the two mobile carriers are Movicel (owned by Angola Telecom) and Unitel (owned by Sonagol), while internet service is provided by Multitel (owned by Angola Telecom). After the end of the civil war China wasn't a strategic partner for Angola, because the country supported other liberation movements, FNLA and UNITA, that finally lost the conflict; in order to extend its influence

also in Angola, China opened diplomatic relations with the Angolan government (MPLA) in 1983 and in 1988 created a Joint Economic and Trade Commission. Only after ten years, in 1998 Angolan president Dos Santo visited China and shown its interest in Chinese collaboration and investments; the three major sectors involved in their partnership were oil, construction and telecommunications. In 2002 and 2003 the Chinese Alcatel Shanghai Bell and ZTE entered the market with fiber optic cables, while in 2004 arrived Huawei; this investing opportunities on one hand gave China a credit access to Angola's oil reserves, on the other hand helped Chinese telecommunications firms to establish their global brands in the continent. In 2008 Huawei set up a training center in Angola, in order to prepare local technicians to work with wireless WiMax and four generation networks, transferring technology and solving the problem of the lack of local professional staff. The training was divided in two phases, one in the company's headquarter in Shenzhen and one in the Angolan center; in addition, Huawei invested 7 million dollars to transform the Angola Telecommunication Institute in a Telecommunication university (Roselyn Hsueh and Michael Byron Nelson, 2013).

Chapter 5: The ethic dimension

5.1. The nature of colonialism in China

In order to understand the “Third World Solidarity” and “South-South cooperation” principles of China in Africa and to determine the range of Chinese presence in the continent, whether it can be defined as a “colonialism” and to which extent, it is important to analyze the impact of Western colonialism between 19th and 20th century in China. China was characterized by different colonial arrangements and foreign concessions; British victory of the Opium War in 1842 forced China to sign the Treaty of Nanjing, the first of the “unequal treaties” that submitted China to the modern imperialist powers, ceding Hong Kong as a colony and initiating the establishment of five ports opened to foreign trade, Shanghai, Guangzhou, Xiamen, Fuzhou e Ningbo. In addition to the British empire, other countries set up their control on the Chinese soil, such as Portugal in Macao, Japan in Taiwan, Russia in Dalian, Germany in Qingdao and France in Guangzhou. In these foreign former possessions, Chinese sovereignty was temporarily suspended and substituted by extraterritorial jurisdiction; these areas coexisted with a more localized colonial zones, the “treaty-ports”, which most famous were Shanghai, Tianjin and Suzhou and accounted for 92 in 1917 including China’s coastal areas, inland ports and railway constructions. The longest-running former colonies in China were Hong Kong and Macao, which survived until 1997 and 1999; for the Chinese history, the colonial period between 1839 and 1949 was named “the century of shame”, because it represented the humiliation of the Qing empire and the end of the Confucian path to the Modern era.

Another matter of importance of this phenomenon is the conceptualization of Chinese colonialism; in 1923 Sun Yat-sen in his work “Three principles of people” stated that there was a notable difference between full colonies and the actual situation in China. He defined China as a “hypo-colony”, because it was a colony of every nation that had signed treaties with her, where the dominant nations were her masters; on the contrary, Lenin defined China as a “semi-colony”, that was subjected by great powers through “capitalist imperialism”. Indeed, Lenin emphasized the growing role of finance capital in the late 19th

century, as a powerful international force that was capable to overcome and rule also nations with the fullest political independence. Following the Leninist theory, the American researcher Rebecca Karl highlighted different important aspects of the semi-colonial regime of China, such as its transitional nature, formal political maintenance of the central sovereignty, demand of national unification and establishment of state capitalism, oscillation between dictatorial and democratic politics, initial rejection of global capitalism. In other words, the domination experienced by China wasn't a former political colonization; first, it left Chinese sovereignty with some extraterritorial jurisdiction zones, served as trading outpost; second, it extended the demand of national unification and liberation from imperialism; third, it put the basis for the "capitalism with Chinese characteristics" (Goodman, 2012).

