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Sustainability in Trade: Exploring China's Best Practices

The article is devoted to a pressing issue of making international trade sustainable. Theoretical approaches to sustainability and trade are examined. The paper explains linkages between these two terms from the economic point of view. Modern techniques of measuring sustainability are studied as well. The article reveals the best practices China developed at state and corporate levels while striving for sustainability in trade.

Key words: *International trade, sustainable development goals, China.*

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Introduction

Trade enables exchanging goods and services between countries. Thereby, it provides access to jobs and new technologies, makes the market competitive and leads to price reduction. Further outcomes of trade sometimes mean price decrease followed by poverty decrease and unemployment rate reduction. Most important contributions of trade towards social and economic spheres cannot be underestimated. Thereby, motivated, policy makers and corporate management pay more and more attention to the characteristics and outcomes of trade.

One of the pressing characteristics of trade is *sustainability*. Based on the definition provided by the Hinrich Foundation in 2018, sustainable trade is the trade which generates economic growth, strengthens social capital and provides environmental stewardship. Therefore, maintaining sustainability in trade is essential to keep the national economy robust, ensure its development, stimulate national welfare growth and preserve natural resources.

Furthermore, sustainability in trade leads to robustness to unforeseen political or natural dangers. Among the most recent and notable examples is China, which

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despite the pandemic has showcased sustainability in trade from an environmental, social and economic perspective.

Evolution of the Concept of Sustainability in Trade

“Sustainability” originated in the 18th century as a term related to the environment. It was initially used by Hans Carl von Carlowitz for describing the forestry circles. Later “sustainability” was also integrated into the studies on population growth and poverty increase. Then it was broadly incorporated into the studies on different energy resources, e.g. it was connected to coal, oil and gas extraction and consumption.

Based on the evolution of the term and according to the concept adopted by most countries of the world, sustainability can be referred to three areas: environmental, social and economic. From the environmental perspective, it highlights the necessity of protecting natural resources and maintaining them for next generations. In terms of social sphere, it is an ability to guarantee welfare (security, health, education), equitably distributed among social classes and genders. From the economic perspective, in most cases it is sort of capacity of an economic system to generate a constant and improving growth of its economic indicators.

Despite covering versatile realms, all definitions of “sustainability” are tied to the necessity of the optimal approach towards consumption which enables maintaining resources and makes life on the Earth possible for future generations. International organisations, governments, corporations and society highlight that the approach to sustainability can be built only through three areas in synergy.

Trade and sustainability are strongly connected and affect each other in both directions.

Trade activities affect national and global sustainability. Trade liberalisation might be a cause of positive or negative effects for sustainable development. Focusing on positive impact, on the international level it is recognised that trade plays a fundamental role in promoting sustainability, since it stimulates economic growth, creates jobs, enables technological exchange, raises incomes and enhances welfare of people. There are many sources that concentrate on this influence. For instance, C. Bellmann and A.V. Tipping focus on trade’s contribution to food security, energy consumption and life in the ocean.

Sustainability guides trade regulators and makes them align the measures they impose with sustainable development goals: sustainability provides a critical framework for policy makers. It is commonly known that economic outputs are based on environmental (e.g. mineral resources) and social (e.g. labour force) inputs. Therefore, policy makers need to be deeply aware about nature conditions, social needs and economic initiatives to maintain sustainability in all of the three

areas related to each. Regulators also should be able to prioritize and follow this ranking to build on the strategies and carry them out in order to achieve sustainable development goals.

Moreover, based on various studies and characteristics, a new classification of such “trade-sustainability” linkages were proposed. Table 1 shows how “trade-sustainability” relations can be classified based on geography of trade policy execution, level of trade policy implication and execution, nature of trade measures application and the subject of sustainable trade policy initiation.

Table 1

Classification of the sustainability related trade policy measures

Key parameter	Types
Area targeted	1) inside a country 2) outside a country
Level of proposal	1) International level 2) state level 3) corporate level
Nature of measures	1) mandatory 2) recommendary
Subject of initiation	1) international organisations 2) state 3) corporations 4) civil society

Source: Compiled by the author.

To identify the most successful way of achieving sustainability in trade various possible methods are suggested to make this countable and, therefore, measurable. The ways of measuring are divided into single measurable parameters and indices that include several metrics at once.

