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The Economy Growth and Adaptation of the Countries' Economic Cycle: An Empirical Outlook

Stavros G. Efthimiou

Department of International and European Studies, University of Piraeus, Piraeus, Greece
Email: sta.efthimiou@gmail.com

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Abstract

From time to time, the economic development and adjustment of the countries has been significantly affected. In order to achieve a balance many countries resorted to the solution of fiscal adjustment programs. These types of programs, apart from the economic recovery of the countries, also have an influence on economic indicators of the economic cycles of the countries. Various sectors affected by economic instability are trade flows, money and capital flows. Adjustment programs bring about a balance that allows a country to recover. The purpose of undertaking this article is to present the correlation and adjustment of economic indicators of countries through Stata statistical analysis and to present the results of the research. According to the literature, various models were explored and those considered the most appropriate were selected for presentation. The countries investigated are four, having as a common feature the use of fiscal programs and the variables used alternately as independent or dependent according to the needs of the research are five. The selected models provide an opportunity for future research to enrich the model with additional interdependent variables showing variations in the findings.

Keywords

Economy, Development, Adaptation, FDI, GDP

1. Introduction

At the end of the first decade of the 2000s, approximately in 2008 and 2009, the first signs of economic distress and concern unexpectedly appeared, approaching the second highest levels since the Second World War. The first downward trends in gross domestic product appeared in the early months of 2009, approaching

levels of 4.5% in developed countries and levels of 8.4% in terms of the average growth rate in real GDP in developing countries. At the same time, according to studies by the Organization for Economic Cooperation and Development (OECD), unemployment levels showed upward trends, approaching 9%, while in industrialized and developing countries the corresponding levels approached double digits (OECD, 1996, 2009). It is worth mentioning that in the second half of 2008, the volume of trade around the world showed downward trends of more than 40%, a percentage greater than the declining levels in total production (Alfaro & Chen, 2010). The severity of this difficulty led many scientists related to the field of economics to investigate the causes of the new reality and macroeconomic patterns. The different levels of the crisis across countries were investigated by Rose and Spiegel (2009) from the perspective of trade and economic linkages. Eaton et al. (2009) and Chor and Manova (2009) investigated the causes of the unprecedented downward trends in trade, which was notable during the crisis, and made an effort to demonstrate the decisive role played by the construction of supply and demand conditions (Alfaro & Chen, 2010).

In 2008, international sales showed a downward trend of 4.6% in contrast to 2007, which had shown an upward trend of 24% (UNCTAD, 2009), while in 2008 the production growth rate of foreign subsidiaries also showed a downward trend of 4.4%. Multinational enterprises are likely to exhibit a complex way of coping with the crisis, as evidenced by the upward trends of 15% in the exports of foreign enterprises, and the strong growth rate they showed compared to other indicators amid the fragmentation of trade indicators around the world (Alfaro & Chen, 2010). Alfaro et al. (2010) highlighted the positive impact of FDI on economic growth, combined with the crucial role played by local financial markets in this process. At the same time, these findings are confirmed by different case studies of countries around the world (Dornean et al., 2012). The largest economies around the world in the context of economic globalization will face various economic challenges, with the study of the course of the economy around the world being a tool for understanding these challenges. The macroeconomic indicators used are mainly "*GDP*, *GDP per capita*, *GDP growth rate*, *inflation*, *unemployment rate*, *current account balance*, *trade balance*, *public debt as a percentage of GDP and general government borrowing*" (Roukanas, 2020: p. 71). Adjustment programs play the role of a balancing mechanism, thus enabling a country to show recovery trends. A different approach for a country, in order to improve the existing situation and its macroeconomic indicators, is FDI.

Therefore, the main reason for this paper is the correlation of adjustment programs and macroeconomic variables of the economic cycles of countries that were in a difficult economic position and were called upon to improve their position and the identification of the best option to exit the economic recession. The research is done through statistical analysis and includes the correlation of macroeconomic variables such as FDI, inflation, unemployment and GDP, for a specific period of time, 2010-2015 and in selected cases of countries, Greece-Ireland-

