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DIRECT FOREIGN INVESTMENTS (FDIS): LESSONS FROM HISTORY¹

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Abstract: Foreign direct investments (FDIs) play a strategic role in the economic development of countries, complementing domestic savings and contributing to the modernization of production capacity. These investments enable participation in Global Value Chains (GVCs) and provide greater economic integration between countries. FDIs contribute to new business opportunities, environmental sustainability, diversification and modernization of the production base, expansion of foreign trade and innovation, thus becoming an important lever for the sustainable development of countries. With this in mind, this article reflects on the origin, significance and contribution of FDIs to economic development and greater global economic integration. **Keywords:** Foreign direct investments, Global value chains, Innovation and integration

INTRODUCTION

From the last decades of the 20th century, foreign direct investments (FDIs) began a long trajectory of rapid growth, gaining increasing importance in international capital flows and becoming more relevant in promoting the economic development of various countries. This expansion of FDIs was associated with the growth of Global Value Chains (GVCs) and the greater integration of the world economy; with this trend showing almost continuous expansion for five decades, when excluding the years of declines due to financial crises.

Despite the strong concentration in developed countries, this phenomenon has encompassed several countries at different stages of development, thus helping to expand the process of globalization of the world economy. In developing countries, participation in FDI flows is strategic because it complements domestic savings and contributes to the modernization of the countries' economic and social infrastructure, providing better conditions for

inclusion in GVCs, as well as expanding the possibilities for participation in international trade in goods and services with higher added value and greater technological content.

In addition to the favorable political-institutional environment for international trade and foreign investment in the second half of the 20th century, supported by multilateral institutions, the introduction of containers in foreign trade from the late 1950s onwards ushered in a new cycle of foreign trade and FDI expansion in the world. Containers significantly reduced port costs for loading and unloading goods, as well as facilitating inland logistics for storing and transporting goods. In industry, the use of containers in the export of parts and pieces has contributed to the spatial reorganization of production lines, giving rise to GVCs

In the 1990s, liberalizing policies, adopted initially in Europe and then in several countries on all continents, gave new impetus to the globalization process, causing the largest flow of FDIs on record. Expectations only really changed in 2020 due to the Covid-19 pandemic, when economic activity came to a standstill in several countries as a result of social isolation to deal with the health crisis, which in turn caused discontinuities in supply logistics on a global scale, prompting initiatives to reorganize GVCs

With this in mind, this article presents the first part of the study on foreign direct investments (FDIs): lessons from history, with the aim of reflecting on the origins, significance and importance of FDIs for economic development and world economic integration, highlighting the contribution of innovations to the growth of FDIs and to the various waves of globalization of the world economy since the European cultural, scientific and technological Renaissance from the 14th century onwards. In addition to the introduction and bibliographical references, this article consists

of four sections. The second section presents a reflection on the origins, significance and benefits of FDIs; the third presents the periods of major breakdowns in economic production and the rise of FDIs; and finally, the fourth presents some final considerations.

FOREIGN DIRECT INVESTMENTS- IEDS: ORIGINS, SIGNIFICANCE AND BENEFITS

Foreign investment is not a recent phenomenon, and there have been several examples of foreign investment since ancient times during the expansion of the great empires, when they invested in the territories they dominated, and represented initiatives to consolidate and expand their dominion over new conquered regions. At the time of the Greek Empire, for example, Alexander “the Great” built several cities under the name “Alexandria” with the aim of bringing Greek culture to the territories he dominated, as well as setting up infrastructure, such as roads and ports, in distant countries in order to expand his domains (FREEMAN, 2014). The Roman Empire had a similar experience with the construction of cities and infrastructure, such as the construction of 400,000 km of roads, 80,000 km of which were paved, to connect the Empire’s cities. In addition, bridges, ports, forums, basilicas, public markets, temples, aqueducts, theaters, arenas and circuses for horse racing were built in the territories dominated in Europe, the Middle East and North Africa, with the infrastructure built extending control over the territories on the shores of the Mediterranean Sea that were part of the Empire (GABRIEL, 2002).

In the “Age of Navigations”, from the 15th century onwards, the experience was similar, with the construction of infrastructure, forts, trading posts, ports, towns and cities and farms to produce agricultural goods for subsistence and export in the new dominated lands. This

investment logic continued throughout the period of European colonialism, exploiting natural resources and indigenous peoples on all continents until the middle of the 20th century.

