инновационная экономика

Sustainable supply chains: compliance to norms or opportunity for innovations



A. S. Veselova, assistant professor, operations management department a.s.veselova@gsom.spbu.ru



A. V. Logacheva, candidate of economic sciences, candidate of economic sciences, candidate of economic sciences, assistant professor, operations management department logacheva@gsom.pu.ru



Yu. N. Aray, senior lecturer, strategic and international management department aray yulia@gsom.pu.ru

Graduate school of management St. Petersburg state university

Companies from emerging markets attract more and more attention both from scholars and business people. It happens due to their active growth and increasing influence on world economy. During the last couple of decades, they have significantly increased and diversified the scope and scale of their operations. Their involvement in global supply chains has largely changed their approaches to doing business both in home and host markets and raised the need for organizational and technological innovations, stimulating adoption of various sustainable practices. The paper presents an essay style discussion about the state of research and practice in the development of sustainable supply chains and the role and place of emerging markets multinational enterprises (MNEs) in this process. It addresses sustainable activities of Russian companies using institutional perspective as a theoretical basis for key propositions. It considers company's legitimacy in host markets as a major driver for sustainable practices implementation which is supported by a number of examples from Russian companies and raises the question — whether sustainability could be considered as innovation by emerging market MNEs.

Keywords: emerging markets, institutional perspective, organizational innovations, sustainability, sustainable supply chains.

Introduction

The last decades have witnessed a considerable increase in interest to sustainability issues both from scholars and business people. This interest to a large extend is a reaction to new challenges posed by changing business environment. More and more companies face much stronger pressure from their stakeholders in terms of meeting sustainability requirement along the whole supply chain [27]. These expectations stimulate companies to reconsider not only their internal processes, but as well principles and standards of their interfirm cooperation transferring their sustainability practices to suppliers and other partners within supply chain [4].

These trends toward sustainability and changes in global supply chains have a particular relevance for emerging markets companies pretending to gain global or, at least, significant presence at foreign markets. Emerging market companies have an extra pressure from host environments due to country of origin effect or liability of emerginess [20]; they often have lower advancements in terms of innovativeness, technologies and also managerial practices; and they often have much less resources to implement sustainability practices. However, to get an access to global production networks and build stable relationships with foreign partners they have to co-align their practices and norms with the ones shared in the network. Highly developed capabilities to imitate innovation practices of these companies could serve as a necessary pre-condition for gaining legitimacy both on home and host market.

Considering a recent increase in scale and scope of internationalization of companies from emerging markets, proper attention from scholars, business people and politicians should be given to aspects connected with the interplay between their internationalization and sustainable practices implementation. A considerable body of research deals with the sustainable practices of companies from developed economies, their policies and innovations when they internationalize to both developed and emerging markets; however, research on internationalization of multinational enterprises from emerging markets and their sustainable practices is limited to just a few studies (e.g. [5]). Nevertheless, «researchers

should also continue to investigate sustainable supply chain management implementation across different contexts, especially developing and emerging countries, which will become increasingly important areas and actors in the sustainability arena» [25], so it could provide a ground for engaging scientific and business discussion and bring new insights to understanding of international strategies and patterns of emerging MNEs.

Sustainable development goals and the role of business

The terms «sustainability» and «sustainable development» have gained popularity after releasing of the final report «Our Common Future» made by «Brundtland Commission» in 1987. Sustainable development was defined as the concept «that meets the needs of the present without compromising the ability of future generations to meet their own needs» [33]. In order to follow sustainable policy and practices, United Nations has developed Millennium Development Goals (till 2015) and, later, Sustainable Development Goals (SDG) (till 2030) which define key targets to be achieved through collaboration of all countries and stakeholders. SDG is a call for the variety of stakeholders: governments, private sector, civil society and people, however, recently business community has started to play a viable role in SDGs' development [26, 15]. Business sustainability has been defined in many ways with the common view upon managing the triple bottom line – a process by which firms co-align their financial, social, and environmental risks, obligations and opportunities [3].