5.1.1. The actual impact of semi-colonialism in China

The impact of colonialism on the Chinese politics was devastating; the Qing dynasty lost its credibility in terms of sovereignty and national interest, causing different rebellions, like the Taiping rebellion (1850-64), the Nian rebellion (1851-68) and the Muslim rebellion (1867-73). Furthermore, the Qing central government bureaucracy was still expensive and inefficient and the monetary compensations paid to the imperialist powers forced the country to face a deep financial crisis. On the other hand, the impact on the economy was comprehensively positive; in fact, during the early 20th century China's annual growth rate ranged from 0.4% to 1.4%, and Chinese population raised by 0.3-0.5% between the 14th and the mid 19th century, by 0.5% during 1873-1913 and by 0.7-0.8% during 1914-1940s. This high growth rate was due to the imported modern medicines and health services from the West, and to the improvement of the agricultural sector and food distribution. In addition, until 1840 China hadn't practised foreign trade in a systematic way, but with the imposition of Western imperialists to open treaty ports, the value of China's foreign trade increased about five times from 1870 to 1913; likewise, foreign investment was authorized by the Qing emperor only after the end of the Sino-Japanese war in 1895, and grew from US\$ 503 million in 1902 to US\$ 2682 million in 1936. Always during the colonial era in China was introduced the machinery-based industrialization, and were established textile

mills, soap, cigarettes, matches and bean oil factories; in spite of the industrial development, China lost its competitive advantage in the export of tea, silk and porcelain, because of the emerging concurrency of Japan, India, Sri Lanka and South East Asian countries. The major influx of foreign capital was addressed to non-manufacturing sectors, such as infrastructures, railways, modern mining, modern shipbuilding, which required capitals, advanced technological know-how, and overseas market knowledge.

Finally, Chinese society came in close contact with Western civilization for the first time, which affected different areas of the country in religion, education, science, philosophy and traditions; Christian missionaries in particular established schools and colleges in order to educate the population to the Christian principles and set up hospitals to give health care assistance (Wahed, 2016).

5.2. Chinese “scientific development” concept

Comparing Western semi-colonization in China at the end of the 19th century and Chinese presence in Africa since 1960s in the international context, it seems evident that the formation of the modern global system has been characterized by a high degree of interdependence among nations, particularly in the economic sphere. This clearly emerges in the relationship between advanced and developing countries in the globalized world, where developing nations offer raw materials and low labor cost in exchange of new technologies and manufactured goods. Since the beginning of the XXI century, some emerging economies such as Brazil, India and China have gained an important role in the Globalization process, becoming manufacturing centers of multinational companies and investing in different economic sectors, especially in the information technology industry. This shift of economic power, most notable from North to East, has driven the raise of China in the international scenario and its progressive industrial overproduction and market saturation has forced the country to find a suitable partner; for this reason, Africa has become of great interest to China, ensuring a continuous supply of oil and cobalt, as well as a virgin market to invest.

In spite of the praised win-win cooperation between China and Africa, the Chinese government sustains first the national interest, which affects its foreign policy in order to

gain advantages and benefits for itself first; therefore, lots of concerns have emerged about China's contemporary engagement in Africa, mainly in the question of human rights. Following Western countries' point of view, the principles of non-interference in the domestic affairs and of unconditional aid applied by China in Africa are reprehensible in terms of human rights for several reasons.

Non-interference principle has been adopted mostly in Sudan, Angola and Zimbabwe, and is embodied in the respect of the national sovereignty of the host country; it was launched at the Bandung Conference 1955 and consolidated during Zhou Enlai's visit to Africa. Consistently with this notion, China doesn't have to judge African governments' activities, but it has just to run its business in the continent; in fact, China perceives human rights as values that are less important than national sovereignty, which should be defended by any means also against international organizations and democratic associations. This concept adapts to African governments, that are more available to threat with China and with its presence in the continent than with Western states; as an evidence, during different United Nations meetings Africa has always supported China against the accuse of being a dictatorship and violating human rights in the internal territory. Moreover, fundamental human rights in Chinese perspective are food, refuge and economic development, then followed by freedom of expression, right to vote and freedom of the press; this fundamental discrepancy between Western and Asian-African concept of human rights has determined concern by the international community about Chinese operations in Africa, as well as in South East Asia and Latin America.

