# GREENFIELD INVESTMENT – GLOBAL OUTLOOK AND PATTERNS IN THE CONTEXT OF PANDEMIC CRISIS

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#### Abstract:

The foreign direct investment (FDI) is considered as an important incentive for economic growth and development of the states, especially for the developing ones. The FDI include the following components: greenfield investment (GI), mergers and acquisitions and international finance projects, each of them presenting different features and evolution patterns during the pandemic crisis.

The greenfield investment suppose the creation of a new company or the establishment of units abroad and it could be considered a form of entry on a new market where a company have a high degree of control over its activities abroad.

The global foreign direct investment were affected by the international pandemic crisis. Especially, the greenfield investments in developing countries (industry and infrastructure projects) were affected severelly.

Despite the pessimistic prospects, in 2021 there was registered a recover of the FDI at the global level (especially on the developed economies) but the greenfield investment still remained under the pre-crisis level.

Considering that the foreign investment are vital for ensuring a sustainable development in different regions of the world, the increase of foreign investment flows in order to support the recovery from the crisis became a policy priority for all states and at the global level.

In this article it is presented a global outlook along with recent evolutions and patterns registered by the greenfield investment at the global level, taking into consideration the effects of the pandemic crisis but also the particularities and risks involved by this type of investment compared with others components of the FDI.

JEL classification: F21, G15

# Key words: greenfield investment, foreign direct investment, evolutions, patterns,

#### 1. INTRODUCTION

Foreign direct investment (FDI) is considered a source for economic growth, a powerful driver for economic development, new technologies and job creation.

FDI can take different forms, such as: greenfield investment (GI), mergers and acquisitions (M&A), international project finance (UNCTAD, 2021a). Each form of FDI present different characteristics and these could generate various evolution patterns, especially during the economic crisis. Besided, FDI forms have various macroeconomic causes and the effects on the hosting economy are different, for instance, mergers and acquisitions grew much more rapidly than greenfield investment (Calderon et all, 2004).

A greenfield investment is a type of FDI in which a parent company (a multinational corporation) creates a subsidiary in a different country, starting its operations

from the ground up (Chen, 2020). This type of investment is developed on a land without an existing infrastructure, where a company builds a new production unit (CFI, 2022).

Greenfield investments are usually made in a place where is a major potential for development in certain industries, due to the risks involved, given the high costs of building facilities and putting them into operation.

For the evaluation of the decision to allocate resources, the greenfield investments are preceded by feasibility studies, have solid business plans, as well as impact analysis based on which the interested parties can take viable economic and financial decisions. An important aspect is the evaluation of the opportunity cost or alternative, which could bring at least the same long-term benefits, but with lower costs.

In fact, a greenfield investment could represent an entry on a market and it could ensure a high degree of control over its activities abroad. Compared to other foreign direct investments - aquisition of foreign securities or a majority share in a foreign company - in those situations, the parent company has low or no control over the business (CFI, 2022).

The greenfield investment presents numerous advantages but also some disatvantages. Among the advantages of a greenfield investment are: a high level of control over the foreign company and brand image; scales economies of research, development or production; job creation for the host economy.

Greenfield investment presents also some disatvantages, suh as: it represents a high risk form of investment; a high market entry cost; greater capital outlay; limits imposed by the government regulations; a more complex investment which impose a longer-term commitment (Adams, 2020). This type of commitment involves a higher risk considering the host country situation and the political stability.

Therefore, the greenfield investments generate the same high costs and risks associated with a construction of new factory, which could be associated with a startup. Other associated risks are related to the difficulties in accessing the local resources and labour, construction overruns, the high costs determined by the feasibility studies and business cost effectiveness.

All these features should be taken into consideration in the analysis of the greenfield investment and its evolutions, especially during the recent international crisis which affected the FDI sector. The risks and costs associated with the greenfield investment determined a higher vulnerability during the pandemic crisis and in same cases, different evolution patterns compared with the global trends and the other components of foreign firect investment.