Cyprus-Portugal, which had received assistance through adjustment programs. The research tool is data analysis, in order to identify the relationship between GDP, inflation, unemployment and FDI. The main research question of this paper is the interactions and interdependence of macroeconomic variables of a country's economic cycle amid fiscal and structural adjustments and the conditions created by support and adjustment programs. The time periods studied, 2010-2015, are the periods during which adjustment programs were implemented in European Union (EU) countries. It is also found that the research that has taken place is fragmentary and fragmented and neither their generalization nor their individual and exclusive use is possible. The attempt to fill the aforementioned gap constitutes an additional reason for writing this specific paper and a factor of originality. By applying economic theories and tools, a non-unidimensional approach and by the empirical analysis of the findings, an attempt is made to evaluate the role and contribution of FDI in addressing the difficulties of the economic cycle and in exiting adjustment programs. Also, in this paper, through Stata analysis, an attempt is made to approach the future levels of GDP and FDI as well as the dynamics of the interaction of the macroeconomic variables under investigation. The structure of the paper includes: in section 2, the mapping of the bibliography regarding the examined macroeconomic variables and adjustment programs (SAP), in section 3, the methodology regarding the empirical study of the research, in section 4, the results resulting from the course of the research and in section 5 the final conclusions from the findings of the analysis are formulated in combination with the limitations and suggestions for future research.

2. Literature Review

In the existing literature, there are several papers that discuss and present macroeconomic indicators. In this specific section of this paper, the concepts of the macroeconomic indicators that will be used will be captured and presented, so as to facilitate the completion and understanding of the empirical research.

2.1. Inflation

According to OECD (2024): "*Inflation measured by consumer price index* (*CPI*) *is defined as the change in the prices of a basket of goods and services that are typically purchased by specific groups of households. Inflation is measured in terms of the annual growth rate and in index, base year with a breakdown for food, energy and total excluding food and energy. Inflation measures the erosion of living standards. A consumer price index is estimated as a series of summary measures of the period-to-period proportional change in the prices of a fixed set of consumer goods and services of constant quantity and characteristics, acquired, used or paid for by the reference population. Each summary measure is constructed as a weighted average of a large number of elementary aggregate indices. Each of the elementary aggregate indices is estimated using a sample of prices for a defined set of goods and services obtained in, or by residents of, a specific region from a*

given set of outlets or other sources of consumption goods and services".

Inflation is one of the most important macroeconomic indicators in an economic cycle. As stated by Pantelidis and Giannelis (2014: p. 570) "*inflation is the continuous tendency of the general price level in the economy to increase*". Inflation is a dangerous form of variable and macroeconomic indicator, given the type of its change (period, duration and level of inflation). Inflation leads to a decrease in the value of money. It also negatively affects the structure of production costs and general well-being, causing instability, unemployment, unequal distribution of income and reduced levels of competitiveness and economic growth (Pantelidis & Giannelis, 2014). Inflation is treated as a problem when it has not been correctly predicted, where in the case of correct prediction it is characterized as expected while in the opposite case as unexpected. At the same time, two different types of inflation are demand-pull inflation, where inflation is a product of increasing trends in demand, and cost-push inflation, where inflation is a product of increasing production costs. The periods of time where inflation shows rapid changes and increasing trends at large levels are characterized by the phenomenon of hyperinflation, while the phenomenon of stagflation is characterized by the simultaneous existence of unemployment and inflation (Pantelidis & Giannelis, 2014).

2.2. Unemployment

The phenomenon of unemployment has social and economic dimensions and in which a percentage of the economically active population cannot offer their work. As stated by Pantelidis and Giannelis (2014: p. 540) "*Unemployment is the situation in which part of the population is without employment, which it seeks in the current wage*". Unemployment as a macroeconomic indicator is approached in sampling ways and a reference point, in addition to the level of the unemployment rate, is also the period of time it lasts. It is noteworthy that the attempt to eliminate this indicator in an economic cycle is a difficult undertaking given that it is determined by the balancing of supply and demand. The most common types of unemployment are: 1) Cyclical Unemployment, which is related to the fluctuations in the growth rate in an economic cycle, 2) Structural Unemployment, which is related to the reduction in the level of productive activity that entails a reduction in jobs, and 3) Frictional Unemployment, which is related to the expected movement of the labor force (Pantelidis & Giannelis, 2014). The aforementioned types arise from the existence and interaction of various factors such as changes in market and consumption patterns, innovations and differentiations in product production, but also the lack of candidate workers for the desired positions (Pantelidis & Giannelis, 2014).

2.3. Relationship between Inflation and Unemployment

Unemployment and inflation indicators have a strong correlation with each other, and the existence of one factor also affects the existence of the other factor. Through the Phillips curve, the correlation between the two indicators is captured.

