Introduction

An increasing number of companies from emerging economies show high competitiveness in global markets. The total number of companies from emerging economies operating overseas exceeded 20000 [33], and the number of companies from the BRIC countries in the Financial Times list of the 500 largest global companies in 2015 accounted for 62, which is 5 times more than in 2006 [1]. In the FT Emerging 500 list, which ranks the most successful companies from emerging markets, clear leadership is for China represented by 202 companies; India is on the second place (51 companies), followed by Brazil (24 companies), and in the fourth place there is Russia (17 companies) [2]. The emergence of a large number of companies from emerging economies carrying out active geographic expansion, as well as strengthening their influence on economic processes at the global scale has pushed scientific debates on causes and circumstances of this phenomenon, its impact on leading companies from developed markets and the global economic system as a whole. In addition, more and more scholars doubt applicability of traditional theoretical approaches developed for the study of companies from developed economies for emerging market (EM) companies, and make a call for development of new theoretical approaches [4-6]. This paper aims to analyze applicability of the 3'I's concept (internationalization, innovation, and institutes) to explain development of EM companies’ competitive advantages. In particular, it explores how company’s international and innovation activities and embeddedness in networks of relations with institutional agents affect its performance.

Active integration of EM companies into the world economic system significantly influences the world economic landscape. Their role in the development of business environment and social processes in home and host countries is constantly rising. They are actively involved in knowledge and technologies transfer which influences formation and development of their innovative potential and consequently their financial performance [7]. Moreover, they pay considerable attention to creation of complex internal and external networks which could stimulate and support realization and development of their specific competitive advantages [8, 9].

It should be admitted that very often even those companies, that have an access to similar resources, obtain different results which pushes scholar to explore specific capabilities of particular companies. The practice shows that formation of capabilities to use various resources (e.g. tangible, human, information, intellectual resources) is context-specific, namely is dependent on home country environment. In this particular paper China was chosen as an object of research due to a number of reasons. Firstly,
China is considered to be the most competitive economy among emerging markets. Thus, according to Global Competitiveness Index (GCI) 2016-2017 [38], China takes the 28th position out of 138 economies in terms of its overall competitiveness while India is on the 39th, Russia — on the 43rd, and Brazil — on the 81st positions. At the present moment, China is the world’s biggest market for cars and electronic devices, and in the near future China will become the biggest consumer market. Furthermore, China and Russia have some similarities in their past (communist regimes, planned economy, economic and political isolation), they both started their active integration into the world economic system more or less at the same time, however, to the moment, Chinese companies have been showing much better results than Russian one. This fact naturally raises an interest for the drivers of Chinese competitiveness.

3'I's Concept and its Applicability to Chinese Context

The interest of management and international business scholars for emerging markets began to appear as early as in the 1980s. However, right at the moment this topic is among the hottest one as evidenced by the growing number of publications in leading international scientific journals. Many journals have already published or have a current call for papers for special issues on emerging markets (e.g. among the most recent ones are International Journal of Emerging Markets (2016), Journal of East-West Business (2017)), as well, leading scientific communities regularly organize special conferences and tracks on this topic.

Many researchers question what allows EM companies to achieve high performance and compete with companies from developed markets. Some of them argue that EM firms have a lack of firm-specific advantages and fully rely on their country-specific advantages (e.g. [3]). Their opponents believe that EM firms do have firm-specific advantages; they possess resources that are different from those possessed by developed market companies [4]. These resources stimulate development of companies’ specific advantages due to their ability to create products more suitable for emerging markets, to find less costly access to advanced equipment and highly skilled personnel, privileged access to resources and markets through state support, to operate in volatile, unstable conditions [5, 10, 11].

One of the concepts that provides a comprehensive approach to better understanding of the sources of EM company’s competitive advantages is the concept of 3'I’s introduced by Kumar, Mudambi and Gray [13], where the first ‘I’ stands for internationalization, the second ‘I’ — for innovation, and the third ‘I’ — for institutional change. The order of these ‘I’s is not deterministic because they work as mutually supportive. Dynamic interaction of three ‘I’s stimulates development of EM company’s specific advantages and increases their competitiveness on both home and host markets (Fig. 1). We further apply 3I’s framework to Chinese context and elaborate on each of the ‘I’s.

Internationalization. Research shows that internationalization becomes crucial for EM firms [41, 42]. Through internationalization EM firms develop production competences manifested in their unique capabilities of functioning in labor-intensive industries, and marketing competences in servicing the niche market segments, thereby increasing their competitiveness on foreign markets [12]. In addition, internationalization allows EM companies to overcome institutional barriers in their domestic market and reduce negative country-of-origin effects [14].