More and more stakeholders are involved in the processes of sustainable development and «the fight to save the planet has turned into a pitched battle between governments and companies, between companies and consumer activists, and sometimes between consumer activists and governments» [22]. Companies try to save licenses for operations by meeting increasing demands in a sense of sustainability from key stakeholders and mitigating risks that unmet expectations could cause. Besides, under the pressure of global market competition companies have to find new ways of creating products, organizing processes, designing business models. Nowadays, sustainability has already become a compelling source of innovation for companies which consider responsibility more as an opportunity rather than an obligation [29]. Implementation of sustainability practices requires the development of not only technological, but also organizational innovations within and between companies, new organizational behavior, new processes and forms of cooperation inside global supply chains [12, 22]. Proactive positions of companies can give them sufficient competitive advantage and increase their market share. Companies not only include responsible operations and approaches into their business processes, but also try to create extra value and extract financial and nonfinancial benefits from sustainable value creation. An increasing role in promoting SDGs is played by MNEs which are characterized by concentration of economic wealth and political power. For instance, over the past three years P&G has increased the number of zero manufacturing waste to landfill (ZMWTL) sites from 10% to nearly 50% of manufacturing sites globally, based on the both technological and organizational innovations [24]; MasterCard, in partnership with financial institutions, merchants, telecommunication companies, governments and non-governmental organizations, has launched a campaign which has made a financial system accessible to more than 180 million people through 500 programs in more than 50 countries [31]. Not surprisingly, there is a great concern regarding pursuing, implication and operationalization of sustainable practices by business, in general, and MNEs, in particular.

Sustainability and supply chain management

Sustainability, being a rather wide concept, has been researched from different perspectives in various academic fields (including firm's operations and consumption, strategy and HR management among others) and on different levels (micro, meso, and macro). In terms of the level of analysis, during the last two decades research focus has moved from a specific facility or organization to entire supply chain [18], which is stimulated by globalization processes that enhance development of complex supply chains with highly complicated interactions, structures, and relations. Acknowledging critical importance of supply chain sustainability, the United Nations Global Compact invokes to address the issue within four dimensions: human rights, labor, environment and anti-corruption [30].

We address sustainable supply chain concept from the perspective of triple bottom line: the intersection of environmental, social, and economic performance, which assumes that managers are directed to identify and introduce social and environmental activities that will improve companies' economic performance [4]. Sustainable supply chain management (SSCM) is an evolving area of research [2]. This field shows intensive growth, presenting specific areas of research interest and revealing new research gaps both on strategic and operational levels. Important contribution to research development on the interaction between sustainability and supply chain has been already made in relation to green supply chain management (GSCM). GSCM is a set of environmental management practices being a crucial part of triple bottom line elements. Though some authors exploit green supply chain management and sustainable supply chain management interchangeably they are not exactly the same. GSCM is mostly characterized by integration of environmental thinking into SCM practices while SSCM adopt broader triple bottom line perspective addressing environmental, social and economic aspects of company's activities [1]. Though most empirical studies are conducted within the first approach, however, the latter one seems to be more complex and systematic, as more and more companies recognize the necessity of creating social value alongside with environmental and economic one [2].

Under the pressure from different stakeholders and in order get legitimacy companies have to take into account the need to align competitive strategies with the three abovementioned sustainable development dimensions. Although some companies still look at social and ecological

issues as erosion for their financial stability; many companies have started to consider sustainability as an opportunity for innovation in its broad sense — not only as product, but also process and organizational ones. [22] shows in their research that «sustainability is a mother lode of organizational and technological innovations that yield both bottomline and top-line returns». [12] indicates that «focusing on supply chains reveals previously unknown innovation potential that seems to be related to limited system understanding». [22] enhances that sustainability make companies to change their way of thinking about products, technologies, processes, and business models which could drive them for higher competitiveness. «By treating sustainability as a goal today, early movers will develop competencies that rivals will be hard-pressed to match» [22]. Very popular innovative business models presented by Uber and AirBnB planforms support high potential of sustainable development. Some companies from the developed markets, such as Boeing, FedEx, IBM have already successfully and efficiently implemented innovations towards sustainability. So, an important question arises in this sense — whether sustainability in supply chains could be considered my MNEs from emerging markets as opportunity for innovation and not only as the compliance to norms.