In addition to pioneering ocean navigation and symbolizing the importance of foreign trade for the economic development of countries, Portuguese navigations offer unique examples of foreign investment, such as the establishment of the sugar agro-industry in the 16th century and the shipbuilding industry in Brazil the 17th century.

The new Portuguese sea routes made it possible to connect European capitals to distant regions on all continents that produced spices used in cooking, as well as providing access to raw materials for various activities, minerals and precious stones. The Portuguese sea route to India, discovered Vasco da Gama in 1498, reconnected the main European trading hubs with spice suppliers in the East, 45 years after the Ottomans seized Constantinople in 1453 and banned land trade routes. In this way, Portuguese navigations had a significant impact on the world economy during the period of transition between the Middle Ages and the Modern Age, and are considered the first great wave in the process of globalization of the world economy as we know it (KENNEDY, 1989).

The Portuguese maritime routes expanded communication between countries on several continents, promoting a significant movement of investments abroad, such as the construction of fiefdoms, a mixed construction of castle and military fortification with the capacity to store the kingdom’s goods and house soldiers, merchants and priests. The consolidation of mercantile activity led to the construction of economic and social infrastructure, such as ports, roads and towns, as well as investments in extractive activities, such as mining and logging, and farming, for subsistence and export production, such as sugar cane and tobacco.

The first Portuguese trading post was built in the city of Bruges in 1445, in Flanders, a country in northern Europe with territory that included part of France, Belgium and Holland. However, with the commercial decline of that city's port, the trading post was transferred to Antwerp in 1499. With the advance of navigation, the trading posts became the model for Portuguese overseas expansion.

In Guanabara Bay, shipbuilding began with the first colonizing expedition sent to Brazil in 1530, commanded by Martin Afonso de Sousa, the first grantee of the captaincy of São Vicente. The expedition arrived in Rio de Janeiro at the end of April 1531 and stayed there for three months. During this stay, two bergantins (a schooner with quadrangular sails on two masts) with 15 benches each were built. The Tamoios Indians were part of the workforce that built these vessels. Another historic date for shipbuilding in Guanabara Bay was 1665, when the Frigate Factory was founded on Ilha do Governador, where Galeão International Airport is now located. This shipyard built the Padre Eterno galleon, the largest ship in the world in the 17th century [see Castro Maya & Ferrez (1965)].

In addition to the considerable availability of wood suitable for shipbuilding, the geographical conditions of Guanabara Bay proved to be suitable for hosting a shipbuilding industry in the 17th century, with a large internal area and a relatively narrow entrance that was protected from potential invasions by the São João (1565) and Santa Cruz (1612) forts. João Teixeira's book, which described the Brazilian coastline in the 17th century, highlighted the port of Rio de Janeiro as one of the best in the world and its suitability for shipbuilding.

"Rio de Janeiro is the best and safest port on the coast of Brazil and one of the best in the world. It has the capacity to receive many large ships. It has an abundance of wood and other things needed to make ships. The distance be-

tween the Fort of Santa Cruz and the Fort of São João, at the entrance to Guanabara Bay, is 750 fathoms, approximately 1,650 meters, and 15 deep, about 33 meters, (...) the ships enter through the tip of the east band where the São João Fortress is."

Description of all the shipping in the Land of S. Crvz called VVlgarmente o Brazil. Made by João Teixeira Cofmographo of His Majesty. Anno di 1640.

Martim Afonso de Souza's expedition demonstrated Portugal's growing interest in the colony. During this period, there was confirmation of the economic viability of sugar cane cultivation in Pernambuco and the foundation of the first towns in Brazil, such as São Vicente (1529), Igarassu (1535), Vila Velha (1535) and Olinda (1537) (IBGE, Enciclopédia dos Municípios). This was a clear demonstration of Portugal's interest in consolidating control over the immense territory of the new colony, with the construction of ships in the colony itself being strategic for military and commercial purposes, given the considerable availability of raw materials and the need to protect the territory against possible invaders, as well as strengthening the capacity to transport exportables such as sugar, "the white gold", to Europe.