Chinese aid to Africa is completely different from Western charity and political intervention, because China avoids to promote long-term economic reforms and acts as a concrete catalyst of African development through direct investment, technology and know-how transfer, infrastructure and communication lines construction. Therefore, China represents the best alternative to the West's attempts of development assistance and is considered as a convenient business partner by Africans, different from the former colonial powers, especially France, UK and U.S. (Osondu-Oti, 2016). Chinese aid practices in Africa date back to the Cold War and to the concept of South-South cooperation among Third World countries which had faced the decolonization process (Tan-Mullins, Mohan and Power, 2010); this concept related to donor and cooperation has evolved with president Hu

Jintao in the early 2000s in the populist idea of “scientific development” as a vehicle of the “harmonious society”. This new approach to development consisted in rethinking the Chinese compulsive pursuit to raise GDP and was more concentrated on people and social welfare policies; the concept has extended to all the leadership practices, including the recruitment of personnel and the administration of the Chinese Communist Party. Scientific development notion was announced for the first time at the Third Plenary Session of the 16th Central Committee in 2003, when Hu explained it as the key for a comprehensive, coordinated and sustainable development. Sustainable development should improve the socialist market economy structure, with specific activities such as promotion of rural development, application of science and technology in order to create advantages of human resources and combination of economic development with protection of natural resources and environment (Fewsmith, 2004).

5.2.1. Huawei's sustainable development

Nowadays sustainability is not only related to environmental protection anymore, but is considered a key factor for doing business successfully, in terms of brand reputation, profit generation, cost-efficiency and return on investment. The competitive advantage of companies gained through sustainable policies has been investigated by UNDP (United Nations Development Programme) committee, which assessed that business, and in particular multinational enterprises, could be drivers of sustainable development in the international context. In fact, MNCs should contribute to the host country's economical development, through creating jobs, generating income, complementing domestic savings, transferring technology, increasing competition and stimulating entrepreneurship; moreover, the company should play also a social role, transferring knowledge and skills, improving labor conditions, working with local organizations, reducing poverty, respecting local environment and promoting international cooperation. In reality, MNCs in developing countries have often exploited the host country natural and human resources, collaborating with local dictatorial governments and benefiting from low cost manpower; in the case of Chinese multinationals, this corporation attitude is more frequent, due to the absence of protection laws of workers even in the domestic market.

Huawei Technologies officially adheres to different principles of sustainability, such as value creation, economic growth and responsibility; its sustainable development activities are applied in products and services, business operations and social contributions.

Huawei products are designed to reduce energy consumption and carbon emissions, thanks to the selection of environmentally friendly raw materials and the controlled production cycle. Considering the services provided by the company, data center switches, training centers and internet networks, Huawei offers important development to both local firms and community; in addition, construction of infrastructures, transportation and internet lines in the rural areas can benefit local environment, ensuring public safety, health care, retail logistic and education.

Regarding business operations, Huawei's objective is to create a sustainability management system, conducting a responsible business growth; in fact, the company adheres to the international standard management systems, ISO 14001, ISO 26000 and OHSAS 18001, which enforce environmental resource management, corporate social responsibility (CSR) and health and safety management. Furthermore, for its employees Huawei sustains a welfare security system, based on healthcare services, fair access to learning and training and equality treatment; this initiative includes the recruitment of local workforce, which is demonstrated by a localization rate of 71% in 2016. Huawei took part to the UN Sustainable Development Goals (SDG) and UN Global Compact, committing ethical procurement and support of sustainable supply chain management; in particular the company is engaged in the monitoring of the cobalt supply chain for lithium batteries and has to supervise the operations of suppliers, assuring respect of human rights, reducing handling risks and preserving the minerals.

Huawei's social contribution reflects the promotion of local economic growth and human capital development policies; in 2008 the firm established the "Seeds for The Future Programme", offering a global programme for university students of the ICT sector to study in China, and by 2017 30.000 students from 350 universities worldwide had participated to the initiative and visited Huawei headquarter in China. In addition to academical formation, Huawei supports the creation of smart cities in 40 countries, which include 5G technology, ecosystem software, Intelligent Traffic Monitoring, Smart Parking, Smart University, Smart Transport and Smart Water Management; these technologies could improve the efficiency of

public services, enhance data security, reducing costs and inequalities (Berning, 2019).