Methods and Metrics of Measuring Sustainability in Trade

The idea of measuring sustainability by population growth was introduced by T. Malthus, economist of the 18th century. His theory is mainly motivated by imbalances between demand and supply caused by exponential growth of population (number of human beings) and arithmetical growth of food production.

In order to characterise the capacity of an economic system, sustainability can be assessed by the GDP. Calculation based on expenditures makes it clear that trade has a direct impact on the ability to generate constant and improving growth of GDP².

² $GDP = C + I + G + (X - M)$, where C — consumer spending on goods and services; I — investor spending on business capital goods; G — government spending on public goods and services; X — exports; M — imports.

Technological advantage started to be assumed as the main metric of sustainability in the 20th century. Living in the era of massive resource extraction and immense production, neoclassical economists argued that technology would cope with the economic issue of limited resources and increasing population demand.

From a utility perspective (based on the so called Hartwick's Rule) sustainability was defined as the non-declining utility. Later the meaning was modified to the statement that current actual utility must not exceed the current maximum sustainable utility. Otherwise, some future decline in actual utility is inevitable [1].

From 1970s scientists became more interested in complex approach towards sustainability assessment. The set of metrics and indices can provide a more comprehensive view on the achievements of sustainability in environmental, economic and social areas.

“The Limits to Growth” (D. Meadows at el.) described 12 scenarios of mankind's future based on five metrics, including population, agricultural production, non-renewable resources, industrial output and pollution generation. The accuracy of the initial research motivation was verified in the “The Limits to Growth: 30 Years Update” (D. Meadows at el.) [2].

Over the time sustainability has become a spotlight for the international organisations which are more and more incorporated into resolving issues in international trade and enhancing international partnerships.

One example of such interest might be eight Millennium Development Goals (UN, 2000) replaced by seventeen Sustainable Development Goals (UN, 2015) [3]. To assess the progress of meeting 17 goals Sustainable Development Report (former SDG Index and Dashboards) was developed. It assesses the state performance based on 231 unique indicators and concludes with ranking 193 countries.

Indices mentioned above are mainly used to assess sustainability in the economy (and in trade as its component), whereas the Sustainable Trade Index (STI) is designed to be applied predominantly in trade. Specifically, it is a modern approach to assessing the level of sustainability in foreign trade of particular states. The index was developed by the Hinrich Foundation, a philanthropic organization founded in Asia. “Sustainability in trade” by Hinrich Foundation is characterized as the trade which generates economic growth, strengthens social capital, and provides environmental stewardship.

“Sustainability” has gone through a long process of transformation from a term associated primarily with environmental issues to a word that is now crucial in the social and economic spheres as well. Based on literature contributions, tight relations between trade and sustainability were identified.

Metrics

Population growth
 GDP growth
 Technological advantage
 Utility

Indices

“World 3” model (Growth of limits)
 Millenium Sustainable Goals
 Sustainable Development Goals Index
 Sustainable Trade Index

Fig. 1. Metrics and indices for sustainable trade assessment

Source: Compiled by the author.

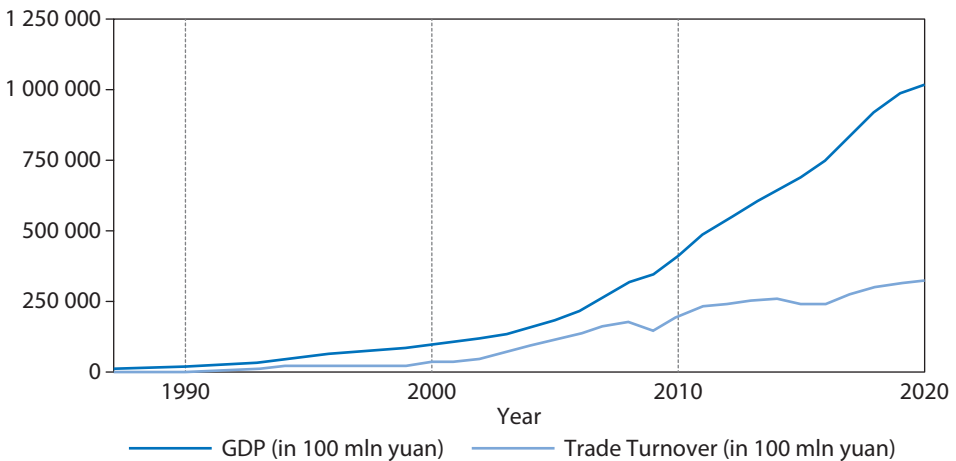
China’s Practices of Sustainable Trade

Having discussed the fundamental basement of the topic on sustainability in foreign trade, this paper also aims to examine sustainability of China’s trade policy following the key metrics based on STI and SDG Index.