In this way, we could say that foreign investment has been linked to the history of Brazil since the voyage of discovery in 1500, given that access to an immense reserve of wood was fundamental to the success of Portuguese overseas expansion. It should be noted that the supply of wood found in Brazil was immense and diverse, much wider than just the brazilwood used in the production of musical instruments and in the production of red paint, with the availability of various types of hardwood suitable for various uses, including shipbuilding.



Map 1. Guanabara Bay in 1640.

Source: Descrição de todo o Maritimo da Terra de S. Crvz Chamado VVlgarmente o Brazil. Made by João Teixeira Cofmographo of His Majesty. Anno di 1640.

Therefore, it would be no exaggeration to say that the voyage of discovery of Brazil in 1500 was a direct consequence of technological advances during the European cultural, scientific and technological Renaissance, which in turn also contributed to the transformations underway in Europe, as it helped to expand maritime trade and greater global economic integration, by supplying goods demanded in Europe, such as brazilwood, as well as other hardwoods for shipbuilding and other applications, foodstuffs such as sugar, and precious metals and stones.

During this period of the European Renaissance, disruptive innovations stood out, such as the iron plow, the microscope, water and windmills for grinding grain and the printing press for disseminating knowledge. However, there were also important incre-

mental innovations, such as the significant evolution of ships and navigation techniques based on the application of mathematics and astronomy and the use of instruments such as the compass and astrolabe. These technological advances helped Portuguese navigators to pioneer oceanic navigation, replacing cabotage navigation, which followed the coastline visually.

After the discovery of Brazil in 1500, the size of ships almost doubled, from caravels and ships up to 31 meters long to galleons over 50 meters long. The barge, of Mediterranean origin, like the one used by navigator Gil Eanes on his voyage around Cape Bojador on the coast of Africa in 1434, was between 15 and 20 meters long and had a crew of between 8 and 20 men. The São Cristóvão caravel of Bartolomeu Dias' squadron when it rounded

the Cape of Good Hope in southern Africa in 1488 was 25m long and had a crew of 121 men. The flagship São Gabriel, used by Vasco da Gama on the voyage to India in 1498 and possibly by Cabral on the voyage to discover Brazil in 1500, was 31 meters long, had a capacity of 750 tons and a crew of 70. On the other hand, the Madre de Deus ship of 1589, used on the route to India, was 50 m long, had a capacity of 1,600 tons and a crew of 700 men, and the Padre Eterno galleon of 1663 was 53 m long, had a capacity to carry 2,000 tons and up to 4,000 crew members [see Caravels, Ships and Galleys of Portugal, Enciclopédia pela Imagem (undated) and Castro Maya & Ferrez (1965)].

Thus, considering the hypothesis that the Portuguese Crown was already aware of the lands beyond the sea south of the parallel from the Canary Islands, guaranteed to Portugal by the Treaty of Alcáçovas (1479) between Portugal and Spain, well before the decision of Pedro Alvarez Cabral's voyage, at least since the voyage of discovery of the Americas carried out by Columbus in 1492, it would be possible to say that probably the decision of Cabral's voyage, after the discovery of the sea route to India around Africa by Vasco da Gama between 1497 and 1498, had a double objective: To guarantee Portugal's new position in India; and to take possession of the new lands guaranteed to Portugal by the Treaty of Tordesillas (1494), precisely because of the possibility of securing access to the immense timber reserves found in the Land of the Holy Cross called Brazil, which would in fact give Portugal world naval leadership in the following centuries, helping to substantially increase the Portuguese merchant-military fleet to account for trade along the Portuguese maritime routes to Asia, Africa and Brazil.

In addition, access to the immense wood reserves in Brazil also played a strategic role for the Portuguese shipbuilding industry, as

access to Brazilian raw materials significantly increased the capacity to build caravels, thus helping to minimize the impact of losses, which were considerable at the time, due to piracy, wars and storms. This was further justification for setting up shipyards in Guanabara Bay.

One point in common between these experiences of foreign investment since ancient times was that the investments were mostly made by the state, with the aim of consolidating and extending its dominion over conquered territories. These experiences differ from the experience of foreign investment since the Industrial Revolution in the mid-18th century, and especially from the 19th century onwards, when private foreign investment became increasingly important as a result of the actions of capitalist companies in search of new markets.

