

Inward and outward FDI and the shadow economy during the Greek Economic Crisis

John Marangos*

Department of Balkan, Slavic and Oriental Studies,
University of Macedonia,
Thessaloniki, Greece
Email: marangosjohn@gmail.com
*Corresponding author

Eirini Triarchi

Department of Accounting and Finance,
University of Ioannina, Greece
and
Department of Balkan, Slavic and Oriental Studies,
University of Macedonia,
Thessaloniki, Greece
Email: etriarhi@uoi.gr

Themis Anhrakidis

Department of Balkan, Slavic and Oriental Studies,
University of Macedonia,
Thessaloniki, Greece
Email: t.anhrakidis@uom.edu.gr

Alexandra Dimitriadou

Department of Economic and Regional Development,
Panteion University, Greece
Email: dimalexandra@gmail.com

Angeliki Nestoroudi

Politics and Economics of Contemporary
Eastern and South-Eastern Europe,
Department of Balkan, Slavic and Oriental Studies,
University of Macedonia,
Thessaloniki, Greece
Email: nestorangela55@yahoo.gr

Abstract: The purpose of the paper is to discover the bearing of inward and outward FDI and the shadow economy on the Greek Economic Crisis (GREC) in reviving the shattered economy. Students and researchers of the global economic crisis will benefit from this novel approach in exploring the GREC from the inward and outward FDI and the shadow economy perspective. The paper establishes that inward and outward FDI and FDI stock as a percentage of GDP, after a substantial period of ups-and-downs, was on the road to recovery as the economy was coming out from the crisis. The shadow economy in Greece exhibits a paradoxical evolution, as it substantially declined due to the sharp reduction in incomes that reduced the demand for activities in the shadow economy. Economic policymakers need to exploit the recovery of inward and outward FDI and this once in a lifetime opportunity of the substantial reduction of the shadow economy.

Keywords: inward FDI; outward FDI; shadow economy; Greece; Greek crisis; European crisis; global financial crisis.

Reference to this paper should be made as follows: Marangos, J., Triarchi, E., Anhtrakidis, T., Dimitriadou, A. and Nestoroudi, A. (2022) 'Inward and outward FDI and the shadow economy during the Greek Economic Crisis', *Int. J. Economics and Business Research*, Vol. 23, No. 2, pp.210–228.

Biographical notes: John Marangos is a Professor of Comparative Economic Systems at the Department of Balkan, Slavic and Oriental Studies of the University of Macedonia. The focal points of his research include the transition processes, international development, and innovative methodologies for teaching economics. His publications or in the process of publication include 12 books (two of them translated into the Greek language), 19 book chapters, 74 refereed journal articles, and nine refereed papers in conference proceedings. He is among the top 5% authors in the world according to the criteria <http://ideas.repec.org/f/pma340.html>.

Eirini Triarchi is a Lecturer of Economics and Business Studies at the Department of Accounting and Finance at the University of Ioannina. The focal points of her research include the political determinants of inward FDI in Western Balkans transition economies, international development, economics and business. Her publications or in the process of publication include three book chapters, ten refereed journal articles, five refereed papers in conference proceedings and seven works in conference.

Themis Anhtrakidis is a PhD student at the University of Macedonia, Thessaloniki. He received a Master's degree in Economics from the University of Amsterdam, the Netherlands, a Bachelor's degree in Economics from the University of Macedonia in Thessaloniki, Greece and a Bachelor's degree in Laws from the Democritus University of Thrace, Greece. Currently, he works as a Special Adviser in the sector of Economics and Administration for the Mayor of the Municipality of Pilea-Hortiatis in Panorama, Thessaloniki, Greece. His research interest is in political economy, comparative political economy, economic and financial crises and institutional economics.

Alexandra Dimitriadou graduated from Panteion University of Athens in 2010 with Bachelor's degree in Political Science and History Department and earned an MSc in Economic and Regional Development of the same university in 2013 in Economic and Regional Development Department. She is a Junior Analyst in International Business Affairs in MYTILINEOS S.A. She has also volunteered during her studies for ESPON through Panteion University.

Angeliki Nestoroudi studied Economics at the University of Macedonia. She has acquired a Master's degree in Politics and Economics of Contemporary Eastern and South-Eastern Europe and a Master's degree in Strategic Managerial Accounting and Financial Management in University of Macedonia. She is a tax collector in the Ministry of Finance. Her research interest is mainly focused on issues related to the economic crisis in Greece and economic development. In the process of publication are one refereed paper in conference proceedings and one refereed journal article.

1 Introduction

The Greek economy was characterised by political and fiscal instability matched with high corruption and financial scandals, illicit and questionable governmental policies, and powerful trade unions, leading to the Greek Economic Crisis (GREC) in 2010, the aftermath of the global financial crisis of 2008. The GREC is characterised and reflects the financial, political, cultural, and social crisis in Greece with a start year of 2010. A point worth mentioning, amid the economic crisis, Greece belongs to the Eurozone, bound by all the flexibility and rigidity associated with such membership. The tectonic damage produced a large number of writings on the reasons, remedies, antidotes, consequences, and outcomes of the GREC. Nevertheless, the literature of the GREC often sidelines on the impact of inward and outward foreign direct investment (FDI) and the shadow economy. Inward and outward FDI and the shadow economy in Greece played a substantial role during the crisis in either stimulating or obstructing recovery. Accordingly, the purpose of the paper is to discover the bearing of inward and outward FDI and the shadow economy on the GREC in reviving the shattered economy. Students and researchers of the Greek and global financial crisis, in general, will benefit from this novel approach in exploring the GREC from the inward and outward FDI and the shadow economy perspective. The paper is structured in the following manner: Section 2 provides a literature review regarding inward and outward FDI and the shadow economy; Section 3 investigates inward FDI during the GREC, while Section 4 examines outward FDI during the GREC; Section 5, analyses the shadow economy during the GREC and Section 6, concludes.

2 The various types and dynamics of inward, outward FDI and the shadow economy

FDI is the major form of capital flows between countries and it is usually perceived as a long-term strategic investment, less volatile than portfolio investment, and it reflects the fundamental location decision of multinational enterprises (MNEs). FDI flows are distinguished between inward and outward. The OECD (2020a) defines:

- 1 inward FDI flows as those representing transactions that increase the investment that foreign investors have in enterprises resident in the reporting economy less transactions that decrease the investment of foreign investors in resident enterprises

- 2 outward FDI flows as those representing transactions that increase the investment that investors in the reporting economy have in enterprises in a foreign economy, less any transactions that decrease the investment that investors in the reporting economy have in enterprises in a foreign economy.

Both inward and outward FDI bring a host of tangible and intangible benefits that can support the rise of a country's productive capabilities and contribute to economic development.

Inward FDI can be an effective method for financing current account deficits based on its non-debt-creating mechanism, especially for those economies that have suffered too long from large current account deficits. Inward FDI has an immediate impact on the market of goods and it is the preferred method to increase capital formation. The positive impact of inward FDI flows in the host economy is attributed to the transfer of appropriate knowledge, organisational, management and technology transfer (know-how) to domestic firms and local labour force alike, as well, the realisation of production spillovers, enhancement of intra-industry competition, and increasing access for exports abroad, notably in the source country (Botrić, 2010; Dabour, 2000; Demekas et al., 2005; Malovic et al., n.d.). Inward FDI provides the export distribution networks along with the information required to enter foreign markets and can create a niche for domestic firms to export [Kurtishi-Kastrati, (2013), p.30]. Overall, inward FDI boosts competitiveness matched with the stimulus of total factor productivity of the host country's output and increases domestic income (Ali and Bohara, 2017; Malovic et al., n.d.).