# 2. GLOBAL FDI BY COMPONENTS – EVOLUTIONS UNDER THE PANDEMIC CIRCUMSTANCES

As a direct consequence of the Covid crisis, the global foreign direct investment registered a high decrease in 2020 (by 35%) (figure 1). The global crisis affected the investment projects and the recession conducted to a reassesment of the new projects by the multinational companies.

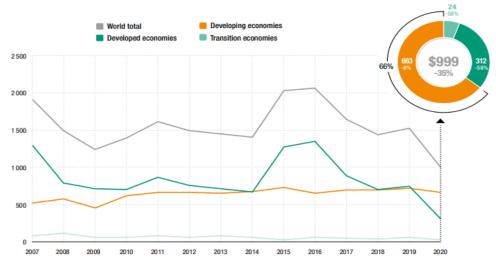


Figure 1. Foreign direct investment inflows, 2007–2020 (bil. USD)

Source: UNCTAD, World Investment Report, Investing in Sustainable Recovery, Geneva, 2021

As a consequence of international crisis, the FDI dropped dramatically in both developed and transition economies (by 58 %). But in the developing economies, the FDI flows decreased at a slower rate than in the developing countries (by 8%).

But in 2021, the global foreign direct investment registered a high recovery, an increase by 77% (to 1.65 trillion USD) which is above the level before crisis. The developed economies registered the highest growth rate, reaching 777 billion USD in 2021, three times higher than the level of foreign direct investment in 2020 (UNCTAD, 2021a).

Considering the components of the FDI, the greenfield investments were the most affected, registering a decrease of 35% in 2020 compared with the previous year (table 1).

Table 1. FDI components – 2020 vs 2019 (% change)

| Region                      | Greenfield investments | M&A  | International project finance |
|-----------------------------|------------------------|------|-------------------------------|
| World                       | -35                    | - 10 | -2                            |
| Developed economies         | -19                    | - 11 | 7                             |
| Europe                      | - 15                   | 26   | 7                             |
| North America               | -29                    | - 43 | -2                            |
| Developing economies        | -46                    | - 4  | -7                            |
| Africa                      | -63                    | - 45 | -40                           |
| Latin America and Caribbean | -61                    | - 67 | -9                            |
| Asia                        | - 38                   | 31   | 17                            |
| Transition economies        | - 60                   | 147  | -50                           |

Source: UNCTAD, Investment Trends Monitor, Issue 38, January 2021

The negative effect of pandemic crisis on the greenfield projects has been even more pronounced than on the case of mergers and aquisition transactions. This reflects the long-term commitment of a GI which requires in the initial phase difficulties generated by the preparation of the ground site (visits and meetings with local authorities).

The other components of FDI, were affected by the crisis in a lower degree: mergers and acquisitions decreased by 10% while the international project only by 2% in 2020.

The patterns of FDI registred a different trend compared with the patterns of new greenfield investment and international project deals. Besides, in the developed economies there were registered lower decrease rates than in the developing economies (table 2).

Table 2. Greenfield investment, M&A and international project finance, by type of economies, 2019–2020

| Type of economies | Type of FDI                   | Value<br>(bil.USD) | Growth rate 2020/2019 | Number | Growth<br>rate<br>2020/2019 |
|-------------------|-------------------------------|--------------------|-----------------------|--------|-----------------------------|
|                   | Cross-border M&A              | 379                | -11                   | 5225   | -10                         |
| Developed         | Greenfield projects           | 289                | -16                   | 8376   | -19                         |
| economies         | International project         | 175                | -28                   | 587    | 8                           |
|                   | finance                       |                    |                       |        |                             |
|                   | Cross-border M&A              | 84                 | 2                     | 907    | -24                         |
| Developing        | Greenfield projects           | 255                | -44                   | 4233   | -42                         |
| economies         | International project finance | 170                | -53                   | 443    | -14                         |
|                   | Cross-border M&A              | 12                 | 716                   | 69     | -40                         |
| Transition        | Greenfield projects           | 20                 | -58                   | 371    | -47                         |
| economies         | International project finance | 21                 | -18                   | 31     | -47                         |

Source: UNCTAD, World Investment Report, Investing in Sustainable Recovery, Geneva, 2021

In developing countries, the value of greenfield investment decreased by 44% and for the international project by 53%, compared with 16% and, respectively, 28% in developed countries. It shoul be considered, that the greenfield projects are very important for the development of infrastructure, capacity of production, and for ensuring a sustainable recovery.