INNOVATIONS, ECONOMIC CYCLES AND FOREIGN INVESTMENT

The Industrial Revolution, starting in the second half of the 18th century, like the Renaissance between the 14th and 16th centuries, brought about a new cycle of expansion in the world economy, driven by innovations such as Hargreaves' multi-thread spinning machine and Watts' steam engine and their respective applications in various sectors of activity, such as mining, textiles and transportation. The impact of the steam engine on means of transportation was immense, ushering in the era of the railroads between the 19th and 20th centuries. The steam engine also had a considerable impact on shipping, making ocean voyages faster and cheaper.

Between the second half of the 19th century and the middle of the 20th century, the "Second Industrial Revolution", marked by innovations in areas such as electricity, chemistry, oil and steel, drove a new cycle of expansion in the world economy. During this phase, industrialization spread to several countries and the

characteristic inputs of the First Industrial Revolution, such as coal, iron and steam power, were replaced by steel, oil and electricity

Similarly, the second half of the 20th century saw a new phase of major technological transformations and advances in the process of globalization of the world economy. This period became known as the “Third Industrial Revolution” or “Technical-Scientific Revolution” and was marked by innovations in areas such as robotics, genetics, information technology, telecommunications, electronics and the robotization of the production system.

Despite the widespread diffusion of innovations across all sectors of activity and the leadership disputed by several countries, the “United States Space Program” in the 1960s stood out for its contribution to the development of multiple technologies that had significant economic impacts in the following decades, such as: satellites, wireless telephony, GPS - Global Positioning System, solar energy panels, microelectronics, semiconductors, integrated circuits, computers, the Internet and robotics.

The last decades of the 20th century saw a new phase of acceleration in the innovation process, with the significant launch of disruptive innovations with significant social, economic and political impacts. This period has become known as the Fourth Industrial Revolution, which encompasses cyber-physical systems, the Internet of Things and Cloud Computing (SCHWAB, 2018).

The most recent wave of high-impact innovations includes advances in areas such as artificial intelligence, robotics, the Internet of Things (IoT), 5G, Industry 4.0, the metaverse, 3D printing, biotechnology and nanotechnology. The transformations in society resulting from this new wave of innovations will be so intense that in a relatively short period of time, by the end of this century, for example, the technological disruption will be unparalleled (EDEN et al, 2012).

One point in common between these phases of acceleration in the innovation process is that they coincided with periods of economic expansion, increases in foreign investment and advances in the process of globalization of the world economy. These phases even had very similar characteristics to each other, such as the Renaissance in Europe between the 14th and 16th centuries and the four Industrial Revolutions from the mid-18th century onwards, periods marked by the launch of disruptive innovations, the spread of knowledge, advances in communication and the rise of values and principles such as humanism, the rights of man and the social contract, the defense of freedom and democracy, and the greater importance of education, culture and the sciences. It's worth remembering that the industrial revolution in the 18th century is associated with the decline of Absolutist Monarchies and the rise of Liberal and Parliamentary Republics and Monarchies, with the independence of the United States in 1786 and the French Revolution in 1789 standing out. Thus, the future scenario we should expect should be one of accelerated production of innovations, increased foreign investment and greater integration of the world economy, accompanied by the greater importance of humanism, human rights, freedom and democracy, and not the other way around.

The first European universities were founded from the 12th century onwards, in the transition period between the end of the Middle Ages and the beginning of the Modern Age. In the 14th century, the European cultural, scientific and technological Renaissance began, with the publication of printed books, the spread of knowledge, advances in communication and the beginning of the age of the great navigations, sparking the first wave of globalization in the modern era.

In the 18th century, the printing of books and advances in communication became fas-

ter, making access to knowledge even easier. News, which had been galloping along on horseback since the Roman Empire, began to be transmitted more quickly with the invention of the printing press in the 15th century and the telegraph in the 19th century. Since then, the means of communication have undergone intense evolution, becoming fundamental to the expansion of foreign investment, economic development and global economic integration, with innovations such as radio, telephone, television, satellite, computer, Internet and Smartphone standing out.