5.2.2. Chinese companies' CSR

Corporate social responsibility (CSR) is a Western concept related to social responsibility, corporate citizenship and sustainable development, that refers to business corporations' obligations to society beyond business interests, and minimum legal requirements on market operations. CSR in the West is perceived as a corporate framework based on three principles: human rights, citizenship and liberalism. In fact, following this view companies should first protect their stakeholders' rights, threat ethically employees and respecting the international and local community; second, individuals should be corporate citizens, participating to the social life and in government's decision making as part of the civil society; third, corporations should be independent from governmental interventions and work in the logic of the competitive market (Tang and Li, 2010). The Globalization era has been characterized by multinational companies which operate freely form national governments and boundaries among states, and can be important catalysts of CSR philosophy. The question is that the global perspective of CSR has a Western-centric framework, which doesn't take account of different values and cultures applied in corporate practices, and presents a non-inclusive background of imperialism and colonialism that could exclude non-Western corporations. China's economic development of the last forty years has deeply involved the country in the Globalization process, and the emerging presence of Chinese MNCs in the international context has required a more expansive notion of CSR in Chinese perspectives. Indeed, China's historical tradition of Confucianism and the development of a socialist system under Mao's leadership evidenced a different relationship between governments, corporations and society; in particular, the ancient Confucian concept of "harmonious society" (different from the revisited harmonious society launched by the chairman Hu Jintao) has developed a different shape of CSR.

Compared to Western notion of CSR, China's Confucian tradition focused more on relational responsibilities than on individual rights; personal dealings have to be regulated following a hierarchical family structure, where all parties perform their relational roles in order to achieve the harmony. During the socialist period, companies were controlled by the

central government, which imposed them organizational goals, allocation of resources and fixed prices; despite this planned economy, the government entrusted companies with the responsibility of social and cultural activities and political coordination, as well as of social welfare policies like medical and labor insurance, housing, child-care facilities, pensions, and guaranteed jobs for their children. This social security collapsed with Deng Xiaoping reforms in 1978, and with the progressive transition of China into a market economy; although this, the government took charge of CSR issues as environmental protection and social prosperity, and included a “CSR with Chinese characteristics” guidelines in the new corporate law enacted in 2006 (Li, 2016).

5.2.3. Huawei CSR in Africa

Huawei presence and operations in Africa can be measured not only through economic data and projects funded by the company, but mostly examining the firm and its employees relationship with the African society; furthermore, it is crucial to analyze Huawei CSR policies in the continent, in the context of China's emerging soft power in Africa. In 2008 Huawei published the first CSR report related to a particular world's region, entitled “Enriching life through communication: a local player in Africa committed to social responsibility”. In this document and in other reports dated from 2005 to 2008, the main CSR activities of the company were related to charity, medical and health donations, contribution to the development of local telecommunications industry, establishment of local training centers, bringing of digital divide, environmental protection and contributions to local community.

In spite of the important effort made by Huawei for the compliance of CSR policies in Africa, the company still considers economic development as a fundamental part of its social responsibilities, and follows Chinese corporations' common vision of making profits as part of the ethical development of both companies and society. For this reason, Huawei has applied a typical Chinese exhausting working schedule for its African employees, who labor without ceasing and in extremely harsh conditions; the company justifies this harassment with the principle of 艰苦奋斗 (jianku fendou) or “hard struggle”, typical of the Chinese work environment and similar to the aforementioned Culture of Mattress. In fact,

Huawei failed to give to both Chinese and African employees fair labor conditions, localization and business transparency; in some countries 70% of Chinese employees have contracted malaria or other infectious diseases and the company was criticized to have missed to protect either its own domestic workers. Moreover, Huawei's recruitment in Africa is still prominent in low-wages manpower, while there is no evidence of African presence in managerial positions, that are usually covered by Chinese expatriates.

Despite this, the company has often emphasized its local commitment in Africa, especially regarding "bringing digital divide" activities, such as the construction of low-cost wireless communication infrastructures, internet network, fax and telephone services. Huawei managers accessed that these installations have a crucial role in the environmental development. For example, giving phones to African people means to cut the cost of transportation, because they don't need to travel to communicate and so they save energy; at the same time, providing mobile phones to the local population means to save some trees, because there's no need of printing paper documents. As a result, Huawei intervention in Africa is coherent with the win-win principle of Sino-African relationships adopted by China; the scope of Huawei CSR activities is on one hand the assistance of African development, on the other hand the implementation of the Chinese working model in the African context (Tang and Li, 2010, p. 103-109).