The effects of the pandemic crisis on the global FDI flows was concentrated in the first semester of the year 2020. The decline in the investment activity – greenfield investment, M&A and international projects - conducted to a high decrease of new equity flows (UNCTAD, 2021a) (figure 2).

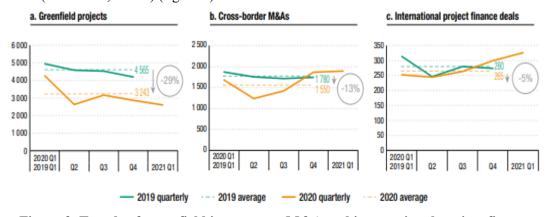


Figure 2. Trends of greenfield investment, M&A and international project finance

Source: UNCTAD, World Investment Report, Investing in Sustainable Recovery, Geneva, 2021

In the second semester of 2020, the mergers and aquisitions and international project deals recovered partly, mostly being concentrated in the developed economies. By contrary, the greenfield investment followed a negative trend in 2020 which continued in the beggining of 2021.

The pandemic crisis had a serious impact on all components of foreign direct investment in 2020, affecting all regions and industries (figure 3).

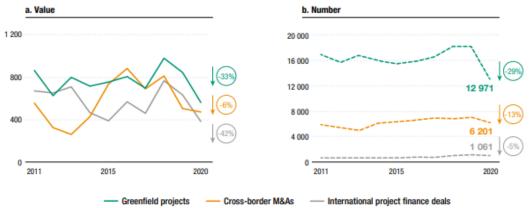


Figure 3. Greenfield investment, M&A and international project finance, 2011–2020 (billion USD and number)

Source: UNCTAD, World Investment Report, Investing in Sustainable Recovery, Geneva, 2021

The GI and international project finance were the most affected by the crisis (a decrease by 33%, repectively 42%) while the mergers and aquisitions decreased at a much lower rate (6%), taking into consideration the value.

Considering the number, the greenfield investment registered a decreased by 29%, while the decline was less severe for the M&A (13%) and the project finance deals (only 5%).

Therefore, during the crisis but also in 2021, the pattern were different from the FDI components, but also could be noticed the difference considering the volumes and the number of transactions.

### 3. GREENFIELD INVESTMENT - RECENT TRENDS AND PROSPECTS

The pandemic crisis had a negative impact on the value of greenfield investment projects, which dropped down to 564 billions USD in 2020 (table 3). The focus of foreign investors turned mostly towards the developed economies and consequently, the developing countries faced an unprecedented downturn in greenfield FDI projects (UNCTAD, 2022).

The primary sector registered a decline in 2020 compared to 2019. The value of greenfield projects in the primary represented about 2% of the total (11 billion USD in 2020). But in 2021, the primary sector registered a recovery by value and the growth rate increated up to 18% compared to the previous year.

The number of greenfield investment projects had a higher decrease than in the primary sector (-37% vs -34%), in the manufacturing sector. The growth rate by number in that sector for GI, in 2021, was about half compared with the primary sector (9%).

Table 3. Greenfield investment, by sector (2019-2021)

| Sector<br>/industry | Value<br>(Billions of dollars) |      |      |                      | Growth rate          | Number |       |       | Growth Growth rate rate |                      |
|---------------------|--------------------------------|------|------|----------------------|----------------------|--------|-------|-------|-------------------------|----------------------|
|                     | 2019                           | 2020 | 2021 | (%)<br>2020/<br>2021 | (%)<br>2021/<br>2020 | 2019   | 2020  | 2021  | (%)<br>2020/<br>2021    | (%)<br>2021/<br>2020 |
| Primary             | 21                             | 11   | 13   | -47                  | 18                   | 151    | 100   | 91    | -34                     | -9                   |
| Manufacturing       | 402                            | 237  | 260  | -41                  | 9                    | 8180   | 5139  | 4972  | -37                     | -5                   |
| Services            | 422                            | 315  | 337  | -25                  | 6                    | 9930   | 7732  | 7987  | -22                     | 2                    |
| Total               | 846                            | 564  | 610  | -33                  | 7                    | 18261  | 12971 | 13049 | -29                     | -1                   |