Similar to the periods of the European Renaissance, between the 14th and 16th centuries, and the Industrial Revolution, from the second half of the 18th century onwards, the current scenario is once again marked by major technological, political and economic transformations. A new scenario of “cultural, scientific and technological renaissance” characterized by the intense launch of innovations that have a major impact on the economy. A situation that presents countries with major challenges in defining public policies capable of ensuring a better position in the international division of labor. It’s a situation that demands a broad effort from government officials to understand the scale of the current cycle of innovation, with new sectors of activity emerging and old ones disappearing, a period characterized by an intense process of innovation and, consequently, a process of “creative destruction”, as Schumpeter conceptualized it in the first half of the 20th century, as an intrinsic feature of the evolution of the capitalist system.

FOREIGN INVESTMENT IN LATIN AMERICA AND THE CARIBBEAN IN THE 19TH CENTURY

In the 19th century, innovations in means of transportation and communication had huge impact, with railroads, steamships and the telegraph promoting foreign trade, foreign investment and greater global economic integration. During this period, there was a huge wave of foreign investment from developed countries to Latin America and the Caribbean. These investments were concentrated in the mining and infrastructure sectors and were associated with improvements in the conditions for transporting exportable goods, such as railroads, ports, telegraphs and energy (RIPPY, 1952)

In this phase, building the institutional environment was key to attracting foreign investors, with countries providing adequate regulation to attract investment in infrastructure. Encouraging investors was based on guaranteeing legal certainty through national laws regulating sector activity, defining a city for arbitrating conflicts related to contracts, and guaranteeing a rate of return on investments if projects proved unprofitable, etc.

According to Rippy (1952), in the study “British Investments in Latin America, 1822-1949”, between 1824 and 1825 26 British mining companies were set up to operate in Latin American countries, raising an authorized capital of 24,190,000 Pounds, of which 3,508,000 had already been constituted. He also showed that by the end of 1880, British investments in the region amounted to 179 million pounds, of which 68.6% was in government bonds and 31.4% belonged to private companies. Brazil, Mexico and Argentina accounted for 47% of investments in government bonds and 60% of private investments. Of the private investments, 80% were concentrated in railroads and *Public Utilities*, with 61.05% and 19.62% respectively (TABLES 1 and 2).

Country	Total Nominal Investment	Government Bonds	Economic Enterprises
Argentina	20,338,709	11,233,700	9,105,009
Bolivia	1,654,000	1,654,000	...
Brazil	38,869,067	23,060,168	15,808,905
Chile	8,468,521	7,765,904	701,417
Colombia	3,073,373	2,100,000	975,383
Costa Rica	3,304,000	3,304,001	...
Cuba	1,231,600	...	1,231,600
Dominican Republic	714,300	714,300	...
Ecuador	1,959,380	1,724,000	135,380
Guatemala	544,200	544,200	...
Honduras	3,222,000	3,222,000	...
Mexico	32,740,916	23,540,800	9,200,116
Nicaragua	206,570	...	206,570
Paraguay	1,505,400	1,505,400	...
Peru	36,177,070	32,688,320	3,488,750
Uruguay	7,644,105	3,519,220	4,124,885
Venezuela	7,564,390	6,402,800	1,161,590
General	10,274,660	...	10,274,660
Total	179,490,261	123,078,006	56,412,255

Table 1. British Investments in Latin America - 1880 (Pounds)

Source: Rippy, J. F. British Investments in Latin America, 1822-1949.

Sector	Number of projects	Investments	%
Railroads	34	34,437,051	61,05
Public Utilities	24	11,070,395	19,62
Mining	18	3,398,305	6,02
Banks and other financial institutions	8	3,013,560	5,34
Construction	5	495,579	0,88
Shipping and Various Sectors	7	3,999,365	7,09
Total	96	56,412,255	100,00

Table 2. Nominal British Private Capital in Latin America by Sector (Pounds)

Source: Rippy, J. F. British Investments in Latin America, 1822-1949.