However, there are potential anomalies with FDI. FDI may have negative productivity spillovers through the transfer of know-how on domestic firms and private domestic investment. Sometimes, foreign firms entering the host economy push less efficient domestically owned firms out of the market. While this action may raise productivity, it influences negatively, at least short-term, the domestic investment and productive capacity (Farla et al., 2016). The crowding out is more likely to happen when competitive foreign firms are technologically advanced or when domestic firms have limited absorptive capacity (Jude, 2019). A challenging issue is whether foreign firms provide their R&D activities in the host market or hold them back in other countries. In the latter case, inward FDI reduces employment positions for highly qualified labour, resulting in brain drain (Melnik et al., 2014). Also, if a recipient country suffers from weak institutions, foreign investors choose to repatriate their profits (Faheem and Siddiqui, 2020). When foreign capital flows out from the host economy, they do not complement domestic capital supply, thus limiting the financing of local investment projects. Hence, MNEs acquiring a dominant position in a host country may produce inefficiencies with a negative effect on growth and investment. Meanwhile, for many economies, especially during 1995–2002, but also earlier and later, FDI represented a type of speculative bubble that eventually burst and did not promote long-term build-up of durable assets. In the meantime, sudden withdrawal or sudden stop of inward FDI may impede host economy's growth when domestic credit market frictions are severe (Gall et al., 2014). Indeed, during the 1997 Asian currency crisis, and the 2008 financial crisis the unexpected decline in FDI presented as an obstacle to the recovery process in many emerging economies (Chen et al., 2017).

Developing countries, emerging economies, and economies in transition liberalised their investments' regulatory framework to attract FDI flows, in an attempt to gain from their positive contribution to economic growth. The prospect of domestic income growth

and in turn of taxation revenue growth also motivates governments to implement FDI-friendly policies. Bénassy-Quéré et al. (2005, p.598) empirically determined that relative high corporate taxation acts as a disincentive for FDI inflows. Governments should balance the taxation policy in such a way that maximises inflows of FDI, but also increases tax revenue. Nevertheless, MNEs can be motivated not only by friendly tax policies but also by regimes in which tax evasion prevails. MNEs play an important role in international trade and capital flows, thus, it is important to know the extent to which the possibility of tax evasion can influence their behaviour in the global economy. Meanwhile, MNEs succeed in paying lower taxes on their global profits [Damgaard et al., (2018), p.3]. MNEs tend to direct investment towards ‘tax havens’, countries that offer very attractive tax benefits. Ali and Bohara (2017) argue that in the case that MNEs target to benefit from tax evasion the size of the shadow economy is not a disadvantage to investing in a foreign economy. Since tax evasion can attract more FDI into the country, it will create more jobs and increase linkages with the domestic business. Tax havens that provide low or zero tax rates to MNEs tend to recoup the ‘lost’ tax revenue from other factors of production. By recouping tax revenue from labour, in defence labour moves into the shadow economy. Thereby, there appears to exist a bidirectional relationship between FDI-MNEs-Tax Havens and shadow economic activities.

Outward FDIs are resources directed to enterprises in other countries to satisfy any target market needs and are considered to be the driving force behind cross-border collaborations in the globalised market (OECD, 2020a). Outward FDI attracts the interest of the policy planners of the target countries, as a supplementary means of development, while investors further business development. Herzer (2010) empirically argued the positive impact of outward FDI on economic growth. Outward FDI enables firms to enter new markets for importing intermediate goods from foreign affiliates at lower costs and gaining access to foreign technology (Herzer, 2010). In this context, it increases the competitiveness of the investing companies and associated spillovers to local firms, contributing to the economic growth of the home country (Amin et al., 2020; Lee, 2010). However, outward FDI by relocating production to overseas destinations may crowd out other economic activity in the home country, such as production, exports, and employment, reducing individuals’ income and tax revenues [Knoerich, (2017), p.451]. Preventive factors of outward FDI are macroeconomic uncertainties, the unstable political, financial situation of a country, and the complex legal frame (Yao and Zhou, 2018). Attractive factors of outward FDI are the reassurance of achieving possible financial goals, the benefit from local knowledge, and effective policies for a further decrease in functional expenses. In this context, OECD member states, including Greece, focus on outward FDI to realise sustainable investments, meanwhile contributing to the financial, social, and environmental development of the target countries.

The institutional framework can also shape the outward investment activity of a firm of the home country. Poor institutional factors in the source economy such as high tax rates, corruption, insufficient protection of intellectual property rights, and governmental interference, can push an indigenous firm to escape to a location with effective institutions [Wang et al., (2012), p.428]. However, institutional disadvantages at the home market may turn into competitive advantages for firms outward FDI activities (Wang et al., 2012). To this line, firms may increase their competitiveness from their oligopolistic or monopolistic advantages obtained in their home market. For example, government support in the form of privileged access to resources, low-cost capital, subsidies, and other benefits help domestic firms acquisition of competitive advantages

supporting across border expansion (Buckley et al., 2007; Stoian, 2013). Notably, the domestic capital market imperfections provide capital at below-market rates, soft loans by the inefficient banking system, intra-company subsidies, and privileged access to other significant financial resources (Buckley et al., 2007). MNEs seek advantages through FDI outflows for their assets to generate financial returns in intangible capability and tangible capacity. These returns contribute to the home country's development needs by providing additional finance, enforcing industrial growth and technological advances, enhancing production capacities, and stabilising the development process (Knoerich, 2017). Advanced economies benefit more in financial and intangible capability returns than the emerging countries, due to high costs at-home market and their need to offshore lower-end productive activities.

Outward FDI is considered a product of economic development, and as such, it did not receive as much attention as the inward FDI. Recently, the research interest has intensified regarding the role of outward FDI in advancing the economic development of the source countries. FDI outflows indicate the competitiveness of domestic enterprises in entering foreign markets based on their advanced technology and specialised knowledge and have on return positive production and employment effects, though, in a country's balance of payments the outward FDI is a capital loss. The advent of MNEs from emerging countries during the last two decades changed the global FDI landscape and challenged the mainstream theories that developed countries are the main source of FDI flows, while developing are only the hosts [Stoian, (2013), p.616]. Based on Dunning's theory of investment development path (IDP) the inward and outward FDI positions of a country are related to the level of economic development (measured by its GDP per capita) [Dunning and Narula, (2003), p.1]. In this context, outward FDI will be undertaken only when a country had acquired a certain minimum level of GDP and the indigenous firms have ownership advantages such as higher capital availability, high productivity, specialised know-how, and R&D (Stoian, 2013). However, successful MNEs have originated from countries, such as Brazil, China, India, Mexico, Russia, South Africa, and Turkey, despite any issues regarding their internal economic development. This may suggest that the increasing amount of FDI outflows from emerging and transition economies is not only influenced by the level of source country economic development but also by the firm's ownership advantages. Also, the business environment and the institutional context of the home country in which firms operate play an important role in outward FDI [Stoian, (2013), p.622].