Emerging market MNEs and sustainability in supply chains

International activities of companies from emerging economies attract considerable attention from scholars (e.g. [6, 7, 10, 13] and others). Such an interest could be largely explained by their increasing influence on economic growth, quality of life, environmental protection of both home and host markets [5]. Researches are highly interested in drivers which force companies to go abroad, and many of them agree that incentives of emerging market MNEs to internationalize are different from those of developed markets MNEs [10]. Some scholars identify institutional drivers among the most powerful one which lead to significant organizational changes, however, the role of institutional contingencies may be twofold. On the one hand, they do stimulate emerging market MNEs to internationalize; and on the other hand, they create a specific pressure which could be borne by the strongest only. Emerging market MNEs despite their impressive growth and development still strive for full legitimacy achievement on the global arena [9].

Institutional environment is a system of various institutions which are represented by formal rules and informal constraints [23]; these institutions set the «rules of the game» for companies to follow [28]. Depending on the position and status of the focal company within its organizational field, consisting of key resource suppliers, product consumers, regulators, competitors and clients, it could participate in setting the rules or just taking them for granted. Considering MNEs' organizational complexity in terms of embeddedness in several organizational fields, development of sustainable patterns of interaction with institutional environment becomes extremely hard to implement. Some scholars argue that MNEs are capable to create their own organizational fields, set up the rules, and

develop cognitive structure for their organizational units [16,17,32]; however, viability of such organizational fields is strongly dependent on the contextual contingencies of a particular host country and organizational characteristics of a particular MNE. Emerging market MNEs are often considered in host markets with a certain portion of suspicion, thus, they are less likely to be among the most influential counterparts to develop the rules and more likely will follow the ones proposed by local actors.

Generally, institutional environment consists of regulatory element (government policy and regulation), cognitive element (knowledge and skills) and normative element (shared values) [28], and it is complete only if both formal and informal institutions are taken into consideration. The regulatory element of institutional environment reflects evidently in environmental practices, it defines a set of responsibilities that are obligatory to be carried out. It might challenge emerging market MNEs as often environmental requirements in developed host markets are much higher than in their home market. There are vivid examples of Russian MNEs which introduced sustainable supply chain practices right before their internationalization to developed markets. The specific requirements of New York Stock Exchange became a reason for Russian pulp manufacturer Kotlas Pulp and Paper Mill to implement Forest Stewardship Council certification systems aiming to develop sustainability supply chain in ecologically sensitive industry. This organizational innovation helped the company to get an access to new market and through meeting the host market's requirements got competitive advantage on its home market. Also, one of the Russian leading oil companies Lukoil announced the introduction of the international environmental certification of ISO and OHSAS (Occupational Health and Safety Assessment Series) and, shortly after that, acquired the US company Getty Petroleum with its network of gas stations.

One of the major factors of survival within organizational field is organizational isomorphism which stimulates organizations within this organizational field to become similar to each other through coercive, normative, or mimetic mechanisms [8]. Coercive isomorphism is a result of formal and informal pressure made by different actors of the field. As shown above, there are evident examples when Russian MNEs introduced sustainability practices driven by coercive pressure from host country institutional environment. However, there have been also significant changes in the legislation in their home market which also contributed to positive development of the overall sustainable policy of Russian companies. Normative isomorphism is associated with professionalization, formal education and legitimization in professional networks. An example of such behavior was demonstrated by the Russian food producer Wimm-Bill-Dann which had received international certificate of compliance by British Retailer Consortium and, then, began to actively promote its brand abroad [11]. Mimetic isomorphism is often a reaction on environmental uncertainty which pushes organizations to innovate in order to imitate more successful representatives of their organizational field. This mechanism could be applied when successful sustainability practices are transferred to