THE IMPORTANCE OF DEVELOPMENTS IN THE MEANS OF TRANSPORT FOR GLOBAL ECONOMIC INTEGRATION

In all these phases of expansion of foreign investment, technological advances in the means of transportation were decisive, expanding the capacity to transport cargo and passengers, increasing the speed of means of transportation and reducing freight costs and travel times. In the 15th and 16th centuries, during the Renaissance in Europe, ships evolved significantly, from barges to caravels and then to ships and galleons, which were much larger and faster. From the 19th century onwards, railroads and steamships made travel much faster and with greater transport capacity. In the second half of the 19th century, the construction of the Suez Canal (1869) in Egypt reduced travel times between ports in Europe and Asia, on the route through the Mediterranean Sea - Red Sea - Gulf of Aden - Arabian Sea and Indian Ocean. At the beginning of the 20th century, the opening of the Panama Canal (1914) shortened the travel time for ships between the Atlantic and Pacific Oceans, further boosting international trade and world economic integration.

These two large canals have long influenced the evolution of ship dimensions around the world. The Suezmax, for example, has a maximum draft of 16.1 m, limited to the depth of the canal. The Panamax ship, on the other hand, has dimensions limited by the size of the canal locks, which are 289 m long, 32.3 m wide and 12 m deep. However, the ships continued to evolve, reaching the immense Capesize that skirts the south of South America and the Cape of Good Hope in South Africa. Today, the largest bulk carrier in the world is the Chinese ship Lan Hua Hai, which is 254 meters long and 43 meters wide and can carry up to 90,000 tons. The largest container ship in the world is the South Korean HMM Alge-

ciras from Hyundai Merchant Marine, which is 400 meters long, 61 meters wide and has a draft of 16.5 meters. This ship can carry up to 24,000 containers with a maximum gross weight of 24 tons, totaling 576,000 tons. The largest oil tanker in the world is the Norwegian Knock Nevis, which is 458.4 meters long, 68.9 meters wide and has a draft of 24.5 meters (<https://www.transportabrazil.com.br>).

In the second half of the 20th century, the use of containers from the late 1950s onwards had a major new impact on foreign trade operations, triggering the start of the last great wave of globalization in the world economy. The reduction in the time and costs of loading and unloading goods at ports was significant, as well as improving the land leg of goods transportation. The use of containers on a large scale led to the reorganization of industrial production around the world in the form of GVCs, based on the fragmentation of producers of parts and pieces in several countries, with production units becoming more specialized and producing more efficiently and with lower quality and costs.

PERIODS OF MAJOR BREAKDOWNS IN ECONOMIC PRODUCTION AND THE RISE OF THE IEDS

Baldwin (2014) presents an analysis of these periods of major transformations and the respective rise of the globalization process of the world economy and the emergence of GVCs. According to Baldwin, the evolution of the pre-industrial economy into a value chain economy took place through two very distinct phases in world economic history that could be called disaggregations of economic production. The first breakdown, before the 19th century, was when means of transportation were based on sailing ships and animal traction, and exports were profitable depending on the high value-to-weight ratio, such as spices. In this

way, each region produced most of the goods it consumed, with production and consumption being concentrated geographically.

With the Industrial Revolution, starting in the mid-18th century, this changed substantially due to the large-scale use of railroads and steamships, which in turn led to a substantial reduction in travel costs and time. A first consequence of these transformations was the geographical disaggregation between production and consumption; with countries specializing and benefiting from comparative advantages, taking advantage of economies of scale and exporting part of their production to third countries.

However, during this period, the economies of scale generated by complex production processes demanded a lot in terms of coordination between the different stages of production, generating high transportation and communication costs, and thus causing intense geographical concentration of production in a few locations. However, as the cost of transportation was reduced throughout the 20th century, coordination costs also declined, due to innovations such as the use of containers in the export of goods, which helped to reduce the cost of logistics and travel time, as well as advances in telecommunications and computer systems from the 1980s onwards. In this way, the trend towards a second major geographical breakdown of production was strengthened, with the stages of production being distributed across several countries, with this form of organization of production coming to be called "Global Value Chains - GVCs".

This geographical disaggregation of production has increased the benefits of comparative advantages and economies of scale, thus helping to increase the cost-benefit ratio of projects and therefore increase the profitability of more geographically decentralized production. In this way, multinational companies began to specialize in specific stages

of the production chain, buying from global suppliers and trading intermediate inputs between their subsidiaries, thus intensifying the benefits of comparative advantages and economies of scale, and exporting products to different countries.

As a result, FDI increased considerably, with multinationals organizing their production in various countries in order to benefit from the comparative advantages and cost savings offered by each region. Other benefits observed during this phase were the intensification of the transfer of knowledge and technology from multinational companies in developed countries to developing countries.