The size of the shadow economy varies among developed countries and developing countries. In developed countries, the size of the shadow economy is lower compared to developing countries in which sometimes their economy is fully underground [Berdiev and Saunoris, (2018), p.223]. Many names are found to be used as synonymous with the shadow economy, such as hidden economy, grey economy, black economy or lack economy, cash economy or informal economy, parallel and underground (Baklouti and Boujelbene, 2018; Medina and Schneider, 2018). Medina and Schneider (2018) in their survey define the shadow economy as all the economic activities that take place under the eyes of competent authorities for monetary, regulatory, and institutional reasons in avoiding paying taxes and social security contributions. This reason is so strong that often the shadow economy and tax evasion are considered as identical. However, the terms are different but closely related, since shadow economic activities often imply the evasion of direct or indirect taxes, so that the factors affecting tax evasion will also affect the shadow economy. Furthermore, regulatory reasoning has the goal to avoid governmental

bureaucratic procedures or the burden of the regulatory framework, while institutional reasoning refers to the weak rule of law, the quality of political institutions, and the laws regarding corruption. The cost-benefit differential between the formal and shadow economy determines the shadow economy's attractiveness; formal firms confront higher labour costs, while informal firms benefit from avoiding high labour costs though they face higher capital costs and lower productivity [Berdiev and Saunoris, (2018), p.223]. Hence, the shadow economy appears as a barrier to sustainable development. This is due to the inefficiencies that shadow economy generates in both the labour market and the market of products and services; the negative impact on public opinion; fewer tax revenues; social dumping; unfair competition between companies and countries; and inefficiencies in the well-functioning of integrated markets, such as the EU Single Market within EU, as cross-border trade flows can be distorted.

Schneider and Enste (2000) provided empirical evidence for the growth of the shadow economy in transition and developing OECD countries during the 1990s. The authors cited as important factors of the growth of the shadow economy the rise of the tax burden and social security contributions combined with rising regulatory activities and labour market restrictions [Schneider and Enste, (2000), p.107]. Hassan and Schneider (2016) estimated the shadow economy for 157 countries including developing, Eastern European, Central Asian, and high-income OECD countries for the period 1999–2013 concluded that the average size of the shadow economy as a percentage of GDP is significant, over 30%. They identified as driving forces of the shadow economy, the tax burden combined with labour regulations, and institutional quality. Baklouti and Boujelbene (2018) found a positive relationship between the size of the shadow economy and the tax burden for the developed countries. For the developing countries, the contraction of the tax burden and improvements in the quality of governance and public institutions should reduce the size of the shadow economy (Baklouti and Boujelbene, 2018). Institutional weakness influences both the size of the shadow economy, as well as, the level of FDI, as most empirical studies conclude that host countries with low-quality institutions and high corruption are not appealing to foreign investors (Li et al., 2017).

The current empirical literature defines the FDI – shadow economy nexus and examines the extent to which a shadow economy influences FDI through two main factors, the tax burden and institutional quality (Van Cuong et al., 2020). Ali and Bohara (2017) provided evidence for the positive relationship between the shadow economy and inward FDI confirming that the investment decision-making process of MNEs is influenced by opportunities in tax evasion. Since tax burden is associated with low profitability it motivates MNEs to enter markets with a large shadow economy for grabbing the higher chance of tax evasion. The empirical results indicate that a one-unit increase in the shadow economy rate of the recipient economy relative to the source economy increases inward FDI by 0.06% (Ali and Bohara, 2017). Nikopour et al. (2009) provide strong empirical evidence for the hypothesis that a higher shadow economy causes higher FDI inflows but were unable to establish empirically the hypothesis that higher FDI inflows cause a lower shadow economy. The latter unsubstantiated hypothesis was based on the positive impact of inward FDI on increasing the domestic firm's productivity, providing in this way an additional channel of increased tax revenues. Supposedly, inward FDI as a stimulant of economic activity can cause reform in the host country's tax system, which will influence the behaviour of the economic agents to comply with the fiscal regulations resulting in the downsizing of the shadow economy. Unfortunately, Nikopour et al. (2009) state regarding this empirical testing that higher

FDI causes a lower shadow economy is not robust. Davidescu and Strat's (2015) empirical study for the relationship between the Romanian shadow economy and FDI inflows find a unidirectional short-run causality relation that runs only from FDI to the shadow economy. Huynh et al. (2020) widen the FDI – shadow economy nexus by identifying the role of the institutional quality in the shadow economy. The research on the causal inter-relationship among FDI inflows, institutional quality, and shadow economy specifies the channels by which FDI can affect the shadow economy and vice versa (Huynh et al., 2020). The negative bidirectional causality between inward FDI and shadow economy and the negative impact of FDI – institutional quality interaction on the shadow economy, reveal that FDI can limit the shadow economy through the channel of better institutions; the lower shadow economy will improve institutional quality which in turn will increase FDI inflows (Huynh et al., 2020).

In times of crisis, FDI holds a stabilising role in the local economy leading to a milder recession. Moon et al. (2011, p.128) empirically supported that countries engaged in increased inward and outward FDI activities before the crisis would experience a milder recession and a more gradual recovery in the immediate aftermath. Contrariwise, an economic crisis influences negatively inward FDI and as such, the global FDI flows began to decline in the latter half of 2009, after the outburst of the global financial crisis [UNCTAD, (2010), p.2]. In terms of FDI stocks, emerging and developing economies were less influenced by the crisis and recorded increases in inward and outward FDI stock, while developed economies experienced serious losses (Bitzenis and Vlachos, (2016), p.118]. The impact of the global financial crisis on FDI flows introduces also the notion of fire-sale FDI, the simultaneous outflow due to higher risk caused by the crisis and inflow due to the following decreasing value of assets, most of the financially distressed firms (Bitzenis and Vlachos, 2016). In a time of crisis, the shadow economy can be the reason but also the cause for a greater recession. The shadow economy becomes part of a vicious circle since it reduces tax revenue that increases the fiscal deficit, which in turn is compensated by higher tax rates that push more businesses and employees into informal economic activities. This vicious circle holds GDP and employment at lower levels. We turn now to the examination of inward, outward, and the shadow economy during the GREC.