According to UNCTAD statistics [15] Chinese outward foreign direct investment (OFDI) showed steady growth starting from 2004; this trend remained even after the economic crisis of 2008 (Fig. 2 and 3). In contrast to Russian OFDI, both Chinese OFDI flows and stocks have been increasing during the last 15 years. In 2015, Chinese OFDI flows accounted for 128 bln USD comparing to 27 bln USD OFDI flows from Russia. Even in 2014, before sanctions, estimated Russian OFDI flows were two times less than Chinese ones, 64 bln USD and 123 bln USD respectively.

Chinese companies’ internationalization was to a large extent driven by the policy of «Go Global» announced by Chinese government in 2001, and China’s accession to the WTO in the same year [17]. The government also developed and implemented a wide range of incentives and supporting mechanisms to stimulate international activities of strong Chinese companies with specific focus on FDIs aimed at acquisition of intangible assets to increase their technological and human capital [16].

Innovations. Considering that China is an emerging economy with constantly growing consumer income, Chinese firms are forced to seek new opportunities to promote products and services. Since the end of XX century foreign firms, including large MNEs, began to penetrate Chinese market which pushed Chinese firms to think about their competitive advantages. It has become clear that innovations have an important, even determining, role in enhancing firm’s position and

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**Fig. 1. Dynamic interaction of 3Is**

Source: on the basis of [13]

**Fig. 2. Outward Foreign Direct Investment Flows from China and Russia in 1992-2015, in mln USD**

Source: [15]
influence in the market. According to Boston Consulting Group in 2015 about 79% of respondents acknowledged that innovations are the top priority of their firm, or they are among the top three of most prioritized directions of firm’s activities [34].

China has various advantages for innovation comparing to developed countries both in terms of supply and consumption [37]. China has a significant number of engineers and scientists who are ready to work for relatively low salary. Despite the fact that many Chinese experts who have returned from abroad can obtain high-paid jobs, their share is still comparably low. Moreover, there are a large number of graduates from technical universities who are paid much less. At the same time, Chinese firms can allocate larger number of staff with lower costs for research and development activities than Western firms do. Additionally, the State supports innovation activities of Chinese firms and provides special-purpose funding and grants for R&D. There are also psychological drivers of innovations in China that could be found in unique entrepreneurial spirit of Chinese people.

Over the past 10 years Asia has become the leading region for investment in research and development, North America is on the second place, then, Europe goes on the third [18]. Asian success is explained by significant investment in foreign and local R&D. In 2015, imported investment in R&D in China increased by 79% compared to 2007, and China has almost reached the USA (Fig. 4). During the last decade many firms have relocated their research centers to China in order to be closer to intensively developing market, key manufacturers, and suppliers. Among the top five countries investing in R&D in China are the USA, Japan, Germany, Switzerland, and South Korea. Moreover, domestic R&D spending also contributed to the increase in R&D investment and accounted for about 20% of all investment [18]. Fig. 5 presents R&D intensity (R&D spending as a percentage of revenue and total R&D spending in 2016 by countries.

Though China is still following the USA, Europe, and Japan in terms of the total volume of R&D investment, it has made a considerable leap forward (Fig. 6).

According to Forbes magazine rating in 2016 seven Chinese firms entered the Top 100 world’s most innovative companies: Shanghai RAAS Blood China Co. Ltd. (16th position), specializing on R&D and production of various blood products and medical products containing plasma; Baidu Inc. (29th position), providing internet solutions for information search and online marketing services similar to Google; Tencent Holdings Ltd (49th position), providing technical, content, and marketing services for multimedia and information technology platforms; Ctrip.com International Ltd. (53rd position), operating in tourism industry and specializing in related services such as tickets and accommodation booking, tour reservations; Hikvision (91st position), providing video products and content services; AVIC Aviation Engines (100th position), manufacturing and distribution of aero engines [21].

At the moment China is the biggest market in the world for new technologies. China has a population of over 1.3 billion people, at the end of 2014 more than 649 million people were active Internet users, including 557 million who used mobile phones to have an Internet access [35]. One of the most important advantages of Chinese companies is their management of Big Data. Many companies receive a lot of information from customers, suppliers, and other counter-partners, but they manage it
in different ways. For example, Tencent which owns the largest mobile communicator in China — WeChat — using social data, identifies trendsetters and purposefully send them advertisements using various marketing techniques. The largest electronic trading platform Alibaba uses information about finances and income of its users through such programs as Taobao and Alipay, and, then, analyzing the data, identifies small businesses which are the most reliable for providing loan [35].