Currently, investments abroad are classified into two types: portfolio investment, in the stock market or government bonds, for example, and FDI. FDI is defined as investment by a foreign company in a country with the aim of carrying out long-term economic activities. FDI can be carried out through mergers and acquisitions, in whole or in part, of the capital of a local company; or through investments to set up new units, *greenfield* investments.

FDIs contribute to innovation, the creation of jobs in general and higher professional qualifications in particular, as well as having a positive impact on local economies, contributing to productivity gains for local suppliers participating in the respective production chains.

Multinational companies have two main motivations for investing abroad. The first type is defined as horizontal investment, *market-seeking*, where the company's objective is to set up a unit abroad in order to get closer to consumers and clients and thus reduce transportation costs. In this case, in order to attract FDIs, countries need to focus on improving their transportation infrastructure.

The second motivation is called vertical investment, in search of greater efficiency, with the company's objective being to minimize production costs and thus start carrying out

the different activities of its respective production process in countries where it is possible to produce at the lowest possible cost, thus dispersing subsidiaries in various countries. In this case, countries need to improve the overall business environment in order to attract FDIs.

FDIs have a positive impact on the economic development of countries, as well as helping to expand global economic integration. The realization that FDIs generate various benefits for countries' economic development has led to the expansion of initiatives to strengthen the capacities needed in countries to attract more FDIs. In this regard, the work of multilateral institutions such as the World Bank (IBRD) and the Inter-American Development Bank (IDB) and the governments of various developing countries and their development support institutions, such as the National Bank for Economic and Social Development (BNDES) in Brazil, stand out.

THE OLI MODEL - OWNERSHIP, LOCATION AND INTERNALIZATION ADVANTAGES

The classic model developed by John Dunning is a useful tool for *policy makers* to understand the dynamics of FDI in the world, helping to identify the motivations of multinationals to invest abroad and the nature of the internationalization of business activities. The OLI model explains the internationalization strategy of companies based on the observation of three conditions for companies to start internationalizing their activities and become multinationals: ownership, location and internalization. According to this model, companies decide to internationalize if at least two of these three advantages are present. Foreign direct investment appears to be a viable option for companies as it makes it possible to reduce trade costs with new markets or allows access to lower production costs.

For the property advantage, the company must have something such as a unique product, differentiated from its competitors' products. A patent or trademark or a technology that can be used in another country.

In the location advantage, the company must have an advantage in producing in other countries compared to its own country of origin. When deciding to produce abroad, the company is motivated by cost savings and efficiency gains, such as lower commercial costs compared to export costs.

In the internalization advantage, the company has advantages in internalizing production processes instead of continuing to produce in the country of origin, with local suppliers.

THE TREND TOWARDS FRAGMENTATION OF PRODUCTION AND GREATER INTEGRATION OF THE WORLD ECONOMY

Today, it is becoming increasingly strategic for *policy makers* to strengthen their understanding of the trend towards the fragmentation of world production as an important feature of the dynamics and growth of the world economy observed over the last five decades, as well as the dynamics of foreign direct investment and its respective contribution to the formation of GVCs and greater world economic integration.

Historically, developed countries have concentrated most FDI flows. However, developing countries have become increasingly important in recent decades both as destinations and sources of FDIs. Particularly noteworthy is the growing participation of Latin American and Caribbean countries in GVCs and in the process of fragmenting the production of transnational companies.

Over the last 50 years, one of the main characteristics of the world economy has been

the emergence of GVCs. These are production chains in which intermediate goods and services from one country are used in production processes in other countries; with their main characteristics being the fragmentation of production, with the production of intermediate inputs being divided into an increasing number of specialized components; and, the geographical dispersion of the production of these components in various countries, often very far from the countries where the final products are produced and marketed. UNCTAD estimates that trade in intermediate goods and services incorporated into various stages of the production processes of final goods and services, produced in units with fragmented locations in various countries, within the framework of GVCs coordinated by multinational companies, account for around 60% of world trade (UNCTAD. World Investment Report 2013).