3 Inward FDI during the GREC 2008–2018

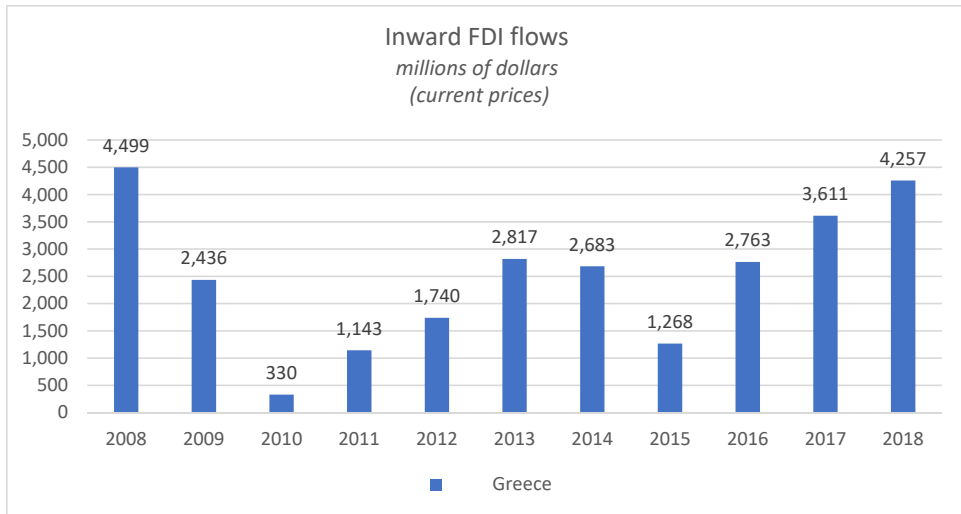
Amid the GREC, inward FDI recorded a great decline between 2009 and 2015 with a small increase between 2013 and 2014 (see Figure 1). Contrariwise since 2016 inward FDI flows are gradually regaining ground. The inflows of FDI are close to the corresponding level of 2008, the starting year of the global financial crisis (Figure 1), coinciding with an increase of inward FDI stocks as a percentage of GDP (Table 1).

According to UNCTAD (2019a) data, in 2018, Greece received the largest amount of inward FDI since 2009, reaching 4.257 million dollars (Figure 1). Inward FDI flows in 2018 recorded a rise for a third continuous year and increased by 17.9% compared to 2017 (Figure 1). FDI inflows have recorded a rather modest performance compared to regional averages following EU and OECD patterns with a small-time lag.

FDI inflows fell rapidly in the first half of the GREC period 2008–2014 due to financial instability and unpredictable institutional framework. Tax surcharges policy on investments was one of the most important reasons eliminating interest from international

investors along with the inefficient bureaucracy and the shadow economy which was augmented due to ineffective and unstable law, weak institutional framework, and corruption consistent with the aforementioned literature review. The national economic strategy was based on three major axes: Promotion of the country's strong advantages; attraction of FDI/MNEs; and a change of old-fashioned governmental policies implementing radical reforms. The supervision of the European Institutions and the IMF ensured the implementation of the much needed fiscal and social policy reforms.

Figure 1 Inward FDI flows to Greece over the period 2008–2018 (see online version for colours)



Source: Adapted from UNCTAD (2019a) data centre, FDI: Inward flows, annual

In late 2015, after the imposition of capital controls matched with radical free-market reforms, FDI inflows experienced an increase. FDI stocks in the percentage of GDP are presented in Table 1 for EU-28 and Figure 2 compares to the corresponding rates inward FDI flows, as a percentage of GDP for the OECD, European Union, and world.

Table 1 Inward FDI stocks in % of GDP per economy in EU-28

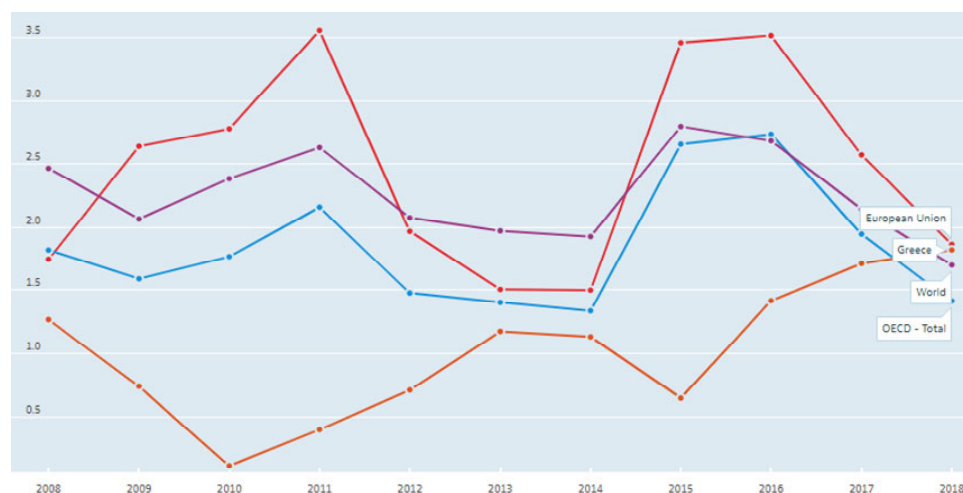
Country	2013	2014	2015	2016	2017
Belgium	102.2	114.5	123.0	115.6	111.1
Bulgaria	87.5	87.6	88.4	84.7	82.0
Czechia	61.7	64.2	61.0	63.1	65.1
Denmark	29.0	38.7	38.4	44.9	43.8
Germany	24.8	24.1	23.6	23.2	24.2
Estonia	84.6	86.1	84.3	86.4	84.4
Ireland	167.1	181.3	311.5	291.9	253.1
Greece	10.4	9.9	12.5	13.4	15.3
Spain	45.0	46.6	45.7	47.0	45.3

Source: Adapted from Eurostat (2020)

Table 1 Inward FDI stocks in % of GDP per economy in EU-28 (continued)

Country	2013	2014	2015	2016	2017
France	26.1	26.8	28.7	30.0	31.8
Croatia	50.5	55.1	53.4	56.1	57.4
Italy	16.5	17.9	18.9	19.5	20.3
Cyprus	851.0	841.3	1,041.6	1,058.0	989.8
Latvia	50.7	52.6	55.7	53.9	54.0
Lithuania	36.4	34.9	36.1	35.8	35.1
Luxembourg	4,638.7	5,353.3	6,554.0	6,783.3	6,004.5
Hungary	176.9	174.0	161.0	198.4	165.9
Malta	1,750.9	1,686.2	1,594.5	1,585.2	1,523.6
Netherlands	483.0	512.6	542.6	553.5	566.3
Austria	65.7	67.6	65.2	53.6	55.5
Poland	42.6	42.6	39.8	42.2	42.9
Portugal	53.3	57.2	60.3	59.3	61.5
Romania	41.8	40.0	40.2	41.0	40.4
Slovenia	24.6	27.1	29.9	32.1	31.8
Slovakia	56.7	53.8	53.4	55.6	54.9
Finland	31.7	36.9	35.8	35.4	32.8
Sweden	65.2	61.0	63.8	61.6	62.3
UK	52.6	58.0	53.9	58.3	57.5

Source: Adapted from Eurostat (2020)

Figure 2 Inward FDI flows, % of GDP, 2008–2018 OECD, World, EU, Greece (see online version for colours)

Source: Adapted from OECD (2019), OECD Data for Foreign direct investment: financial flows, main aggregates

The GREC along with the fiscal policy program that Greece followed during 2008–2012 had a tremendous impact on the country's economy and social welfare (OECD, 2013). The decline of consumption, investments, and FDI, as a result of the continuous recession, harmed economic prosperity and living standards, especially in the regions of the Ionian Islands and Central Macedonia (OECD, 2013). This economic condition became aggravated after the third economic adjustment program which was signed by the Greek government in August 2015, to prevent a collapse of the banking system. The key objective of the third economic adjustment program was to secure a return to sustainable economic growth in Greece, but it coincided with the imposition of capital controls and an increasing negative fiscal condition. Capital controls indeed managed to safeguard the stability of the banking system, but at the same time alienated the investors who foresaw uncertainty (Vogiatzoglou, 2018). As a result, a negative outburst with massive cash withdrawals (few days before the imposition of capital controls) took place with a pause of all inflows and outflows, while at the same time many enterprises recorded large losses due to lack of cash liquidity. These results were, eventually, completely the opposite than those expected by the adjustment program.