Providing innovative solutions Chinese companies attract partners around the world. A vivid example is cooperation between the Chinese technological giant Baidu Inc. and world-famous automobile producer Mercedes-Benz. In China search engine Baidu is much more popular than Google, and, in order to strengthen its presence in Chinese market, Mercedes-Benz initiated a strategic partnership with Baidu. Realizing specifics of Chinese market, Mercedes-Benz and Baidu offer Chinese customers personalized service for their mobile devices that are used in automobiles. The new models will use Baidu software CarLife which will allow customers to use their smartphone content (music, Internet) via the car’s screen. Two companies have already had an experience of cooperation in Chinese market. In 2013, Mercedes-Benz integrated Baidu’s Street View into its vehicles [36].

Another interesting example is Tencent which entered the Forbes Most Innovative Companies list this year. Despite the fact that many people believe that its success is due to the lack of competition, since Facebook has been banned in China and Google has left Chinese market, it’s not exactly the case. The company has developed the most popular communicator in Asia WeChat. The number of its users has already reached 805 million people. Initially, the company gained profit from advertising and selling of users’ premium accounts in the QQ communicator. Since 2004 the company launched its gaming platform and started to sell virtual goods, game weapon, extra energy for games, ringtones and access to data storage. In 2011 the company launched the communicator and group chat Weixin which was monthly updated with new functions, e.g. by shaking the phone one could immediately identify which users are nearby to strike up an acquaintance, also, it introduced an option to send free voice messages. Nowadays, more than 355 million users regularly use Weixin. In 2012 the company entered the international market with its new product — the communicator WeChat, and in 2013 in India it took the second place as the most downloadable application for mobile devices. For Chinese users WeChat is not just an ordinary messenger, it provides the opportunity to order taxi and food, buy tickets in cinema, send money to friends, make appointment to the doctor, pay bills, find music or book, read newspapers and etc. WeChat makes the «mobile lifestyle» of Chinese users [43]. Today the company heavily invests in start-ups and programs to develop smartphone games, e.g. Epic Games, Riot Games, etc.

According to Chinese news portal ifanr.com that publishes news about up-to-date developments and technologies, in 2013 the company provided users with a free service to use the so-called «cloud» storage of 10TB. At the same time, the use of the storage of the same size provided by Google would cost about $100 per month. Free services are also provided by Dropbox, but the volume is limited to 2 GB, and 15GB from Google Drive [23].

The company not only constantly develops and uses innovative products, but also implement innovative ways to use traditional products. For example, the company used Chinese New Year’s tradition to exchange «Red envelopes» (envelopes with money) and offered its users an option to make money transfers via WeChat, so called, Red Packets or Lucky Money. When Red envelopes were introduced in 2014 during Chinese New Year the number of people using WeChat payments increased in three times and accounted for 100 million in a month. Over the six-day holiday, users sent to each other 20 million Red envelopes [22]. In 2015 the number of envelopes reached 3.2 billion, while in 2016 it exceeded 8 billion [19].

Tencent has a lot of partners in China which allows them to have interesting projects. For example, Chinese toy company Dan Dan Man created Bluetooth toy which is called Mon Mon. This toy can be connected to offline world via WeChat. Parents can use the official web-site of the toy company and send fairytales or different exercises to their children. Children immediately receive the message and can send voice message back to parents by pushing the stomach of the toy. This service is extremely popular in China where parents are always busy at work [43].

Institutions. Another aspect of emerging markets that has been undergone significant changes is their institutional environment which definitely transforms the nature of market competition [24, 25]. EM firms obtain a kind of immunity as a consequence of functioning in a weak institutional environment of home market, so they are not afraid to make investment in countries with institutions that are similar or even weaker than in their home country, for example, Chinese investments in Africa [26]. EM firms often compensate a low level institutional development through an increase of ownership concentration and building partnerships with other firms and state agencies which serve as an informal substitute for formal institutional support [27]. Also, companies from countries with weak institutions are trying to diversify their activities by combining business groups and creating social and business network [28]. This reduces their risks and provides access to rare resources, in particular, human and intellectual capital [29]. It also contributes to development of their international business activities providing valuable information and knowledge sharing between members of the network with extensive international experience [30].