Source: UNCTAD, Investment Trends Monitor, Issue 38, January 2021; UNCTAD, Global Investment Trends Monitor, Issue 40, 19 January 2022

Greenfield investment in manufacturing industries registered a 41% decrease to 237 billion USD. In developing economies, the decline followed the global trend, with a 42% fall to 129 billion USD, mostly from Asia (101 billion USD in 2020).

The service sector gather about half of the greenfield projects and in this sector, the value and number of the greenfield investment were less affected in 2020 and in 2021 registered even an increase by 6% in volume and by 2% in number.

By industries, in 2020, the greenfield investment value reached the lowest rate levels in construction and automotive (-47%), transportation and storage (-39%), chemicals, electronics and electrical equipment (about -14%) while other sectors registed an increase, such as trade (2%) and especially, information and comunication (22%) and pharmaceuticals (24%) (table 4).

Table 4. Greenfield investment, by industry (2019-2021)

| Table 4. Greenfield investment, by industry (2019-2021) |         |         |         |                      |                      |       |        |      |                      |                      |
|---|---------|---------|---------|----------------------|----------------------|-------|--------|------|----------------------|----------------------|
| Sector  |         | Value   |         | Growth               | Growth               | N     | Number | •    | Growth               | Growth               |
| /industry   | (Billio | ns of d | ollars) | rate                 | rate                 |       |        |      | rate                 | rate                 |
|   | 2019    | 2020    | 2021    | (%)<br>2020/<br>2021 | (%)<br>2021/<br>2020 | 2019  | 2020   | 2021 | (%)<br>2020/<br>2021 | (%)<br>2021/<br>2020 |
| Information and communication                           | 66      | 82      | 100     | 22                   | 22                   | 3332  | 2958   | 3404 | -13                  | 15                   |
| Electronics and electrical equipment                    | 53      | 46      | 95      | -14                  | 108                  | 1 201 | 878    | 872  | -28                  | -1                   |
| Electricity and gas supply                              | 113     | 99      | 87      | -13                  | -12                  | 560   | 530    | 448  | -6                   | -15                  |
| Construction  | 66      | 35      | 47      | -47                  | 35                   | 437   | 321    | 307  | -27                  | -5                   |
| Transportation and storage                              | 43      | 27      | 32      | -39                  | 20                   | 764   | 636    | 656  | -18                  | 3                    |
| Automotive  | 62      | 33      | 32      | -47                  | -5                   | 1022  | 571    | 638  | -45                  | 12                   |
| Chemicals   | 47      | 40      | 28      | -15                  | -31                  | 752   | 452    | 406  | -41                  | -10                  |
| Trade   | 22      | 23      | 24      | 5                    | 2                    | 688   | 576    | 605  | -17                  | 5                    |
| Food, beverages and tobacco                             | 21      | 17      | 19      | -2                   | 11                   | 555   | 431    | 392  | -9                   | -9                   |
| Pharmaceuticals   | 14      | 15      | 19      | 7                    | 24                   | 449   | 360    | 338  | -6                   | -6                   |

Source: UNCTAD, Investment Trends Monitor, Issue 38, January 2021; UNCTAD, Global Investment Trends Monitor, Issue 40, 19 January 2022

In 2021, considering the number of greendfield investment, most industries recovered and the highest growth rates were reached by information and comunication (15%) as the pandemic crisis increased the demand for digitalisation and services at the global level. Also, other sectors recovered and followed positive trends in 2021 compared to 2020, such as: automotive (12% from -45%), trade (5% from -17%) and transportation and storage (3% from -18%).