Trade unions in Greece objected to FDI-privatisation of sectors that were traditionally monopolies and owned by the state. The polemic against FDI-privatisation by the trade union officials can be rationalised by the widespread public accusation that trade union response to the GREC was insufficient and/or irrelevant to the occasion. In a 2013 opinion poll, an impressive 95.2% of the respondents considered that the unions did 'very few things or nothing' to stop the austerity; this is the main reason people lost faith in the trade union movement (Vogiatzoglou, 2018). The following section examines outward FDI during the GREC.

4 Outward FDI during the GREC 2008–2018

Examining recent data concerning outward FDI, from Table 2, it is observed that in 2008 investments made abroad from Greek companies were 0.68% of GDP. However, the 2009 economic crisis influenced Greek investors and as a result from 2009 until 2013, there was a gradual decrease in invested capital in the form of outward FDI. Thus, outbound investments dropped from 0.62% in 2009 to 0.52% in 2010. There was a slight increase in 2011, back to the 2009 level of 0.62% of GDP, followed by a drop to 0.28% of GDP in 2012 and in 2013 no new outward FDI took place, instead, there was a return of invested funds back home of 0.33% of GDP from the Greek investments abroad. These fluctuations of outward FDI, indicate an uncertain business environment and high business risk, which existed in Greece from 2009 and onwards, due to the Greek and global economic recession (Bitzenis and Vlachos, 2011).

Interestingly, in 2014, an increase in outward investment was observed, which was estimated at 1.27% of GDP, indicating recovery and re-investment in foreign markets by Greek companies. However, this investing trend did not last for long as in the following year a decline to 0.80% of GDP was registered and in 2016 there was a return of funds at the home of 0.85% of GDP. From 2017 to 2018, a gradual recovery was again observed of 0.29% of GDP and 0.39% of GDP in 2017 and 2018, respectively.

Table 2 Outward FDI allocation in Greece from 2008 until 2018, as a percentage of GDP

2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
0.68	0.62	0.52	0.62	0.28	-0,33	1.27	0.80	-0.85	0.29	0.39

Source: Adapted from OECD (2019)

According to OECD (2020b), “Foreign direct investment (FDI) stocks measure the total level of direct investment at a given point in time, while the outward FDI stock is the value of the resident investors’ equity in and net loans to enterprises in foreign economies”. Concerning the total Outward FDI stock in Greece from 2008 until 2018 from Table 3, we can observe that the economic crisis influenced FDI stocks. There is a gradual increase in outward FDI stocks from 10.50% of GDP in 2008 to 18.30% of GDP in 2012, a fact that indicates that even during the GREC, the outward FDI stocks were continuing strong. However, from 2013, starting with outward FDI stocks of 15.13% of GDP, onwards, a gradual decline was taking place up to 2016, with 9.22% of GDP outward FDI stocks, while in 2017 there is a small increase to 9.90% of GDP and in 2018 it dropped to 8.97% of GDP.

Table 3 Greece outward FDI stocks, as a percentage of GDP, 2008–2018

2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
10.50	11.96	14.24	16.69	18.30	15.13	13.68	13.88	9.22	9.90	8.97

Source: Adapted from OECD (2019)

UNCTAD (2019b) reports that the Greek FDI outflows as a percentage of gross fixed capital formation, in 2016 was -7.1% , while in 2017 and 2018 increased to 2.2% and 2.8% , respectively.

Despite the adverse economic conditions, Greek enterprises expanded their operations in 2010, by investing in South-Eastern European countries in the form of outward FDI gaining a significant market share in these countries. The incentives for this investment activity were low labour costs, geographical and cultural proximity, and the absence of other significant investments in the host countries (Bitzenis and Vlachos, 2013). At the same time, the favourable institutional conditions, the bilateral agreements, the acquisition of assets, and the profitability of the parent company are some of the reasons that have played a role in encouraging outward FDI. It should be noticed that the Greek outward FDI was potentially affected by increased competitive pressures, reduced demand, increased production costs, and in some cases by unfavourable legislation fostering the internationalisation of their business activities in neighbouring countries.

According to the Bank of Greece (2019) statistics, although there is a decrease of outward FDI by 1246 million euros in the period from 2008 to 2018 and especially to Europe, which is the main destination of 614 million euros, there is an increase in the construction sector from 110 to 255 million euros. Respectively, investments increase during this period, to Asian countries by 84 million euros, reduced to America (from 611 million to -78 million euros) and Africa (from 30 million to -10 million euros). These investments are mainly made in the Central Eastern European Countries and Cyprus, in the areas of financial services, construction, telecommunications, manufacturing, trade, metal, and basic metal products, as well as in the food and chemical industries [Giakoulas, (2015), pp.233–237]. Such typical examples of investments abroad are Coca-Cola HBC, FAGE, GEK TERNA, Chipita, Fourlis, and Sarantis groups

(Markopoulos, 2018). The following section examines the shadow economy during the GREC

5 The shadow economy during the GREC 2008–2018

The shadow economy is a considerable part of the economic system and hence it has an impact on every aspect of the economy. So, the shadow economy, as an established economic, social, and cultural phenomenon, can influence FDI flows. More, the impact of a shadow economy on FDI can be better understood through tax burden and institutional quality. On one hand, the tax burden affects profitability and hence it encourages companies to invest in countries with a large shadow economy to take advantage of the embedded tax evasion and avoidance opportunities. This implies that there is a positive correlation between the shadow economy and FDI inflows. However, FDI is attracted by a large array of factors, and hence the importance of the shadow economy can be negligible. On the other hand, conflicting findings are also documented in the way that institutional quality affects FDI because low-quality institutions and corruption discourage FDI by reducing companies' trust, but at the same time, they attract investors that want to take advantage of these inefficiencies to promote their business interests. Overall, early literature does not offer a solid view of the relationship between the shadow economy and FDI. However, even more, recent empirical studies (Ali and Bohara, 2017; Huynh et al., 2020; Nikopour et al., 2009) offer mixed findings and different perspectives on the way that the shadow economy interacts with FDI [Van Cuong et al., (2020), pp.1–2]. Thus, it should be underlined that the relationship between FDI and shadow economy is rather ambiguous and needs a further theoretical and empirical examination for better conceiving the channels through which FDI affects the shadow economy and vice versa (Huynh et al., 2020).

The presence of the shadow economy is considered to be a common feature of all countries; nevertheless, there are significant differences in the level of the shadow economy. Meanwhile, the impact of the shadow economy on socioeconomic development depends on the size of these unreported and undetected economic activities [Schneider, (2008), pp.518–523]. In this context, concerning Greece, research shows that the size of the shadow economy, independently of the method of estimation, represents a considerable percentage of the official GDP. In particular, the bulk of these studies, and especially those that refer to the period after 2000, estimate the size of the Greek shadow economy between 26%–28% of GDP (Bitzenis et al., 2016).