Phillips (1958) through his research work and study captured the rates of differentiation of unemployment rates and the level of inflation (Shroff, 2019). This particular theory was questioned by many such as Friedman while Samuelson and Solow (1960) through their research effort presented an inverse relationship between the two indicators. Although the two aforementioned economists improved the Phillips curve, it kept its name from the English economist Phillips, constituting a graphical representation of the connection between inflation and unemployment and reflecting their inverse relationship (Pantelidis & Giannelis, 2014).

2.4. Structural Adjustments Programs

The Structural Adjustment Programs—SAP are defined as programs that aim to resolve economic crises and disruptions in periods of recession. Their nature concerns measures and actions that are characterized by high austerity, constituting a condition for the granting of loans by official creditors such as the IMF. Their appearance is determined by the early 80 s (Beneria, 1999). Since the period of their appearance, adjustment programs emphasize the market, with an attempt to reduce the role of the state in the flow of the economy, constituting the main allocator of economic resources. Despite the differentiation of programs depending on the country of implementation, there are policy areas that constitute main characteristics (Beneria, 1999). SAPs aim at profound economic and social changes such as: 1) increasing productivity levels, even in the initial stages, with lower real wages, 2) eliminating inefficiency, and "rationalizing" the economy, according to the signals dictated by an expanding market, 3) achieving a higher degree of openness to foreign competition and integration into the world economy through trade and economic liberalization, 4) modifying economic and social relations and shifting the distribution of resources, rights and privileges towards social groups that benefit from the market, and 5) achieving the ultimate goal of returning to acceptable levels of economic growth and stability (Beneria, 1999).

2.5. Foreign Direct Investments

Various definitions of Foreign Direct Investment have been published in the literature. The International Monetary Fund (IMF, 1977: p. 136) defines FDI as follows: "*Investment that is made to acquire a lasting interest in an enterprise operating in an economy other than that of the investor, the investor's purpose being to have an effective voice in the management of the enterprise*". The main feature of FDI is the impression of either a decisive and complete or a substantial control over the operation and management of a foreign entity. FDI contributes to the creation of a relationship between the country of origin and the host country through contagion effects (Antonietti et al., 2020). Developed countries carry out FDI in order to renew sustainable development, maintain competition in markets and improve the level of exports (Antonietti et al., 2020; Matei, 2004), but also because they see FDI as a financial means for the return of capital flows and the

improvement of the lending balance (Barauskaite, 2012). On the other hand, developing countries need new capital flows that have a positive influence on the economy, increasing the prospects for employment, progress and innovation (Hysa & Mansi, 2021; Hysa et al., 2022). Also, according to the definitions of the IMF and the OECD: "*foreign direct investment reflects the objective of acquiring a 'lasting interest' by a domestic entity of one economy* (*direct investor*) *in a company resident in another economy* (*direct investment enterprise*)" (OECD, 2008). The "lasting interest" implies the existence of a long-term relationship between the direct investor and the company as a direct investment and a significant degree of influence on the management of the latter (OECD, 2008). Through FDI, a relationship of dependence is determined between the new and the parent enterprise, which is two-way and reflects the relationship of dependence between the two entities. Economic approaches find that FDI has direct effects on both the host and the origin country (Hayes, 2024). FDI as a form of investment has advantages such as exchange rate stability and improved capital flow, while there are also disadvantages such as hindering domestic investment (Calimanu, 2021). Important factor in FDI the strengthening of the tax complexity difference between the source country and the destination country plays a role, and is associated with the increase of FDI outflows (Esteller-Moré et al., 2021). The position that FDI enhances jobs in the host country and has the opposite impact in the country of origin is short-term in nature, without a certain long-term determination (Stepanok, 2023). High levels of inflation have a primarily negative impact on investments where, combined with the depreciation of the local currency, the value of assets related to the local currency as opposed to the foreign currency is at risk (Takefman, 2022).

2.6. GDP

Various definitions have been formulated for Gross Domestic Product. One from them states: "*GDP is the standard measure of the value of final goods and services produced by a country during a period*" (OECD, 2009: p. 16). Although Gross Domestic Product is the most important indicator for measuring and recording economic activities, it is not a strong measure of social well-being and is in fact a limited measure of living standards. Countries calculate GDP in their local currency, which necessitates conversion to a common currency. This necessary conversion to a common currency is carried out on the basis of the current exchange rate, without excluding extraneous comparisons of the volumes of final goods and services in GDP (OECD, 2009: p. 16). A better approach is to use purchasing power parity (PPP) rates. These rates are "currency converters that control for differences in the price levels of products between countries and so allow an international comparison of the volumes of GDP and of the size of economies" (OECD, 2009: p. 16). Although all OECD countries now follow the 1993 System of National Accounts, in some countries, for example in specific sectors such as software production or own-account financial intermediation in services (indirect measures), differences remain,