The pandemic crises determined some changes in the interest of investitors and turned their interest towards modern industries, such as information and communication, electronics, pharmaceuticals, automotive.

#### 4. Conclusions

The pandemic crisis had a strong impact on the global FDI and at the end of 2020 their level dropped down with 30% compared with the level registered in 2009. The most sever decline was registered by the developed countries (by 69%) and less in the developing countries (12%) (UNCTAD, 2021a).

But after the turndown caused by the international crisis, the global FDI registered an unexpected high rebound in 2021 (77% in 2021 compared to 2020). The developed economies attracted about 500 billion USD from the total global FDI increase in 2021 while the developing economies registered more modest recovery growth (UNCTAD, 2022).

By components, the greendfield investment has not always followed the general FDI trend, compared with the other components: mergers and acquisitions and international project finance. Thus, the GI decreased with 35% in 2020, which is much more than the decrease rates for M&A (10%) and international project finance (2%).

The interest of foreign investors turned more to the developed economies in 2020. Consequently, developing countries faced a high decrease in the same year (46%).

By sectors, the most affected sector was the primary one (-52%, in value) while the manufacturing and services were less affected by value (-8% and -6%) but more affected by number (-30% and respectively, -14%). The investors interest focused on the infrastructure sectors while the investment in industry remain low.

In 2021, the situation for the greenfield investment improved comparaed with the previous year but still remain negative (-1%). The greenfield investment has not followed the global FDI trend (77%) and the positive evolutions of the the other two components: mergers and aquisitions (with a 49% growth rate) and international project finance (53%).

By sectors, the grenfield investment in the primary sector turned to a positive growth rate considering the volume (18%), higher than manufacturing (9%) and services (6%). By industries, considering the value of the GI, electronics and electrical equipment, information and communication, construction, pharmaceuticals registered the highest growth rates in 2021 compared to 2020.

Longer-term patterns of announced greenfield projects indicate a concentration in a limited number of sectors, some of which are highly sensitive to the effects of the pandemic.

Considering the fact that the FDI are an essential factor for a sustainable growth and development for the economies, the increase of foreign direct investment and its components could become an important factor to support the recovery from the pandemic crisis and a global and countries priority in the next future.

# REFERENCES

| 1.  | Adams, J.       | Greenfield investment in UK, Trading and Investment News, July 27, 2020  |
|-----|-----------------|--|
| 2.  | Calderón, C.,   | Greenfield Foreign Direct Investment and Mergers and Acquisitions:       |
|     | Loayza, N.,     | Feedback And Macroeconomic Effects, World Bank Policy Research           |
|     | Servén, L.,     | Working Paper 3192, January 2004   |
| 3.  | Chen, J.        | Green-Field Investment, Investopedia, 2020                               |
| 4.  | CMS Legal       | Greenfield investments in CEE, Fifth Edition, 2021                       |
|     | Services EBG    |  |
| 5.  | Corporate       | Greenfield Investment, 2022:   |
|     | Finance         | https://corporatefinanceinstitute.com/resources/knowledge/strategy/gree  |
|     | Institute (CFI) | nfield-investment/   |
| 6.  | European        | Investment Report 2021/2022, Recovery as a springboard for change,       |
|     | Investment      | 2022   |
|     | Bank            |  |
| 7.  | fDi             | The fDi REPORT 2021, Global greenfield investment trend, 2021            |
|     | Intelligence    |  |
| 8.  | Financial       | Investiție greenfield:   |
|     | Market          | https://www.financialmarket.ro/terms/investitie-greenfield/              |
| 9.  | OECD            | Foreign Direct Investment Statistics: Data, Analysis and Forecasts, 2021 |
| 10. | OECD            | FDI flows in the time of COVID-19, 4 May 2020                            |
| 11. | UNCTAD          | Global Investment Trends Monitor, Issue 40, 19 January 2022              |
| 12. | UNCTAD          | World Investment Report 2021, Investing in sustainable recovery,         |
|     |                 | Geneva, 2021   |
| 13. | UNCTAD          | Global Investment Trends Monitor, Issue 38, January 2021                 |