emerging market companies after acquisition by developed market MNEs. For instance, in 1994 Russian pulp and paper plant Svetogorsk Mill was acquired by Tetra Laval from Sweden. In four years after the deal, Svetogorsk Mill stopped to use molecular chlorine in the pulp bleaching having switched to natural gas and introduced closed water consumption system based on new ecological policy delivered by acquiring company. Introduction of this process innovation strengthen company's positions in the industry. It was the first Russian pulp and paper plant which passed ISO 14001 certification. After implementation of such sustainable practices in 1998 the company was acquired by International Paper Company from the USA and started to change national standards, particularly, through implementation of sustainability forest management principles of SFI instead of Europian FSC system and protection old-growth forests as the ecological value. Nowadays, Svetogorsk Mill is a part of global supply chain of International Paper Company and fully satisfies the principles of green purchasing as a supplier [14].

Another example of successful implementation of sustainable practices in a mimetic way could be found in the case of Russian pulp and paper plant Syktyvkar Paper Mill. In 2002, the plant was acquired by Neusiedler AG (subdivision of Mondi Europe). Being an initiator in the supply chain and almost a monopolist in the region, it implemented ISO Certification and other international sustainability principles, and, then, changed requirements to its suppliers based on the green purchaising rules. So, the innovation activity of the company spread outside the company and influenced other members of its supply chain. It distributed sustainability principles to the whole regional supply chain in accordance with the certification requirements organizing consultations with local communities and conducting social partnership agreements [21].

Isomorphic changes are usually oriented at gaining legitimacy; however, in the case of multinational companies quite often the direction of these changes is in the opposite way, namely, trying to gain legitimacy MNEs become more and more distinct from each other which is explained by their internal organizational complexity and multidimensionality of their environments [17]. The more institutional distance between home and host countries is, the more likely isomorphic changes will be replaced by negotiation processes with institutional agents [16]. Implementation of sustainable practices in global supply chains by emerging market MNEs could significantly increase their negotiation power, thus, those MNEs that have proper motivation and enough resources will very likely do this considering long-term goals even if shortterm benefits are lower than costs due to the fact that innovations toward sustainability might significantly contributes to strengthening their image as employer, social value creator, etc. For example, in 2008, Lukoil Group acquired 49% stakes in the ISAB refinery in Priolo in the southeast of Sicily. Nowadays, the ISAB refinery is Europe's third largest refinery by throughput. Since then, Lukoil has been actively developing its operations on Italian market and has become one of the largest Russian investors in Italy. Considering the relevance and potential of the market, the company invests a lot in environmental and social sustainable practices; it aims to minimize its environmental footprint continuously improving environmental standards. Lukoil provides a strong support to the project «Liberamente» which is oriented at protection of the salt lakes in the vicinity of the ISAB refinery, as well as restoration and preservation of the birds' nesting grounds [19].

The examples, provided above, show that under the institutional pressure MNEs from emerging countries being engaged into the global supply chains start to innovate through implementation of sustainability practices and approaches into their operations and processes. The discussed issues open the door for future in-depth research in order to detect the evidence and nature of sustainable innovations applied by emerging markets MNEs.

Conclusions

The paper presents an overview of recent activities of Russian companies in terms of the role of their international exposure in adoption of sustainability practices. Despite practical evidence that companies operating in international markets usually have more developed, complex and diversified sustainable supply chains, authors managed to identify just a few studies that consider relationships between company's internationalization and implementation of sustainability initiatives. Moreover, the context of emerging markets is mostly addressed through the analysis of activities of developed market MNEs delivering their experience and policies in sustainability aspects to emerging markets, while sustainability strategies and practices of companies headquartered in emerging markets are almost unexplored. However, considering the overall contribution of business into achievement of sustainable development goals, the role of emerging market MNEs can't be neglected. This research area seems to have a large potential for investigation, and rigorous research could bring new valuable insights not only for academics, but for business people and policy-makers, as well.