which can affect GDP comparisons (OECD, 2009). Changes in the size of economies are usually measured by changes in the volume (often referred to as real volume) of GDP. The use of the term "real" reflects the fact that changes in GDP brought about by inflation are not taken into account. This provides a measure of changes in the volume of output of an economy (OECD, 2009). The conversion of the nominal GDP values to real ones presupposes a set of detailed price indicators, indirectly or directly collected. When applied to the face value of trades, corresponding volume changes can be recorded. The detailed volume changes for goods and services are then added together to yield an overall change in GDP volume. In the past, most countries used fixed weights for this concentration and the base year changed every five to ten years (OECD, 2009).

2.7. GDPPC

Gross Domestic Product per capita (GDPPC) is a core indicator of economic performance and commonly used as a broad measure of average living standards or economic well-being; despite some recognized shortcomings (OECD, 2012).

For example, average GDP per capita gives no indication of how GDP is distributed among citizens. Average GDP per capita may rise for example but more people may be worse off if income inequalities also increase (OECD, 2012).

Equally, in some countries there may be a significant number of non-resident border or seasonal workers or indeed inflows and outflows of property income and both phenomena imply that the value of production differs from the income of residents, thereby over or under stating their living standards (OECD, 2012).

3. Research Methodology

In order to determine the economic adjustment and the interaction of macroeconomic indicators in a different economic cycle fixed effects models were examined. Fixed effects models are applied with the aim of eliminating estimator bias by considering changes within different time periods (years). This article captures the relationship between FDI on one hand and GDP, unemployment, GDPPC and inflation on the other.

Table 1 shows the results of the quantitative analysis for the years from 2010 to 2015, for the countries of Greece, Cyprus, Portugal, and Ireland, which have been affected by the financial crisis and in which fiscal consolidation programs have been implemented. In this study, several combinations of models were investigated and the most prevalent were selected as the most suitable for price interpretation and prediction.

The analysis was based on the following:

$$Y = \beta_0 + \beta_1 \cdot v + u$$

Two models that were considered most appropriate in relation to the entire course of the research were chosen.

In Model 1, FDI has been considered as a dependent variable and as an

independent have been considered GDP, GDPPC, inflation and unemployment, in addition, to ensure the robustness of the estimates. Estimating the sample to be examined in panel format for Ireland, Greece, Cyprus, and Portugal, and for the years 2010 to 2015, the following model is obtained:

$$\text{FDI}_{it} = -133 + 1.222\text{GDP}_{it} + 128\text{GDPPC}_{it} - 3.662\text{INF}_{it} + 501\text{UNEM}_{it}$$

$$\text{for} \quad i = 1, 2, 3, 4 \quad \text{and} \quad t = 2010, 2011, \cdots, 2015$$

where, FDI_{it} is foreign direct investment, GDP_{it} is gross domestic product, GDPPC_{it} is gross domestic product per capita, INF_{it} is inflation, and UNEM_{it} is unemployment in country *i* at time *t*.

In Model 2, GDP has been considered as a dependent variable and as an independent have been considered FDI, GDPPC, inflation and unemployment. The fixed effects Model 2 has the form:

$$\text{GDP}_{it} = 85 + 0.0001\text{FDI}_{it} + 0.213\text{GDPPC}_{it} + 1.175\text{INF}_{it} - 0.329\text{UNEM}_{it}$$

$$\text{for} \quad i = 1, 2, 3, 4 \quad \text{and} \quad t = 2010, 2011, \cdots, 2015$$

where, FDI_{it} is foreign direct investment, GDP_{it} is gross domestic product, GDPPC_{it} is gross domestic product per capita, INF_{it} is inflation, and UNEM_{it} is unemployment in country *i* at time *t*.

In Model 3, GDP has been considered as a dependent variable and as an independent have been considered FDI, GDPPC, inflation and unemployment. The fixed effects Model 3 has the form:

$$\text{GDPPC}_{it} = -86 + 0.0001\text{FDI}_{it} + 1.973\text{GDP}_{it} - 3.472\text{INF}_{it} - 0.176\text{UNEM}_{it}$$

$$\text{for} \quad i = 1, 2, 3, 4 \quad \text{and} \quad t = 2010, 2011, \cdots, 2015$$

where, FDI_{it} is foreign direct investment, GDP_{it} is gross domestic product, GDPPC_{it} is gross domestic product per capita, INF_{it} is inflation, and UNEM_{it} is unemployment in country *i* at time *t*. Table 1 shows in detail the results of the estimations of Models 1, 2 and 3:

Table 1. Fixed effects model estimates.