5.3. African perception of Chinese business in the continent

Although there is a recognition of the positive impact of Chinese investments in Africa, because they create concrete and fast economic development, the host country has expressed considerable concern about the social and environmental aspect of Chinese business activities in the continent. In fact, African population generally perceives Chinese multinationals as low-cost and low-quality products companies, which exploit African resources and aren't interested in the ethical dimension of business; conversely, local people admit that they have received by China a better treatment compared to the previous former colonial powers. Following EthicsSA survey based on fifteen African countries, empirical data suggest that the reputation of Chinese companies in Africa are felt 43.3% as negative and 35.4% as positive, while the quality of Chinese products and services is considered

55.9% negative and 22.7% positive; moreover, environmental responsibility resulted 53.9% negative and 11.01% positive, and social responsibility accounted for 45.7% negative and 28.3% positive.

Chinese business in Africa can be divided in formal and informal sector. The formal sector includes both Chinese state-owned enterprises and private-owned multinational corporations, and it is administrated by government leaders, diplomats and corporate managers; in this sector the leading Chinese principle is “Beijing consensus” (non-interference principle), which usually damages African population through the collaboration with African dictators and the involvement in corruption and illegal trade. The informal sector comprehends Chinese immigrant traders, usually poor and with a minimum education level, that run their legitimate or illegal business in Africa, particularly in the import-export field; the problems caused by these expatriates are the overcrowding of the most advanced African countries (especially South Africa), the remittances to the motherland and the unfair competition due to the lower price of Chinese products (Geerts, Xinwa and Rossouw, 2014).

5.3.1. Chinese migrant traders in Africa

The question of Chinese migrants in Africa embodies three main issues, the periodization of the Chinese diaspora, the differences among migrants and their role in the potential development of the host country. The flow of Chinese migrants to different countries has been always affected by the emigration policies launched by the central government, which in the past encouraged them to stay in the motherland considering migrants as traitors, while nowadays is more tolerant especially with immigrant traders. In fact, it was only after the Opium wars in 1840s that China was forced by Western colonial powers to reduce restrictions about Chinese migrations' policies; this foreign intervention caused the firsts Chinese immigration waves overseas, which actors were independent traders, worker and peasants. In 1949 with the establishment of the PRC there was a reversal of the migration rules, and when the Kuomintang was exiled to Taiwan, the isle became the first Chinese operating actor in Africa. During the Cold War, the aid initiative promoted by China in Africa resulted in the transfer of Chinese workers to the continent, which often were engaged in

commercial activities with both compatriots and local traders; Third World Solidarity was a driver of the switch of the emigrants conception, initially seen as a national embarrassment and then involved in an important political action leaded by the government. During the 1970s, the number of migrants coming from Taiwan and Hong Kong raised dramatically, especially to South Africa; since than, the raising OFDI and the booming economy of China fostered the working migration to Africa, both for national demand and private entrepreneurship.

With the aim to understand the economic and social integration of Chinese migrants in Africa, it is needed to measure their embeddedness in the host country. Most of Chinese traders have been involved in the commerce of low-cost consumer goods, called “down street merchandise” or “illegal Chinatown”; this contest is typically related to a frugal lifestyle and family labor, which implies limited African involvement, usually in working activities like cleaning and security. As an evidence, this kind of business creates a lack of trust towards Chinese traders, who buy directly from China’s wholesalers or factories, and maintain competitive prices at the expense of African companies and workers; moreover, Chinese participation in the local society is still minimum, also because of the low knowledge level of local languages, such as English, French and Portuguese. Despite this, there are some experiences of positive integration, for example in the four nations that have faced the early wave of Chinese migrations: South Africa, Mauritius (where 30.000 Chinese migrants have obtained the local citizenship), Madagascar (where 60% of Chinese migrants are mixed ethnically) and Reunion. It is important to remind that there's not a single “African perception” about Chinese migrations in the continent, for several reasons. First, Africa is formed by different countries that don't share the same political culture (intended as state political system and history of the state formation), and also internally have deep differences of class, race and power; second, the modern continent was formed through the fight between Western colonial expropriation and local anti-colonial nationalism, which have made African population suspicious towards foreign presence; third, Chinese business activities in the region often lack of transparency, so while local governments benefit from Chinese investments in the continent, the informal sector is still perceived as a menace by African workers (Mohan and Tan-Mullins, 2009).