The shadow economy emerged as a considerable economic policy challenge, in Greece since the beginning of the 1970s. Currently, the importance of the shadow economy is substantial, owing to the Greek economy's sovereign debt problems. In this context, the unreported economic activity, which takes place outside the official economy, has a significant impact on government revenues and the size of the debt, through multiple channels, such as tax evasion and social security contributions.

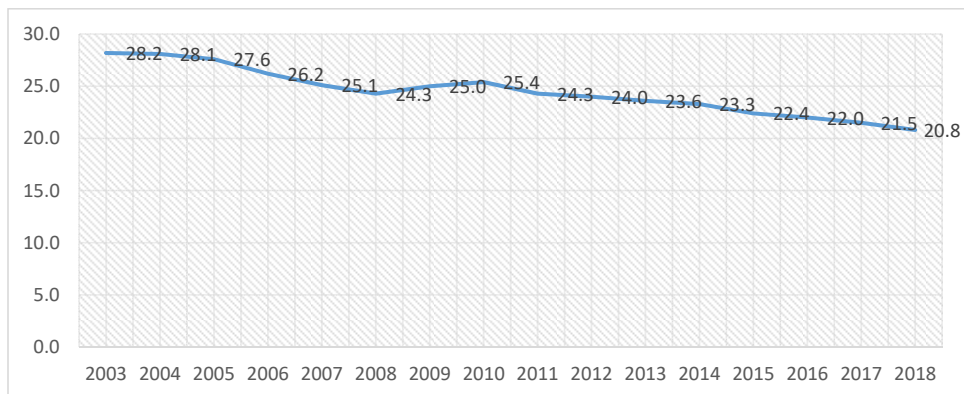
The size of the shadow economy and the debt-to-GDP ratio are positively related. The debt-to-GDP ratio is estimated based on official GDP and hence the large shadow economy emerges as a statistically significant factor for debt accumulation. Consequently, it has been argued that the shadow economy should be absorbed by the GDP to facilitate fiscal adjustment and become part of the official Greek economy. In this context, the contraction of the shadow economy can potentially increase government

revenues and contribute to the solution of the country's debt crisis (Bitzenis et al., 2016). Indeed, given the magnitude of the shadow economy in Greece, if a part was transferred to the official economy, the added government revenue would facilitate fiscal consolidation and foster the Greek economy to size the debt-deflation spiral (Bitzenis and Vlachos, 2015).

According to the recent study by Schneider and Boockmann (2018) which estimates the shadow economy among 20 developed OECD countries, in 2018 Greece was ranked first among OECD economies given that the size of its shadow economy. Greece's shadow economy was estimated at 20.8% of GDP, followed by Italy (19.5%) and Spain (16.6%). Figure 3, depicts the evolution of the size of the shadow economy in Greece over the period 2003–2018, based on the same study. Drawing on this data, during the GREC, the size of the shadow economy has been considerably decreased. Indeed, in 2008 the size of the shadow economy in Greece was 24.3% of GDP, whereas ten years later, in 2018 has been decreased to 20.8% of GDP.

The shadow economy in Greece declined during the crisis period (2008–2018) by approximately 15% (from 24.3% to 20.8%) as documented in Figure 3 and this finding is consistent with Schneider's (2012, pp.1–2) interpretation of the reduction of the shadow economy in Greece. The scholar argued that when the economy recovers people decrease their shadow economy activities, whereas recession provides incentives to people to earn 'black' money. The author highlights that the Greek case is an exception to this rule. Indeed, the Greek case represents an absurdity. More, in the Greek economy, the downturn was so severe that the demand for shadow economy activities has been reduced owing to the income losses. Thus, this exceptional case of the Greek shadow economy is attributed to the deep recession of the official economy, which was so severe that it even reduced the demand for the shadow economy activities owing to the unprecedented income losses. However, the size of the shadow economy remains at a very high level, hence, it represents a major challenge for policymakers in Greece. The absorption of the shadow economy in the official economy can provide fiscal consolidation in a period of ongoing tight fiscal conditions of 10.1% of GDP into a primary surplus of 3.9% of GDP [Stournaras, (2019), p.130].

Figure 3 The size of the Greek shadow economy 2003–2018 (% GDP) (see online version for colours)



Source: Adapted from Schneider and Boockmann (2018)

Indeed, the GREC represents a near-decade of economic meltdown. Greece is the worst victim of the global and eurozone crisis. During the period 2009–2016, GDP was reduced by 26.7%, while private and public consumption was reduced by 29.1% and 26.6% respectively and unemployment reached unprecedented levels increasing by 144.8% [Sakellariopoulos, (2019), p.90]. Bitzenis et al. (2016) exploring the shadow economy in Greece during the crisis empirically prove that the tax burden, the level of unemployment, the level of self-employment, and GDP growth are positively related to the shadow economy, while the tax morale, business freedom and the rule of law have a negative relationship with the size of the shadow economy. The size of the Greek shadow economy which accounts for over 20% of GDP during the crisis (see Figure 3) works as a disincentive to foreign investors and enhances the country's systematic inability to attract significant amounts of FDI for facilitating economic growth (Vlachos et al., 2019). The Greek economy affected by the sovereign debt crisis implemented macroeconomic policy reforms adopting austerity measures to achieve fiscal consolidation. Since fiscal austerity harmed public investment spending, the role of inward FDI was to substitute for this loss (Bitzenis and Vlachos, 2016). The last economic adjustment program completed in the third quarter of 2018 allows Greece to position itself as an attractive economy to FDI (Vlachos et al., 2019).

Overall, according to data from the OECD and UNCTAD, inward and outward FDI had a reverse process during the GREC. Where inward FDI was increasing, outward FDI was recording losses, and where inward FDI was noting a steady growth course, outward FDI was constantly falling (Table 1, Table 3). On the other hand, the shadow economy followed a steady downward trend, according to Schneider and Boockmann (2018) (Figure 3). This phenomenon can be explained by the circumstances under which inward FDI grow when MNEs find breeding ground during recession and instability, so they can benefit from low-cost labour due to unemployment and 'bargain' absorptions due to bankruptcy. Contrarywise, inward FDI can thrive when the economy is on growth rates, and investors want to expand and increase their capitals by reducing their cost and tax enforcements. Finally, the shadow economy records an upward trend when the growth rate of the economy is negative but not so excessive as it happened with Greece (Figure 3). This is an observation that attests to the mutative financial scene of this decade in Greece. For example, the decision made by the government in 2015 – imposing capital controls – resulted in a noticeable increase in outward FDI, for at least a year, while at the same time brought losses in inward FDI. This phenomenon derives from the severity of the GREC. Cash liquidity and official economy had been declined in such low levels – scoring peak with the capital controls imposition – where even earning 'black' money was a really hard job.

6 Conclusions

In conclusion, what seems to be the case is that all three constructs under investigation, inward and outward FDI and the shadow economy, have been affected during the GREC 2008–2018. It was determined that inward FDI and FDI stock as a percentage of GDP after a substantial period of ups-and-downs was on the road to recovery as the economy was coming out from the recession. The same pattern is realised regarding outward FDI and outward FDI stock as a percentage of GDP. Considering aforesaid, both inward and outward FDI can strengthen the recovery of the Greek economy.