GVCs generate several benefits for the participating countries. For example, they contribute to industrial development as countries can participate in this experience by setting up a few industrial units without having to implement all the links in the production chain to produce a final product. In addition, the fragmentation and specialization of the production process has a positive impact on local productivity. In addition, GVCs help to expand production capacity, modernize industry, disseminate technologies and improve management practices and professional training.

GVCs also contribute to increasing exports of high value-added products, generating important impacts for developing countries, such as on the labor market, generating higher-skilled jobs and therefore improving job opportunities and wages. GVCs help the economic development of developing countries through the expansion of industrial production, productivity gains and employment, as well as supporting countries' productive capacities.

Even the countries furthest away from the world's major production and consumption centers can attract such capital. Remember that FDIs are influenced by the size of domestic markets, foreign trade agreements, the possibility of exporting to neighboring countries, access to raw materials, skilled labor and systemic competitiveness.

In Latin America, for example, countries like Brazil, Argentina and Mexico have great advantages for the location of multinational companies. Business location in these countries provides access to large markets with good growth opportunities for companies from various GVCs. In addition, foreign companies gain access to tax incentives, industrial centers with modern infrastructure and support from public policies in areas such as financing, workforce training and innovation.

However, developing regions such as Latin America and the Caribbean are still lacking in a number of sectors, and improvements need to be made in several areas to make them more competitive in attracting FDIs and increasing their participation in GVCs, among which are: infrastructure, free trade agreements, education and innovation, reducing the tax burden and legal certainty.

In this way, government policies could implement initiatives capable of improving multinational companies' perceptions of the expectations related to their internationalization strategies, motivated by factors such as the potential to expand sales abroad and make their operations more efficient and effective, through access to lower costs, proximity to customers in large consumer markets and access to third markets, such as neighbouring countries.

The current scenario is marked by major transformations, similar to the periods of the European Renaissance, between the 14th and 16th centuries, and the Industrial Revolution from the second half of the 18th century. A

scenario characterized by intense scientific and technological production that has a major impact on the economy. A situation that presents countries with major challenges in deciding on the most appropriate public policies to achieve a better position in the international division of labor.

This is a situation that calls for a broad effort on the part of governments to understand the nature of the phase of the cycle that we are going through, characterized by an intense process of innovation and, consequently, a process of "creative destruction", as Schumpeter conceptualized it as a basic characteristic of the evolution of the capitalist system. A process that can be characterized by the acceleration in the emergence of innovations, the replacement of old industries, sectors of activity by new industries, sectors and the accelerated evolution of the economic system; as happened more intensely during specific periods in history, such as the cultural, scientific and technological Renaissance and the Industrial Revolution

In recent decades, this phenomenon has once again been repeated with greater intensity, generating profound impacts in sectoral and spatial terms. It is no exaggeration to say that we have been living through a "new period of renaissance", cultural, scientific and technological, with a global dimension since the last decades of the 20th century. It is therefore necessary to define the strategies that are best suited to the major changes underway and capable of providing a better integration into this new world, influenced by disruptive innovations, economic integration, GVCs and FDIs.

FINAL CONSIDERATIONS

FDIs provide multiple benefits to countries, complementing domestic savings, contributing to the expansion and modernization of productive capacity, generating positive effects for improving indicators such as jobs, wages, professional qualifications and competitiveness. FDIs contribute to the emergence of new business opportunities, to the industrialization and diversification of the economy, to increasing participation in GVCs and in the flow of foreign trade (exports + imports), as well as contributing to greater global economic integration and sustainable development, thus justifying efforts to attract such capital.

Countries that decide to attract foreign investors to their territories need to support initiatives capable of improving confidence in the economy and thus promoting a safer business environment with high systemic competitiveness. The promotion of FDIs, in line with the

best practices in the world, should focus on areas such as: infrastructure, education and qualification of human resources, *compliance*, reduction of Country Risk, legal certainty, debureaucratization, reduction of the tax burden, as well as macroeconomic, industrial, innovation and foreign trade policies.

In addition, the importance of education and innovation in expanding the country's development potential should be emphasized. It is essential to promote the development of these sectors, such as promoting initiatives capable of making Brazil a superpower in education, science and technology, with the professional qualification of the country's human resources and the innovation system becoming factors of competitiveness and drivers of national development. In the Knowledge Age, excellence in competitive education and innovation systems is a basic prerequisite for achieving sustainable development.

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