It is evidenced that emerging market MNEs often implement sustainable practices into their activities when they become members of global supply chains, thus, it would be interesting to investigate whether they consider sustainability as a source of innovation and competitive advantage. With this paper we make an attempt to identify future direction for research in this area which could enhance and contribute to our understanding of global sustainable supply chain management and MNEs management across different contexts and setting.

References

- P. Ahi, C. Searcy. A comparative literature analysis of definitions for green and sustainable supply chain management//Journal of Cleaner Production, 2013, no. 52, pp. 329-341.
- A. Ashby, M. Leat, M. Hudson-Smith. Making connections: A review of supply chain management and sustainability literature// Supply Chain Management: An International Journal, 2012, no. 17(5), pp. 497-516.
- S. Bertels, L. Papania, D. Papania. Embedding sustainability in organizational culture: A systematic Review of the body

- of knowledge, network for business sustainability, 2010. http://nbs.net/wp-content/uploads/Systematic-Review-Sustainability-and-Corporate-Culture.pdf.
- C. R. Carter, P. L. Easton. Sustainable supply chain management: evolution and future directions//International Journal of Physical Distribution & Logistic Management, 2011, no. 41 (1), pp. 46-62.
- V. Z. Chen, L. Johnson. Emerging market MNEs and social responsibility: an institutional perspective//Transnational Corporations, 2013, no. 22 (3), pp. 1-4.
- P. Deng, M. Yang. Cross-border mergers and acquisitions by emerging market firms: a comparative investigation//International Business Review, 2015, no. 24 (1), pp. 157-172.
- D. Dikova, A. Panibratov, A. Veselova, L. Ermolaeva. The joint effect of investment motives and institutional context on Russian international acquisitions//International Journal of Emerging Markets, 2016, no. 11 (4), pp. 674-692.
- P. DiMaggio, W. Powell. The iron cage revisited: institutional isomorphism and collective rationality in organizational fields// American Sociological Review, 1983, no. 48, pp. 147-160.
- 9. D. Fiaschi, E. Giuliani, F. Nieri. BRIC companies seeking legitimacy through Corporate Social Responsibility//Transnational Corporations, 2013, no. 22(3), pp. 5-42.
- I. Filatotchev, R. Strange, J. Piesse, Y.-C. Lien. FDI by firms from newly industrialized economies in emerging markets: corporate governance, entry mode and location strategies//Journal of International Business Studies, 2007, no. 38(4), pp. 556-572.
- K. Gerasimova. Corporate social responsibility. 2017. https://delovoymir.biz/ru/articles/view/?did=10375.
- R. Isaksson, P. Johansson, K. Fischer. Detecting supply chain innovation potential for sustainable development//Journal of Business Ethics, 2010, no. 97(3), pp. 425-442.
- N. Jain, D. Hausknecht, D. Mukherjee. Loction determinants for emerging market firms// Management Decision, 2013, no. 51 (2), pp. 396-418.
- International Paper Official Website. 2017. http://ip-paper.ru/ quality/manufacturing.
- 15. G. Koehler. Seven decades of 'Development', and now what?// Journal of International Development, 2015, no. 27, pp. 733-751.
 16. T. Kostova, K. Roth, M. T. Dacin. Institutional theory in the study
- T. Kostova, K. Roth, M. T. Dacin. Institutional theory in the study of multinational corporations: a critique and new directions// Academy of Management Review, 2008, no. 33 (4), pp. 994-1006.
- 17. T. Kostova, S. Zaheer. Organizational legitimacy under conditions of complexity: the case of the multinational enterprise//Academy of Management Review, 1999, no. 24 (1), pp. 64-81.
- J. D. Linton, R. Klassen, V. Jayaraman. Sustainable supply chains: An introduction//Journal of Operations Management, 2007, no. 25, pp. 1075-1082.
- Lukoil Official Website. 2017. http://www.lukoil.com/Company/ BusinessOperation/GeographicReach/Europe/LUKOILinItaly.
- A. Madhok, M. Keyhani. Acquisitions as entrepreneurship: asymmetries, opportunities, and the internationalization of multinationals from emerging economies//Global Strategy Journal, 2012, no. 2, pp. 26-40.
- 21. Mondi Syktyvkar Official Site. 2017. https://www.mondigroup.com/en/about-mondi/where-we-operate/our-locations/europe/russia/mondi-syktyvkar.
- R. Nidumolu, C.K. Prahalad, M.R. Rangaswami. Why sustainability is now key driver of innovation//Harvard Business Review, 2009, September, pp. 57-64.
- 23. D.C. North. Institutions, institutional change and economic performance. Cambridge University Press: Princeton, 1990.
- P&G. P&G Sustainability Report, 2015. http://us.pg.com/ sustainability/at-a-glance/sustainability-reports.
- A. M. Quarshie, A. Salmi, R. Leuschner. Sustainability and corporate social responsibility in supply chains: The state of research in supply chain management and business ethics journals. Journal of Purchasing and Supply Chain Management, 2016, no. 22, pp. 82-97.