Taxation and institutional quality are the two main factors that influence FDI and the shadow economy. These same factors are also the drawbacks of the Greek economy in stimulating FDI inflows and outflows. One of the legacies of fiscal austerity programs in Greece is the high corporate taxation that reduces the attractiveness of the country as an FDI destination compared to the rest of EU countries. Thus, a convergence of tax rates to the EU level is required to raise the competitiveness of the Greek market. The disadvantage of the high tax rate is so intense that vanishes any advantages produced by the deregulation of the labour market for attracting FDI. Central and local governmental authorities should also establish a stable tax system for an extended period which will reduce the uncertainties produced by the frequent changes in the tax regime, and as such will improve the business environment. Policy officials should target also advances in government effectiveness and regulations that promote private sector development. The quality of public administration is low with high bureaucratic procedures and corruption increases the cost of doing business. The low institutional quality at home inhibits outward FDI growth and encourages Greek enterprises abroad to reduce the proportion of their earnings that are repatriating back home. Finally, institutions must promote financial stability by resolving the funding problems that the capital controls and the non-performing loans produced during the GREC.

The shadow economy in Greece exhibits a paradoxical evolution under the conditions of a severe downturn and a prolonged economic crisis; instead of increasing as a result of the intensified incentives of individuals to engage in the informal economy, it substantially declined due to the sharp decline in incomes that reduced the demand for activities in the shadow economy. It is a very sorry fact that with recovery the shadow economy will increase again to its previous pre-crisis levels if economic policy is not triggered to exploit this once in a lifetime opportunity of this substantial reduction in the shadow economy.

Acknowledgements

We would like to thank two anonymous referees for their valuable comments.

References

- Ali, M. and Bohara, A.K. (2017) 'How does FDI respond to the size of shadow economy: an empirical analysis under a gravity model setting', *International Economic Journal*, Vol. 31, No. 2, pp.159–178.
- Amin, A., Anwar, S. and Liu, X.H. (2020) 'Outward foreign direct investment and economic growth in Romania: evidence from non-linear ARDL approach', *International Journal of Finance and Economics*, March, pp.1–13.
- Baklouti, N. and Boujelbene, Y. (2018) 'A simultaneous equation model of economic growth and shadow economy: Is there a difference between the developed and developing countries?', *Economic Change and Restructuring*, pp.1–20, Springer, US.
- Bank of Greece (2019) *Statistics: External Sector – Direct Investment – Flows*, Bank of Greece [online] <https://www.bankofgreece.gr/en/statistics/external-sector/direct-investment/direct-investment---flows> (accessed 9 May 2020).
- Bénassy-Quéré, A., Fontagné, L. and Lahrèche-Révil, A. (2005) 'How does FDI react to corporate taxation?', *International Tax and Public Finance*, Vol. 12, No. 5, pp.583–603.

- Berdiev, A.N. and Saunoris, J.W. (2018) 'Does globalisation affect the shadow economy?', *World Economy*, Vol. 41, No. 1, pp.222–241.
- Bitzenis, A. and Vlachos, V.A. (2011) *Outward FDI from Greece and its Policy Context*, *Columbia FDI Profiles*, Vale Columbia Center on Sustainable International Investment, DOI: <https://doi.org/https://doi.org/10.7916/D8WH2Z3Z>.
- Bitzenis, A. and Vlachos, V.A. (2013) 'Greece's outward FDI: a window for growth? Greece's horizons: reflecting on the country's assets and capabilities', in Sklias, P. and Tzifakis, N. (Eds.): *Greece's Horizons*, Springer, Berlin, Heidelberg, https://doi.org/doi.org/10.1007/978-3-642-34534-0_20.
- Bitzenis, A. and Vlachos, V.A. (2015) 'The fight against the shadow economy as an exit from the greek sovereign debt crisis', *Europe in Crisis*, September 2018, pp.275–285.
- Bitzenis, A. and Vlachos, V.A. (2016) 'Foreign direct investment in the light of the recent crisis', *Global Business and Economic Review*, Vol. 18, No. 2, pp.115–123.
- Bitzenis, A., Vlachos, V. and Schneider, F. (2016) 'An exploration of the Greek shadow economy: can its transfer into the official economy provide economic relief amid the crisis?', *Journal of Economic Issues*, Vol. 50, No. 1, pp.165–196.
- Botrić, V. (2010) 'Foreign direct investment in the Western Balkans: privatization, institutional change, and banking sector dominance', *Economic Annals*, Vol. 55, No. 187, pp.7–30.
- Buckley, P.J., Clegg, L.J., Cross, A.R., Liu, X., Voss, H. and Zheng, P. (2007) 'The determinants of Chinese outward foreign direct investment', *Journal of International Business Studies*, Vol. 38, No. 4, pp.499–518.
- Chen, G.S., Yao, Y. and Malizard, J. (2017) 'Does foreign direct investment crowd in or crowd out private domestic investment in China? The effect of entry mode', *Economic Modelling*, Vol. 61, pp.409–419, Elsevier.
- Dabour, N.M. (2000) 'The role of foreign direct investment (FDI) in development and growth in OIC member countries', *Journal of Economic Cooperation*, Vol. 21, No. 3, pp.27–55.
- Damgaard, J., Elkjaer, T. and Johannesen, N. (2018) 'Piercing the veil', *New Scientist*, Vol. 55 [online] <https://www.imf.org/external/pubs/ft/fandd/2018/06/inside-the-world-of-global-tax-havens-and-offshore-banking/damgaard.htm>.
- Davidescu, A.A. and Strat, V.A. (2015) 'Shadow economy and foreign direct investments: an empirical analysis for the case of Romania', *Ecoforum*, Vol. 4, No. 2, pp.110–118.
- Demekas, D.G., Horváth, B., Ribakova, E. and Wu, Y. (2005) *Foreign Direct Investment in Southeastern Europe: How (And How Much) Can Policies Help?*, IMF Working Papers, Vol. 5, No. 110, p.1.
- Dunning, J.H. and Narula, R. (2003) 'The investment development path revisited: some emerging issues', in Dunning, J.H. and Narula, R. (Eds.): *Foreign Direct Investment and Governments: Catalysts for Economic Restructuring*, pp.1–40, Routledge.
- Eurostat (2020) *Inward FDI stocks in % of GDP* [online] <https://ec.europa.eu/eurostat/databrowser/view/tec00105/default/table?lang=en> (accessed 2 August 2020).
- Faheem, G.B. and Siddiqui, D.A. (2020) 'Does FDI caused profit repatriation: exploring the moderating role of governance institutions', *Business and Economic Research*, Vol. 10, No. 2, pp.134–151.
- Farla, K., de Crombrugge, D. and Verspagen, B. (2016) 'Institutions, foreign direct investment, and domestic investment: crowding out or crowding in?', *World Development*, Vol. 88, pp.1–9, Elsevier Ltd.
- Gall, T., Schiffbauer, M. and Kubny, J. (2014) 'Dynamic effects of foreign direct investment when credit markets are imperfect', *Macroeconomic Dynamics*, Vol. 18, No. 8, pp.1797–1831.
- Giakoulas, D. (2015) *Greek Outward Foreign Direct Investment*, Doctoral Dissertation, National and Kapodistrian University of Athens, Athens [online] <http://hdl.handle.net/10442/hedi/35522>.

