Decoding China's export miracle: a global value chain analysis.

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This is the first time I am giving seminar to Russian scholars.

On the back of the book, you can see a list of authors. There are 8 chapters in the book that include the following: Introduction; Overview of China's export miracle, GVCs: catalyst of the explosive growth of China's export; The China-USA trade imbalance from the GVC perspective; Diminished impact of the yuan exchange rate on trade balances; A supportive policy environment: the key to China's GVC entry; The Chinese mobile phone industry and its GVC strategy; Trade war and pandemic: dark shadows over China-centered GVC.

In today's presentation, due to the lack of time, I will focus mostly on the second and third chapters.

Thus, why are Chinese exports called a miracle? Until the 1980s, China was a closed economy. Since 2009, China has been the number one exporting nation. Whereas in 1980, when reforms and opening-up were launched, China accounted for only 0.9% of world exports – less than 1%. In 2004 – 6.4% of world exports (higher than Japan), in 2007 – 8.7% (more than USA), in 2009 – 9.6% (higher than Germany and any other state). In 2009 China's GDP/capita was $ 3800, that is, much less than, for example, the United States. This means that when China became the number 1 exporting power, its incomes were low and the country was far from industrialization. Taking into account the fact that before 1980 China generally had a closed economy, we can say that this is a miracle.

China's export success is even more impressive in the field of high-tech products. Since 2007, China has been the world number one exporting nation in high-tech products. From 2007 to 2017 China's high-tech exports almost doubled from $342.6 billion to $654 billion, while US's high-tech exports fell from $160 billion to $245 billion. During this 10-year period, the high-tech exports of Germany and Japan have

not changed. That is, China surpassed the United States, which was considered an undoubted high-tech leader.

Who invented these high-tech products? Most of IP of these products, which we now use every day, were invented in multinational companies in developing countries. They were not invented in China. Chinese companies do not own these IP. At the same time, exports are so big. A miracle again.

Another point is the US trade deficit with China: in 2018 it is five times of that in 2001 (83.1 vs 419.5). At the same time the ratio of the deficit to GDP is almost the same: it was 4% in 2001 and 4,3% in 2018. Even though the trade deficit itself surged during this period, but the proportion stayed the same. It is also a miracle. Why is the US trade deficit concentrating on China? There is no such thing with Japan, for example. Why does the US so strongly prefer to buy Chinese products, rather than Japanese or German, for example? This is also a miracle.

The inability of conventional theories to explain this miracle:

Conventional theories cannot fully explain the export miracle.

Chinese institutional reforms were not so significant for these trade indicators.

Mainstream trading theories include the following: Ricardian Comparative advantage, Heckscher-Ohlin theory, New trade theory, New-new trade theory. All these theories assume that, to sell products in international market, a firm has to do all the tasks in house: from R&D, product design, branding, manufacturing parts, assembly, marketing to retailing. But this is not true. Chinese exports are made and traded along global value chains, which managed and operated by multinational companies.

“Designed by Apple in California. Assembled in China.”, “Made in China”, etc. means, that everything made in China, but Chinese companies are just a part of a global value chain, leaded by other big companies, like Apple, H&M, UNIQLO, etc. Such companies, as Walmart, help Chinese products enter international market. Technology, design and marketing network are NOT China’s comparative advantage, as they belong to multinational companies!

Global value chains: a new model of international trade:

Global value chains are a new model of international trade, where the international division of labor has evolved from the level of goods and industries to the more granular level of the tasks of the same product. Especially it is seen on the example of China.

