Lu Liling
Master Student, West Ukrainian National University

Iryna ZVARYCH
Doctor of Economic Sciences, Professor, Head of International Economics Department, West Ukrainian National University

CHANGE OF SUPPLY CHAIN PARADIGMS – TRANSFORMATION IN THE POST-EPIDEMIC ERA

Trade and investment trends unfold across three key dimensions of international production: the fragmentation and length of value chains (short to long), the geographic distribution of value added (centralized to distributed), and the management choices of MNEs that identify advantages. There are several prototype configurations covering industries that collectively account for the largest share of world trade and investment. These include capital-intensive and labor-intensive industries in the primary sector; high-tech and low-tech industries with intensive GVC (Global Value Chain) use; geographically dispersed processing and hub industries; and high- and low-value-added industries.

The impact of technologies, policies and trends on international production is multifaceted. Sometimes they reinforce each other, sometimes they push each other; and they vary across industries and regions. Depending on the starting point of each industry—their prototype international production configuration—they will tend to choose one of four trajectories:

• *Reshoring*

will result in shorter, more fragmented value chains and higher geographic concentration of value added. This will mainly affect high-tech industries that use global value chains intensively. Consequences of this trajectory include increased redemptions and reduced foreign direct investment aimed at improving efficiency.

• *Diversification*

will lead to a wider distribution of economic activity. This will primarily affect GVC-intensive services and production. This trajectory will increase opportunities for new entrants (economy and companies) to participate in GVCs, but its reliance on the digitization of supply chains will lead to these GVCs being more freely managed, platform-based and asset-free.

• *Regionalization*

will reduce physical length without fragmenting the supply chain. The geographical distribution of value added will increase. This trajectory will affect regional processing industries, some GVC-intensive industries, and even primary industries.

• *Duplication*

will reduce value chains and restructure production stages. This will lead to more geographically distributed activities, but more concentrated added value. This is especially true for hub and regional processing industries.

So, if global supply chains remain disrupted until early 2022, how will the winners and losers in the supply chain be determined?

When asked to evaluate vacancies in the global supply chain, experts agreed that there was no direct answer. A common lesson for many companies and localization consultants during a pandemic is that supply chain management strategies need to be flexible.

This directly contradicts the nature of supply chains and production as an industry; investments are often long-term and expensive to implement and regulate. Supply chain decisions have many levers - talent, location, value, technology, geopolitics - and all of these are likely to change with investment.

Although the different trajectories suggest that the expected shift in international production is not one-way, the general direction of development points to:

• Shorter, *more fragmented value chains*;

• More *concentrated added value*;

• More *platform-driven and asset-light value chain* governance;

• From *global value chains to regional and subregional value chains*;

• Global efficiency-seeking FDI faces downward pressure in favor of regional market-seeking FDI;

• Global trade in intermediate goods faces downward pressure, with less downward pressure on trade in final goods;

• Some industries move from large-scale investment to small-scale distributed manufacturing;

• Continued growth and fragmentation of the service value chain;

• Resilience and national security concerns are key drivers of global value chain diversification;

• Shift from global value chain investments to cross-border investments in infrastructure, domestic services and green and blue economies, driven by the need for sustainable development.

Policymakers need to be prepared for the challenges posed by the transformation of international production and to seize the opportunities.

Challenges include *increased divestments, relocations, investment transfers, and a shrinking pool of investments seeking efficiency*, which means more competition for foreign direct investment. Value capture and vertical specialization-based development in global value chains will become more difficult. Industrial infrastructure built for a global value chain world will see diminishing returns. Changes in the locational determinants of investment tend to negatively impact developing countries' opportunities to attract business from multinational corporations.

Opportunities arising from the transformation include attracting investors seeking to diversify the supply base and building redundancy and resiliency. The scale of regional market-based investment promotion was expanded. Shorter value chains will lead to more investment in distributed manufacturing and final product production, as well as broader industrial capacity building and clustering. Digital infrastructure and platforms will support new applications and services and improve bottom-up access to global value chains. The need for sustainable development will lead to more green and blue investments and value chains.

Meeting challenges and seizing opportunities will require changing investment paths. From a focus on seeking export-oriented efficiency investments in narrowly specialised global value chain sectors, a refocusing needs to be made to a broader export-led strategy that extends to investment in production in regional markets and regional industrial clusters. Likewise, the focus needs to shift from cost competition for single-site investors to diversified investment competition based on flexibility and resilience. From prioritizing large industrial investors with “big infrastructure” to making room for smaller manufacturing facilities and services with “lean infrastructure”.

Finally, there is a need to shift investment promotion strategies towards infrastructure and services. International production and promotion of investment in export-oriented manufacturing have been the backbone of most developing countries' development and industrialization strategies over the past three decades. Investments aimed at developing factors of production, resources and low-cost labor remain important, but the scale of such investments is shrinking. Some rebalancing based on domestic and regional demand, services, and growth in green and blue economies will be the new way forward.

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Demin Zhong
PhD Student, West Ukrainian National University

Iryna ZVARYCH
Doctor of Economic Sciences, Professor, Head of International Economics Department, West Ukrainian National University

CIRCULAR ECONOMY MODEL: PRACTICE AND FUNCTION IN CHINA'S ECONOMIC APPLICATION

Circular economy refers to the economy based on material circulation, regeneration and effective utilization. It is a kind of economic growth mode which takes the efficient utilization and recycling of resources as the core, reduces, reuses and resources as the principle, takes the low consumption, the low emission, the high efficiency as the basic characteristic, conforms to the sustainable development idea. The difference from the traditional energy consumptive economy is that the circular economy is based on the idea of reducing the use of resources and striving for the reuse and recycling of resources, rather than the pursuit of economic benefits in our original transition. A lot of energy consumption and a lot of environmental pollution, so circular economy in today's situation more and more need. The purpose of developing circular economy is to realize resource saving and ecological environment improvement without affecting the rapid development of economy and society, so that human beings can enter the track of sustainable development.

The emergence of circular economy conforms to the principle of harmonious symbiosis between man and nature. It is a material flow process that organizes economic activities into a resource-product-renewable resource. All materials and energy should be used rationally and sustainably in this ongoing economic cycle. In China. There are two points in time to illustrate this principle. For example, 29 April 2020, The Seventeenth Session of the Standing Committee of the Thirteenth National People's Congress deliberated and adopted the revised Law on the Prevention and