- Hassan, M. and Schneider, F. (2016) 'Size and the development of the shadow economies of 157 worldwide countries: updated and new measures from 1999 to 2013', *Journal of Global Economics*, Vol. 4, No. 3, pp.1–14.
- Herzer, D. (2010) 'Outward FDI and economic growth', *Journal of Economic Studies*, Vol. 37, No. 5, pp.476–494.
- Huynh, C.M., Nguyen, V.H.T., Nguyen, H.B. and Nguyen, P.C. (2020) 'One-way effect or multiple-way causality: foreign direct investment, institutional quality and shadow economy?', *International Economics and Economic Policy*, Vol. 17, No. 1, pp.219–239.
- Jude, C. (2019) 'Does FDI crowd out domestic investment in transition countries?', *Economics of Transition and Institutional Change*, Vol. 27, No. 1, pp.163–200.
- Knoerich, J. (2017) 'How does outward foreign direct investment contribute to economic development in less advanced home countries?', *Oxford Development Studies*, Vol. 45, pp.443–459, Routledge.
- Kurtishi-Kastrati, S. (2013) 'The effects of foreign direct investments for host country's economy', *European Journal of Interdisciplinary Studies*, Vol. 5, No. 1, pp.26–38.
- Lee, C.G. (2010) 'Outward foreign direct investment and economic growth: evidence from Japan', *Global Economic Review*, Vol. 39, No. 3, pp.317–326.
- Li, C., Murshed, S.M. and Tanna, S. (2017) 'The impact of civil war on foreign direct investment flows to developing countries', *Journal of International Trade and Economic Development*, Vol. 26, No. 4, pp.488–507, Taylor & Francis.
- Malovic, M., Özer, M. and Zdravkovic, A. (n.d.) 'Misunderstanding of FDI in the Western Balkans: cart before the horse and wheels without suspension', *Journal of Balkan and Near Eastern Studies*, Routledge, <https://doi.org/10.1080/19448953.2018.1506285>.
- Markopoulos, D. (2018) 'Greek enterprises invest, but abroad', *Newmoney.Org*.
- Medina, L. and Schneider, F. (2018) *Shadow Economies around the World: What Did We Learn Over the Last 20 Years?*, IMF Working Papers, Vol. 18, No. 17, pp.1–77.
- Melnyk, L., Kubatko, O. and Pysarenko, S. (2014) 'The impact of foreign direct investment on economic growth: case of post communism transition economies', *Problems and Perspectives in Management*, Vol. 12, No. 1, pp.17–24.
- Moon, H.C., Cheng, J.L.c., Kim, M.Y. and Kim, J.U. (2011) 'FDI, economic decline and recovery: lessons from the Asian financial crisis', *Multinational Business Review*, Vol. 19, No. 2, pp.120–132.
- Nikopour, H., Habibullah, S., Schneider, F. and Law, S.H. (2009) *Foreign Direct Investment and Shadow Economy: A Causality Analysis Using Panel Data*, No. 14485, Munich Personal RePEc Archive, <https://doi.org/10.5897/JAERD12.088>.
- OECD (2013) *The Economic Crisis and Recovery in OECD Regions and Cities. Regions and Cities: Where Policies and People Meet*, Third Ministerial Meeting of the Territorial Development Policy Committee, Marseille, France.
- OECD (2019) *OECD International Direct Investment Statistics*, OECD Data, OECD Publishing, Paris, available at: <https://data.oecd.org/fdi/fdi-flows.htm> (accessed 10 October 2019).
- OECD (2020a) 'FDI flows (indicator)', *OECD Data*, DOI: <https://doi.org/doi:10.1787/99f6e393-en>.
- OECD (2020b) 'FDI stocks (indicator)', *OECD Data* [online] <https://doi.org/https://doi.org/10.1787/80eca1f9-en>.
- Sakellariopoulos, S. (2019) *Greece's (Un)Competitive Capitalism and the Economic Crisis. How the Memoranda Changed Society, Politics and the Economy*, 1st ed., Palgrave Macmillan, Cham, London, UK, DOI: <https://doi.org/doi.org/10.1007/978-3-030-14319-0>.
- Schneider, F. (2008) 'Shadow economy', *Readings in Public Choice and Constitutional Political Economy*, pp.511–532.

- Schneider, F. (2012) 'Size and development of the shadow economy of 31 European and 5 other OECD countries from 2003 to 2012: some new facts', *ShadEcEurope*, 31 March, Vol. 3, No. 4.
- Schneider, F. and Boockmann, B. (2018) *Die Größe Der Schattenwirtschaft – Methodik Und Berechnungen Für Das Jahr 2015*, Johannes Kepler Universität / Tübingen: Institut für Angewandte Wirtschaftsforschung, Linz.
- Schneider, F. and Enste, D. (2000) 'Shadow economies around the world: size, causes, and consequences', *Journal of Economic Literature*, Vol. 38, No. 1, pp.77–114.
- Stoian, C. (2013) 'Extending Dunning's investment development path: the role of home country institutional determinants in explaining outward foreign direct investment', *International Business Review*, Vol. 22, No. 3, pp.615–637, Elsevier Ltd.
- Stournaras, Y. (2019) 'Lessons from the Greek Crisis: Past, present, future', *87th International Atlantic Economic Conference*, Athens, pp.127–135.
- UNCTAD (2010) *World Investment Report 2010 – Investing in a Low-Carbon Economy*, United Nations Publication, New York and Geneva.
- UNCTAD (2019a) *UNCTADstat – Table View – Foreign Direct Investment: Inward and Outward Flows and Stock, Annual* [online] <https://unctadstat.unctad.org/wds/TableViewer/tableView.aspx?ReportId=96740>.
- UNCTAD (2019b) *World Investment Report 2019*, Special Economic Zones, New York.
- Van Cuong, H., Luu, H.N. and Tuan, L.Q. (2020) 'The impact of the shadow economy on foreign direct investment', *Applied Economics Letters*, pp.1–6, Routledge.
- Vlachos, V.A., Mitrakos, P., Tsimpida, C., Tsitouras, A. and Bitzenis, A. (2019) 'Factors favoring greece's inward foreign direct investment in the aftermath of the global financial crisis: an exploratory survey', *Journal of East-West Business*, Vol. 25, No. 3, pp.262–292, Routledge.
- Vogiatzoglou, M. (2018) 'Trade unions in Greece: protest and social movements in the context of austerity politics', in Grote, J.R. and Wagemann, C. (Eds.): *Social Movements and Organized Labour Passions and Interests*, 1st ed., Routledge, London, <https://doi.org/doi.org/10.4324/9781315609553>.
- Wang, C., Hong, J., Kafouros, M. and Boateng, A. (2012) 'What drives outward FDI of Chinese firms? Testing the explanatory power of three theoretical frameworks', *International Business Review*, Vol. 21, No. 3, pp.425–438, Elsevier Ltd.
- Yao, Y. and Zhou, Y. (2018) 'Research on outward direct investment in emerging economies', *Advances in social science, education and humanities research*, *Proceedings of the 3rd International Seminar on Education Innovation and Economic Management (SEIEM 2018)*, Vol. 286, pp.300–303.