Before examining measures that have contributed to the sustainability development in trade, it is suggested to look at general trends in China’s trade.

Since December 1978 when the reform and opening up program was introduced China has always been experiencing positive GDP growth. It is crucial to gain understanding of trade contribution to GDP growth and analyse its resilience as a component of GDP. The analysis of trade-related data, collected from 1987 to 2020, showed that the drop in the overall trade occurred only four times: in 1998 by 0,44%, in 2009 by 16,27%, in 2015 by 7,09% and in 2016 by 0,86%. The maximum growth was observed in 1994 by 80.83% (Fig. 2).

In terms of the SDG Index, China showed notable results in poverty alleviation, low unemployment maintenance, gender equality, tertiary education accessibility

**Fig. 2.** China’s GDP and trade turnover, mln RMB

Source: National Bureau of Statistics of China.

and ecology development (China's Progress Report on Implementation of the 2030 Agenda for Sustainable Development, 2019). Trade policy has also contributed to SDG achievement by:

- involvement of small and medium-sized businesses in trade activities with other countries, which increased average income and standard of living in general;
- access to advanced technology from abroad has laid the ground for new industries that have made production technologically advanced and also diversified exports;
- lowering of barriers to foreign investors allowed to attract funds for the development of industries that produce goods for sale on foreign markets;
- need to recruit professional staff has contributed to the development of an educational system that not only teaches local students, but also attracts a huge number of foreign students.

Considering the STI index, China has gained 5.2 points over 4 years (2016–2020) and moved up from the 12th to the 7th position. Notable growth occurred in the social pillar, while in economic and environmental pillars China has experienced slight decline (Table 2).

Table 2

China's Rankings in Sustainable Trade Index, 2016–2020

	Overall			Pillars								
				Economic			Social			Environmental		
Year	2016	2018	2020	2016	2018	2020	2016	2018	2020	2016	2018	2020
Rank	50.9	55.2	56.1	64.2	66.1	63.6	39.1	44.7	50.2	49.5	54.6	54.5

Source: Compiled by the author based on [4].

Based on a recent global survey, conducted by PricewaterhouseCoopers along with the China Chamber of International Commerce (CCOIC), the government is entitled as a main driver of achieving the Sustainable Development Goals.

On the state level Chinese policy-making is based on five-year plans (五年计划) as social and economic initiatives, which were first issued in 1953. Based on such documents, three main blocks were distinguished: trade in goods, trade in services and foreign investment.

Regarding trade in goods, China mainly shifted its focus from predominantly quantitative targets to qualitative ones. Within the 7th Plan the state was striving to increase the volume of imports and exports, then in the 9th plan it started to be concerned about post-sale services and added value in export [5]. 13th plan was aimed at qualitative improvements in imports [6]. The common things in all plans are expanding technological exchange with the world, and diversifying distribution channels and trading partners.

Services have started to be a spotlight of Chinese trade rather recently. The goal for the 13th plan was to reach at least 16% of services in the total trade [7].

Regarding investment, it has experienced a similar shift to trade in goods, i.e. from quantitative to qualitative targets. In 1978 the aim was general: “expand the scale of foreign investments”. In the 9th plan, investments were mainly attracted in energy, communication and agriculture. Several years later international funds were reoriented to research and development, innovative centres and science. In the 13th plan trade in services became the main goal for investing.

Eventually, the efficiency of the five-year plans was proved under the uncertain conditions last year, while the pandemic was spreading from China around the world. Monthly data on trade turnover with 22 China’s biggest partners, has indicated that border closures in the beginning of the pandemic caused a short-term decline in overall trade, however, gave the state the ability to strive and even increase trade turnover when borders of trade partners were closed.

Sustainability in trade at the corporate level is considered to be the second main one. Analysis of the structure of China’s corporations with the largest market capitalization showed that the corporate digital technologies become a leading sector at the national level, since the list (Table 3) is dominated by IT and financial sector companies.