	Model 1	Model 2	Model 3
Independent Variables	FDI	GDP	GDPPC
FDI	-	0.0001*	0.0001
	-	(0.000)	(0.000)
GDP	1.222*	-	1.973***
	(662.2)	-	(0.532)
GDPPC	127.9	0.213***	-
	(234.3)	(0.0574)	-
INF	−3.662*	1.175*	−3.472*
	(2.123)	(0.677)	(2.070)

Continued

UNEM	500.9	−0.329**	−0.176
	(469.7)	(0.135)	(0.468)
Fixed term	−133.079**	84.86***	−86.16
	(60.144)	(9.169)	(62.48)
Number of observations	24	24	24
Number of countries	4	4	4
R^2	0.5388	0.8519	0.7814

Note: ***$p < 0.01$, **$p < 0.05$, *$p < 0.1$. The standard errors of the estimates are shown in parentheses. Source: Author's calculations.

4. Results and Discussion

At table 1 we can read the fixed effects model estimates. For the Model 1, where FDI is the dependent variable under examination, it is found that the model exhibits multicollinearity and the estimates of the coefficients of the independent variables are statistically significant with the exception of unemployment, which appears marginally non-significant. More specifically, the GDP of each country shows significantly and positively affect FDI at a 1% significance level. A one-unit change in a country's GDP is estimated to increase FDI by 1.222 units, when other explanatory variables remain constant, while in a similar case GDPPC by 127.9. It is worth noting It should be noted that the model's adjustment coefficient marginally exceeds 53%, which is considered satisfactory.

For the Model 2, where GDP is the dependent variable under consideration and FDI is included in the set of independent explanatory variables, then the model shows a better fit with the corresponding adjusted coefficient approaching 85.2%. The statistical significance of the estimators of model (2) can be considered satisfactory with FDI explaining a country's development at a significance level of 1%. More specifically, when FDI changes by 1000 units, then the country's GDP is expected to increase by an average of 0.1 percentage points while the influence of inflation reaches levels of 1.175 units and unemployment 0.329 units respectively with a negative momentum.

For the Model 3, where GDPPC is the dependent variable under consideration and FDI and GDP are included in the set of independent explanatory variables, then the model shows a fairly good fit with the corresponding adjusted coefficient approaching 78.2%. The statistical significance of the estimators of model (3) can be considered satisfactory with FDI explaining a country's development at a significance level of 1%. More specifically, when FDI changes by 1000 units, then the country's GDPPC is expected to increase by an average of 0.1 percentage points and when GDP changes by 1 unit it is estimated that it will increase GDPPC by 1.973 units while the influence of inflation reaches levels of 3.472 units and unemployment 0.176 units respectively with negative momentum.

The differentiation of the results of the three models can also be explained by the existence and influence of other factors, mainly exogenous, which have not been reflected in the economic model. As has been reflected, FDI is a broad form of investment and internationalization with several ways that can be carried out and with various incentives to carry it out. Another differentiation regarding the countries examined is the fact that these countries did receive financial assistance through adjustment programs, but neither the time period was the same nor the conditions for the distribution of economic resources. Also, the countries examined had several socio-economic differences, while the size of all four countries was not very large nor were they among the strongest economies with their macroeconomic indicators lagging behind other economically stronger countries. Due to the unfavorable phase of the economic cycle of the countries, unemployment was at high levels, with these countries having as their main priority economic recovery and return to previous levels. The measures of the fiscal adjustment programs maintained the recession without creating the conditions for investment absorption, resulting in the negative trends in macroeconomic indicators being maintained. Foreign direct investment inflows increase the invested capital, productivity, production, employment and the income in the host country. The foreign direct investments which are export oriented can also promote them exports and economic growth. This point of view is the comparative advantage of this form of investment (UNCTAD, 2024). Investments are the best way for a country to remain competitive and to maintain its economy stable and its public finances with positive indicators.

In the periods before the financial crisis, economic indicators showed upward trends, with the results of the financial crisis being inevitable and the new conditions not being visible.

Through the study of the course and the results of the four countries investigated in the context of this thesis, we found that the results are not the same for all countries that are under the regime of adjustment programs. International fiscal adjustment programs do not always have the same purpose and methods. This is also explained by the fact of the parties involved, in each case.