- 26. R. Scheyvens, G. Banks, E. Hughes. The private sector and the SDGs: The need to move beyond 'Business as usual'. Sustainable Development, 2016, no. 24, pp. 371-382.
- 27. N. L. Schittfeld, T. Busch. Sustainability management within supply chains A resource dependence view//Business Strategy and the Environment, 2016, no. 25, pp. 337-354.
- W. R. Scott. Institutions and organizations. Thousand Oaks, CA: Sage Publications, 1995.
- D. Seebode, S. Jeanrenaud, J. Bessant. Managing innovation for sustainability//R&D Management, 2012, no. 42, pp. 195-206.
- United Nations. Global corporate sustainability report. NY: United Nations Global Compact, 2013.
- USCIB. Business for 2030: Forging a path for business in the UN 2030 development agenda. 2017. http://www.businessfor2030.org/ goal-1-end-poverty.
- 32. D.E. Westney. Country patterns in R&D organization: The United States and Japan/In B. Kogut (eds), Country competitiveness. Oxford: Oxford University Press, 1993, pp. 36-53.
- 33. World Commission on Environment and Development. Our common future: Report of the World Commission on environment and development, 1987. http://www.un-documents.net/our-common-future.pdf.

Устойчивые цепи поставок: соблюдение норм или возможность для инноваций

- **А. С. Веселова**, к. э. н., ассистент, кафедра операционного менеджмента.
- **А. В. Логачева**, к. э. н., ассистент, кафедра операционного менеджмента.
- **Ю. Н. Арай**, к. э. н., ст. преподаватель, кафедра стратегического и международного менеджмента.

(Институт «Высшая школа менеджмента», Санкт-Петербургский государственный университет)

Компании из стран с растущими экономиками привлекают все больше внимания как ученых, так и практиков бизнеса. Это происходит благодаря активному росту этих компаний и усилению их влияния на мировую экономику. В течение последних десятилетий они существенно увеличили и диверсифицировали масштабы и разнообразие своих международных операций. Включенность в глобальные цепи поставок значительно изменила их подходы к ведению бизнеса как на домашнем рынке, так и на рынках принимающих стран и поставила перед необходимостью внедрения организационных и технологических инноваций, стимулируя использование принципов и задач концепции устойчивого развития в деятельности. Статья рассматривает деятельность международных компаний, представляемых странами с растущей экономикой с позиции институционального подхода и устойчивого развития. Легитимация компании на рынке принимающих стран рассматривается как основной драйвер внедрения практик устойчивого развития, что подтверждается рядом примеров российских компаний. Также, в статье ставится вопрос о том, могут ли принципы и задачи концепции устойчивого развития рассматриваться как источник инноваций для МНК из стран с растущими экономиками.

Ключевые слова: развивающиеся рынки, институциональный подход, организационные инновации, устойчивость, устойчивые цепи поставок, цели устойчивого развития.