Table 3

Top China’s Companies by market capitalization, mln USD

Name	Sector	Rank in 2021	Rank in 2015	Market Cap, 2020	Market Cap, 2015
Tencent	IT	1	8	774,390	135,890
Alibaba	E-commerce	2	4	628,220	202,800
Kweichou Moutai	Consumer goods	3	–	389,390	42,330
ICBC	Financial Services	4	2	264,250	275,000
Meituan	E-commerce	5	–	233,440	Private company
CM Bank	Financial Services	6	10	202,290	105,660
Ping An Insurance	Insurance	7	9	199,290	113,000
China Construction Bank	Financial Services	8	3	1,989,000	209,000
Wuliangye Yibin	Consumer goods	9	–	170,870	15,990
Agricultural Bank of China	Financial Services	10	6	169,250	189,000
Pingduoduo	E-commerce	11	–	167,170	Private company
CATL	Battery	12	–	139,670	Private company
Bank of China	Financial Services	13	5	139,100	197,000
Kuaishou Technology	IT	14	–	137,830	Private company
China life Insurance	Insurance	15	7	119,520	157,000
PetroChina Co Ltd	Oil & Gas	–	1	–	330,000

Source: Compiled by the author based on [8].

Notable Examples of Sustainability Implementation at the Corporate Level

The “Private sector Awareness of the SDGs” survey made by PwC and CCOIC discloses the current understanding of sustainable goals in the Chinese private sector [9]. Survey has revealed a positive fact that most of the companies (around 89%) are aware of SDGs, 68% of which even mentioned it publicly. However, even if companies are aware of SDGs, they still do not figure out and understand how to measure their performance.

Chinese companies that have begun to develop and implement strategies to achieve sustainable goals, started to compile reports on corporate social responsibility (CSR) and also disclose information on environmental, social and governance (ESG).

One great example of an exception is Alibaba group. Company’s recent report “ESG 2018” highlights several priorities: environmental impact, human capital, social impact and others [10].

Regarding social impact, in the Alibaba report the contribution is divided between people who work for the corporation and who are served by the company. For example, a company:

- makes a significant impact on children rights and human overall well-being. It has developed the platform “Reunion” which enables to find infants and children who have been abducted in China;
- decreases the poverty rate enabling rural based sellers to join Alibaba marketplace. This initiative is set and explained in the “Rural Taobao” program.

“Rural Taobao” program also helps in achieving sustainability in the economic sphere. For example, it contributes to an unemployment rate decrease, since small and micro enterprises enable new job opportunities around China and globally.

Alibaba Group is not the only notable examples of companies which integrate the strategy of achieving sustainable goals into their operations. Other Chinese giant companies like Tencent, Agricultural bank of China and many others also align their production with new social, environmental and economic challenges [11].

China achieved significant results in removing barriers for foreign investors, simplifying business conditions, and granting foreign investors the same rights as local ones. China has achieved impressive growth in numbers of enterprises with foreign capital (Table 4). Based on the National Bureau of Statistics of China, the number of enterprises in 2020 has increased by 133 thousand (by 29%) in comparison to 2016. The total amount of investments has increased two-fold.

Table 4

Registered Foreign — Funded Enterprises

	2016	2017	2018	2019	2020
Number of registered enterprises	460,699	481,179	505,151	539,345	593,276
Total investment, hundreds of mln USD	37,977	45,390	51,240	68,992	77,738

Source: National Bureau of Statistics of China.

Conclusion

Due to notable results in sustainability in trade at the national and corporate levels, China is considered to show its best practice for countries which are combating the external shocks (e.g. the COVID-19 pandemic) while aiming to maintain sustainable economic growth along with social and environmental resilience. China's sustainable trade policy can guide countries to increase GDP, improve social well-being and become more environmentally efficient.

In summary, integrating sustainability at state and corporate levels enables steady income generation and at the same time it maintains social and environmental prosperity which are crucial for policy makers, corporate executives and leaders of the civil society.

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Устойчивость в торговле: анализ лучших практик КНР

Статья посвящена актуальной теме достижения устойчивости в международной торговле. Рассматриваются теоретические подходы к данной проблеме. В работе объясняется связь между этими понятиями с экономической точки зрения. Также изучаются современные способы оценки устойчивости и выявляются практики, применяемые китайскими властями и компаниями в целях достижения устойчивости в торговле.

Ключевые слова: *международная торговля, цели устойчивого развития, Китай.*

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