5.3.2. The control of media and communications

As previously observed, media and telecommunications are the new frontier of Chinese engagement in Africa and are a part of the increasing investments in the continent and of the “soft power” strategy. China is changing African broadcasters with loans, training and exchange programs, in addition to expanding its own media operations in the continent; in the telecommunications market China supports African governments, both democratic and authoritarian, to extend access to internet and mobile telephones. The international press has expressed its concern several times about the influence of Chinese media in Africa; in particular the U.S. secretary Hillary Clinton in 2011 during a visit in Tanzania observed this phenomenon defining it “a telecommunications’ colonialism”, and during the same year the British prime minister David Cameron talked about “authoritarian capitalism” regarding Chinese operations in Lagos and Nigeria. Moreover, in the last ten years many articles have ridden the way of the cyber security topic, affirming that China is promoting an anti-Western media model and Chinese flag companies like Huawei and ZTE could spy their equipment users, including African governments and population; following U.S. National Security Agency, Chinese government applies the illicit principle of “Internet sovereignty” through strict control measures like monitoring of political oppositions, violating freedom of speech right and privacy users’ policies.

China's media and communications initiative in Africa comprehends the transmitting of CCTV (China Central Television) in the continent, with digital terrestrial channels like BBC and Al-Jazeera; furthermore, in Kenya China Radio international has launched its own local FM stations in English, Mandarin and Swahili and Xinhua news has become to appear in African newspapers. It goes without saying that Chinese press and media in Africa influence the local audience, reporting positive aspects of the “rising modern Africa” dreamed by Chinese telecom multinationals; this strategy distracts the public from controversial themes like human rights and environmental issues, such as the Chinese ivory demand in the elephant poaching crisis and the illicit trade of wild animals (Gagliardone and Geall, 2014).

5.3.3. The question of surveillance

Alongside the influence of Chinese media and communications in Africa, there are many Chinese ICT companies accused of missing data protection and even of conducting espionage activities in both private and business clients. Huawei in particular is charged with sale of end-to-end encryption products that are still vulnerable to cyberattacks and breaches; besides, cybersecurity experts, intelligent agencies and political leaders have assumed that Huawei's installations of 5G networks in Africa could pose significant security risks, especially if associated with critical infrastructures existing in the continent or built by the same Huawei. Other concerns are related to the founder's background; in fact, in spite of the private legal status of the company, it's crucial to remind that Huawei's founder Ren Zhengfei was a military of the People's Liberation Army, which is an official body of the CCP and is obliged to actively support Chinese government in all of its activities.

U.S. agencies have specifically investigated Huawei operations, so the CIA (Central Intelligence Agency) and NSA (National Security Agency) published different reports describing illicit operations among the company, the PLA and the government (Dutta and Marek, 2019). The most echoing media event was the international case of Meng Wanzhou, daughter of Ren Zhengfei and CFO (Chief Financial Officer) of Huawei; the Chinese "high-tech princess" was arrested at the Vancouver International Airport in Canada in December 2018, accused of violating US sanctions of Iran by knowingly misleading U.S. banks about Huawei's relationship with Skycom, a company based in Tehran. Canada's extradition treaty with U.S. allowed Meng to be legally arrested in Canada and to stay in the country during the determination of the place of the trial and whether the case merits extradition; this event has defined the worst crisis of Sino-Canadian diplomatic relations since 1970, and represents an additional fracture of the relations between China and United States, already undermined by the Trade War of the last years (Silva, 2019). The final blow was given by president Trump, who enforced the trade sanctions to China with a ban directly against Huawei products and the withdrawal of the Android licence from the company's smartphones; this strong measure has caused the late market launch of Huawei Mate 30, Mate 30 Pro and Honor 20 Pro, as well as the promotion of an alternative operating system for Huawei's future products, HarmonyOS. In spite of the quick response of the

Chinese giant, the Trump Ban have generated dramatic consequences on Huawei's marketing and sales, because it deprives the company of many others Google services, like PlayStore, Gmail and Google Drive; furthermore, this ordinance has encouraged other ICT companies to break their relationship with Huawei, such as microchips producers Intel, Qualcomm, Xilinx e Broadcom and even Microsoft has left Huawei without Windows operative system (Mantovani, 2019).