Before 1980s the Chinese government focused on state-owned companies’ development, investment and development of the Chinese domestic market and large cities, investment in coastal areas were not encouraged. To stimulate production of iron, steel and machinery equipment the government allocated remote inland areas; moreover, foreign investments were banned [31]. Since 1980s China has taken an economic liberalization path implementing an export-oriented industrial policy, constructing industrial parks and creating free economic zones, for instance, Shenzhen was among the first industrial zones sponsored by the government to develop an export industry.
The Chinese government has always taken an active role in the economic life of the country; it has stimulated migration of people from rural to urban areas which ensured a supply of cheap labor. In coastal areas it was given a start to formation of small clusters which could supply existing manufacturing enterprises with necessary components. An important role was played by relationships between enterprises created by local network structures. For example, in Zhejiang over 10,000 households in 120 villages formed the largest cluster in China for production of hosiery and knitwear. Each individual farm specializes in a specific aspect, such as production of goods, purchasing of equipment, marketing and other services, which gives them a competitive advantage. This kind of specialization, communication and personal relationships allows them to respond quickly to market changes and minimize risks [31].

Analyzing statistics we could state that formal institutions in China are still very weak. According to GCI 2016-2017 China has the 45th position in terms of institutional development out of 138 countries with quite low intellectual property protection (62th position), strength of auditing and reporting standards (68th position), efficacy of corporate boards (116th position), strength of investor protection (108th position). Moreover, Chinese institutional environment is characterized by high favoritism in decision of government officials and high burden of government regulation [38]. However, even considering a number of holes in its institutional environment, China significantly outperforms Russia which takes only the 88th position in this ranking in terms of institutions. Moreover, Chinese institutional environment has another distinctive feature acknowledge by academics, practitioners and politicians, namely its very strong informal institutions.

One of the most widely used and discussed informal institutional element are, so called, «guanxi». «Guanxi» are specific type of relationships between individuals or small groups, who are often not related by birth, but have common interests and goals. These relationships are more emotional than instrumental; they are always long-term oriented and require careful cultivation. «Guanxi» are not illegal; they always go hand in hand with laws. «Guanxi» are based on the Confucian system of «Five most important relationships», namely relationships between a ruler and a subordinate, a father and a son, a husband and a wife, an older and a younger brother, and relationships between friends; they could be based on locality or dialect, kinship, place of birth, membership in trade associations, professional or social clubs, etc. [39]. Inheriting collectivism and nurturing collective values Chinese society worships and develops a system of personal relationships and networks. This collectivism refers to a personal network of contacts, and is not extended to a third-party network.

«Guanxi» stimulate group interaction, so the majority of Chinese people are loyal to their group members, e.g. company’s staff. Models of interaction between people, who are within the «guanxi» network and those who are outside the network, significantly differ. In China reliability is appreciated much higher than competence. In most cases the Chinese will hire people from their «guanxi» network even if they are less qualified than applicants from outside. Thus, they ensure stability of relationships. In conflict situations the Chinese are not oriented at problem solving, but more at human relationships [32]. Realizing crucial role of «guanxi» management of Chinese companies spend 2-3% of total expenditures on building and development of “guanxi” networks. Chinese companies actively invite ex-governmental officials who have a wide range of contacts to cooperate with; they have good reputation and perform as mediators in different type of negotiations [40].

The importance of informal institutes and business relationships based on trust, when cooperating with Chinese people, is not limited to Chinese market, but also spreads outside. When internationalizing their activities, Chinese businessmen obtain a strong support from Chinese diaspora which is quite numerous in most countries. Thus, individual «guanxi» network becomes a crucial intangible asset for internationalizing companies.

Conclusions

This paper makes an attempt to look at the foundations of Chinese companies’ competitiveness through 3‘I’s perspective. An overview of Chinese OFDI during the last two decades shows that their fast increase which started at the beginning of 2000s corresponds to the appearance and strengthening of positions of Chinese companies on global arena. These internationalization processes were strongly supported by Chinese government which created new and developed existing formal institutions. Moreover, informal institutions, in particular, interpersonal connections between Chinese businessmen, also stimulated internationalization processes which contributed to competitiveness strengthening. And, finally, the vivid examples provided in the paper confirm the fact that nowadays the success of Chinese companies is usually associated not with low costs production, but, first of all, with innovative solutions. Thus, each of the ‘I’s does contribute to development of EM company’s competitive advantages and the effective interaction of three ‘I’s does really determine EM company’s success in the global market.

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Интернационализация, инновации, институты как драйверы конкурентоспособности китайских компаний

А. С. Веселова, к. э. н., ассистент кафедры операционного менеджмента.
Л. С. Веселова, к. ист. н., ст. преподаватель кафедры европейских исследований.
(Санкт-Петербургский государственный университет)