In the case of Ireland and Cyprus, it was found that after the use of the adjustment programs, these countries managed to improve the conditions in their internal environment, resulting in them becoming an attractive destination for investments, which also led to the improvement of their position. At the same time, in the case of Portugal, it was found that although the country was not among the most attractive destinations in terms of investment absorption, after the implementation of the programs it managed to change the conditions so that investment inflows increased, resulting in the improvement of the economic situation of the country. In the case of Greece, the financial crisis first started in Greece before it started in the rest of the European Union, bringing about a series of many malfunctions. The recession was getting deeper and deeper, our country's competitiveness was beginning to decline at a very rapid rate, while investor mistrust

and insecurity were beginning to increase. Nevertheless, Greece was not able to take advantage of the favorable financing conditions to reduce the ratio of debt to GDP and make it sustainable. Deficits by the end of the decade were quite large, and corrective efforts were absent (Efthimiou, 2024).

5. Conclusion

Regarding the findings that emerged from the analysis using the Stata model and the data obtained from the official EU website, it is found that FDI and its trends in the countries in which fiscal adjustment programs were implemented are significantly affected by the levels of unemployment, GDP and inflation. The data from the official website were selected so that there is great security in drawing conclusions, which showed that FDI as dependent variables are significantly affected by the macroeconomic independent indicators of the model, while GDP and GDPPC as dependent variables have a fairly good adjustment and correlation, as reflected by the value of the corresponding adjusted coefficient, which remains high. In practice, this indicates that when an independent coefficient changes, it also causes a change in the dependent variable, highlighting the significant correlation that exists between them. The selection of macroeconomic indicators of the model was chosen based on the literature review and the importance of macroeconomic indicators in relation to the economic cycle of a country as well as their countercyclical and economic impact. The analyses result in an upward trend in all 3 models, which although showing significant adjustment, may be affected by qualitative indicators that are not included in the models and may cause variation. Contributing to this direction, the independent variables of the model with FDI as a dependent variable significantly affect investment trends and should be carefully monitored by economic decision-makers. The combinations of the specific models were selected in conjunction with the literature in order to highlight the intended findings. The independent variables of the models are determinants and explanatory factors of FDI, GDP and GDPPC so that they can predict their course with a small degree of deviation. In the context of this analysis, it was found that FDI and GDPPC are likely to initially show downward trends as a result of the deterioration of the independent variables caused by the fiscal adjustment programs, but this can be reversed in the process, showing upward trends. There is room for interpretation of the findings since these are countries in crisis in parallel with the use of adjustment programs. This means that one of the factors of the model, unemployment, could be particularly affected because governments, through external financing, could create new jobs and invest in infrastructure development in order to improve the conditions for receiving and absorbing FDI, making the countries more attractive in terms of investment and economics. The paper examines the phenomenon if FDI is a lever for growth and restarting the economy, as well as if GDP and GDPPC contribute to exiting the recession period of an economic cycle with as few negative impacts as possible and in a shorter period of time. Through the course of the study, it was found that FDI—especially

for multinational companies—is a good alternative in order to achieve a greater level of efficiency and competitiveness. In this regard, it is worth noting that the investment of a multinational company in a country that is under the regime of fiscal adjustment programs, offers a comparative advantage regarding the economic parameters of these programs. The limitations of this specific study are: the countries studied (Greece, Cyprus, Portugal, and Ireland), the period under consideration (2010-2015), which is the crisis period during which the countries under consideration were under fiscal adjustment programs, and the variables under consideration (FDI, GDP, GDPPC, Inflation and Unemployment). In conclusion, and based on what was analyzed and studied in this paper, and in view of the ultimate purpose of its preparation, it is worth mentioning that future scholars would find it very useful to investigate the ways in which each country that was strengthened by the international fiscal adjustment programs coped with the new situation and whether, in the long run, the results were positive or not. Another area for research could be the attractiveness of these countries to investors after the completion of their commitments, as the new situation can often involve risks, both for investments and for attracting investment funds from overseas credit institutions. Finally, through the analysis presented regarding the FDI related to the adjustment programs, a future researcher could explore the extensive correlation that may exist with other factors and which it is the news flat of GDP and GDPPC which prove the economic situation of countries because of fluctuations of levels of young financial data and trends, and also the impact of multicollinearity on the reliability of the estimates with further exploration and mitigation strategies.

Conflicts of Interest

The author declares no conflicts of interest regarding the publication of this paper.

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