Another reported case is the accusation against Huawei's support to Ugandan and Zambian governments in spy activities on political opponents; according to the Wall Street Journal, the company exported digital surveillance equipment in Africa and assisted Ugandan institutions to hack the WhatsApp and Skype accounts of the popular musician and political activist Robert Kyagulanyi, locally known as Bobi Wine. Similarly, Huawei helped Zambian authorities to crack the messages' apps of some anti-regime bloggers, allowing the police to arrest them; of course both African governments and Chinese corporation denied all these activities and implications. Furthermore, at present Huawei owns the 70% of Africa's telecommunication networks and in Kampala (Uganda) it has installed a 126 million dollars facial recognition system based on CCTV cameras and facial recognition software, as part of the company's "Safe City Initiative"; recently, the American NGO Freedom House has defined Chinese ICT companies' digital surveillance as a "techno-distopian espansionism". In spite of the surveillance technology exercised by Huawei in Africa, this sector is becoming a global business and also Western corporations are selling these spying products to Ethiopia, South Africa, Rwanda, Ivory Coast, Kenya, Togo, Uganda and Zambia (Woodhams, 2019).

5.4. Conclusion

5.4.1. Macro analysis

Having reviewed the colonial period faced by both Africa and China, it is mandatory to make some considerations. First, in Africa imperialist powers like British and French empires exercised a former political control on African countries, exploiting their resources and labor force, oppressing the local population with slavery, taxes and territorial expropriation; on the other hand, in China was applied a particular semi-colony system, through the establishment of foreign concessions and commercial ports controlled by Western powers, which exercised their extraterritorial jurisdiction over the national Chinese sovereignty. Since the end of World War II both advanced and developing countries have been involved in a systematic change of the global order; given that colonialism itself was a concept initially theorized by Joseph-Ernest Renan in his work “*La Réforme intellectuelle et morale*” (1871), which ideologically justified the racial superiority of the Western world on non-Western countries, the “post-colonial theory” emerged in the postwar context included themes like “new international order”, “new alignment of forces” and “hegemonic powers”. At this stage was introduced the notion of “neocolonialism” by Kwame Nkrumah's in his book “*Neo-colonialism: the Last Stage of Imperialism*”, published in 1965; he explained it as an economical and financial support of imperialist powers towards their ex-colonies, in charge of preferential access to raw materials, products and low-cost manpower. Nkrumah assessed that despite the end of formal colonialism and the African conquer of national sovereignty, the continent's economic system and political policies were still directed from outside; moreover, he stated that foreign investments increased rather than decreased the gap between rich and poor countries of the world, such as between the rich and poor sections of the society. Nkrumah sustained that the main cause of this gap had been the braking of the African continent into many small inefficient states, that were unable to reach an independent development and had to rely on the old tyrannical colonial powers in order to survive and maintain internal order (Rao, 2000).

In this case China represents a whole different situation, considering in particular the development of OFDI; in fact, while at present foreign investment is perceived as a tool of