There spillover effects of GVCS:

1. **Brands**. Consumers are brand oriented. Their purchasing decisions are largely determined by brand preference. In Europe clothing market, branded clothes constituted around 80 percent of the market. There is competition between GAP and Uniqlo. China can export their products under famous foreign brands.
2. Technology and product innovation by the lead firms of GVCs gives rise to new products. **By specializing in low technology tasks, Chinese firms can join the value creation processes of high-technology products**. Example: Toshiba invented a tiny disk drive Apple developed iPod, which uses such disk drive, Toshiba benefited from the spillover effect. Another example: Corning Glass invented Gorilla Glass, Apple invented iPhone, Gorilla Glass is used in iPhones – Coring Glass benefited. Such spillover means an opportunity to serve the global market.
3. **Distribution and retail networks**. Lead firms of GVCs (H&M, Nike, Walmart) are buyers. They are responsible for marketing and distribution. Building international retail networks (like H&M, Nike, Walmart do) are very costly for Chinese companies. Chinese companies become suppliers of such networks, sell products via retail networks of the world giants like Apple.

Chinese high-tech export

Significant rise in iPhone exports to the US is triggered by Chinese manufacturers. China has become more expensive in terms of assembling due to the rise in Chinese worker's wage, Chinese yuan appreciated against the US dollar, but still global value chains are powerful. The core technologies of PCs, no Chinese brand laptops before

2010 at the world market, but still China manufactured 70% of all laptops. In 2012 China accounted for 57% of global mobile phone exports, but no Xiaomi, OPPO. Few foreign users heard of Huawei at that time. Chinese manufacturers were subcontracted by global brands. Processing exports mainly made of imports international inputs. Processing exports are subset of GVC trade. Processing exports means China imports all components, assembles, and exports a product. By 2003 90% of Chinese high-tech export was produced this way. But by 2016 this share reduced to 60%. Processing export is an effective means for Chinese exports to enter the market of high-income countries. Around 55% in 2000s of processing exports in China. Especially processing export was Important for Chinese export to the US, Japan, and Germany. Most of Chinese exports with zero foreign intermediate inputs/value added belong to value chain trade (Walmart, UNIQLO, H&M, Nike) – labor-intensive products.

Main ideas of discussion:

Lessons of the Chinese growth for developing countries.

It is becoming nearly impossible to find products where China doesn't have its role in value chains. Restrictive measures effects are unpredictable in cases of long global value chains. The idea of linear development is old, the modern situation shows that technologies can be obtained by Chinese firms through global value chains. It is important to understand, that electronics can't be a driver of the growth anymore, China was one of the last examples of success. Not only cheap labor, but also special policy environment benefited Chinese firms and the whole rise of China. The scale of the companies for national chains, but not signifiable for global chains, which means that there is a change from producing cheaply to producing something unique. Import-side of the growth is important for growth because it can help to get technologies. Even though the diversification has an important role in the economic growth, China's experience shows that it's essential to continue develop traditional industries, which are the basement of the country's economy.

The new Industrial revolution leads from U-shape core to W-shape core what is associated with customization. Chains will change into networks; their composition will be changed and less controlled by concrete companies. Small and medium firms with technological advancements will have their important role in the value chains of the future (it can be seen on the example of start-ups).

Globalization.

The Chinese example is important for the emerging economies of Asia like Vietnam. The trade war between China and the US and movement of business out of China pose a question about de-globalization. Will cost convergence lead to de-globalization? Trade war imposed asymmetrical tariffs, that eliminates incomes of some American companies. That means that China loses its title as the manufacture of the world. There are new centers of production – Vietnam, Philippines, India. But still the main income stays in leading firms and brands, not in the assembling countries. And still sunk costs of relocation of the assembly lines are giant. Especially it is difficult for the companies which have big capital investments in China. The presented book benefits the literature on China-US trade relationships and on global value chains.

Other ideas.

- In iPhone China captures 104 dollars for each iPhone X, about 25% of the manufacturing cost.
- China companies catch more and more added value, and it will continue in the nearest future. It has become possible due to the Chinese policy towards strengthening telecom R&D pays off.
- How easy it is for companies to move out from China in the situation of Sino-American trade war? Those companies which have huge sunk costs (huge initial investments in China) will face difficulties while moving their manufacturing from China.