neocolonialist powers to keep overcoming the African continent, it has been the main catalyst of economic development for China since the mid-Qing era with direct investment by Western countries, and the late-Qing era when it resulted in a quasi-colonial relationship with effective foreign control of China's largest commercial port cities. As an evidence, during the period 1870-1930 Chinese financial system saw an extraordinary switch, whereby Chinese enterprises located in the major port cities evolved from family-based to private equity ventures and finally to semi-public firms, which could draw foreign investments; although FDI over this period financed remarkable growth in Chinese economy, from the Western perspective Chinese concessions were just a form of foreign investor protection, while from the Chinese perspective it was an affront to sovereignty and an impediment to the development of a domestic corporate sector. Nevertheless, a strong capitalistic system grew after the Treaty of Shimonoseki in 1895 (which declared the winning of Japan against China and the independence of Korea from China), but the national resentment against foreign concessions was the key of the revolution of 1949 and of the official formation of the People's Republic of China (Goetzmann, Ukhov and Zhu, 2007). As analyzed in chapter II, during the leadership of Mao Zedong China came back to a more centralized and planned economy, while his successor Deng Xiaoping launched some policies to attract foreign capital like the Opening Up reforms and the establishment of Special Economic Zones. It is interesting that Deng, with the aim to reach economic development, understood the necessity of the transition to a socialist market economy, which pursued both central directives of the Chinese Communist Party (for example Five Years' Plans) and the rules of a modern market economy. Furthermore, the system of SEZ and JV applied by Deng to attract FDI in China was very similar to the foreign concessions of the Western semi-colonial period in the country; as foreign investors during the "Century of Shame", foreign investors since 1980s in China have benefited from private property right protection, tax incentives and land use policies. Also many treaty ports were reopened to foreign trade and corresponded to the actual SEZ, such as Shanghai, Xiamen, Guangzhou and Tianjin, while Hong Kong after its "decolonization" in 1997 adopted the policy "one country-two systems" and became one of the biggest world's stock exchange centers; it is clear that the establishment of SEZ have also create industrial clusters, particularly in the coastal areas, which have represented the main recipients of FDI until now.

It seems evident that China's experience of semi-colonialism has affected its attitude both in the domestic and international context; indeed, considering Chinese presence in Africa since post-WWII period, it is possible to observe a dual approach. On one hand, the gaping wound about the foreign concessions period has made China extremely sensitive about the national sovereignty question, which has to be preserved in Africa through the "Beijing Consensus" principle; on the other hand, China has replicated in Africa the foreign concessions framework applied also in the internal market, which included foreign direct investments, infrastructural projects, establishment of special economic zones, strategic trade outposts, agricultural and mining projects. In spite of the similarities with Western colonialism in China, the Chinese initiative in Africa presents exclusive characteristics. From the theoretical point of view, the common struggle against imperialism and capitalism, the Third World alliance rhetoric and the Chinese Aid have given to Mao the unique chance to create an equal relationship with the African continent; in concrete terms, this new alignment of power has offered to China an opening door for a privileged position in the black continent.

5.4.2. Micro analysis

This vantage point is not enough to explain this complex relationship; indeed, in addition to the political strategy and Chinese institutional investments in Africa, a key role has been assumed by Chinese corporations, initially only state-owned enterprises and later also private companies. It has been recognized that Chinese companies, especially multinational companies, represent a concrete human capital development possibility thanks to their investments in recruitment and training of local population; this phenomenon is more evident in the ICT industry, which need continuous technological updating and R&D activities. The emblematic example of Chinese multinational company is Huawei Technology, the huge flag company that has been operated in Africa for the last twenty-two years; as analyzed in chapter four, Huawei's success in Africa was determined by the African staff training both in the local countries and in the Chinese territory, the competitive advantage in the early entry strategy and its convenient prices, the monopoly of the mobile industry in the continent and the construction of telecommunications infrastructures and the

contemporary installation of 5G networks.

On the other hand, considering the footprint of FDI spillovers intended as the Chinese firms' impact on African companies' economic performance, the study shows that horizontal spillovers do take place, but with a limited extent, only through demonstration and competition; in fact, for African companies it is still difficult to absorb technical and managerial skills from Chinese companies of the same industry, due to the limited labor mobility of managers and skilled workers, as well as a limited access to capitals. As a result, firms that are part of complex production skills and longer-training industries process, have been reported to delegate more skills and responsibilities to local staff than those in assembly-line industries.

In the case of vertical spillovers, as evidenced in the DFID-ESRC Growth Research Programme, the knowledge transfer is more effective than the horizontal one; indeed, knowledge is transferred vertically along the chain through local suppliers, subcontractors and clients. Given that Chinese companies are legally obligated to hire local subcontractors, long-term supply and subcontracting relationships address the productivity growth of African firms; some Chinese companies, particularly in the ICT industry, offer technological and financial assistance to African suppliers and subcontractors, with the aim to ensure good quality of the final product and fulfillment of the commissioned task. Huawei in particular has to give to subcontractors an additional training, in order to install and troubleshoot the technological equipment (Calabrese and Tang, 2020).

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